

A Grammar of Hup

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The block contains six handwritten signatures, each written over a horizontal line. From top to bottom, the signatures correspond to the names listed on the left: Eve Danziger, Ellen Contini-Morava, Lise Dobrin, George Mentore, Peter Hook, and Orin Gensler. The signatures are written in dark ink and vary in style, with some being more cursive and others more formal.

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Finally, a special thanks to my husband Chris for all his support and his patience with my long absences.

Abbreviations

<i>Gloss</i>	<i>Definition</i>	<i>Hup morpheme</i>
ACQ	Acquiescence	<i>bé</i>
ADVR	Adversative	<i>kaḥ</i>
AGAIN	Repetitive aspect/ topic-shift	<i>=b'ay</i>
ALT.INT	Alternative interrogative	<i>=haʔ</i>
APPR	Apprehensive mood	
ASSOC.PL	Associative plural	<i>-and'əḥ</i>
CAUSE	Reason adverbial	<i>-keyóʔ</i>
CMP	Comparative	<i>dɪyiʔ</i>
COMPL	Completive	<i>-cɥp, -cɥw-</i>
COND	Conditional	<i>-tæñ</i>
COOP	Cooperative	<i>-nɪŋ</i>
CNTR	Contrastive	<i>n'uḥ</i>
CNTRFCT	Counterfactual	<i>-tæʔ-</i>
CNTRFCT2	Counterfactual 2	<i>tíḥ</i>
DCSD	Deceased marker	<i>=cud</i>
DECL	Declarative	<i>-Vḥ</i>
DEP	Dependent marker, Topic marker	<i>-Vp</i>
DIM	Diminutive intensifier	<i>=mæḥ</i>
DIR	Directional oblique	<i>-an</i>
DISJ	Disjunction	<i>ʔó</i>
DIST	Distributive	<i>pɪd</i>
DST.CNTR	Distant past contrast	<i>j'ám</i>
DYNM	Dynamic	<i>-Vý</i>
EMPH1	Emphasis 1	<i>-pog</i>
EMPH2	Emphasis 2	<i>tíḥ</i>
EMPH.CO	Emphatic Coordinator	<i>=nih</i>
EMPH.INT	Interrogative emphasis	<i>tĩ</i>
EMPH.DEP	Dependent emphasis	<i>tí</i>
EMPH.TAG	Emphatic tag	<i>-(V)tiʔ</i>
EPIST	Epistemic modality	<i>ʔuḥ</i>
EXCL	Exclusive	<i>-Vyɪk</i>
FACT	Factitive	<i>hi-</i>
FEM	Feminine (bound noun)	<i>=ʔǎy</i>
FLR	Filler form	<i>-Vw-</i>
FLW	Following marker	<i>hũy</i>
FOC	Focus	<i>-ah</i>
FRUST	Frustrative	<i>yæñ</i>
FUT	Future	<i>-teg, -te-</i>

FUT.CNTR	Future contrast	<i>tán</i>
HAB	Habitual	<i>bǝg, -bǝ</i>
IDEO	Ideophone	
IMP	Imperative	
IMP2	Imperative suffix	<i>-kǝm</i>
INCH	Inchoative, Inch. focus	<i>-ay</i>
INFR	Inferential evidential	<i>=cud</i>
INFR2	Inferential 2 evidential	<i>-ni-</i>
ITG	Intangible (dem.)	
INT	Interrogative	<i>-V?</i>
INTERJ	Interjection	
INTS1	Intensifier 1	<i>-(V)cáp</i>
INTS2	Intensifier 2	<i>mún/ muhún</i>
INTS3	Intensifier 3	<i>-tubud-</i>
LOC	Locative	<i>có?</i>
MEAS	Measure	<i>-m' ǝ</i>
MEAS2	Measure 2	<i>=tǝn</i>
MSC	Masculine (bound noun), Emphasis	<i>=ǝh</i>
NEG	Negative (verbal)	<i>-nǝh</i>
NEG:EX	Negative existence	<i>pǝ</i>
NEG:ID	Negative identity	<i>ǝáp</i>
NEG:R	Reinforcing negative particle	<i>nǝ</i>
NMZ	Nominalizer	<i>-n' ǝh</i>
NONVIS	Nonvisual evidential	<i>=hǝ</i>
OBJ	Object (non-subject case)	<i>-ǝn</i>
OBL	Oblique	<i>-Vt</i>
OPT	Optative	<i>-ǝhǝ</i>
PERF	Perfective	<i>-ǝe ǝ, -ǝe-</i>
PL	Plural/collective	<i>=d' ǝh</i>
POSS	Possessive	<i>nǝh</i>
PROTST	Protest	<i>bá?</i>
PRX.CNTR	Proximate contrast	<i>páh</i>
PURP	Purpose	<i>-téǝ</i>
Q	Interrogative particle	<i>hǝ</i>
QTY	Quantity	<i>=ǝap</i>
RECP	Reciprocal/ pluractional	<i>ǝhǝ-</i>
RED	Reduplication	
REL.INST	Related instance	<i>tá?</i>
REP	Reportive evidential	<i>=mah</i>
RESP	Respect marker	<i>=wǝd</i>

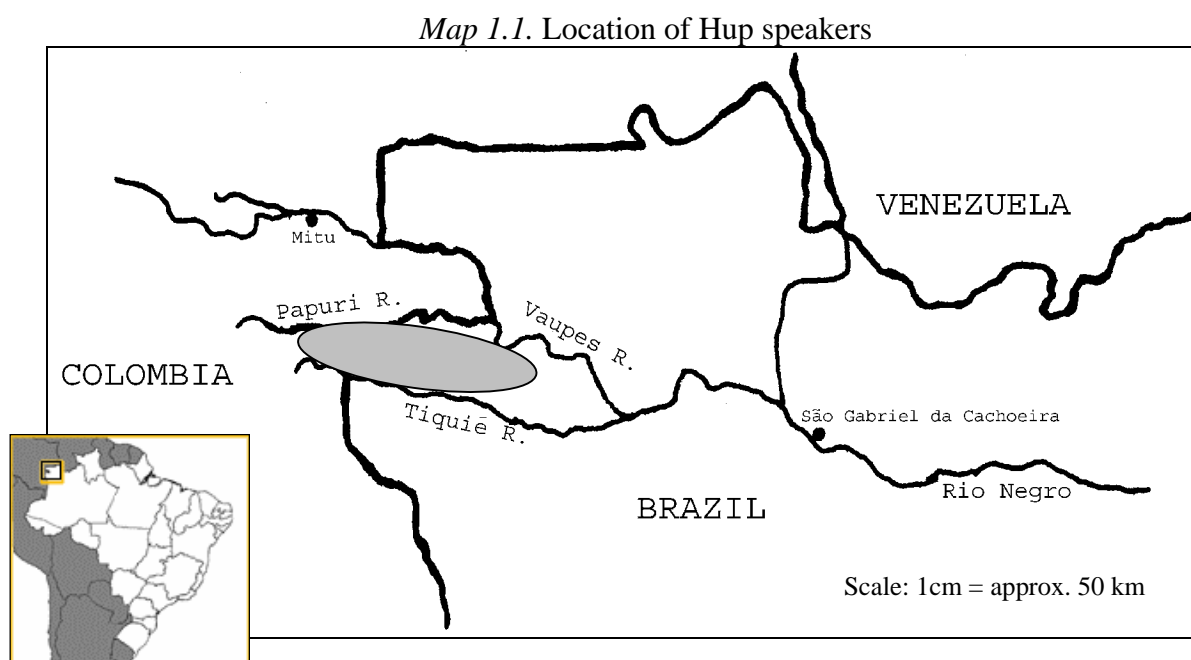
RFLX	Reflexive	<i>hup-</i>
RFLX.INTS	Reflexive intensifier	<i>=hup</i>
SEQ	Sequential	<i>-yóʔ</i>
TAG1	Interactive tag 1	<i>ya</i>
TAG2	Interactive tag 2	<i>-(V)həʔ</i>
TEL	Telic, Contrastive emphasis	<i>=yíʔ</i>
UNDER	Locative adposition, Adverbial	<i>-míʔ</i>
VDIM	Verbal diminutive	<i>-kodé</i>
VENT	Ventive	<i>-ʔay-</i>
YET	Ongoing event	<i>tæ</i>

Abbreviations of example sources:

Cv.txt	Conversation text
EL	Elicitation
OS	Overheard speech
RU	Reported utterance
Song	Song

1. Hup and its speakers

The approximately 1500 speakers¹ of the Hup language (also known as Hupda) live scattered throughout the heavily forested region on the Brazil-Colombia frontier. On the Brazilian side, the region is known as the *Cabeça de Cachorro* or ‘Dog’s Head’ (due to its shape on the map), and is part of the state of Amazonas. Within this region, most Hup speakers live in an area of approximately 5400 square kilometers, defined by the Tiquié River to the south, the Vaupés River to the east, and the Papuri River to the north, as shown in Map 1.1.



¹ Because the Hud’əh live scattered throughout remote areas in both Brazil and Colombia, estimates of their population size are rough and vary widely; for example, Pozzobon (1983: 38) puts the number at 1200, while Martins and Martins (1999: 253) estimate it at 1900.

1.1. Linguistic profile of Hup

Hup grammar exhibits a combination of features that it shares with its Nadahup (Maku) sister languages, and a number of language-specific innovations, many of which are due to contact with eastern Tukanoan languages, principally Tukano.

In its phonology, Hup has nine contrastive vowels and twenty-one contrastive consonants, including a series of eight glottalized consonants. Nasalization in Hup is a morpheme-level prosody, and the language has a word-accent (restricted tone) system made up of two contrastive tones (rising and high). There is a strong tendency toward isomorphism of the morpheme and the syllable.

Hup's nominal morphology is considerably more isolating than its verbal morphology, which tends toward polysynthesis and can be relatively complex. Hup morphology involves both compounding (of as many as five verb stems) and the association of multiple bound formatives in a series of slots. It is relatively agglutinative with very little fusion, and bound formatives are predominantly suffixing or otherwise post-stem.

Hup has nominative-accusative alignment and employs morphological case marking. In general, it favors dependent marking (realized mainly as nominal case marking and possession marked on the possessor). Hup grammar shows sensitivity to an animacy hierarchy and particularly to humanness; this is particularly evident in its systems of differential object case marking and differential or 'split' plural/collective marking, which reflect the animacy of the referent. Such differential grammatical marking is a feature of the languages of the Vaupés region generally.

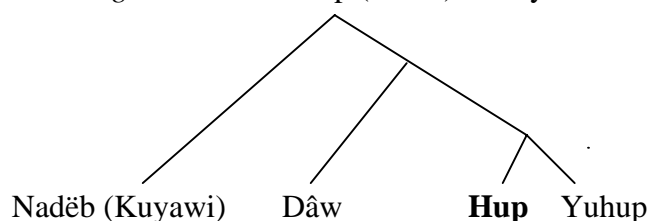
Other features of Hup grammar include a basically verb-final constituent order; this is best characterized as AOV, although the relative order of A and O is highly flexible. In addition, Hup has developed a complex evidentiality system (with five distinctions) and an incipient system of noun classification; these features also fit the regional profile, and their development in Hup has probably been motivated by contact with Tukano. Finally, an intriguing aspect of Hup grammar is the significant and even exuberant polyfunctionality of many morphemes, which in most cases reflects traceable historical processes of grammaticalization.

A number of aspects of Hup grammar are typologically unusual, as well as intriguing from an areal perspective. These include the treatment of possessed body parts (animal body parts are inalienably possessed, while human body parts are alienable; see §5.4.5), word order inversion patterns in question formation (see §17.4), the polyfunctionality of many morphemes (e.g. §3.3), and several unusual paths of grammaticalization that create such unique historical links as between the noun ‘stick, tree’ and a verbal future suffix (§13.1), and between an evidential and a nominal marker indicating a deceased referent (§14.9.3). Other features, such as the heavy effects of areal diffusion on Hup grammar (but much less on its lexicon) are also interesting from both a cross-linguistic and a regional point of view. Hup is a good illustration of the value of research on little-known and endangered languages, which can provide us with new ways of thinking about languages in general.

1.2. Hup within the Nadahup (Maku) language family

Hup belongs to the Nadahup or Maku family (see §1.2.1 below for a discussion of the family name). Its closest relative is Yuhup, followed by Dâw, then Nadëb, as shown in Figure 1.1. This tree is based on lexical correspondence percentages, and is also supported by the regular sound changes identified by Martins (2005) in his preliminary phonological reconstruction of the Nadahup family.

Figure 1.1. Nadahup (Maku) family



Hup and Yuhup are very similar, indeed almost mutually intelligible; they share over 90% cognate basic vocabulary. Their most striking difference is their opposing tone patterns, which are the mirror image of each other: where Hup has high/falling tone, Yuhup has rising; and where Hup has rising tone, Yuhup has high/falling. The historical reasons for this intriguing tone difference are not yet clear. Yuhup is spoken (as a first language) by around 550 people (Franky and Mahecha 1997), who are located in the area of the Brazilian and Colombian Vaupés between the Tiquié and Japura Rivers, south of Hup territory, as can be seen on Map 1.2 below. Many of these speakers are also fluent in Tukano (Ana María Ospina, p.c.). The main studies of the Yuhup language are Del Vigna (1991), Brandão Lopes (1995), Brandão Lopes and Parker (1999), and Ospina (1999, 2002).

Dâw (also known as Kamã) shares approximately 75% cognate vocabulary with Hup and Yuhup (see also Martins and Martins 1999: 254). It is spoken by only 94 people (S. Martins 2004: 6), who are located on the periphery of the Vaupés region (see Map 1.2). Most of the Dâw people also speak Nheengatú (also known as Língua Geral, a version of Tupinamba spread by early Jesuit missionaries, see §1.5) or Portuguese as a second language. The main studies of Dâw are S. Martins (1994, 2004) and V. Martins (1994).

The Nadëb language (also known as Guariba²) is significantly different from the rest of the Nadahup family. The percent of its vocabulary that it shares with Hup, Yuhup, and Dâw has been estimated at roughly 50% (cf. Martins and Martins 1999: 254); its grammatical differences include its lack of contrastive tone, its extensive noun incorporation, preference for prefixation, and elements of ergativity. These profound grammatical differences between Nadëb and its sister languages may be due largely to the apparent lack of any Tukanoan influence on Nadëb, which is spoken along the Uneiuxi River, well outside the Vaupés region (see Map 1.2), but may also be attributable to contact between Nadëb and Arawak or other languages in the past. The speakers of Nadëb are estimated at about 400 (Pozzobon 1983: 38), and some of these speak Portuguese as a second language (cf. S. Martins 2004: 6). Studies of Nadëb are limited primarily to Weir (1984, 1986, 1990, 1994).

Kuyawi, probably best characterized as a dialect of Nadëb, is reportedly spoken by a handful of old people living near the town of Santa Isabel on the Rio Negro (Martins

² Portuguese *guariba* ‘howler monkey’.

and Martins 1999: 253, S. Martins 2004: 6). The rest of the Kuyawi community is said to speak only Nheengatú and Portuguese.

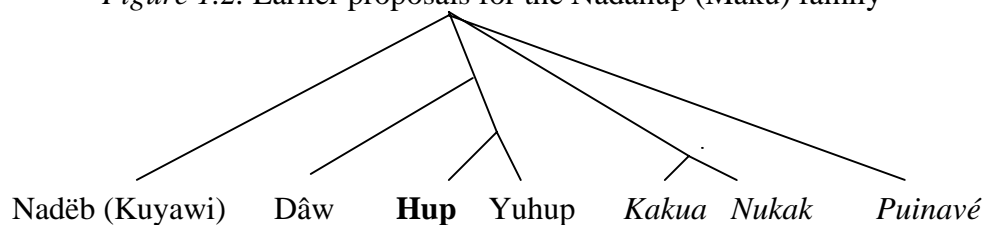
Map 1.2. Location of the Nadahup languages



Due in large part to the relative inaccessibility of the Nadahup peoples to the outside world, the Nadahup language family is under-described and as a result poorly understood. Work relating to the Nadahup family as a whole is for the most part limited to some scattered word lists and grammatical notes relating to a subset of the languages; these are Koch-Grünberg (1906b), Rivet, Kok, and Tastevin (1925), and Nimuendajú (1950). An overview of the family is also given in Martins and Martins (1999); however, their description is severely constrained by faulty and missing data, due to the lack of reliable documentation on these languages (at the time documentation existed only for Dâw and Nadëb).

The family tree in Figure 1.1 above is a conservative classification. Previous proposals regarding the Nadahup (Maku) family tree also include the languages Kakua (Bara) and Nukak, which are spoken in Colombia and are clearly related to each other, and the language Puinavé, also spoken in Colombia, as illustrated in Figure 1.2; see, for example, Loukotka (1968), Rodrigues (1986), Campbell (1997), and Martins and Martins (1999: 255).³

Figure 1.2. Earlier proposals for the Nadahup (Maku) family



The further addition of the Hodï language of Venezuela to the Nadahup family was proposed by Henley et al. (1996), but primarily on the basis of ethnographic similarities; the linguistic resemblances that are suggested are impressionistic, and my own examination of a longer list of data (provided by Marie-Claude Mattei-Müller) did not produce more than a few potential look-alikes, with no clear evidence of regular sound correspondences. Moreover, most of the similarities that were identified by Henley et al. are between Hodï and Kakua-Nukak, whose relationship with the other Nadahup languages is itself in question.

Very little is known about the Kakua (Bara) and Nukak languages, which are spoken in an area of eastern Colombia that is currently difficult to access due to guerrilla activity. The Kakua, thought to number about 300 (Buchillet 1992: 53), live in the area

³ Martins and Martins include Kakua and Nukak, but not Puinavé, in their proposed family tree.

between the Papuri and Vaupés Rivers (see Map 1.2 above). Preliminary linguistic investigations of Kakua (almost entirely by missionaries) are Cathcart (1972, 1979), Cathcart and Levinsohn (1977), and La Rotta (1978); see also the word lists in Koch-Grünberg (1906 and 1906b) and Huber and Reed (1992). The Nukak number about 200 (S. Martins 2004: 7), and only came into contact with Colombian society in 1988, before which they lived exclusively as hunter-gatherers. Some preliminary notes on their language have been published in Cabrera et al. (1994, 1999) and Huber and Reed (1992), and an in-depth study of Nukak is currently being undertaken by Dany Mahecha (University of Amsterdam and University of Oregon).

The claim for a relationship between Kakua-Nukak and the rest of the Nadahup family apparently goes back to Koch-Grünberg (1906b), who published some short word lists and pointed out a number of supposed similarities between the words. However, Koch-Grünberg's proposal rests on a half-dozen look-alikes among words collected with no prior knowledge of the languages. Thus a number of the resemblances he suggests can be identified as due to little more than transcription errors or the mistaking of morphological formatives as part of the root. Because so little was known about these languages, it seems that scholars simply continued to cite Koch-Grünberg's claim, with little opportunity to verify it for themselves. Almost a hundred years later, Martins and Martins (1999) propose that Kakua-Nukak share 35% of their vocabularies cognate with Hup-Yuhup, but they note that "the lexical data on Kakua-Nukak are scanty and these... figures are provisional" (1999: 254). They do not cite a source for their data on Kakua and Nukak, nor do they provide this data; the reasoning that led to their figure of 35% is not made clear. Recent work by Martins (2005: 331-41) presents a list of 47 possible

cognates between the Nadëb-Dâw-Hup-Yuhup languages and Kakua/Nukak, but these are determined purely impressionistically and Martins is unable to draw a definitive conclusion, noting only that “it was not possible to discover rules of regular correspondence” among the words, although they appear to “share a certain resemblance”.

In Appendix II, I have attempted to reevaluate the claim that Kakua-Nukak is related to the Nadahup family by putting together the available lexical data on Kakua and Nukak (from Cabrera et al. 1994, Huber and Reed 1992, and a word list kindly provided by Marie-Claude Mattei-Müller), and comparing it with the available lexical data on the other Nadahup languages (which is also quite scarce). Included in Appendix II is a reevaluation of the proposed cognate lists offered by Koch-Grünberg (1906b: 882) and Martins and Martins (1999: 253-54). I conclude that there is in fact very little evidence for a relationship, and that the list of supposed cognates boils down to only a handful of possible look-alikes, which do not exhibit any recognizable sound correspondences.

As Appendix II illustrates, it is nevertheless possible to identify four words that are virtually identical across Kakua-Nukak and Hup-Yuhup—‘thorn’, ‘egg’, ‘mother’, and ‘father’—on which the previous claims for relationship were largely based. However, the fact that these words are *so* similar makes the case for genetic relationship seem less likely: if the languages have changed so much that the rest of the basic vocabulary cannot even be identified as cognate at all, then would not these words, too, have undergone at least a few sound changes? Language contact seems a much more likely explanation for these lexical resemblances. In fact, contact between Hup and Kakua speakers—whose territories are separated only by the Papuri River—has been

documented by Silverwood-Cope (1972; see also Reid 1979: 23). However, it is important to note that the data on Kakua and Nukak in Appendix II is of unknown quality; the transcriptions may be faulty, and the word lists are far from complete. The final evaluation of the relationship of Kakua and Nukak to the Nadahup family must await future research.

The claim that Puinavé is related to the rest of the Nadahup family is even more dubious than that for Kakua-Nukak. It appears (rather like the Kakua-Nukak claim) to be due to a snowball effect of citations, all apparently tracing back to a 1920 article by Rivet and Tastevin. As did Koch-Grünberg, Rivet and Tastevin base their argument on extremely sketchy and poorly transcribed lexical data, from which they identify a number of supposed look-alikes. No sound correspondences are proposed, and the identification of the supposed cognates appears to have been carried out in an impressionistic and liberal fashion. It may be telling that Paul Rivet actually published dozens of articles during his lifetime proposing relationships among languages all over South America, many of which have proved to be unfounded; Beuchat and Rivet (1910), Rivet (1911), and Rivet (1912) are only a few examples.

In evaluating the arguments of Rivet and Tastevin regarding Puinavé, it is clear that a number of the supposed resemblances are simply founded on mistakes. For example, the claim that the Hup or Yuhup pronouns *ám* 1sg and *ã* 1pl correspond to Puinavé *am* 1sg is incorrect; the Hup and Yuhup pronouns (which differ from each other only by tone) are actually *ʔãh* 1sg and *ʔín* 1pl, while *ʔam* is 2sg. Likewise, the ‘striking similarity’ that Rivet and Tastevin claim for many other pairs of words is obviously very

much exaggerated (especially when the revised transcriptions are taken into account). Also, like Koch-Grünberg, the authors have no particular concept of ‘basic vocabulary’ (as defined by Morris Swadesh and others) by which to organize the proposed correspondences, and they accept all kinds of semantic variation in their list of ‘related’ words. One example of such a ‘strikingly similar’ pair, for which the phonetic resemblance in fact appears to be fairly weak, is Puinavé *dexei* and Hup *toho* ‘white’. Another, for which the relationship appears questionable on both phonetic and semantic grounds, is Puinavé *ueyu* ‘day’ and Hup *uerhó* ‘sun’ (actually *wædhɔ*). Additional problems with the analysis include the non-systematic mix of Nadahup languages used in the comparison (undoubtedly due to a lack of adequate data), and the failure to appeal to regular sound correspondences—which do not seem to appear in the data at all, especially since clear cognates cannot even be identified as a first step. All this corroborates my basic claim: there is at this point essentially no evidence for a relationship between Puinavé and the Nadahup languages, although more and better data is needed before the question can be settled conclusively. Currently, work on Puinavé is being carried out by Jesús Mario Girón Higueta at the University of Amsterdam, which will perhaps yield some answers to these questions.

There may be a simple explanation for why all of these languages were lumped together in the first place. The riverine, agriculturalist Tukanoan and Arawak peoples of the Upper Rio Negro region have long used the name ‘Maku’ to refer to all Indians who are nomadic forest-dwellers and rely heavily on hunting and gathering for subsistence. The name ‘Maku’, which probably comes from Arawak ‘do not talk; without speech’ (cf.

Baniwa *ma-aku* [NEG-talk]; Ramirez 2001: 198, Martins and Martins 1999: 251), is applied with no particular regard to the language and ethnicity of the recipients (i.e. it essentially means ‘primitive people’). Thus, in addition to the Nadahup peoples, Yanomami and numerous others are sometimes referred to as ‘Maku’ (see §1.2.1 below). The early European travelers had contact primarily with the riverine groups, and therefore learned of the Nadahup and other so-called ‘Maku’ peoples mainly through them. The similarities in the culture and subsistence patterns of these forest-dwellers and the use of the single name ‘Maku’ to refer to them may have encouraged Europeans to consider their languages more alike than they really were.⁴

1.2.1. Suggested name changes

The Hup language has generally been referred to in the literature as Hupda, with alternate spellings Jupda, Hubde, etc. This name is derived from the ethnonym of the speakers: *húp* is an ethnonymic ‘shifter’ term (cf. Proschan 1997), which can be applied generally to mean ‘human’, and specifically to mean ‘person of Hup ethnicity’; =*d’əh* is the plural or collective marker (see §4.4). Thus *húpd’əh* means ‘people; Hup people’, just as *húp*=*ʔh* (person=MSC) means ‘man, Hup man’, and *hup*=*ʔǎy* (person=FEM) means ‘woman, Hup woman’. The Hupd’əh themselves call their language *húp ʔǎd* ‘Hup language’, or simply refer to it as *húp*. An additional alternative is *húp-d’əh nʔh ʔǎd* (person-PL POSS language) ‘the language of the Hup people’; it is probably this form that was rendered as *ubde-nehern* by Giaccone (1955). Since the change of the language’s

name from Hupda to Hup is a minor one, and since Hup is considered the correct name by the speakers themselves, I have chosen to use this name to refer to the language.

The name of the language family presents a somewhat more complex problem. Although it is generally known as Maku (or Makú), this name is unsatisfactory for several reasons. First, as already discussed in §1.2 above, there is considerable confusion surrounding the name ‘Maku’, which occurs in the literature in reference to several unrelated languages and language groups in Amazonia. In particular, these include Máku or Makú, spoken along the Auari River in Roraima, Brazil; Mako or Cofán-Makú, spoken in the area of Lake Cuyabeno in Colombia and Ecuador; and Makú, Sáliba-Maco, or Maco-Piaroa, a subgroup belonging to the Sáliba-Piaroa family in Venezuela (cf. Martins and Martins 1999: 251).⁵ Nimuendajú (1950: 172) refers to as many as six independent indigenous groups in Colombia, Venezuela, and Brazil that are known as ‘Maku’. In addition to this problem, the name ‘Maku’ (probably from Arawak ‘without language’, as noted above) is widely recognized in the Vaupés region as an ethnic slur, frequently directed toward the Nadahup peoples by River Indians as an insult, and considered to be extremely offensive.

For both of these reasons, I prefer not to use the name ‘Maku’ to describe this language family. An appropriate name to put in its place has been under discussion among a group of scholars working on these languages, but to date no consensus has been

⁴ Note, however, that both Koch-Grünberg (1906b: 878) and Nimuendajú (1950: 172) recognize that the name ‘Maku’ is applied widely to groups that are linguistically quite distinct.

⁵ As an example of the confusion surrounding this name, compare Campbell’s (1997: 183) listing of the Nadahup languages and Puinavé (labeled ‘Maku’ by other authors) as belonging to the ‘Puinavean’ family, and ‘Maku’ as an extinct or near-extinct isolate located in Brazil and Venezuela.

reached. I propose the name ‘Nadahup’, which combines elements of the four established members of the language family (Nadëb, Dâw, Hup, and Yuhup).⁶

1.2.2. Previous studies of Hup

Research on the Hup language itself has been very limited. Some lexical and grammatical data (of very poor quality) was published by Rivet, Kok and Tastevin in 1925, followed by an equally poor Portuguese-Hup dictionary by Giaccone in 1955. Later, missionaries associated with SIL published some short studies: articles by Moore 1977, Moore and Franklin 1979, and Franklin and Moore 1979, and a Hup-Spanish-Portuguese lexicon by Erickson and Erickson 1993. These materials are all relatively superficial and overlook numerous important aspects of Hup, such as its phonemic tone and series of glottalized consonants. Finally, Henri Ramirez began a study of Hup (working exclusively in the city of São Gabriel da Cachoeira, Brazil) at about the same time as I began my own fieldwork (2001), with the intention of producing a pedagogical dictionary and orthography; this dictionary will presumably be published soon in Brazil.

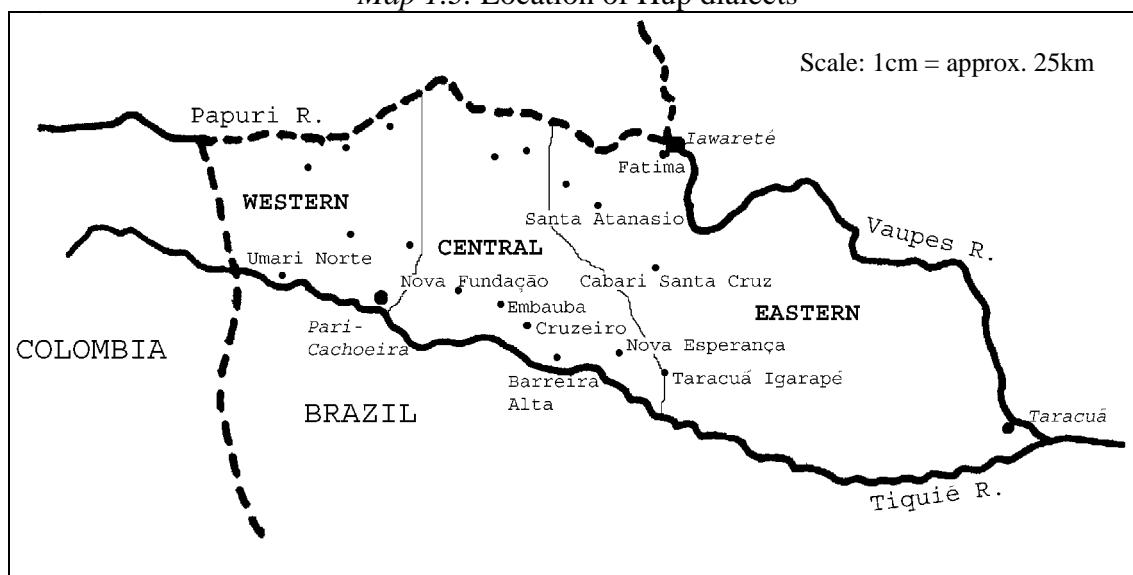
1.3. Dialectal variation in Hup

The Hup language is subdivided into three main dialect areas, as defined initially by Pozzobon (1992: 55; see also Cabalzar and Ricardo 1998: 52). These are the Western dialect, spoken between the upper Tiquié and Papuri Rivers, the Central dialect, spoken

⁶ An alternative name that has been suggested is Vaupés-Japura (Ramirez 2001), based on the names of two rivers (the Vaupés and the Japura) that delineate the general area in which these languages are spoken. However, the general consensus among those working with these languages is that this name is unwieldy and obscures the fact that many other unrelated languages are also spoken in this geographical region.

between the middle Tiquié and Papuri Rivers, and the Eastern dialect, spoken in the area south of the Papuri and west of the Vaupés.

Map 1.3. Location of Hup dialects



Map 1.3 shows the approximate locations of the dialect regions, the major Hup villages that occur within them, and the three large River Indian towns (Yawareté, Taracuá, and Pari-Cachoeira), in which major Catholic missions, health stations, and Brazilian army garrisons are located. Each of the major villages has both an ‘official’ Portuguese (or Língua Geral [Nheengatú]) name, as given on the map, and a Hup name, which typically corresponds to the name of the stream on which the village is located. When the village name involves the name of a local plant or animal, the Língua Geral name and the Hup name are simply translations of each other (e.g. Cabari, Umari, Embaúba; see Appendix V for definitions of these terms). The Hup names that correspond to the Portuguese names on Map 1.3 are the following:

Western region:

Umari Norte = Pæj J'ŋh Deh ('unripe umari stream')

Central region:

Nova Fundação = Pŋ Deh ('cucura stream')

Embauba = B'ab'ă? Deh ('embauba stream')

Cruzeiro = Payă? Deh ('falling? stream')

Barreira Alta = Yiyŋw Deh Nɔ ('mouth of ant sp. stream')⁷

Nova Esperança = B'öy Deh ('traira stream')

Eastern region:

Taracuá Igarapé = Tăt Deh ('ant sp. stream')

Cabari Santa Cruz = Pij Deh ('cabari stream')

Santa Atanasio / Serra dos Porcos = Tɔ Hayám ('pig town')

Fatima: Ya?am Hŋh ('jaguar rapid')

I worked extensively with speakers of the Central dialect, mostly in the village of Barreira Alta, and with speakers on the border of the Central and Eastern regions, in the village of Taracuá Igarapé / Tat Deh. The people of Tat Deh use features of both the Central and Eastern regions in their speech, and because many residents of Tat Deh were born in the Eastern dialect region (especially Cabari Santa Cruz village) and have married into the Tat Deh group, there is some individual variation in the degree to which speakers favor aspects of one dialect or the other. My knowledge of the Eastern region comes mainly from my work with speakers in Tat Deh, from conversations with Hupd'əh from those regions who arrived in Tat Deh and in Barreira Alta on visits, and from a visit to the village of Cabari Santa Cruz / Pij Deh in the Eastern dialect region. I also visited all of the villages along the middle Tiquié River that represent the Central region (Nova Esperança / B'öy Deh, Cruzeiro / Paya? Deh, Embauba / B'ab'a? Deh, and Nova Fundação / Pŋ Deh). My knowledge of the Western dialect is limited to data collected

during a week spent in the village of Umari Norte / Pæj J'ih Deh) on the upper Tiquié River. During this time I had the opportunity to meet an additional Hup speaker from the Colombian side, who was visiting relatives in Umari Norte; his dialect was similar to that of speakers on the Brazilian side.⁸

In discussing specific dialectal differences in this grammar, I refer to the names of villages in which I spent the most time, rather than extrapolate regional isoglosses for specific features when my knowledge is limited primarily to one or two villages in that region. However, these known points can for the most part be considered as representative of the larger regions (although Tat Deh is of course more fuzzy):

Umari Norte: Western dialect
 Barreira: Central dialect
 Tat Deh: Eastern and Central dialects

The differences between the Central and Eastern dialects are fairly small, while those separating the Western dialect from the others are much greater. This is undoubtedly due to the fact that interaction between the Western group and the other groups is minimal, at least on the Tiquié side (it may be greater along the Papuri River, where one might expect to find a more gradual continuum between the dialects). Differences are phonological, lexical, and grammatical in nature. In general, the Central dialect appears to be the most conservative, in some cases preserving internally analyzable variants of forms that have been phonologically reduced in the Eastern and Western dialects. Specific dialectal differences will be identified and discussed in the relevant sections of this grammar.

⁷ Hup speakers rarely use the Hup name of this village, but typically refer to it as Barreira [bahéda].

⁸ Interestingly, however, his pronunciation of dental-alveolar stops was slightly retroflex.

Despite the significant differences between the Western dialect and the others, they are certainly mutually intelligible, because I myself was able to communicate with Western speakers in my Eastern/Central Hup (although it was more difficult). However, Hupd'əh from the Central and Eastern regions tended to describe the Western dialect as “a different language” and “hard to understand”, and occasionally say that its speakers “do not know how to speak”. A visitor from Umari Norte to the Central region in 2002 was reported to have spoken only Tukano with the other Hupd'əh, presumably because he was sensitive about his language's differences, and felt disconcerted by not being able to communicate normally.⁹ This underscores the difficulty in assessing mutual intelligibility among the Vaupés languages on the basis of native speakers' own reports. Sorensen (1967), Grimes (1985), Aikhenvald (2002), and others have reported on the strictness of Vaupés Indians' evaluation of competence in a language; people do not typically admit to ‘knowing’ or ‘speaking’ a language unless they have an almost native-speaker fluency, and will often switch to the lingua franca (Tukano) if uncomfortable.

1.4. The cultural context of the Hupd'əh

In this section, I give a brief overview of some aspects of Hup culture. Constraints of space necessarily limit this to no more than a sketch, but a basic understanding of Hup life is an important backdrop for understanding their language, and for engaging with the material presented in the examples and texts. A fuller account of Hup culture and living

⁹ There is no doubt that this speaker routinely speaks Hup at home in his own village; I had interacted with him there a few months previously.

patterns is available in the PhD theses of Reid (1979) and Pozzobon (1991) (the principal ethnographic contributions on the Hupd'əh); other works include Athias (1995) and articles by Koch-Grünberg (1906, 1906b), Terribilini and Terribilini (1961), Bamonte (1972), Knobloch (1972), Reid (1978), Milton (1984), and Pozzobon (1994, 1997).¹⁰

Described as 'professional hunters', the Hupd'əh traditionally have been semi-nomadic forest dwellers, who travel primarily on foot and live along small streams in the forest. They practice limited agriculture (cultivating mostly bitter manioc in small plots), and hunt and gather for much of their subsistence. Their lifestyle is therefore distinct from that of the River Indians, who live along the rivers, travel by canoe, and rely primarily on fishing and agriculture (also cultivating bitter manioc) for their subsistence. For the Hupd'əh, the last generation has seen a move toward more settled villages, less reliance on hunting, and a somewhat greater dependence on agriculture (see §1.6 below). Nevertheless, many Hupd'əh today still spend several months of the year away from their villages, visiting relatives, living in hunting and gathering camps in the forest, or attached to a River Indian village. Also, while some Hupd'əh plant fairly large *roças*, or manioc fields, and devote considerable time to them, others do not have their own *roças* at all, and obtain manioc by helping relatives in their *roças*, working for River Indians or other Hupd'əh, or stealing from others' fields. Their relationship with the River Indians is described in detail in §1.5.1 below.

¹⁰ The most important ethnographies of other 'Maku' peoples are the studies of the Kakua (Bara) by Silverwood-Cope (1972), and the Nukak (Cabrera et al. 1994, 1999 and Politis 1996); however, the

The Hupd'əh are divided socially into clans, listed in Table 1.1. These tend to be concentrated in particular geographic areas, but almost all clans are represented in more than one village, and every village is made up of members (both male and female) of multiple clans. Clan membership is determined patrilineally, and is traced back in each case to a particular ancestral figure.

In addition to clan membership, Hupd'əh on the Rio Tiquié are classified (both by River Indians and amongst themselves) as being affiliated with a particular Tukanoan group, either Tukano or Desano (via a patron-client relationship, see §1.5.1 below). This affiliation corresponds to clan divisions, as illustrated in Table 1.1.

membership of these languages in the Nadahup family is highly doubtful (see §1.2). Little ethnographic material has been published on the Nadëb, Dâw, and Yuhup peoples.

Table 1.1. Hup clans

Clan name	Translation	River Indian affiliation	Some villages where this clan is well-represented
<i>cəkʷ'ət nɔg'od tæhd'əh</i>	Toucan's Beak Children	Desano	Taracuá Igarapé (Tat Deh), Cabari Santa Cruz, Barreira Alta
<i>dog m'æh tæhd'əh</i>	Vapisuna Snake Children	Tukano	Santa Atanasio, Cabari Santa Cruz
<i>mɔhɔy kəʔ tæhd'əh</i>	Deer Bone(?) Children	Desano	Santa Atanasio, Cabari Santa Cruz
<i>paç ya ʔám tæhd'əh</i>	Stone/sky Jaguar Children	?	Santa Atanasio
<i>deh puñ tæhd'əh</i>	Water Foam Children	Desano	Fatima
<i>ya ʔam d'uñb tæhd'əh</i>	Jaguar's Tail Children	Tukano	Barreira Alta
<i>wih tæhd'əh</i>	Hawk Children	Desano	Barreira Alta
<i>mih pow tæhd'əh</i>	Turtle Open-shell Children	?	Barreira Alta
<i>pij nɔwá tæhd'əh</i>	Sprouting Cabari Children	Tukano	Cruzeiro
<i>g'og g'æğ tæhd'əh</i>	Titi-monkey Bone Children	Tukano	Nova Fundação, Embauba, Umari Norte
<i>tegd'uh ʔág tæhd'əh</i>	Tree Fruit Children	?	Umari Norte

River Indian clans are ranked hierarchically (cf. Chernela 1993, Hill 1985, S. Hugh-Jones 1979, etc.); a few Hupd'əh mention such a ranking for their own Hup clans, but almost no one seems to be aware of this or care much about it. Perhaps it was once more important and has been all but forgotten, or perhaps it was borrowed only half-heartedly from the River Indians and never taken very seriously in the first place. The latter possibility seems somewhat more likely; in general, Hup society is very egalitarian,

with fewer rules and taboos than those observed by the River Indians, and less pressure to observe those that do exist (cf. Reid 1979, Pozzobon 1991).

The Hupd'əh marry among themselves, and observe a fairly strict pattern of clan exogamy. Kinship is organized according to a basically Dravidian-type system; cross-cousin marriage is considered ideal, whereas parallel-cousin marriage is clan-internal and prohibited. Relationships and even marriages between members of the same clan do occur (cf. Pozzobon 1991: 141), but are not looked upon favorably; for example, when an unmarried girl in the village was discovered having an affair with a boy of her clan, I heard the other young girls gossiping about it with disgust; “How gross [*páy* ‘bad, strange’],” they said, “he’s sleeping with his younger sister!” As in the Vaupés generally (cf. Goldman 1963: 122-23, Chernela 1993: 66, etc.), sister-exchange (i.e. marriage between two pairs of opposite-sex siblings) is a norm, and forms the mythological basis for established patterns of marriage between specific pairs of clans (said to be descended from male ancestors who married each others’ sisters; cf. Pozzobon 1991: 122).

In their religious and spiritual life, the Hupd'əh are nominally Catholic, and most villages hold Sunday services (in Tukano) led by a resident River Indian (who is often also the schoolteacher). Many people are only marginally involved in these services or do not attend at all, while a few take it fairly seriously. There is considerable syncretism between the Hupd'əh understanding of Catholicism and their more traditional cosmology (which is described in detail in Reid 1979: 218-271); for example, the culture-hero *g'æḡ tæh* ‘Bone-Son’ is equated with the Christian God, and the ever-present *baʔtɨb'-d'əh* or malignant spirits, which include the spirits of the dead, are sometimes equated with the

Christian Devil or demons. Aside from the *baʔtɨbʔ* spirits, the Hupd'əh consider their lands to be inhabited by several other malignant spirit-like beings, the most frequently mentioned of which is undoubtedly Curupira, a being known all over northern Amazonia (for which the Hupd'əh and other groups each have their own name). It is said that Curupira is covered with long, reddish hair, lives in the forest, and that his feet are attached to his body backwards, so that his tracks appear to be going when they are coming, and vice versa. He practices various kinds of deception in order to lure people into his clutches; having succeeded in doing so, he opens a small hole in their skulls and sucks out their brains.

Probably the most common ritual and social event among the Hupd'əh is the *dabacuri*, which involves the presentation of a gift (usually forest fruit, but also tapioca, smoked game, smoked fish, etc.) from one group (often a clan or village) to another (or occasionally, to one or two individuals, such as a village schoolteacher). The *dabacuri* almost always involves large quantities of *caxiri*, or manioc beer. Usually the whole village participates, and sometimes another village is involved as well (in such cases, one village is usually presenting to the other); however, the people involved in the *dabacuri* (both givers and recipients) can also make up a subgroup within a large village. The gift is usually expected to be reciprocated (either at the same *dabacuri*, or at another *dabacuri* at some later time), except in cases where it is requested by the River Indians (who usually give some reason for why it is 'owed' them); *dabacuris* presented to teachers (who are mostly River Indians) are often of this type.

The drinking party is a frequent event in Hup life, occurring as often as once

every one to two weeks in some villages, every one to two months in others. It often involves the entire village, and depending on the amount of caxiri (manioc beer) that is produced, by the end of the day nearly everyone is drunk, including even small children. On other occasions, one or two families prepare a small quantity of caxiri to offer to other Hupd'əh who have spent the day helping them clear a manioc field or in some other task.

Occasions for holding a drinking party include ritual events such as a dabacuri, Brazilian national holidays such as Christmas or Independence Day, and community work days (when most of the drinking occurs in the afternoon once the work is over). The drinking is usually accompanied by a few impromptu speeches and by dancing—often traditional group dancing to the music of pan-flutes, and later on Brazilian-style couples-dancing to the music of a tape player (when enough batteries can be found). Once they have imbibed enough alcohol, women in particular often begin to sing. They arrive face to face with another person, usually brandishing a *cuiá* (gourd dipper) full of beer, and improvise a text according to a semi-stylized pattern, set to a high-pitched melody. They typically sing about their personal status in the community, and their relationship with and thoughts about the person to whom they are singing. This person on his/her part frequently responds in song, and sometimes the two carry on an animated, sung conversation for some time—the drunker they are, the longer it tends to go on. These singing discourses are usually congenial, although I have witnessed some that are more quarrelsome. This singing tradition is also common among the Tukanos and other Vaupés peoples (cf. Chernela 1988, 1993).

According to several elderly Hupd'əh people, the drinking party in days past used to be a much more ritualized event, occurred less frequently, and typically involved more singing and traditional dancing than it does today. Several of the older women I met said they were disgusted by the more hedonistic atmosphere of today's parties, and rarely attended. In the old days, the old people said, men would often drink the hallucinogenic *caapi* (produced from the vine *banisteriopsis caapi*), after decorating themselves with macaw and parrot feathers, monkey fur, and other paraphernalia, and would perform the *kapiwaya* dance and song cycle. The *kapiwaya* tradition is known throughout the region, although it is rarely performed among either River Indians or Hupd'əh today; nevertheless, many older Hupd'əh men still know the songs. The most fascinating feature of the *kapiwaya* songs is that they are not sung in the Hup language, or in fact in any language that the Hupd'əh are familiar with, but are formulaic sets of unintelligible words which are apparently passed down from person to person and learned verbatim. The *kapiwaya* songs may be a reflection of the 'shamanic language' tradition that is relatively widespread in Amazonia, whereby shamans or other powerful figures use a distinct or unintelligible form of language for spells, etc. It is also possible that the songs have their origin in an Arawak language; as discussed below, a number of names for significant ritual and religious items are shared among all three of the Vaupés language families, and may originally be Arawak.

Another important aspect of Hup ritual life is the *Yurupari* tradition, which has been described at length in the literature about the Vaupés region—especially by the scandalized priests, who at one time considered it devil-worship and did their best to

eradicate it (see, for example, Bruzzi 1977: 313-17, Buchillet 1992: 18). The Yurupari was once a Vaupés-wide phenomenon; today, the majority of River Indian groups in the Brazilian Vaupés no longer practice it, but many Hupd'əh groups have kept the tradition alive. The Yurupari ritual is centered around sacred bark trumpets, played by initiated men, which women and children are not allowed to see—supposedly on pain of death.¹¹ Each trumpet is said to embody the spirit of an ancestral figure, whose voice is heard when it is played. The instruments are typically associated with the wild fruits or wild game intended for a dabacuri, and (in my experience) they are played initially in the forest as the men bring the offering into the village, and then in the village itself for several hours, while the women hide in the forest or in an enclosed hut. The women sit listening to the far-off music with an air of awe, excitement, and fear, and although they have never seen the trumpets (and are terrified of doing so accidentally), they recognize their many different 'voices' and can name each one by its ancestral name. The music of the Yurupari is pulsing, eerie, and indescribably beautiful.

Most large Hup villages have one shaman or *pajé*, who has the power to both heal and curse, and is said to take the form of a jaguar and travel large distances in his dreams. The *pajés* are always men (at least among the Brazilian Hupd'əh today), and are highly respected and sometimes feared. While the *pajé* holds a unique and specialized position, most older men are considered to have certain specialized powers of healing, 'blessing' (known in the local Portuguese as *benzamento*), and cursing. Such a man is known as a *kumu* in Tukano and *kɔd=ʔh* in Hup (see §15.1.3.3 for a discussion of this term), and

typically has an extended repertoire of spells at his disposal. These are used for such tasks as inducing childbirth, healing illness, protecting against possible curses or poisonings by River Indians and others, helping a newborn infant and mother through the first stages of life (such as the child's first bath and its receiving of a 'blessing' name), warding off snakebite, etc. Typically, the spell is spoken in private over some object such as tobacco (rolled into a cigar), a healing plant, piece of resin, etc., and the object is then given to the individual to smoke, apply, or burn him/herself, thereby transferring the words of the spell to his/her person. An example of a Hup spell text is provided in Appendix IV.

Ritual restrictions exist among the Hupd'əh, many or most of which are shared by the River Indians; however (as noted above) the Hupd'əh are comparatively relaxed about these (see also Reid 1979). Examples of restrictions include the admonition that a menstruating woman should not bathe in a large river or stream (because snakes or river dolphins will be drawn to her and harm her), and should not attempt to extract tapioca from manioc, because the tapioca will not come out of the mash for her. When the Yurupari trumpets enter the village, the listening women of child-bearing age should stand up, so as to ease the passage of a child out of the body. The mother and father of a newborn infant obey couvade restrictions, such as staying in the house and eating only blessed food for a period of time. Victims of snakebite must obey certain eating restrictions and stay isolated from other people (except for someone who stays to care for

¹¹ A similar tradition of sacred instruments that are forbidden to women is found elsewhere in Amazonia, such as among the Yagua of the Peruvian Amazon (Chaumeil 1993) and among the Mundurucu of the southern Amazonian region of Brazil (Murphy and Murphy 1985).

them). People should not eat both meat and fish at the same time; if they do, cysts will emerge on their bodies.

Verbal art is quite rich among the Hupd'əh, and includes a variety of traditional stories and personal narratives, the kapiwaya and song styles mentioned above, and spells. Speeches are impromptu and are not particularly stylized. Musical instruments are mostly woodwind, and include the pan-flute, the long *japurutu* flutes, small cane and deer-leg-bone flutes, and the Yurupari trumpets; occasionally one sees a small drum. Gesture is fairly rich, and typically accompanies any narrative; both lip pointing and index finger pointing are also common. Hup laughter is often shouted out as a loud 'hey-hey-hey!' especially by women; I have also heard Tukano women do this, and it may be a more widespread phenomenon.

Most Hupd'əh have several names, as is common among Vaupés Indians. The first of these is the Hup name, the *bi ʔid hat* 'blessing name' or 'spell name'. This name is determined by the person's clan membership; each clan has a relatively small repertoire of girls' and boys' names (amounting to less than a dozen of each) that are typically applied in a rough order according to the birth order of the children. The Hup 'spell names' for the Toucan's Beak, Jaguar's Tail, and Hawk Clans are given in Table 1.2.¹²

¹² Several of these names differ in intriguing ways from normal Hup vocabulary. A few have opposite tone values (and therefore correspond to the same words in Yuhup), and the meanings of several others are not known. In the case of the name *məhɔy kəʔ*, the word *kəʔ* has no meaning in Hup, but means 'bone' in Yuhup. It seems likely that some of these names preserve archaic features of the language, or perhaps started out as Yuhup names and entered Hup through intermarriage.

Table 1.2. Hup ‘spell names’

Clan	Male spell name	Translation	Female spell name	Translation
<i>cɔkw'ət nɔg'od</i> <i>tæhd'əh</i> Toucan's Beak Clan	<i>mɔhɔy kəʔ</i>	‘deer bone?’	<i>pěd</i>	‘cunuri fruit’
	<i>g'od</i>	? (compare <i>nɔg'od</i> ‘mouth’; <i>g'odan</i> ‘inside’)	<i>cɪb</i>	‘mutum (bird)’
	<i>m'æh j'ih</i>	‘immature snake’?	<i>mæhæñ</i>	‘night monkey (sp.)’
	<i>b'ɔʔ</i>	‘cuia’	<i>mɔt</i>	‘rubber-tree fruit’
	<i>b'oh</i>	‘salt’	<i>muñ</i>	‘caatinga’
	<i>hūd</i>	‘sauva ant’	<i>kəwɔg</i>	‘eye’ (opposite tone)
	<i>w'ih</i>	‘sarapó fish’	<i>kawáy</i>	?
	<i>ʔæd</i>	‘insect sp.’; also type of spirit?	<i>wɔhwæw</i>	‘whippoorwill’
<i>yaʔám d'úb</i> <i>tæhd'əh</i> Jaguar's Tail Clan	<i>yaʔám d'úb</i>	‘jaguar’s tail’	<i>yaʔám</i> <i>yééy</i>	‘entering jaguar’
	<i>hɔp cognih</i>	‘catches no fish’	<i>hɔw deh</i>	‘urucu-water’
	<i>j'im</i>	‘tapuru (parasitic worm) sp.’	<i>púh</i>	?
	<i>pan wɔd</i>	‘many sloths’	<i>hɪʔ</i>	‘paint’
	<i>wæç</i>	‘dove’	<i>b'ət hɪʔ</i>	‘roça-paint’
	<i>j'ɔ</i>	‘flower’	<i>yakʔəh</i>	‘small macaw sp.’
	<i>ped j'ɔ</i>	‘cunuri flower’	<i>báh</i>	‘small fish sp.’
	<i>b'eb'ep</i>	‘butterfly’	<i>hæb</i>	?
<i>wih tæhd'əh</i> Hawk Clan	<i>wih kɔy'</i>	‘hawk-?’	<i>j'ɔ</i>	‘flower’
	<i>wih pæm</i>	‘sitting hawk’	<i>wih pāt</i>	‘hawk’s feather’
	<i>wih j'ib</i> <i>b'ɔk</i>	‘hawk’s claw’	<i>pāt</i>	‘hair/ fur / feather’
	<i>wih tok</i>	‘hawk’s belly’		
	<i>wih tohó</i>	‘white hawk’		

In addition to a Hup name, each person has a Portuguese name (composed of first name, middle name corresponding to mother’s last name, and father’s last name), which is usually given them in a formal baptism ceremony by a visiting priest. Some Hupd’əh

add a version of their Hup clan name to this name. It is also common to have a nickname, which is often not a Hup word; for example, one little boy is called *cubi* ('curly' in Tukano) because of his curly hair, and his brother is nicknamed *ceb* (from 'zebu'—the type of cow that was given to some villages by missionaries—because of his buck teeth). Where Portuguese names are used, they are frequently shortened to one or two syllables; for example, Selina becomes *cidi*, Roseneia (pronounced [hozenea] in Portuguese) becomes *hoc* [hoʸt], and Jovino *yubi*. Whether an individual is called more often by his/her Hup name, Portuguese name, or nickname varies from person to person, and may depend on the relative length of the name, or on which one has simply happened to stick. For example, the three daughters in my 'adopted' family in Barreira are named Pěd / Mariestella, Sīb / Aracy, and Mæhæén / Emilia, and are usually called Pěd, Ara, and Min. Curiously, dogs seem to always be given Portuguese names (e.g. *tubirão* 'shark', *motor-serra* 'chainsaw', and *cupim* 'termite'), which presumably reflects their identity as an entity of foreign origin.

1.5. Vaupés multilingualism and language contact

The Vaupés is well-known in the literature on South America as an extremely multilingual region: multiple languages are typically spoken in any given community, and most children grow up speaking more than one. This multilingualism is closely linked to the system of linguistic exogamy practiced by the River Indians (though not by the Hupd'əh), which requires people to marry outside their language group. Each River Indian language group is defined as a clan-like structure in which membership is

determined patrilineally; speakers therefore identify first and foremost with their father's language as emblematic—and indeed constitutive—of their identity, regardless of how many other languages (such as their mother's language) they can speak or understand. This linguistic exogamy system has been described at length by Sorensen (1967, 1984), Jackson (1974, 1983, 1984), and others.

The Vaupés region is home to as many as four different language families. Languages belonging to the Eastern Tukanoan family¹³ are the most numerous, and include Tukano, Desano, Wanano, Piratapuya, Tuyuca, Tatuyo, and Siriano. There are also a few speakers of Cubeo and Makuna on the Brazilian side, and many more in Colombia. The Eastern Tukanoan languages in the region are said to be, on the whole, “a little further apart” than the Romance languages (Sorensen 1967). In addition to the Eastern Tukanoan languages, the Arawak language Tariana is spoken within the Vaupés region proper, while other Arawak languages (Baniwa, Warekena, and Piapoco) are spoken to the north along the Içana River, and Baré was once spoken in the area of São Gabriel and downstream but is now probably extinct (cf. Aikhenvald 2002: 19). Nheengatu or *Língua Geral*, a creolized version of Tupinamba (Tupi-Guarani family), was spread as a lingua franca throughout much of Brazil by the Jesuits in the 17th-19th centuries; it is still spoken in the Upper Rio Negro region and by older people along the Vaupés River, and has contributed many loanwords to the region's native languages (cf. Rodrigues 1986, Aikhenvald 2002: 20). Finally, as discussed above, the Nadahup languages spoken within the Vaupés region are Hup and Yuhup, while Dâw is found on

¹³ The ethnographic documentation of the Eastern Tukanoan peoples in the region (particularly in Colombia) is fairly substantial, and includes major works on the Cubeo (Goldman 1963), the Wanano

the periphery. Within the Vaupés itself, only the Nadahup peoples do not participate in the linguistic exogamy system.¹⁴

Today, the custom of linguistic exogamy and multilingualism in the region is changing, due primarily to the influence of Catholic missionaries, who have encouraged monolingualism and pushed the use of Tukano as a lingua franca (which it already was to some extent) since the 1920's (after giving up Nheengatú). These changes have led to a gradual undermining of the strong regional identification between language and ethnic group, and marriage patterns are no longer as strictly determined by language (although ethnicity is still the main factor). Many of the River Indians have given up their 'father languages' and speak only Tukano and Portuguese, and most of the Tukanoan languages other than Tukano can now be considered endangered within the Brazilian Vaupés, as is Tariana (cf. Aikhenvald 2002: 27).

Despite these recent changes, there is still a strong regional ideology surrounding language. Language and identity are considered to be in a sense inseparable, such that—by definition—you are what you speak, and you speak what you are. Even for those who no longer speak their 'father's language', the sense remains that this *is* their language, and that they are somehow not quite complete without it. This ideology is undoubtedly closely linked historically to the system of linguistic exogamy.

The practical outcome of this regional linguistic ideology and of the practice of linguistic exogamy itself has been a remarkable combination of multilingualism and language contact on the one hand, and strong pressure to *avoid* language mixing on the

(Chernela 1993), the Barasana (C. Hugh-Jones 1979, S. Hugh-Jones 1979), and the Desano (Reichel-Dolmatoff 1971); see also Bruzzi (1977).

other. This has led to an intriguing language contact situation, in which the borrowing of vocabulary (of which speakers are very aware, cf. Jackson 1983, etc.) is relatively rare, but at the same time, the languages converge on a structural level (of which speakers are much less aware) until they come to resemble each other grammatically. This kind of grammatical convergence is relatively easily identified when the languages involved belong to different language families. A detailed discussion of the striking influence that Tukano has had on the grammar of the Arawak language Tariana has been presented by Aikhenvald (1999b, 2002, etc.).

Understanding the position of Hup speakers in this linguistic melting pot is essential background to understanding their language. As the discussion at various points in this grammar will illustrate, the Hup language has undergone significant influence from Tukano, particularly on a structural level. This has occurred in spite of the important ways in which the Hupd'əh and other Nadahup peoples differ from the River Indians—their forest orientation, their emphasis on foraging over agriculture, and their linguistic and ethnic endogamy. As the following discussion will argue, the Hupd'əh are in fact deeply involved in the Vaupés regional network, despite being outside the linguistic exogamy system.

1.5.1. The Hupd'əh and the River Indians: socioeconomic interaction

Far from being isolated in their forests, the Hupd'əh are engaged in an active socioeconomic relationship with the River Indians, which was probably in place long

¹⁴ Outside the Vaupés, the Cubeo people are linguistically endogamous, as are the Arawak peoples of the

before the Europeans arrived in the region. This interaction has been discussed in depth by Athias (1995), Fisser (1988), Pozzobon (1991), Ramos et al. (1980), Reid (1979), and others, and has been characterized by a range of labels, from ‘slavery’ (e.g. Koch-Grunberg 1906b) to ‘symbiosis’ (e.g. Silverwood-Cope 1972), ‘patron/client’ (Ramos et al. 1980), or ‘intelligent parasitism’ (Reid 1979).¹⁵

For untold generations, the Hupd’əh have provided the River Indians with labor (clearing gardens, building houses, collecting cipó vines, etc.), hunted meat,¹⁶ and *aturá* baskets and other products (such as tipitis or manioc-squeezers). In exchange, they receive agricultural products (primarily raw manioc and manioc products such as tapioca, farinha, and beiju, as well as tobacco, hot peppers, coca, etc.) and other goods, especially Western trade goods such as clothing, machetes, axes, pots, beads, etc. From the point of view of ecological adaptation, the two groups have traditionally practiced complementary strategies, which exploit different environmental niches (cf. Silverwood-Cope 1972, Milton 1984). In a sense, the Hupd’əh can be said to occupy a somewhat extreme position in a region-wide system of economic specialization and trade, in which the Tuyucas traditionally make the canoes, the Baniwas make the manioc graters, and the Tukanos make the painted benches. Traditionally, however, many Hup families are ‘linked’ to River Indian families, such that much of the socioeconomic exchange is

Içana River.

¹⁵ The ‘symbiotic’ relationship between the River Indians and the Hupd’əh is strikingly similar to the relationship between other foragers and agriculturalists elsewhere in the world, such as the Mbuti Pygmies and the Bantu peoples in Africa. It is an intriguing possibility that aspects of this interaction may be characteristic of the interface between foragers and agriculturalists more generally (cf. Fisser 1988, Peterson 1978).

¹⁶ Meat is more rarely traded today because of a lack of surplus; see §1.6 below.

carried out directly with them.¹⁷ Also, as noted in Table 1.1 above, each Hup clan is associated with a particular River Indian group—presumably one with which they have historically been most directly involved.

While this socioeconomic interaction is essentially ‘symbiotic’, it is marked by a profound social inequality (which is probably what led early visitors to characterize it as enslavement). The River Indians treat the Hupd’əh and other Nadahup peoples as inferior, and hold them in considerable contempt. Various descriptions of the region note the River Indians’ evaluation of the Hupd’əh as being little better than animals, citing their linguistic endogamy, their forest orientation, and their semi-nomadic status as evidence for this (cf. Koch-Grünberg 1906b, Jackson 1983, Buchillet 1992, etc.), and even exaggerating it to falsely include such behaviors as sleeping on the ground. I myself have more often heard the River Indians describe the Hupd’əh as ‘like children’—irresponsible, disorganized, and capricious.

This attitude is constantly reflected in the River Indians’ interaction with the Hupd’əh. They often show up at Hup parties and request drink, and sometimes ‘invite’ the Hupd’əh to give dabacuris for them (cf. Reid 1979); they are known to take advantage of Hup girls and have even killed Hup people, usually when they feel that the person is trespassing on their fishing territory (one such event happened during my stay in the region). When visiting a Hup village, they often help themselves to the possessions of the inhabitants. They treat the Hup language as animal-like and not worth

¹⁷ This association is usually not considered to be particularly binding—at least not on the part of the Hupd’əh. It appears to be somewhat less common today than it was in the past, but this is not entirely clear.

learning, so that interaction is carried out almost exclusively in Tukano. Occasionally Hup women marry River Indian men, but I was unable to discover even a single case of the reverse arrangement.

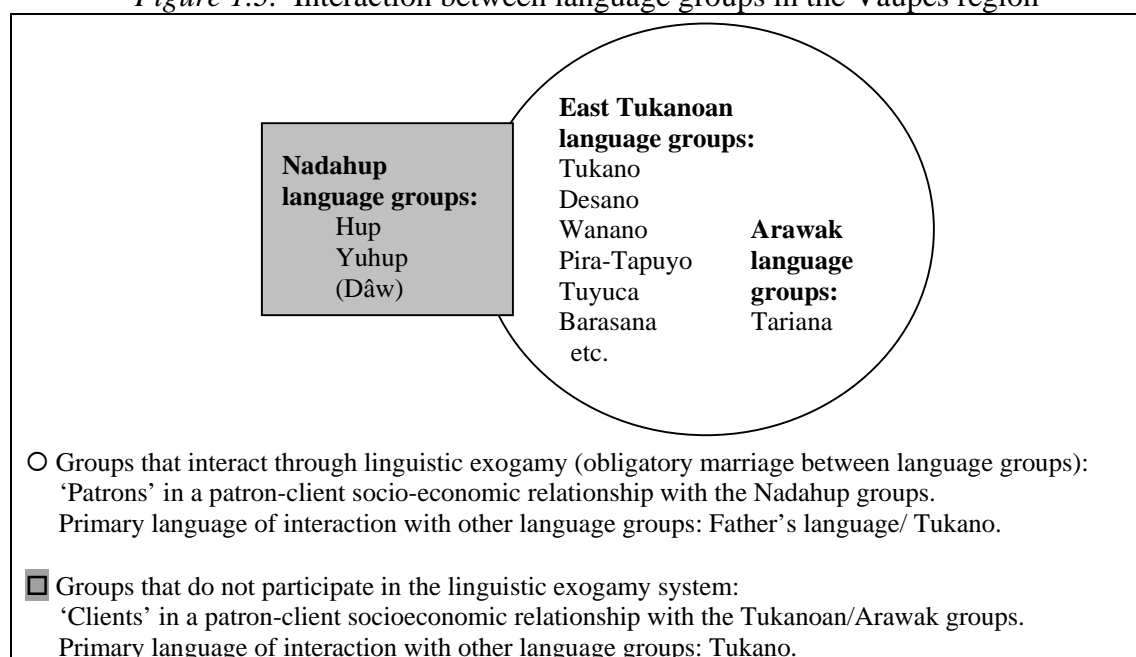
For their part, the Hupd'əh appear to accept their position in the regional hierarchy, while at the same time maintaining a sense of pride in their own identity. They usually act timid and deferential in the presence of the River Indians, but often make ribald jokes at their expense when back on their own turf. When they feel themselves to be underpaid (or sometimes when they simply think they can get away with it) they pilfer produce from the roças of the River Indians—so much so that the latter often feel obliged to locate their manioc fields in relatively inaccessible places (such as across the river). A visit of River Indians to a Hup village usually results in a scurry to hide food, fish nets, and other possessions, probably not only to keep them from being appropriated, but also to encourage the River Indians to think of their Hup neighbors as poor and needy, in order to extract as much payment as possible for their services. Fear of the other group's sorcery appears to be mutual between the Hupd'əh and the River Indians.

The intense interaction between the various groups in the Vaupés region has led to striking cultural similarities among them. This applies not only to the Tukanoan and Arawak groups, but also to the Hupd'əh (and to some extent to the Yuhup and Dâw), despite their distinct social position, alternative subsistence strategies, and general forest orientation. The groups of the region share myths and stories, spells, song styles, music, and dances; they have common religious and ritual beliefs and practices, such as the Yurupari and the dabacuri; and they all use (or used in the recent past) coca and ritual

hallucinogenic substances. Material culture is also very similar from one group to another, as are their agricultural practices—the difference between the ‘agriculturalists’ and the ‘foragers’ in the region is more one of relative degree of emphasis on agriculture, rather than of techniques and produce types.

Figure 1.3 summarizes the relationships among the Vaupés groups, as discussed in this and the following sections.

Figure 1.3. Interaction between language groups in the Vaupés region



1.5.2. The sociolinguistics of Hupd’əh - River Indian interaction

The social inequality that defines the relationship between the Hupd’əh and the River Indians also structures the sociolinguistics of their interaction. The Hupd’əh use Tukano almost exclusively in their interactions with River Indians, who in general show no interest whatsoever in learning any Hup. This use of Tukano applies even in cases where

the River Indians are not Tukano themselves and prefer to speak their own language in their community (although of course they can speak Tukano, and many of the women are themselves Tukano). This is the case in the Tuyuca village of São Pedro, close to the Hup village of Umari Norte; here the River Indians use both Tukano and Tuyuca (which is closely related to Tukano) in addressing the Hupd'əh, who respond exclusively in Tukano.

As far as I could ascertain, 100% of adult Hupd'əh understand Tukano, and at least 90% speak it fluently. A few choose not to speak it regularly, despite rumors that they can command it as well as anyone; this may be due to feelings of insecurity about their fluency, or perhaps to a desire to avoid interaction with the River Indians as much as possible. Children learn Tukano as they grow up, mainly in the context of their parents' frequent interactions with River Indians, although young children—especially in villages like Tat Deh where there are fewer Tukanos around—sometimes understand relatively little. Ethnohistoric evidence and the reports of late 19th-century explorers suggest that this bilingualism and the socioeconomic relationship between the two groups may be quite old, and may predate the arrival of the Europeans considerably.

The attitude of the River Indians toward the Hup language corresponds to their attitude toward the Hup people. From their point of view, Hup is not a proper language; it is extremely 'difficult', basically sub-human, and not worth speaking. In general, River Indian teachers in Hup villages make no effort whatsoever to learn Hup, even though the children do not always understand what they are being taught. However, some River Indians apparently understand more Hup than they let on, and occasionally even say a

few words as a joke—usually greeted with shouts of laughter from other River Indians. In one case, three Tukano teenagers who have grown up with Hup children (in Barriera, where the Hup village is adjacent to the Tukano village) do speak fluent Hup, but their parents have forbidden them to speak it and chastise them for doing so. Because most non-Indian people associate with the River Indians rather than with the Hupd'əh, the fact that I speak Hup but not Tukano is typically received with disbelief and some consternation by the River Indians, and with great amusement by the Hupd'əh themselves.

The fact that the Hupd'əh have maintained their language in the face of generations of bilingualism and linguistic inequality is probably largely a result of the same regional attitudes that created this situation in the first place. As discussed in §1.5.1 above, the Hupd'əh are deeply integrated into the Vaupés regional system, and share many aspects of their culture with the other language groups in the area. One of these aspects is the regional ideology linking language intrinsically to one's ethnic identity. Despite the fact that this ideology has undoubtedly been promoted and strengthened by the practice of linguistic exogamy, in which the Hupd'əh do not take part, they have nevertheless embraced the perception that language and identity are one and the same thing. A person can no more escape his or her language than he can escape his identity by birth—which cannot really be hidden, since it is almost impossible to go somewhere in the region without running into people one knows. Thus for the Hupd'əh, being Hup means speaking Hup. The Hupd'əh occasionally refer to themselves as a group with the

term *ʔid-d'əh* (speak-PL) 'those who speak', and most feel that no amount of speaking Tukano would make them *become* Tukano (although there are those who try; see below). As one woman characterized the ability of the Hupd'əh to speak Tukano, "we don't really know their language; we're just stealing/appropriating it; it's not our language."

The attitudes of the Hupd'əh toward their own language are thus a complex mixture of linguistic pride and linguistic insecurity, linked to positive and negative feelings of identity vis-à-vis the River Indians. They see their language as something to cherish and be proud of within the Hup community, reflecting the comfort and autonomy they feel within the bounds of their own villages and their forest world, and their connection to other Hupd'əh. On the other hand, they see it as something to be ashamed of when they step outside this domain. One Hup woman told me that she was afraid to fall asleep when in the company of River Indians, for fear of speaking Hup in her sleep and being mocked by her companions. I often found that people I conversed with freely in Hup in their villages or in the forest would immediately clam up when we entered a River Indian village, and would cease speaking to me at all, or would speak only in whispers. Similarly, conversations with Hupd'əh in their own language in the city of São Gabriel (where Portuguese is dominant) are usually conducted in a low, almost whispered voice, except in private; the Hupd'əh seem to find it disconcerting on such occasions that our only common language is Hup, since I do not speak Tukano and few of them speak Portuguese. The feelings of linguistic insecurity that arise in these contexts are further illustrated by a story told by a Hup girl of about 17 or 18 years old who had gone to São Gabriel with a Tukano family to look after their children. Upon returning to her village

and recounting her experiences, she mentioned encountering a local missionary in the city: “I saw M. there, and he said to me, ‘Hello!’ [in Hup]. Oh, I was so ashamed!”

This curious mix of pride and insecurity is also reflected in the positive and negative uses of the ethnonym *húp*. In general, its use is positive; as noted in §1.2.1, it can be used in reference to human beings in general (i.e. in contrast with animals), but it is most commonly used to refer specifically to Hup people (i.e. in comparison with River Indians, non-Indians, etc.). In addition, it is used as an adjective meaning ‘new, good, beautiful’. At the same time, however, *húp* is used to translate the extremely negative term ‘Maku’ (see §1.2), used by River Indians as an ethnic slur toward Hup (and other Nadahup) people; for example, it turns up in the common (Hup) insult *húp tǎh* ‘son of a Maku’ (probably a calque from Tukano).

While most Hupd’əh feel that their identity and their language are inseparable, and that there is no escaping either even if they wanted to, a few individuals handle the tension differently. These Hupd’əh have dropped Hup altogether and speak only Tukano. The people that do this are very few; I know of a total of four, and two of these were apparently raised by River Indians and so did not really speak Hup as children.

Of the other two, one had switched back to Hup and given up his Tukano-only approach before I arrived in the area. According to other Hupd’əh, he had used Tukano in an effort to ‘change’ his Hup identity, and had even secured his Hup wife while pretending to be Pira-Tapuya. However, after living for some time in the Hup village of Tat Deh, his fellow villagers teased him so mercilessly that he gave up Tukano.

Interestingly, it was apparently his own grammatical mistakes in Tukano that were the main subject of the teasing.

I had the opportunity to interact closely and over a long period of time with the remaining Tukano speaker, who is the wife of one of my consultants. Her case is quite interesting. Although she did spend many years with River Indians while a young girl (from perhaps eight or ten years old until a teenager), living with a family to look after their children, people all agreed that she was old enough when she left her village, and spoke Hup fluently enough, that she could not possibly have forgotten it. However, although today she lives in a Hup village and has a Hup family—all of whom speak exclusively Hup in their interactions with her and other Hupd’əh—she will not speak a word of Hup. Nevertheless, her level of understanding is clearly that of a native speaker, and in fact her Tukano is not flawless, according to a local Tukano woman. All of her conversations—with her Hup husband, children, parents, etc.—are carried out in two languages; she speaks Tukano to them, and they speak Hup to her. No one seems to think anything of this, since this sort of bilingual conversation is actually fairly normal in the linguistic context of the Vaupés.

In me, however, she was faced for the first time with a person—particularly an adult—who spoke Hup but understood virtually no Tukano. In spite of my inability to understand, she never compromised herself by saying a single word to me in Hup, even though I ate together with her family every morning, and often accompanied them to the manioc fields or in other tasks. It was no different even when I was alone or nearly alone with her and needed direction, such as when planting a manioc field, or was in danger of

getting hurt by something, such as when the canoe was moving into a tree branch while I was not paying attention. She would always say something, but this was only in Tukano, and I would always have to appeal to someone else to translate.

Other Hupd'əh had a variety of answers to my inquiries about the woman's refusal to speak Hup. Some seemed intrigued by my question, as if they had never really thought about it before. Several responded by saying "she's lying!" (i.e. about her identity); one said 'she's ashamed' (again about her Hup identity); and others did not have an answer. Still others told me that the River Indians had given her 'medicine' to magically make her switch languages.

Code switching into Tukano does occur in the speech of ordinary adult Hupd'əh, but this is fairly constrained. While the Hupd'əh do not seem to be as anxious about language mixing as the River Indians are reported to be, most do in general avoid unrestrained borrowing and code switching, and sometimes respond negatively to others' use of a Tukano word. In the context of narrative, on the other hand, spirits and animals often speak in Tukano (cf. Aikhenvald 1996: 79, who notes that the Tarianas use Wanano or Tukano in this context). People who are speaking about River Indians in a narrative will occasionally mix in some Tukano words, especially when recounting a River Indian's part in a dialogue, and a few speakers will throw in bits of Tukano somewhat more indiscriminately. Certain adults speak Tukano now and then to children with the explicit intention of helping them learn the language, and once in a while young people speak Tukano to me in order to tease me.

1.5.3. Bilingualism and language contact

The Hup language and its speakers must be understood within the full context of the Vaupés linguistic area, especially vis-à-vis the relationship of the Hupd'əh with Tukano speakers; Hup should not be considered as a self-contained system. In the Vaupés, both the Hupd'əh and the River Indians effectively belong to two different kinds of speech community at once: one defined by a language or dialect group, the other by a group of people in the immediate locale who interact on a regular basis. Arguably, the type of speech community that is more of an everyday reality in the Vaupés is this second one: a geographically and socially defined group of people who communicate with each other on a regular basis, using multiple languages. Thus the discourse-defined 'speech community' is not isomorphic with the language group, but rather cross-cuts it. It is even possible that certain features of discourse or even of grammar or lexicon may have arisen among one particular group of Tukano and Hup speakers, before spreading to other groups of speakers of both these languages.

Contact with Tukano has had significant effects on the Hup language. While some loanwords have entered the vocabulary, the most profound effects have been structural, such that many aspects of Hup grammar have come to resemble those of Tukano. These contact phenomena can be compared with those undergone by Tariana, as discussed by Aikhenvald (1996, 2002, etc.); in fact, the unilateral influence of Tukano has caused Hup and Tariana to resemble each other closely in a number of ways, even though they have had little or no mutual contact. Many of these contact phenomena are discussed in the Comparative Notes that appear throughout this grammar.

Among the Nadahup languages, the influence of Tukano appears to be the strongest in the case of Hup, whose speakers are located squarely in the Vaupés region and apparently have the highest degree of interaction with River Indians. Yuhup also appears to have been profoundly influenced by Tukano, although perhaps not quite to the extent that Hup has been. Otherwise, the degree to which the Nadahup languages have undergone contact with the Eastern Tukanoan languages seems to correspond neatly to their geographical distribution. Dâw, spoken on the periphery of the Vaupés, has far fewer contact features; and Tukano-like features seem to be essentially absent from Nadëb, which is spoken well outside the Vaupés (see Map 1.2 above), although it is possible that Nadëb underwent areal influence from its own now-extinct neighbors, such as Arawak Baré.

It is important to note that previous assessments of Tukano's influence on the Nadahup languages as a group are misleading because they were based mostly on Dâw. For example, Aikhenvald states that there is "no inhibition against lexical loans" in the Nadahup languages (1999b: 389), and claims that in these languages "areal diffusion is more superficial (compared with Tariana - Tucano interaction)... since the Maku are accorded an inferior social status and are not fully integrated into the multi-lingual socio-cultural community" (Aikhenvald 1999b: 394). As this discussion has argued, however, and as the Comparative Notes throughout this grammar illustrate, the deep involvement of Hup speakers in the Vaupés system has indeed resulted in profound contact effects on their language.

1.5.4. Viability and endangerment status of Hup

At present, Hup is not seriously endangered: virtually all Hupd'əh learn it as a first language, and many children are essentially monolingual (although virtually all understand some Tukano). However, its future is uncertain. Its speakers are numerically few (although for an Amazonian language 1500 speakers is actually fairly respectable). Bilingualism in Tukano approaches 100% in adults, and most Hupd'əh experience some degree of linguistic insecurity regarding their own language, such that a few individuals have even given up Hup in favor of Tukano, as discussed in §1.5.2 above. The general shift toward Tukano among the other languages of the region, brought about by the growing contact with Brazilian society and the resulting social changes, does not bode well for the future of Hup. It may be partly the social discrimination experienced by the Hupd'əh and their relative dissociation from the non-Indian world that has encouraged them to hold on to their language as long as they have. Perhaps Hup's future preservation will be aided by the development of native-language literacy and a Hup-centered education program.

1.6. Regional history and the current situation of the Hupd'əh

Little is known about the history of the Vaupés peoples before the arrival of the Europeans. Pottery found in sites on the middle Vaupés River dates from about 1200 B.C.E. onward (Neves 1998, cf. Cabalzar and Ricardo 1998: 55), but in general the archaeological record is poor. This is due both to the high biodegradability of material remains in the region and to the paucity of excavation that has been undertaken there.

Ethnohistorical accounts of the Tariana indicate that they arrived late to the region, coming from the direction of the Rio Aiari to occupy lands already occupied by the Wanano and Tukano, possibly around 600 years ago (Cabalzar and Ricardo 1998: 55, Aikhenvald 2002: 24). Nimuendajú (1982) and others appeal to ethnohistorical accounts to suggest that speakers of the Eastern Tukanoan languages entered the Vaupés region from the west within the last 500-1000 years, while the Nadahup peoples (Maku) are the autochthonous inhabitants of the region. However, this is still unclear and awaits future research (cf. Aikhenvald 2002: 24), and it is worth noting that the origin myth of the various Tukanoan peoples of the region involves their arrival in an anaconda-canoe from the *east*, from Brazil, rather than the west (cf. Goldman 1963, S. Hugh-Jones 1979, etc.). Reid (1979: 21) reports that the Hupd'əh say they came from the east, from the direction of the Amazon River, on foot (whereas the Kakua say they came from the northeast, from the Orinoco); in my own experience, contemporary Hup accounts of their origin closely mirror those told by the Tukanoans.

Questions regarding the material culture and familiarity with agriculture of the early Nadahup peoples are also not easily answered. However, their languages may offer some intriguing clues to these issues, which are presented in the lexical comparison in Appendix III.¹⁸ While these clues are of course provisional and somewhat speculative, they suggest hypotheses that can perhaps be tested in the future through more in-depth linguistic investigation, as well as through archaeological, ethnohistorical, and other work.

¹⁸ Note that the data is sketchy; lexicons of most of these languages are either nonexistent or limited to a few pages.

One of the interesting facts arising from the lexical comparison in Appendix III is that the word ‘River Indian’ is cognate at least across Hup and Dâw, as illustrated in example (1). There is unfortunately no data available on this word in Yuhup or Nadëb, but the Hup-Dâw cognate is evidence that the speakers of the Hup-Yuhup-Dâw parent language were familiar with River Indians as a social category. This suggests that the distinction between and interaction among the Nadahup peoples and River Indian groups is quite old, probably predating at least the split of Hup, Yuhup, and Dâw into separate languages.

- (1) Hup *wǝh* ‘River Indian’
 Dâw *wǝ:h*

The lexical data also provide clues to the material culture of the early Nadahup peoples. For example, the words for ‘hammock’ and ‘canoe’ reconstruct for the entire Nadahup family (Hup, Yuhup, Dâw, and Nadëb), as shown in example (2). This is also evidence that some of the early historical accounts of the Nadahup peoples’ ‘primitiveness’ are exaggerated, which is no great surprise since European travelers attained most of their information about the Nadahup peoples through their River Indian neighbors, who considered them inferior. In particular, Koch-Grünberg characterizes the Nadahup peoples as “crude nomadic hunters, who have no agriculture, and *know neither hammock nor canoe*, but who have an excellent knowledge of the woods” (1906b: 877; my translation and emphasis). However, not only did they apparently know hammock

and canoe in Koch-Grünberg's time, but probably had known them for many generations.¹⁹

(2)		Hup	Yuhup	Dâw	Nadëb
	hammock	<i>yág</i>	<i>yǎg</i>	<i>yæ̃g</i>	<i>yág</i>
	canoe	<i>hɔh-těg</i>	<i>hɔh</i>	<i>hɔ:</i>	<i>h'ɔɔh</i>

As far as the agricultural history of the Nadahup peoples, it is notable that terms referring both to cultivated plants and to manioc-processing technology appear to be considerably more innovative (including a number of borrowings) than do terms for native (forest) plants and other vocabulary (animals, body parts, etc.), as illustrated in Appendix III. This suggests that agriculture was not an important part of the lives of Proto-Nadahup peoples. This point is especially relevant because some present-day Amazonian foraging peoples have been shown to be 'remnants' of formerly agricultural populations, who abandoned agriculture and returned (in the sense of long-term historical patterns) to a foraging subsistence strategy. In at least one such case, that of the Guajá (Balée 1999), this has been established on the basis of linguistic evidence (see also Balée 2000, Dixon and Aikhenvald 1999b: 6, Headland and Bailey 1991). By contrast, the linguistic data for the Nadahup family suggest that the Nadahup peoples were probably never true farmers, and that their current degree of involvement with agriculture is probably the most that they have ever experienced.

At the same time, however (as can be seen in Appendix III), an intriguing split appears between certain terms—particularly those pertaining to agriculture—that are

¹⁹ That these lexical correspondences could be due to borrowing is unlikely, since no donor language can be identified outside the family, and there has apparently been relatively little contact among the Nadahup languages themselves since the split of the family.

shared by Hup-Yuhup on one hand, and by Dâw-Nadëb on the other. Another split occurs between Hup-Yuhup-Dâw and Nadëb, which is more to be expected given the overall similarities among the first three languages (see the family tree in Figure 1.1). These splits suggest that there may have been ongoing contact between Dâw and Nadëb on the one hand, and Dâw and Hup-Yuhup on the other, even after these groups had separated—a scenario that makes some sense for semi-nomadic hunter-gatherers, and also fits the present situation, in which different dialect groups of Hup speakers maintain a degree of contact with each other.

Finally, several words connected to ritual and religious practices common to the Vaupés groups are shared across languages of all three families (Nadahup, Tukanoan, and Arawak; see Appendix III). These are the words for coca and caapi (the hallucinogenic *Banisteriopsis caapi*) and the name of the culture-hero (‘Bone Son’ in Hup and Tukano; ‘the one on the bone’ in Tariana and Baniwa). These terms probably do not have a Nadahup origin, but whether they are originally Tukanoan or Arawak is still uncertain.

The more recent phases of Vaupés history were shaped by the arrival of the Europeans. The Portuguese reached the area around São Gabriel da Cachoeira by the late 1700’s, initiating an epoch characterized by a fierce slave trade and epidemics that decimated the indigenous populations. This was followed later by a rubber boom, which lasted from about 1870 to 1920; during this time non-Indian rubber seekers penetrated deep into the Vaupés region, coercing local Indians to work as rubber gatherers according to a debt-peonage system. For several centuries, Catholic missionaries have also been present in the region, building missions, conducting baptisms and other ceremonies, and making Indian children attend the mission schools (often by force), where—until

recently—the children were frequently mistreated and forbidden to speak their native languages.

The River Indians bore the brunt of this onslaught, and for a long time the nomadic, forest-dwelling Hupd'əh and other Nadahup peoples were spared the worst. Some are reported to have been sold by River Indians to Whites as slaves or to work rubber (cf. Reid 1979: 25), but in general, the River Indians experienced most of the direct contact with the non-Indians themselves, while the Hupd'əh obtained manufactured trade goods through the River Indians as intermediaries. As a result, the River Indians have experienced the more drastic cultural changes; for example, with the exception of some groups on the Upper Tiquié and in Colombia, many have abandoned traditional practices such as the Yurupari ceremony, which are still practiced by the Hupd'əh.

By the 1940's, however, the Salesian Catholic missionaries had begun to approach the Hupd'əh seriously, and intensified their efforts in the early 1970's. In their efforts to 'civilize' the Hupd'əh, the Salesians coerced numerous local groups into moving into large, settled villages, which in some cases were located at a considerable distance from the inhabitants' original lands. In the course of these events, which are described in detail in Reid 1979, a River Indian was usually installed as a schoolteacher and catechist, and in many cases a missionary couple or priest would live in the new Hup village as well.

The abrupt changes in living patterns brought about by the Salesian missionaries' 'civilizing' efforts have led to many serious problems for the Hupd'əh. Even after

devastating epidemics took their toll in the initial years of the shift, the problems have continued. Many of these were described by Reid in 1979, when the mission villages were still relatively new, and they are unfortunately still glaringly obvious today—in fact, they appear to have increased as populations expand in the mission villages and fewer Hup groups maintain a small size and relatively autonomous existence.

One of the most striking problems is the level of nutrition, especially among children. Particularly in the larger villages, such as Tat Deh (Taracuí Igarapé) and Nova Fundação, many children appear visibly malnourished, with swollen bellies and thin limbs. One of the main reasons for this is that game has gradually grown scarce as the forest surrounding the mission villages has been continuously hunted over several decades. In contrast, Reid (1979) describes the nutritional well-being and frequent surpluses of game among the more nomadic groups of Hupd'əh, who when game grew scarce could easily move on to areas where it was more plentiful. In addition to scarcity of game, the sites of the new villages were typically chosen by the missionaries on the basis of accessibility to the river and/or nearby missions, and are often not the best land for agriculture. Even in the best soils of the region, roças must be moved every two years or so, and now (after several decades have passed) many Hup women must walk for up to two hours to reach their gardens, since the cultivatable areas closer to the village have been exhausted.

The health problems of the Hupd'əh are not limited to nutrition (cf. Athias 2004, etc.). Intestinal parasites are a constant and serious problem, and greatly exacerbate the nutritional deficiencies, especially for children. This is undoubtedly due in part to the

fact that their current sanitation practices are better suited to a nomadic lifestyle, where the accumulated filth and debris of human living can be left behind every six months or so. Large population size also leads to greater risk of epidemic and infection, and the initial move from smaller to larger groups in the 1970's and 80's led to widespread outbreaks of disease among the Hupd'əh, in which large numbers of people died.

Nutritional deficiencies also contribute to a lowered resistance to disease, which in turn results in a mortality rate that is alarmingly high: an informal survey of Hup families along the Tiquié River revealed that over 30% of children have died before reaching adulthood within approximately the past 20 years (Herma Klandermans, p.c.), and this rate does not seem to have slowed in the past 5 years. On the other hand, the new pattern of large villages that are relatively accessible to outsiders does facilitate the arrival of health care and medicines through the visits of government-sponsored teams of health agents. If the Hupd'əh were not living in these large communities in the first place, however, their need for some of this medical aid would probably be lessened.

Yet another problem fostered by the missionary settlement pattern is violence. The large number of people living in one place disrupts the traditional patterns of sharing meat and coca, and this in turn fosters and fuels resentments (cf. Reid 1979: 311). Whereas in earlier times such frictions could be defused by the fissioning of the group, this is a less viable option in these villages, and enormous and deadly fights sometimes break out, usually in the context of the drinking party. In 2003, for example, friction among subgroups in Santa Atanasio (Serra dos Porcos), the largest of the mission villages with some 300 or more inhabitants, reportedly led to an extended period of fighting that

lasted for weeks and resulted in a number of deaths, serious injuries, and destroyed houses (see Appendix IV, text 4).

Finally, other problems the Hupd'əh face today are a loss of self-esteem when confronted by the patronizing and disrespectful attitudes of missionaries and others, and the compromising of their relative autonomy vis-à-vis the River Indians by the continuous presence of the latter in Hup villages as teachers and catechists. The resident River Indians typically adopt a leadership role in the village, and are often domineering.

The reasons why the Hupd'əh continue to stay in the mission villages, despite all these problems, are complex, and involve a combination of factors. When the villages were initiated in the 1970's, many Hupd'əh tried to leave, only to be coerced and intimidated into returning by River Indians and missionaries (Reid 1979). Today, while coercion is less of a factor, many Hupd'əh value the medical assistance, the access to the village school for their children (although these schools are currently extremely ineffective, see Epps to appear-c), and the school food stipend sent by the government. They also welcome the opportunity to trade with passing non-Indians, who tend to give them a better rate of exchange than do the River Indians (cf. Reid 1979: 314). Most Hupd'əh, who attribute much illness and death to sorcery or poisoning (usually by River Indians), do not seem to be aware of a connection between large population size, sanitation practices, and illness and violence. Also, the importance to Hup culture of visiting among related kin groups and participating in group rituals and parties makes it difficult for a small family group to break away and live on its own, and even those family groups that did hold out for years after neighboring groups had been attracted to a

larger village usually joined them eventually. Finally, probably all Hupd'əh are very aware of the scale of 'primitive' to 'civilized' that is typically applied among the region's inhabitants. Some version of this scale probably predates European contact, in the sense that a social hierarchy already existed among different River Indian clans and between River Indian and Nadahup peoples (cf. Chernela 1993, Jackson 1983, etc.), but it has since been changed, strengthened, and reified by non-Indians, particularly missionaries. Thus, like the River Indians themselves, some Hupd'əh (especially the young) have apparently come to equate aspects of their traditional lifestyle—such as living 'in the middle of the forest' and hunting with blowpipes and darts rather than with bows and arrows or guns—with being 'primitive'.

Currently, some efforts are being made to bring improved medical care to the Hupd'əh, and to consider ways to initiate a more effective village school system. However, it is not yet clear whether these efforts will meet with much success. At least the lands of the Hupd'əh are safe for the time being, having been demarcated as part of the Upper Rio Negro Indigenous Area in 1996, thereby restricting outsiders' access to the region.

1.7. Methods and presentation of the study

The materials for this grammar were gathered during four trips to the Vaupés region between 2000 and 2004, adding up to a total of about 15 months actually spent in the field. The longest of these trips involved a year spent in the region, divided into two- to

three-month blocks in the Hup villages, with short supply trips (one to two weeks) to São Gabriel in between.

The area where Hup is spoken is relatively remote. After flying to Manaus and then by smaller plane to São Gabriel, one must travel by boat to the Tiquié River. By motorboat, this usually takes from two to three days; by the local riverboat (when it is functional) the trip can last up to five days if the water level is low. Upon reaching the path to the Hup village, I was typically dropped off on the riverbank to make my own way in through the forest while the boat continued on its way.

I divided most of my time in the field between the villages of Tat Deh (Taracúá Igarapé) and Barreira Alta. Like most Hup villages, these have no electricity, telephone, or even a two-way radio. Barreira is near the river and travelers occasionally pass by in boats and even stop for the night, but the only visitors to Tat Deh—which is located an hour's walk through the forest from the river—are Hupd'əh from other towns or the occasional River Indians, health agents, or missionaries. Aside from my occupation as linguist, I lived much like the Hupd'əh: in a thatched hut with stick walls, sleeping in a hammock, bathing in the nearby stream, and usually cooking over a wood fire. I made participant-observation an integral part of my work with the Hup language, so that an understanding and appreciation of their culture would inform my work on the language, and vice versa. I therefore tried to integrate myself as much as possible into the daily life of the community, becoming attached to an 'adopted' family in both villages (especially in Barreira), and eating and interacting together with them and others on a daily basis. I also found time to help with the work in the manioc fields and to participate in

expeditions to gather wild forest fruits, impromptu armadillo and rat hunts, treks on foot to other villages for drinking parties, fishing expeditions with timbó (fish-poison vine, which stuns the fish when put into a creek), and many other activities.

One of the most important factors of my fieldwork was the fact that very few Hupd'əh speak more than a few words of Portuguese. This made the initial stages of my work very difficult. When I first arrived, I of course spoke no Hup, knew very little about the culture, and spent a frustratingly large amount of my time following around after the one busy Hup person in the village who spoke Portuguese, hoping that she would have time to work with me, and worrying that I was making a pest of myself. Eventually, however, the lack of Portuguese became a blessing; completely immersed and surrounded by Hup twenty-four hours a day, I attained a reasonable level of fluency. This allowed me to obtain a considerable amount of data from the spontaneous speech around me, and eventually to have my choice of consultants for tasks that could be carried out without the help of an intermediary language.

My choice of principal consultants was constrained by 1) who in the village spoke enough Portuguese to communicate effectively, and 2) who was interested in working with me. In Tat Deh, I worked mostly with Teresa Monteiro Socot (Mũn), the only Hup schoolteacher in the region, and with Jovino Monteiro (Hũd); I also worked in Hup with Americo Monteiro (M'æh J'ĩh), the village leader, and with Sabino Monteiro (?ăd). In Barreira, I worked principally with Pedro Dias (Yaʔam D'úb), and occasionally in Hup with Jarbas Dias (J'ib Hĩʔ). I also recorded a variety of texts from many people in the region (including those from villages other than Tat Deh and Barreira), including several

old people who are true encyclopedias of stories and traditional knowledge; this has so far amounted to around 600 transcribed pages (mostly handwritten) of narratives, interviews, conversations, songs, spells, etc.

The organization and presentation of this grammar is informed as much as possible by historical and cultural observations, especially when attempting to give explanations for linguistic phenomena. It seeks to view the Hup language as part of a broader system of human discourse and interaction within the context of Hup society and culture. The analysis of the phonetics and phonology was aided by the program Speech Analyzer 1.5, and the discussion of Hup morphosyntax is informed by a functional-typological approach, in keeping with the perspectives presented in Shopen (1985), Givón (2001), etc. At various points throughout the grammar, the synchronic description is supplemented with Historical Notes, which discuss the possible development and grammaticalization of the constructions under consideration, and with Comparative Notes, which compare the Hup phenomena with those found in Tukano, Tariana, and other Vaupés languages, and propose hypotheses relating to areal diffusion.

Conventions in the transcription and glossing of examples are the following. Portuguese and Tukano forms (with the exception of loans that are very well integrated into the Hup language) are generally rendered according to Hup phonology (although speakers vary in their pronunciations of Portuguese words according to their command of this language) and are identified in the interlinear gloss line as (Pt) or (T), respectively. Local Portuguese or *Língua Geral* terms referring to aspects of the regional culture (e.g. ‘caxiri’, ‘tipiti’, ‘roça’) are used in the transcriptions and are defined in Appendix V. The abbreviations used in the glossing of grammatical morphemes are listed on page xv.

In indicating morpheme juncture, a hyphen is used to indicate boundaries between (compounded) verb stems and affixes, while an equals sign marks juncture for clitics and bound nouns. Particles (defined in §3.4.2.2 as grammatically bound formatives that are phonologically relatively free) are written as unattached forms (i.e. separated from their grammatical host by a space), as are most constituents of NPs. In cases where an internally analyzable form has been relexicalized as essentially monomorphemic, no juncture is indicated in the transcription, but the semantic breakdown of the parts is indicated in the gloss line; the general meaning of the full unit as a whole is given in the translation line.

The examples used in this grammar are drawn from a number of sources. The majority come from texts of traditional stories, personal narratives, spells, speeches, and descriptive and hortatory discourse (recorded, transcribed and translated in the field); these examples are coded with a series of letters and numbers corresponding to the text in which they occur. A few examples come from songs (coded as (Song)), and others from spontaneous conversations, coded as (cv.txt); both of these text genres were also recorded and transcribed in the field. Still other examples come from speech I happened to overhear or that was addressed to me in the context of daily life (which I checked afterwards with consultants), glossed (OS) (for ‘Overheard Speech’). Finally, elicited examples are of two types. Many are statements that were volunteered more or less spontaneously by a consultant, often in the context of an elicitation setting (i.e. ‘we say X when...’); these are coded (RU) (for ‘Reported Utterance’). Others are explicit grammaticality judgments and direct translations, glossed as (EL) (for ‘Elicited’); these are relied on as little as possible, but sometimes could not be avoided. Almost all of the

examples herein were double-checked with consultants when the grammar was in draft form.

Additional conventions used in this grammar are the following. I have chosen to capitalize the grammatical labels applied to individual Hup formatives (e.g. Perfective aspect, Future tense). This reflects the fact that these labels are all language-specific to some degree, even when they appeal to categories that are widely attested typologically. Also, in the comparative sections of the grammar involving the other Nadahup languages (Yuhup, Dâw, and Nadëb), I have adapted the orthographies of Martins, Ospina, and Weir to correspond as much as possible to that used with Hup, in order to facilitate comparison on the part of the reader. In some cases, however, the changes necessarily reflect my own analysis of phenomena in Hup phonology, and do not always accurately represent the analyses of these authors. Finally, the orthographic conventions used in this grammar to write the Hup language are discussed in §2.5.

2. Phonology

Hup phonology is fairly complex, and relies on contrasts on both the segmental and the prosodic levels. Not only does Hup have a relatively large inventory of segmental phonemes relative to the neighboring Tukanoan languages, but it also makes use of contrastive tone (realized within a word-accent system)²⁰ and nasalization as morpheme- or syllable-level prosodic features. Hup demonstrates a strong preference for isomorphism between the morpheme and the syllable. The majority of syllables take the form CVC, but CV, CV:, and VC syllables also exist, although in somewhat more limited contexts.

This discussion presents the basic points of Hup phonology, including both segmental and prosodic features. A brief discussion of the phonological differences that exist among the various Hup dialects follows, as well as an overview of orthographic issues. Morphophonemic processes are also dealt with in this chapter; some are touched on early in order to provide the context for discussing consonantal alternations, while others are treated in more detail in the final section (§2.6).

Hup phonology is extremely rich, and not all of the questions posed in the following sections can at this point be fully resolved. These issues must await more detailed explanation and development in future research.

²⁰ In Hup's word-accent system, tonal contrasts occur only on the syllable of the word that receives lexical stress (see §2.3.2). For this reason, stress is not marked independently of tone in the examples in this

2.1. Segmental phonology

Compared to most of its neighbors, Hup has a fairly large repertoire of vowels and consonants. Note, however, that on the segmental level these do not contrast in terms of nasalization; as discussed in detail in §2.3.1 below, nasalization is a morpheme- or syllable-level prosody, and is not a property of the individual segment. In the following discussion, the examples are given in both phonemic and phonetic transcriptions. The phonemic transcriptions for the most part mirror the orthography used in this grammar (see §2.5), with the exception (primarily) of the nasal morphemes;²¹ for these forms the orthographic spelling is given (in italics) alongside the other transcriptions.

2.1.1. Vowels

The Hup vowel inventory is composed of nine contrasting segments:

i	ĩ	u
e	ə	o
æ	a	ɔ

This is in fact a very large vowel inventory for an Amazonian language. Most of the neighboring (non-Nadahup) languages, including Tukano, have more typical six-vowel systems: i, ĩ, u, e, o, a. However, Hup's nine-vowel inventory applies only in non-nasal contexts; in nasal morphemes/syllables the number of contrastive segments is reduced to six (see below). There are no diphthongs or phonemically long vowels in Hup, although phonetic lengthening effects do apply word-finally to CV morphemes (see §2.2).

chapter; instead, word-accent is marked by a diacritic above the vowel: ́ = stress and high (falling) tone; ́̃ = stress and rising tone.

The contrasts distinguishing the Hup vowels in oral contexts are illustrated by the minimal or near-minimal word sets in Table 2.1. (Diacritics marking word-accent are not provided for verb roots; see §2.3.2.2 below for discussion).

Table 2.1. Hup vowel contrasts in oral contexts²²

i	ĩ	u	e	ə	o	æ	a	ɔ
/ciʔ/ [čiʔ] 'urinate'	/cɪʔ/ [čĩʔ] 'slug'	/cuʔ/ [čuʔ] 'grab'	/céʔ/ [čéʔ] 'buriti- palm-leaf basket'	/cɔʔ/ [čɔʔ] 'shrimp'	/cóʔ/ [čóʔ] Locative particle	/cæʔ/ [čæʔ] 'urine smell'	/cáʔ/ [čáʔ] 'box'	/cɔʔ/ [čɔ:] 'rainbow'
/tũg/ [tũg̃] 'stem'		/tũg/ [tũg̃] 'howler monkey'	/tẽg/ [tẽg̃] 'wood'	/təg/ [təg̃] 'tooth'	/tóg/ [tóg̃] 'daughter'			
		/tuk/ [tuk̃] 'want'		/tək/ [tək̃] 'give something to be shared'	/tok/ [tok̃] 'pound w/ mortar & pestle'		/tǎk/ [tǎk̃] 'rubber, sticky sap'	/tɔk/ [tɔk̃] 'thigh'
	/bĩg/ [ᵐbĩg̃] 'anteater'			/bəg/ [ᵐbəg̃] 'bee sp.'			/b'ág/ [bâg̃] 'light'	/bɔg/ [ᵐbɔg̃] 'bundle of vines/ strings'
		/b'uy/ [ᵐbuy] 'throw'	/b'ėj/ [ᵐbēj̃d̃] 'jandiá (fish sp)'		/b'öy/ [ᵐböy] 'traira fish'		/b'ay/ [ᵐbay] 'leave'	/b'ɔy/ [ᵐböy] 'vagina'
	/dĩd/ [ᵐdĩd̃] 'stump'	/dudũd/ [ᵐdurũd̃] 'tadpole'	/dedéʔ/ [ᵐderéb̃] 'round'	/dɔb/ [ᵐdɔb̃] 'many'	/dód/ [ᵐdód̃] 'worm'		/d'ád/ [ᵐdǎd̃] 'jenipapo (dye)'	
/cĩh/ [čĩh] 'grass'	/cĩh/ [čĩh] 'be tired'	/cuh/ [čuh] 'put on string (e.g. beads)'		/cəh/ [čəh] 'sing in kapiwaya ceremony (women)'	/coh/ [čoh] 'walk with a cane'	/cæhæʔ/ [čæhæʔ] 'have food stick in throat'	/j'áh/ [čáh] 'earth'	/cɔh/ [čɔh] 'peck (bird); dig by chipping with instrument'

²¹ Nasal morphemes are indicated phonemically by a tilde preceding the rest of the form /~.../.

²² The phonetic spellings given here use the symbol ʏ to indicate a laryngealized vowel. As discussed in §2.1.2.6 below, vocalic laryngealization is a phonetic effect of a preceding glottalized consonant. The symbol for laryngealization (ʏ) should not be confused with that for nasality (ṽ).

Because nasality in Hup is a morpheme-level (or minimally syllable-level) prosodic feature, vowels are *not* considered to be marked as nasal or oral on the segmental level, as noted above. In nasal environments, however, Hup's vowel inventory is reduced to six contrastive segments:

<i>ĩ</i>	<i>î</i>	<i>ũ</i>
<i>æ̃</i>	<i>ã</i>	<i>õ</i>

This vowel set suggests that nasal environments lead to a neutralization of the mid vowels' contrast with the low and/or high vowels. Since morphemes in Hup are lexically marked as nasal or oral, no cases of alternation between nasal and oral vowels have been encountered that would establish exactly how this neutralization takes place. However, it is worth noting that [î] is sometimes pronounced [õ], most noticeably when the nasal /ĩ/ occurs in the environment of [h]; e.g. /~bĩh/ [mõħ] *mħ* 'ucuqui', /~ʔĩh/ [ʔõh] *ʔħ* 'fire ant'.²³

The contrasts among the Hup vowels in nasal contexts are illustrated by the minimal or near-minimal word sets in Table 2.2:

²³ As mentioned above, nasal morphemes are represented orthographically in italics, since the orthographic representation of nasals differs from the phonetic and phonological representations (a decision made in the interest of user-friendliness; see §2.5).

Table 2.2. Hup vowel contrasts in nasal contexts

ĩ	ĩ̃	ũ	ǣ	ǣ̃	õ
/~bĩh/ [mĩh] <i>mĩh</i> ‘turtle’	/~bĩ̃h/ [mĩ̃h] <i>mĩ̃h</i> ‘ucuqui’	/~bũh/ [mũh] <i>mũh</i> ‘arrow’	/~bǣh/ [mǣh] <i>mǣh</i> ‘younger sister’	/~bǣ̃h/ [mǣ̃h] <i>mǣ̃h</i> ‘nearby’	/~bõh/ [mõh] <i>mõh</i> ‘inambu’
/~kidĩb/ [kĩnim] <i>kinĩm</i> ‘wrist, upper part of hand’	/~dĩ̃b/ [nĩ̃m] <i>nĩ̃m</i> ‘shadow, spirit of dead’		/~dǣ̃b/ [nǣ̃m] <i>nǣ̃m</i> ‘louse’	/~dǣ̃b/ [nǣ̃m] <i>nǣ̃m</i> ‘curare’	
	/~dĩ/ [nĩ:] <i>nĩ</i> ‘keep’		/~dǣ/ [nǣ:] <i>nǣ</i> ‘bring together’	/~daʔ/ [naʔ] <i>naʔ</i> ‘die’	/~doʔ/ [nõʔ] <i>nõʔ</i> ‘give’
	/~tĩhĩy/ [tĩhĩỹ] <i>tĩhĩỹ</i> ‘venomous snake’	/~tuhúʔ/ [tũhũʔ] <i>tũhũʔ</i> ‘phlegm; a cold’	/~tǣ̃h/ [tǣ̃h] <i>tǣ̃h</i> ‘offspring, son’		/~tõh/ [tõh] <i>tõh</i> ‘pig’
/~ʔĩʔ/ [ʔĩʔ] <i>ʔĩʔ</i> ‘Mom’ (vocative)	/~ʔĩ̃h/ [ʔĩ̃h] <i>ʔĩ̃h</i> ‘fire ant’	/~ʔúh/ [ʔúh] <i>ʔúh</i> ‘opposite-sex sibling’		/~ʔǣ̃h/ [ʔǣ̃h] <i>ʔǣ̃h</i> ‘I’ (1sg pronoun)	/~ʔõh/ [ʔõh] <i>ʔõh</i> ‘sleep’

2.1.2. Consonants

Hup has nineteen (or marginally twenty) contrasting consonant segments.²⁴ The consonant inventory is given in Table 2.3:

Table 2.3. The Hup consonant inventory

	Bilabial	Dental-alveolar	Palatal	Velar	Glottal
Voiceless stops	p	t	c	k	ʔ
Voiced stops	b	d	j	g	
Glottalized stops	b', (p')	d'	j'	g'	
Fricatives (voiceless)			ç		h
Glides	w		y		
Glottalized glides	w'		y'		

²⁴ Note that this is much larger than the eleven-consonant inventory of Tukano (cf. Ramirez 1997: 25).

Three of Hup's consonants can only appear in morpheme-final position: /j/, /g/, and /ɟ/. (Note that /p'/ has been encountered only in morpheme-initial position, but occurs in only one word and is not found at all in some Hup dialects.) All other consonants appear in morpheme-initial, medial, and final position (initial and medial positions are subject to the same constraints on which consonants may be present).

While only encountered in morpheme-final position, the consonants /j/, /g/, and /ɟ/ are not in fact limited to syllable codas. As discussed in detail below, when a CVC root is followed by a vowel-initial (-VC) suffix, the final consonant of the root geminates to form both the coda of the first syllable and the onset of the next. It is extremely rare cross-linguistically for a language to have more consonant contrasts in syllable coda position than in onset position (reported only for Toda, Dravidian family; Ian Maddieson, p.c., cf. Shalev et al. 1993); Hup, however, can only be said to have more coda than onset contrasts on an underlying (morphophonemic) level, not on a surface level.

Other relevant observations include the fact that the glottalized consonants in Hup, while represented orthographically as C', are phonetically distinct from the ejective consonants (also written C') found in many other languages. While certain glottalized consonants in Hup can have a mildly ejective realization, glottalization is usually realized quite differently (as laryngealization on a following vowel or as non-release of the consonant when morpheme-final; see §2.1.2.6). Furthermore, Hup's palatal consonants are also somewhat unusual phonetically in that they are frequently pronounced with a strong glide (C^y or ^yC) (as if they were composed phonetically of two segments), but they clearly pattern phonologically as single segments rather than clusters. Note that analyzing these as a *palatalized* series, rather than a palatal series, is probably

inappropriate; if palatalization were a suprasegmental feature associating with consonants, we would expect it to associate with all the stops rather than only with /t/, /d/, and /d'/.

Hup's non-glottalized stops are contrastive on the basis of voicing (voiced vs. voiceless), but not on the basis of nasalization, which—as noted above—is not a property of the individual segment in Hup at all. In oral environments, voiced stops are pre-nasalized (^NC) in morpheme-initial position, post-nasalized (C^N) in morpheme-final position, and may be medially nasalized (C^NC) at morpheme boundaries; in nasal contexts, they are realized as fully nasal (sonorant) allophones. These phenomena are discussed at more length in the subsections below.

2.1.2.1. Consonantal allophones and alternations: morphological context

The allophonic variation of a given consonant segment is determined by several factors. These are the nasal or oral quality of the morpheme, the identity of the adjacent segments, and the position of the consonant (particularly as morpheme-initial, medial, or final).

An intriguing feature of Hup phonology is the fact that variation in the surface realization of a given consonant is determined largely by its position in the morpheme, rather than by its position in the syllable (as onset or coda). While there is some isomorphism in Hup among syllable, morpheme, and phonological word, they frequently do not overlap—especially in the case of verbs. In these cases, it is the morpheme boundary that is the most relevant to determining the surface realization of the consonant.

One of the most important contexts for defining consonantal alternations and allophony is the morpheme boundary between a consonant-final stem and a vowel-initial suffix. The vowel-initial suffixes, discussed in detail in §3.4.1, include Oblique case *-V́t*, Object case *-ǎn*, Dynamic *-V́y*, etc. Driven by Hup's constraint that all syllables have onsets (where possible), these suffixes condition the gemination of the final consonant of the stem, where one exists, in order to provide an onset for the suffix (examples 1-2). When the suffix has an underlyingly specified vowel and the nasality of the suffix differs from that of the stem, the nasal or oral value of the copied consonant corresponds to the value of the suffix, as in (2).

- (1) a) *ʔǎg-ǎy*
 [ʔǎg^ŋ.^ŋgǎy] (fast speech: [ʔǎgǎy])
 drink-DYNM
 'drinking'
- b) *wǎd-ǎy*
 [βǎdⁿ.ⁿdǎy] (fast speech: [βǎrǎy])
 eat-DYNM
 'eating'
- (2) a) *hám-ay*
 [hǎm.bay]
 go-INCH
 'I'm going.'
- b) *ba ʔǎb'-ǎn*
 [baʔǎp.mǎn]
 spirit-OBJ
 'spirit' (object)

In its surface realization, this gemination phenomenon varies to some degree across consonants and speech events. For example, /d/ and sometimes /t/ may be

pronounced as a short flap [ɾ] in intervocalic contexts, and in faster speech consonant duration tends to be shorter.

In general, consonant gemination is most audible when the morpheme-final consonant is a phonetically complex segment—particularly a post-nasalized stop or a glottalized consonant. These segments are made up syntagmatically of multiple phonetic components, whose relative order is determined by their position in the syllable as onset or coda. The consonant’s gemination thus creates an even more complex series of contours, as if a part of the complex segment were copying around the remaining segmental material. For example, a voiced stop that is post-nasalized in coda position will be pre-nasalized in onset position, as illustrated in (1) above. A similar phenomenon occurs with palatal consonants; for example, /pǎç/ [pǎ^yh] ‘stone’ yields /pǎç-át/ [pǎ^yh.h^yát^ʔ] (stone + Oblique case) ‘with a stone’. The post-nasalized voiced palatal stop /j/ produces an even more complex unit: /pǎj/ [pǎ^ydⁿ] ‘umari’ yields /pǎj-æt/ [pǎ^ydⁿ.ⁿd^yæt^ʔ] (umari + Oblique case) ‘with umari’.²⁵

As the discussion below of the individual consonants will illustrate, the gemination phenomenon provides an essential context for revealing consonantal contrasts that may be neutralized in other environments. This is most clearly the case for the glottalized consonants, which undergo alternation according to the morphological context in which they appear.

While these stem + suffix combinations that condition gemination clearly involve two morphemes, other forms in Hup can be understood as having a synchronic identity

that falls somewhere *in between* a monomorphemic and a bimorphemic form. These ‘marginally bimorphemic’ forms are those words that were formed via reduplication and relexicalization. In many cases (though not all) these are only historically bimorphemic, in the sense that they can no longer be taken apart etymologically (for example, no meaningful stem can be identified for most reduplicated nouns in Hup, which are frozen forms; cf. §4.5 and §12.9.3). This morphologically in-between status tends to be reflected in their surface realization. As discussed in more detail in §2.6 below, where the medial consonant appearing in such forms is other than a voiced stop, it typically appears as geminate or long (although this is to some degree optional); when a voiced stop, it tends to surface as a homorganic consonant cluster (voiceless + voiced stop)—resulting in a CVC.CVC template.

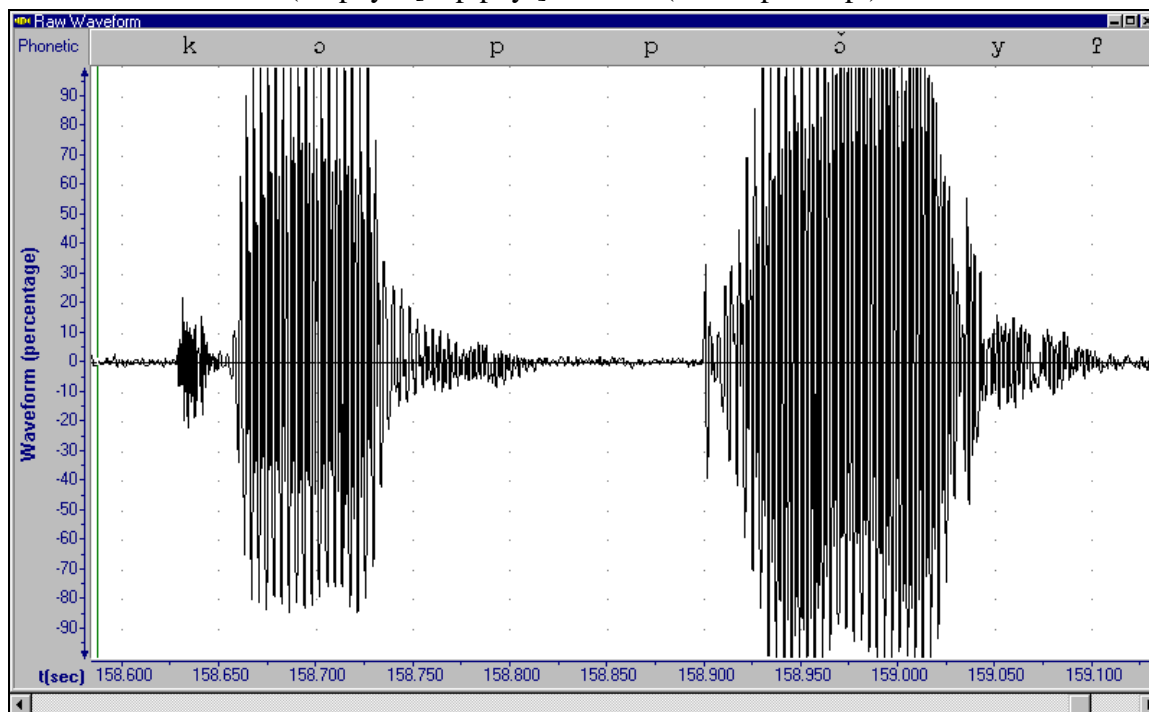
Finally, monomorphemic forms of more than one syllable (e.g. /~bɔhɔ̃y/ *mɔhɔ̃y* ‘deer’) are optionally pronounced as CV.CVC, or may surface with a long or geminate medial consonant which provides a coda to the first syllable and onset to the second (CVC.CVC) (particularly in slow, careful speech). However, even when pronounced long, this medial consonant is almost never realized as the complex contour (such as C^N.^NC) typical of gemination (for some segments) in the context of vowel-initial suffixes, or as the homorganic (voiceless + voiced) consonant cluster found in reduplicated or relexicalized morphemes.

A long or geminate medial consonant in a monomorphemic form is illustrated in Figure 2.1, at the syllable boundary of the word *kɔpɔ̃y* ‘taioba’ (a vegetable). Note that

²⁵ There may, however, be some neutralization of voicing in the part of the consonant that forms the onset of the second syllable.

the first syllable ends in the voiceless stop /p/, which is then reinitiated by a burst at the beginning of the second syllable; the total length of the consonant is at least as long as that of the stressed vowel in the second syllable.

Figure 2.1. Geminata medial consonant
(/kɔpɔy' / [kɔp.pɔy'] 'taioba' (edible plant sp.)



The discussion in the following subsections examines the allophones and distribution of the Hup consonants, and their alternations vis-à-vis their position in the morpheme and in the word—especially in the context of the geminate-conditioning vowel-initial suffixes.

2.1.2.2. Voiceless obstruents

All voiceless obstruents in Hup are unreleased in coda position. They do not undergo nasalization in nasal environments, having no nasal allophones.

A. /p/

The voiceless bilabial stop /p/ in morpheme-initial and medial position is illustrated in the following examples. The right-hand column provides minimal pair contrasts (/p/ ≠ /b/, /p/ ≠ /w/).

- | | | | | | | |
|-----|---------|----------------------|-------------|--------|-----------------------------------|--------------------|
| (3) | /pód/ | [pód ⁿ] | ‘island’ | /bod/ | [^m bod ⁿ] | ‘elope’ |
| | /pǝ́ç/ | [pǝ́ ^y h] | ‘comb’ | /wǝ́ç/ | [wǝ́ ^y h] | ‘fish-trap (type)’ |
| | /pǝ́b’/ | [pǝ́b ^ʔ] | ‘mushroom’ | | | |
| | /~páç/ | [pǎ́ ^y h] | <i>pǎ́ç</i> | | | ‘paternal uncle’ |
- (4) /pǝ́pǝ́p/ [pǝ́pǝ́p^ʔ] ‘small owl’
Or: [pǝ́p.pǝ́p]

The morpheme-final realization of /p/ as [p^ʔ] is illustrated in the following:

- | | | | | | |
|-----|--------|----------------------|----------------------|--------|--|
| (5) | /púp/ | [púp ^ʔ] | ‘paxiuba (palm sp.)’ | | |
| | /hǝ́p/ | [hǝ́p ^ʔ] | ‘dry up’ | /hǝ́b/ | [hǝ́b ^m] ‘hollow (plant part)’ |

B. /t/

The voiceless dental-alveolar stop /t/ occurs in initial position in the examples in (6), and in final position (as [t^ʔ]) in (7). The contrasting words on the right illustrate /t/ ≠ /c/, /t/ ≠ /d/.

- (6) /tóg/ [tôg^ɰ] ‘wood’ /cóg/ [čôg^ɰ] ‘piece, shred’
 /tóg/ [tôg^ɰ] ‘daughter’ /dóg/ [dôg^ɰ] ‘wirapisuna’
 /~tĩhĩy/ [tĩhĩy] tĩhĩy ‘poisonous snake’
- (7) /hăt/ [hăt^ɰ] ‘alligator’ /căc/ [să^yt^ɰ] ‘shoulder’
 /ʔĩt/ [ʔĩt^ɰ] ‘piranha’ /ʔĩd/ [ʔĩd^ɰ] ‘language, speech’

Intervocalically (both morpheme-internally and when followed by a vowel-initial suffix), /t/ is usually realized as a flap [ɾ] in the Tat Deh and Umari Norte area dialects. In the Central dialect region of Barreira and other middle Tiquié villages, it is pronounced [t] (or as long/geminate [t.t]).

- (8) /bɔtɔk/ [ᵐbɔtɔk] ‘ear’
 [ᵐbɔrɔk] (Tat Deh)
 /tetěy/ [tetěy] ‘coral snake’
 [terěy] (Tat Deh)
 /ʔɔt-ɔy/ [ʔɔt.tɔy] [cry-DYNM] ‘crying’
 [ʔɔrɔy] (Tat Deh)

C. /c/

As an onset, the voiceless palatal stop /c/ is usually pronounced as a postalveolar fricative, varying between [ʃ] and [č]. More infrequently, it also appears as [ts], [s] or the palatal [tʲ]. These realizations are essentially in free variation; an individual speaker may alternate between [ʃ] and [č], in particular, from one pronunciation to another of the same word, in the same context. Note that the phonetic spelling in the examples below and elsewhere in this chapter represents this phoneme as [č], but this should be understood as interchangeable with [ʃ] (and, although more rarely, with the other variants). The

contrastive minimal pairs on the right illustrate /c/ ≠ /t/, /c/ ≠ /j'/, and (below) /c/ ≠ /ç/,

/c/ ≠ /j/.

- | | | | | | | |
|-----|---------|----------------------|----------------------|--------|---------------------|------------------|
| (9) | /cǎk/ | [čǎk ^ɿ] | ‘mash (esp. manioc)’ | /tǎk/ | [tǎk ^ɿ] | ‘rubber, sap’ |
| | /cǎy/ | [čǎy] | ‘centipede’ | /j'ǎy/ | [čǎy] | ‘juí (frog sp.)’ |
| | /~cǐm'/ | [čǐmp ^ɿ] | ‘sifting basket’ | | | |

Between vowels, /c/ is realized just as it is in onset position, but—particularly when it geminates before a vowel-initial suffix—the palatal stop [^yt] is frequently audible in the coda of the first syllable, and as [^yt] in the onset of the second. As mentioned above, Hup palatal consonants are somewhat unusual in that they surface phonetically almost as if they were composed of two segments, although they clearly pattern as unitary segments.

- | | | | |
|------|----------|--|-----------------------|
| (10) | /cacáp/ | [čacáp ^ɿ] | ‘smooth’ |
| | | or [ča ^y t.t ^y áp] | |
| | /tác-áy/ | [tácáy] | [kick-DYNM] ‘kicking’ |
| | | or [tá ^y t.t ^y áy] | |

Morpheme-finally, /c/ is realized as the unreleased stop [^yt^ɿ] (except when followed by a vowel-initial suffix). Personal names from Portuguese that are shortened to one syllable provide an example of this allophony: e.g. Roseneia → [hó^yt^ɿ].²⁶

- | | | | | | | |
|------|-------|-----------------------------------|----------------------|-------|-----------------------------------|--------------------|
| (11) | /pác/ | [pá ^y t ^ɿ] | ‘mandube (fish sp.)’ | /pǎç/ | [pǎ ^y h] | ‘stone’ |
| | | | | /pat/ | [pat ^ɿ] | ‘clear vegetation’ |
| | /cǒc/ | [čǒ ^y t ^ɿ] | ‘hoe, digging tool’ | /cǒj/ | [čǒ ^y d ⁿ] | ‘brilliant red’ |

²⁶ Portuguese word-initial /r/ is pronounced /h/.

D. /k/

The voiceless velar stop /k/ occurs in morpheme-initial and medial position, and in final position as unreleased [k̚]. As the minimal pairs demonstrate, /k/ ≠ /ʔ/, /k/ ≠ /t/, /k/ ≠ /g/, and /k/ ≠ /g̊/.

- | | | | | | | |
|------|----------|----------|-------------------|--------|--------|---------------------|
| (12) | /key/ | [key] | ‘see, look at’ | /ʔey/ | [ʔey] | ‘call’ |
| | /kək/ | [kək̚] | ‘pull’ | /tək/ | [tək̚] | ‘give to be shared’ |
| (13) | /~kíkíy/ | [kíkíy̝] | k̥k̥íy̝ ‘winding’ | | | |
| | /kakăh/ | [kakăh] | ‘between’ | | | |
| (14) | /cũk/ | [sũk̚] | ‘small owl type’ | /tóg/ | [tôg̊] | ‘daughter’ |
| | /tők/ | [tők̚] | ‘belly’ | /tóg̊/ | [tók̚] | ‘room, compartment’ |

E. /ʔ/

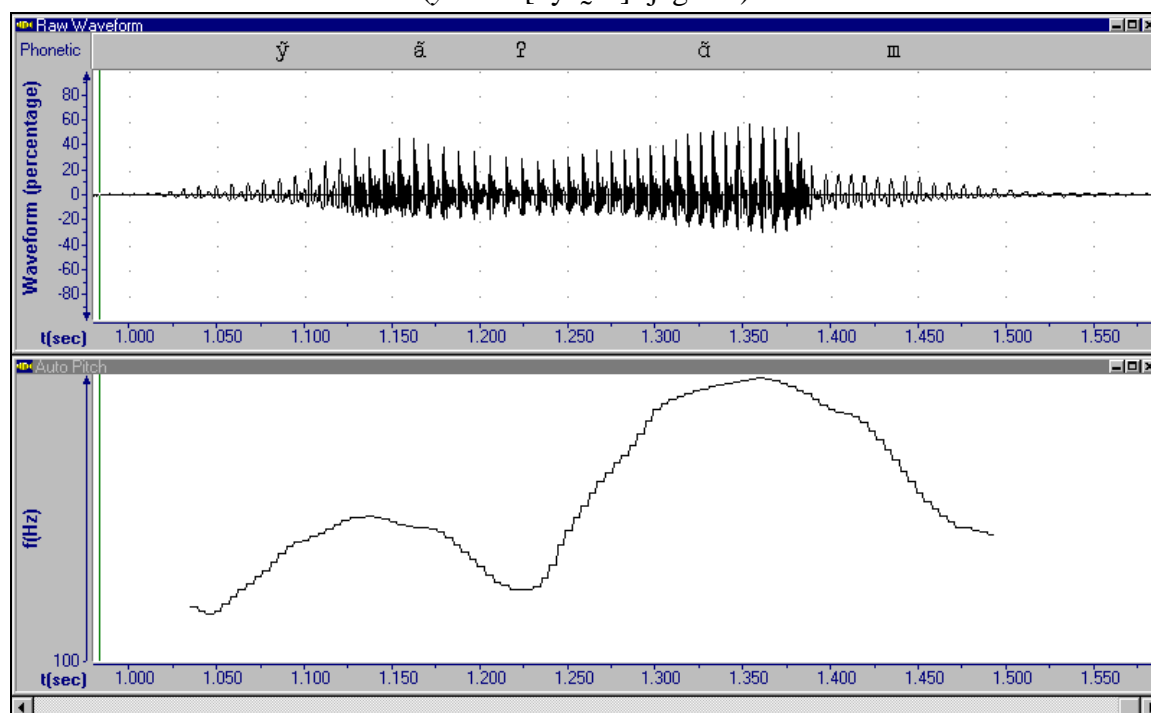
The glottal stop in Hup is a segment in its own right, and can appear in initial and final position, as well as intervocally (morpheme-medially or preceding a vowel-initial suffix). It contrasts with other segments; for example, /ʔ/ ≠ /t/, /ʔ/ ≠ /k/.

- | | | | | | | |
|------|----------|-------------|------------------------------|-------|--------|-------------------|
| (15) | /ʔóg/ | [ʔôg̊] | ‘drink’ | /tóg/ | [tôg̊] | ‘tooth’ |
| | /ʔít/ | [ʔít] | ‘piranha’ | /kit/ | [kit̚] | ‘cut by chopping’ |
| (16) | /ʔiʔid/ | [ʔiʔid̚] | ‘stammer’ | | | |
| | /~yaʔáb/ | [yãʔâm] | yã ʔám ‘jaguar’ | | | |
| | | or: [yããâm] | | | | |
| (17) | /céʔ/ | [čéʔ] | ‘basket made of palm leaves’ | /cet/ | [čet̚] | ‘carry on back’ |
| | /táʔ/ | [táʔ] | ‘Related Instance’ particle | /tăk/ | [tăk̚] | ‘rubber, sap’ |

In a few cases, /ʔ/ forms a default coda in the first syllable in words that are historically bimorphemic but are synchronically lexicalized as monomorphemic. In these cases, /ʔ/ is less constrained in its occurrence than other consonants, in that it can form a non-homorganic medial cluster with the onset of the following syllable (see §2.6 below for more discussion):

- (18) /wiʔwiʔ/ [wiʔwiʔ] ‘tremble’
(reduplicated form)

Figure 2.2. Medial glottal stop realized as vocalic laryngealization
(*yã ʔám* [nỹããm] ‘jaguar’)



2.1.2.3. Voiced obstruents

Voiced obstruents in Hup are pre-nasalized in morpheme-initial position, and post-nasalized in morpheme-final position. Medial nasalization normally occurs when the obstruent-final root is followed by a vowel-initial suffix (i.e. producing a geminate consonant $C^N.NC$). The voiced obstruents are realized as their nasal allophones when they occur in nasal morphemes or syllables.

A. /d/

Morpheme-initially, the voiced alveolar stop /d/ appears as pre-nasalized [nd], and morpheme-finally as postnasalized [d^n]. Note that /d/ \neq /t/, /d/ \neq /j/, and /d/ \neq /d'/.

- | | | | | | | |
|------|-------|-----------------------------------|--------------|-------|-----------------------------------|---------------|
| (19) | /dód/ | [ⁿ dôd ⁿ] | ‘large worm’ | | | |
| | /dú/ | [ⁿ dû:] | ‘grandchild’ | tú/ | [tû] | ‘ground, low’ |
| (20) | /wǣd/ | [βǣd ⁿ] | ‘food’ | /pǣj/ | [pǣ ^y d ⁿ] | ‘umari’ |
| | /tód/ | [tôd ⁿ] | ‘hollow log’ | /tód/ | [tót ^ɿ] | ‘jar, bottle’ |

Within a morpheme, /d/ is typically pronounced as a flap [ɾ]:

- (21) /ci**d**íʔ/ [čiríʔ] ‘bag’

In reduplicated contexts (cf. §2.1.2.1 above and §2.6), medial /d/ may be realized as /r/,

medially nasalized, geminate [d^{n.n}d]:

- (22) /tǔd-út/ [tǔd^{n.n}.dút^ʔ] (support + Oblique case) ‘with the support’
[tǔrút^ʔ]

In lexically nasal morphemes, /~d/ is realized as its nasal allophone [n]:

- (23) /~dĩb/ [nĩm] *nĩm* ‘shadow, spirit of dead’
 /~dudút/ [nũnũt̚] *nunút* ‘moth’
 /~tɔd/ [tɔ̃n] *tɔn-* ‘hold’

B. /b/

Following the general pattern for voiced obstruents, the voiced bilabial stop /b/ is prenasalized [ᵐb] morpheme-initially, and post-nasalized [bᵐ] morpheme-finally. Note that /b/ ≠ /w/, /b/ ≠ /d/, /b/ ≠ /g/, and /b/ ≠ /p/.

- (24) /bǐg/ [ᵐbǐg^ŋ] ‘long time’ /wǐg/ [wǐg^ŋ] ‘seed’
 /bobób/ [ᵐbop.bôb^m] ‘ant sp.’ /dód/ [ᵐdôdⁿ] ‘worm’

- | | | | | | | |
|------|----------------|------------------------------|-----------------------|----------------|------------------------------|-------------|
| (25) | /c ó b/ | [č ó b ^m] | ‘finger’ | /c o g/ | [č ó g ⁿ] | ‘gather up’ |
| | /h ó b/ | [h ó b ^m] | ‘hollow (plant part)’ | /h o p/ | [h ó p ⁿ] | ‘dry up’ |

In reduplicated contexts, where the medial consonant marks the marginal morpheme boundary (see above), /b/ is usually pronounced [pb] (although it occasionally appears as [b] or even—in exaggeratedly slow speech—as medially nasalized [b^mb]).

- | | | | |
|------|-----------------|--------------------------------------|------------------|
| (26) | /b e bé/ | [^m bep.bê:] | ‘small bird sp.’ |
| | | [^m bebê:] | |
| | | [^m beb ^m bê:] | |

This latter variant [b^mb] or [b^m.^mb] is typical when morpheme-final /b/ is followed by a vowel-initial suffix:

- | | | | | |
|------|-------------------|--|----------------|-----------------------------|
| (27) | /w ó b-óy/ | [w ó b ^m . ^m bóy] | [rest.on-DYNM] | ‘be resting on (something)’ |
|------|-------------------|--|----------------|-----------------------------|

In lexically nasal morphemes, /~b/ appears consistently as [m]:

- | | | | | |
|------|-------------------|------------------|---------------------|------------|
| (28) | /~b ǎ b/ | [m ǎ m] | <i>mǎm</i> | ‘axe’ |
| | /~b u bǔy/ | [mũm ǔ ỹ] | <i>mumuỹ</i> | ‘arm’ |
| | /~b ũ d/ | [m ũ n] | <i>muñ</i> | ‘caatinga’ |

C. /j/

The voiced palatal stop /j/ (which corresponds to the IPA symbol ɟ; cf. §2.5) occurs only in morpheme-final position, where it is realized as [ʎdⁿ]. The minimal pairs on the right illustrate that /j/ ≠ /d/, /j/ ≠ /c/.

- | | | | | | | |
|------|----------------|-------------------------------|-----------------|----------------|-------------------------------|---------------------|
| (29) | /tu j / | [tuʎd ⁿ] | ‘light up’ | /tu d / | [tud ⁿ] | ‘support’ |
| | /p ǎ j/ | [p ǎ ʎd ⁿ] | ‘umari’ | /w ǎ d/ | [β ǎ d ⁿ] | ‘food’ |
| | /c ǎ j/ | [č ǎ ʎd ⁿ] | ‘brilliant red’ | /c ǎ c/ | [č ǎ ʎt ⁿ] | ‘hoe, digging tool’ |
| | /t ǎ j/ | [t ǎ ʎd ⁿ] | ‘nose’ | | | |

Before a vowel-initial suffix, morpheme-final /j/ is realized as geminate [^ydⁿ.ⁿd^y] or [^yd.d^y]:

- (30) /tǒj-ót/ [tǒ^ydⁿ.ⁿd^yót^ɿ] (nose + Oblique case) ‘in the nose’

In nasal morphemes, /~j/ appears as [^yn] (and as geminate [^yn.n^y] before a vowel-initial suffix):

- (31) /~tǎj/ [tǎ^yn] ‘jacundá (fish sp.)’
 /~búj/ [mũ^yn] ‘stink’
 /~g’ǒj/ [kǒ^yn] ‘snail’

Note that [d^y] and [n^y] would be the expected morpheme-initial allophones of /j/ if this consonant occurred in morpheme-initial position, which it does not. Instead, while these sounds do occur in Hup, they are morpheme-initial allophonic variants of /y/, as discussed below.

D. /g/

Like /j/ and /ç/, the voiced velar stop /g/ occurs only morpheme-finally, where it is realized as [g^ɳ]. Note that /g/ ≠ /d/, /g/ ≠ /j/, and /g/ ≠ /k/.

- (32) /pǒg/ [pǒg^ɳ] ‘big’ /pód/ [pôdⁿ] ‘island’
 /bǐg/ [bǐg^ɳ] ‘anteater’ /b’ǐj/ [bǐ^ydⁿ] ‘squirrel monkey’
 /cúg/ [čúg^ɳ] ‘hummingbird’ /cúk/ [čúk^ɿ] ‘tool handle’

Before a vowel-initial suffix, /g/ typically appears as medially nasalized [g^ɳ.^ɳg]:

- (33) /bǐg-ít/ [bǐg^ɳ.^ɳgít] (anteater + Oblique case) ‘with the anteater’

In nasal morphemes, /~g/ is realized as its nasal allophone [ɲ]:

- (34) /~dǎǵ/ [nǎǵ] *nǎǵ* ‘honey, candy’
 /~dǎǵ/ [nǎǵ] *nǎǵ* ‘fat, grease’
 /~pǐǵ/ [pǐǵ] *pǐǵ* ‘wild grape’

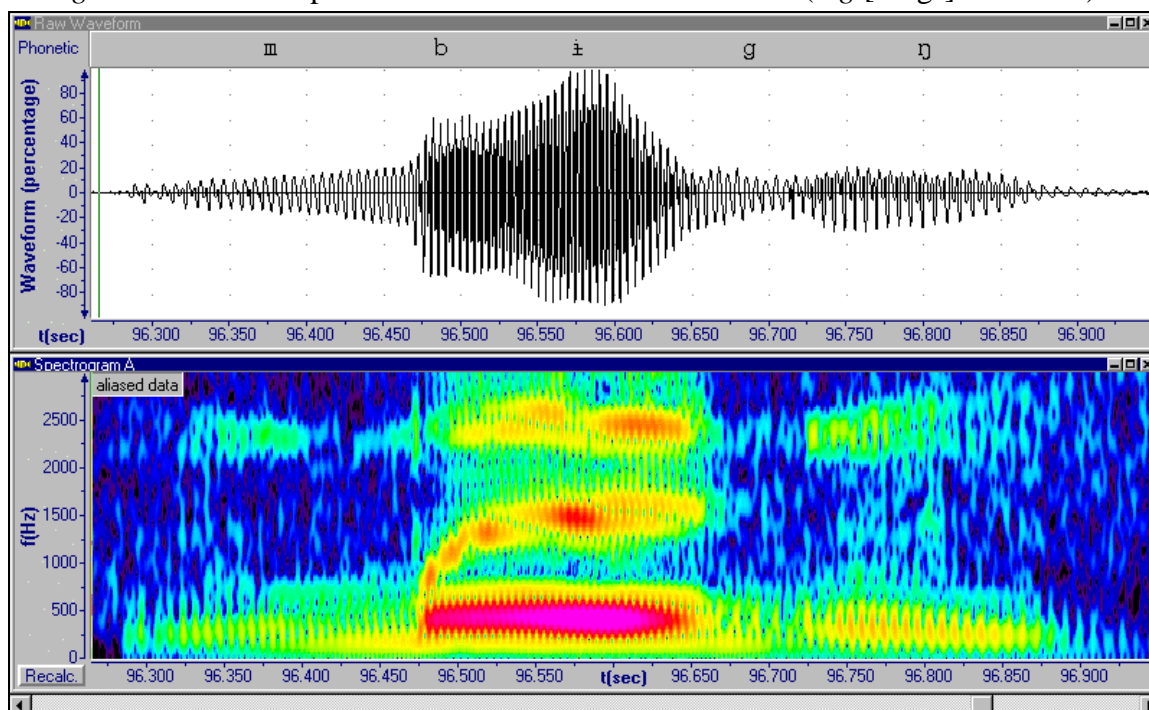
As the examples in this section illustrate, each voiced obstruent segment in Hup has multiple allophones, and at least a trace of nasalization is present in almost all contexts. In nasal environments, these consonants are realized as nasal sonorants; in oral contexts, as pre-, post-, and even medially nasalized contour segments. Such pre- and post-nasalization of voiced obstruents is fairly common in South American languages, and is found in particular in Hup’s Tukanoan neighbors. In fact, according to Wetzels (1995: 291), “the presence of nasal contours represents the unmarked situation in languages in which nasal consonants and contour segments are allophones of underlying voiced obstruents”.²⁷

In Hup, post-nasalization of morpheme-final voiced obstruents is considerably more pronounced and audible than is pre-nasalization, and is obligatory (unless the obstruent is followed by a vowel-initial suffix, when the nasal contour may be left out in fast speech); pre-nasalization is to some degree optional.

Figure 2.3 illustrates pre- and post-nasalization for the Hup word /bǐǵ/ [ʰbǐǵʱ] ‘anteater’. The nasalization is represented by the long, low sections of the waveform, and the low yellow sections (about 250 Hz) of the spectrogram, which precede and follow the rest of the word.

²⁷ My translation.

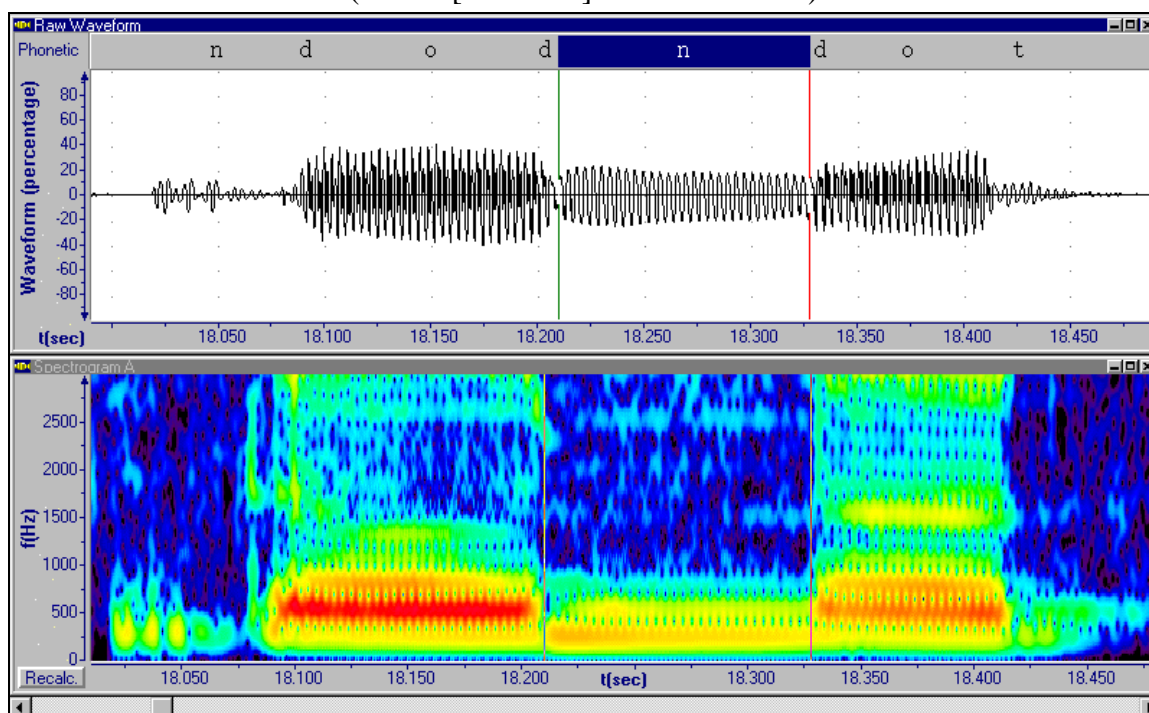
Figure 2.3. Pre- and post-nasalization of voiced obstruents (*bġg* [ʰbġgʱ] ‘anteater’)



Medial nasalization (i.e. C^NC contours between vowels) occurs in some South American languages such as Kaingáng (cf. Wetzels 1995) and Karitiana (cf. Storto 1999). In Hup, it is rarely found outside of bimorphemic contexts involving a vowel-copying suffix (motivated by the need for an onset for the second syllable; see above). In general, medial nasalization is more common in slower speech; in faster speech, it may be absent—for example, when the voiced stop /d/ is pronounced as a flap [ɾ].

Figure 2.4 illustrates medial nasalization of the geminate obstruent /d/ as [dⁿd] (in free variation with the flap [ɾ]). As in Figure 2.3 above, the nasal portion of the segment is represented by the long, low portion of the waveform, and the low yellow section of the spectrogram.

Figure 2.4. Word-medial nasalization of voiced obstruent
(*dód-ót* [ⁿdôdⁿdót^ɿ] ‘with the worm’)



Given that they usually have at least a trace of nasalization in both nasal and oral contexts, how are the voiced obstruents in Hup best understood? Several analyses of similar phenomena in other languages have posited a series of underlyingly *nasal* consonants, in lieu of a simple (nasality-neutral) voiced stop series and in opposition to the voiceless stops. To explain the pre-, post-, and (in some cases) medial nasalization of voiced obstruents in oral contexts (i.e. non-nasal morphemes or syllables), these analyses suggest that the underlying nasals are oralized by the adjacent vowels, resulting in contour segments with both an oral and a nasal component. Such an analysis of underlying nasals instead of a voiced stop series is offered by Brandão Lopes and Parker (1999) for Yuhup, and has also been proposed for the Amazonian languages Kaingáng (Wiesemann 1964, cf. Wetzels 1995) and Karitiana (Storto 1999).

In Hup, however, the question of the underlying nasal or oral identity of segments is probably irrelevant. As a prosodic feature that applies to the morpheme or syllable as a whole (see §2.3.1), nasality (like orality) is not a property of the individual segment at all; segments are simply unspecified for nasality at the underlying level. The meaningful contrast on the level of the obstruent segment is rather one of voiced vs. voiceless, *not* oral vs. nasal.

But since Hup voiced obstruents are underlyingly neither nasal nor oral, what explains their appearance as contour segments (C^N or NC) in oral environments? Arguably, the nasal contours on Hup oral segments are motivated primarily by the phonetic salience of a fully audible release. In coda and/or morpheme-final position, a nasal release is the only reasonable option for a highly audible stop release which will not compromise the CVC form of the syllable (note that all words in Hup must end in a heavy, bimoraic syllable; see §2.2 below). The insertion of an epenthetic vowel after the stop would be equally or even more audibly salient, but would violate this heavy syllable constraint. This audibility of the release is particularly important in Hup because both the series of voiceless stops and that of glottalized stops are unreleased in coda position; were the voiced stops unreleased as well, the contrast between all three of these sets (already essentially neutralized in the case of the voiceless and glottalized stops) would be obscured or completely neutralized.

Likewise, pre-nasalization helps to differentiate the voiced stops from the voiceless stops in onset position; however, the fact that this voiced-voiceless distinction is already relatively audible in this context (even without the pre-nasalization) explains

why post-nasalization is so much more audibly distinctive and near-obligatory than is pre-nasalization in Hup.

2.1.2.4. Fricatives

Hup has only voiceless fricatives, /ç/ and /h/. In nasal environments, these are pronounced as nasal fricatives. Note that the palatal stop /c/ also appears allophonically (in morpheme-initial and medial positions) as a voiceless fricative or affricate, typically realized as [ʃ] or [č].

A. /ç/

The voiceless palatal fricative /ç/ occurs only morpheme-finally, where it is realized as [ʰh]. It is nasalized in nasal contexts. The contrasting words on the right demonstrate that /ç/ ≠ /h/, /ç/ ≠ /c/, and /ç/ ≠ /k/.

- | | | | | | | |
|------|--------|--------|----------------------|--------|---------|----------------------|
| (35) | /g'əç/ | [kəʰh] | 'bite' | /g'əh/ | [kəh] | 'sweet' |
| | /păç/ | [păʰh] | 'stone, hill' | /pác/ | [páʰtʰ] | 'mandube (fish sp.)' |
| | /wəç/ | [wəʰh] | 'fish-trap (type)' | /wək/ | [wəkʰ] | 'sauva ant (type)' |
| | /j'əç/ | [čəʰh] | 'spit' | | | |
| | /~páč/ | [păʰh] | páč 'paternal uncle' | | | |

Before a vowel-initial suffix, /ç/ is realized as geminate [ʰh.hʰ] (this can be contrasted with /c/ in this context, which is realized as [č] or [ʰt.tʰ], see §2.1.2.2C above):

- (36) /păç-át/ [păʰh.hʰátʰ] (stone + Oblique case) 'with a stone'

B. /h/

The voiceless glottal fricative /h/ occurs in morpheme-initial, medial, and final positions, and undergoes nasalization in nasal morphemes. Note that /h/ ≠ /ʔ/ and /h/ ≠ /ç/.

- | | | | | | |
|------|---------|---------------------|----------------------|--------------------------------|--|
| (37) | /húp/ | [húp ^ː] | ‘person, Hup person’ | | |
| | /hɔhɔh/ | [hɔhɔh] | ‘toad’ | | |
| | /~huh/ | [hũh] | <i>hũh-</i> | ‘carry in arms or on shoulder’ | |
-
- | | | | | | | |
|------|--------|-------|--------------------|---------|---------------------|---|
| (38) | /hũh/ | [hũh] | ‘rapid, waterfall’ | /húʔ/ | [húʔ] | ‘pium (insect)’ |
| | /wĩh/ | [βĩh] | ‘hawk’ | /wiç/ | [βi ^y h] | ‘whistle (using fingers)’ |
| | /póh/ | [póh] | ‘high’ | | | |
| | /~bũh/ | [mũh] | <i>muĩh</i> | ‘arrow’ | /~ʔũh/ | [ʔũh] <i>ʔũh</i> ‘opposite-sex sibling’ |

2.1.2.5. Glides

Hup has two (non-glottalized) glides, /w/ and /y/. Both are nasalized in nasal contexts.

A. /w/

The bilabial glide /w/ occurs in morpheme-initial, final, and intervocalic position. It is pronounced [β] before front vowels (/æ/, /e/, and especially the high front vowel /i/), and is pronounced [w] before all other vowels. Contrasts with other consonants include /w/ ≠ /p/ and /w/ ≠ /b/.

- | | | | | | |
|------|-------|-----------------------------------|--------------------------|-------|---|
| (39) | /wĩh/ | [βĩh] | ‘hawk’ | | |
| | /wěç/ | [βě ^y t ^ː] | ‘maroon-tailed parakeet’ | /péc/ | [pé ^y t ^ː] ‘(fish) scales’ |
-
- | | | | | | |
|------|---------|-----------------------|--------------------|---------|---|
| (40) | /wowŏw/ | [wowŏw] | ‘fly (insect) sp.’ | /bobób/ | [^m bop.bôb ^m] ‘ant sp.’ |
| | /ciwĩb/ | [čĩβĩb ^m] | ‘bacaba’ | | |

- (41) /kɔ́w/ [kɔ́w] ‘hot pepper’
 /wĩw/ [βĩw] ‘tocandira ant’

In nasal morphemes, /w/ is nasalized [w̃] or [β̃]:

- (42) /~wáʔ/ [w̃áʔ] wáʔ ‘vulture’
 /~wǎç/ [β̃ǎ̃ʰ] wǎ̃ç ‘dove’
 /~wawaw/ [w̃ǎ̃w̃ǎ̃w̃] wǎ̃wǎ̃w- ‘stammar’

B. /y/

Because the realization of /y/ is more complex in morpheme-initial context than in morpheme-final context, I begin with the latter for the sake of clarity. Morpheme-finally and between vowels, /y/ is realized as [y], or as nasalized [ỹ] in nasal contexts. It

contrasts with the other palatals in final position: /y/ ≠ /ç/, /y/ ≠ /j/, and /y/ ≠ /c/.

- (43) /páy/ [páy] ‘bad’ /pǎç/ [pǎ̃ʰ] ‘stone, hill’
 /cǎy/ [sǎy] ‘centipede’ /caj/ [saʔd̃] ‘lean with shoulder’
 /~bohǎy/ [mɔ̃hǎ̃ỹ] mɔ̃hǎ̃ ‘deer’
- (44) /yiyĩw/ [ᵈyiyĩw] ‘ant sp.’ /cǎc/ [sǎ̃ʰt̃] ‘shoulder’
 /tiyĩʔ/ [tiyĩʔ] ‘man’

We now turn to the behavior of /y/ morpheme-initially. Other than the palatal stop /c/, which is usually pronounced as a fricative when not morpheme-final, the glide /y/ (and its glottalized counterpart /yʔ/, see below) is the only palatal consonant allowed in non-morpheme-final position. In initial position, /y/ is pronounced [ᵈy] or [ⁿy] (depending on the oral or nasal context). This represents a neutralization of the contrast that exists elsewhere (i.e. morpheme-finally) between the palatal glide /y/ [y] and the

voiced palatal stop /j/ ([^yd], or [d^y] when geminate and forming the onset of a vowel-initial suffix syllable). That this sound [d^y] / [n^y] in morpheme-initial position represents underlying /y/ and not a morpheme-initial realization of /j/ is supported by two points. First, since both the sound [d^y] and the stop phoneme /j/ are absent from morpheme-medial environments, and because consonants that cannot appear medially also do not appear initially in Hup, initial [d^y] cannot be the phoneme /j/. Second, reduplication phenomena also indicate that [d^y] and [y] are allophones, hence realizations of the same phoneme /y/. For example, the verb /yo/ [d^yyo] ‘swing from hand’ is reduplicated to form /yoyo/ [d^yyoyo] ‘swing back and forth’, in which the initial and medial consonants are phonetically different but must be underlyingly identical.

The morpheme-initial realization of /y/ as [d^y] in oral morphemes is illustrated in (45), and as [n^y] in nasal morphemes in (46). Note that /y/ contrasts with other palatals and glides, e.g. /y/ ≠ /w/ and /y/ ≠ /c/.

- | | | | | | | |
|------|----------|--|-----------------------------|--------|-------|-------------|
| (45) | /yáy/ | [^d yáy] | ‘fish sp.’ | /way/ | [way] | ‘go out’ |
| | /yíb/ | [^d yíb ^m] | ‘slick’ | /căy/ | [căy] | ‘centipede’ |
| (46) | /~yǎh/ | [ⁿ yǎh] | yǎh ‘medicine’ | /~wǎh/ | [wǎh] | wǎh ‘resin’ |
| | /~yɔʔɔb/ | [ⁿ yɔʔɔm] or [ⁿ yɔʔɔm] | yɔʔɔm ‘dangerous, powerful’ | | | |

2.1.2.6. Glottalized consonants

The glottalized consonant series in Hup includes both glottalized stops and glottalized glides. Voicing distinctions are neutralized for the entire series of glottalized consonants (with the exception of the marginal phoneme /p’/, which contrasts with /b’/ but is found in only one word). In morpheme-initial position, the glottalized stops /j’/ and /g’/ are

realized phonetically as voiceless (i.e. they sound as if they should be written *c'* and *k'*),²⁸ while in this position /b'/ and /d'/ are realized phonetically as voiced. Note that the non-glottalized voiced stops /j/ and /g/—the counterparts of /j'/ [cV] and /g'/ [kV]—cannot occur in morpheme-initial (or medial) position at all, and the voiceless phonetic realization of glottalized /j'/ and /g'/ is in harmony with this fact. In coda position, the glottalized stops are all realized phonetically as unreleased (i.e. *not* post-nasalized) stops; in oral contexts, the distinction between them and the voiceless stops—which are also unreleased in final position—is neutralized.

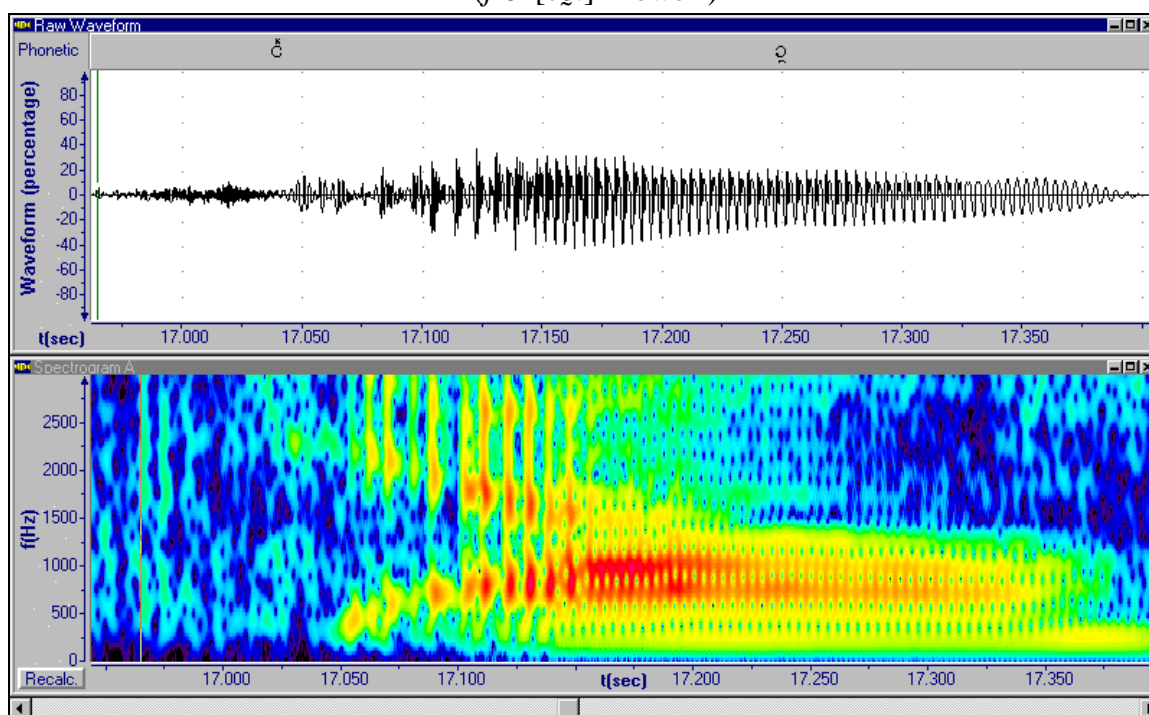
When the glottalized consonants appear in onset position, the most audible realization of the glottalization comes on the following vowel—typically much more so than on the consonant itself (although the phonetically voiceless /j'/ and /g'/ may in some cases sound mildly ejective). This following vowel is consistently laryngealized; in other words, pronounced with ‘creaky voice’ (represented phonetically as V̤). Arguments against analyzing this laryngealization as a phonemic property of Hup vowels (rather than as a phonetic effect of the glottalized consonants) are given below. As noted above, the glottalized consonants in Hup differ markedly in their phonetic realization from the ejective consonants found in other languages.

Figure 2.5 illustrates this laryngealization effect for the word /j'ɔ/ [čɔ̤:] ‘flower’.

The laryngealization or ‘creaky voice’ can be seen in the long intervals between the peaks of the waveform and spectrogram in the initial section of the word.

²⁸ While the choice to represent the glottalized obstruent series using the voiced obstruent symbols is somewhat arbitrary, it allows for the distinction between /b'/ and phonemically marginal /p'/, and is consistent with the fact that both the voiced obstruents and the glottalized stops have nasal allophones (and

Figure 2.5. Glottalized consonant in onset position: laryngealization of following vowel (j'ɔ̥ [čɔ̥:] 'flower')



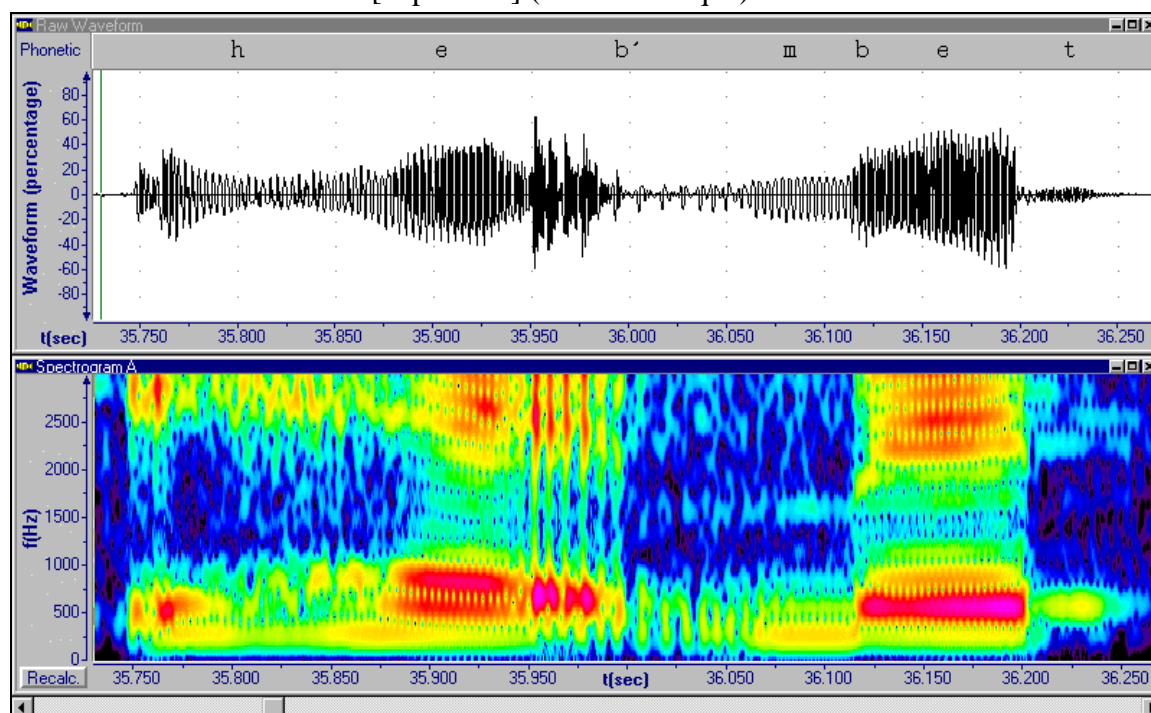
As mentioned in §2.1.2.2 above, a segmental glottal stop can also condition weak phonetic laryngealization on the surrounding vowels. Nevertheless, C'V? and CV? words do contrast, mainly by the relative strength of the laryngealization and by its location on the beginning vs. the end of the vowel segment (i.e. in C'V? syllables, the entire vowel is laryngealized, but most strongly on its initial part; in CV? syllables, only the end of the vowel segment is laryngealized, and only slightly). Examples of this contrast include /yúʔ/ [yúʔ] 'burn (IMP)' and /y'úʔ/ [y'úʔ] 'soft, flexible'; /cáʔ/ [cáʔ] 'box, nest' and /j'áʔ/ [čáʔ] 'turí wood'.

in the case of the phonetically voiced glottalized stops /b'/ and /d'/, they can be pre-nasalized in oral contexts), whereas the voiceless stops do not.

Because morpheme-final glottalized stops are phonetically unreleased and cannot be audibly distinguished from voiceless stops (except in nasal contexts or when followed by a vowel-initial suffix), the contrast between these segments in this position is effectively neutralized. That native speakers do not hear a difference is clear from their efforts at writing in Hup literacy sessions. When trying to write a word ending in a glottalized stop, speakers tend to write a simple voiceless stop; only after adding a vowel-initial suffix—in the context of which the contrast between a morpheme-final glottalized stop and voiceless stop is clear—are they aware of the contrast.

The underlying difference between final voiceless stops and final glottalized stops in oral contexts emerges through the alternations undergone by a morpheme-final glottalized stop. While the difference between the two types of consonant is neutralized in word-final position, they behave differently when followed by a vowel-initial suffix. In this environment, the consonant geminates in order to produce an onset for the following syllable (as discussed in §2.1.2.1); glottalized stops surface with voicing and pre-nasalization in this onset position, whereas voiceless stops do not. For example, the voiceless stop /p/ in this intervocalic context is realized as [CVp.pVC], whereas the geminate glottalized stop /b'/ is realized as [CVp.^mbVC] or [CVb'.^mbVC]. This is illustrated for the word *heb'-et* [hép'.^mbét'] ('fan' + Oblique) 'with a fan' in Figure 2.6; note that some laryngealization—realized as relatively long intervals between wave peaks—is evident at the morpheme boundary (but is *not* realized on the vowel of the suffix):

Figure 2.6. Glottalized stop followed by vowel-initial suffix
heb'-et [hépʰ.ᵐbét] ('fan' + Oblique) 'with a fan'



I. Glottalized obstruents

As mentioned above, voicing contrasts are neutralized in these segments. Those that are phonetically voiced (in onset position)—/bʰ/ and /dʰ/—are pre-nasalized; phonetically voiceless /jʰ/ and /gʰ/ are not.

A. /bʰ/

In morpheme-initial and morpheme-medial position, /bʰ/ conditions laryngealization on the following vowel: [ᵐbV]. Note that /bʰ/ ≠ /b/ and /bʰ/ ≠ /p/.

- (47) /b'ǎh/ [ᵐbǎh] 'flat thing' /báh/ [ᵐbáh] 'acara (fish sp.)'
 /b'ǎʔ/ [ᵐbǎʔ] 'beiju' /páʔ/ [páʔ] 'shallow atura basket'
 /b'öy/ [ᵐböy] 'traira fish'
 /b'úg'/ [ᵐbükʷ] 'hill'
 /b'ab'ǎw/ [bap.bǎw] 'snake sp.'

Morpheme-finally, /b'/ is realized as [bʷ] or [pʷ]. Following the general pattern, the contrast between /b'/ and voiceless stop /p/ [pʷ] is effectively neutralized in this context.

- (48) /báb'/ [ᵐbápʷ] 'sibling' /d'éb'/ [ᵐdépʷ] 'lightning bug type' /dedéb/ [ᵐderébᵐ] 'round'
 /pǎb'/ [pǎpʷ] 'mushroom' /pəpǎp/ [pəpǎpʷ] 'small owl'
 /ʔib'/ [ʔipʷ] 'life'
 /bibib'/ [ᵐbip.bípʷ] 'squirrel'

The contrast between glottalized /b'/ and voiceless /p/ in morpheme-final position is only realized when the root ending in /b'/ is directly followed by a vowel-initial suffix. In this context, /b'/ geminates as the complex segment [p.ᵐb] (or [bʷ.ᵐb]), and contrasts clearly with voiceless /p/ in the same environment:

- (49) /pǎb'-ét/ [pǎp.ᵐbótʷ] (mushroom + Oblique case) 'with mushroom'
 (50) /pəpǎp-ét/ [pəpǎp.pótʷ] (small owl + Oblique case) 'with small owl'

In nasal morphemes, /~b'/ is realized in onset position as [mV], and in coda position as [mpʷ]. The difference between morpheme-final /~b'/ and /~p/ in nasal contexts is not fully neutralized, in contrast to oral contexts, although it is relatively difficult to distinguish.

- (51) /~b'áb/ [mǎ́m] *m'ám* 'termite type' /~bab/ [mām] *mam-* 'lean sideways'
 /~b'ǎh/ [mǎ́h] *m'ǎh* 'water snake' /~bǎh/ [mǎ́h] *mǎh* 'younger sister'
 /~b'uc/ [mṹt̚] *m'uc-* 'suck on' /~bũc/ [mṹt̚] *mũc* 'clay wind instrument'
- (52) /~sĩb'/ [čĩmp̚] *cĩm'* 'sifting basket' /~j'ip/ [čĩp] *j'ĩp-* 'tie up'
 /~d'æb'/ [næmp̚] *n'æm'* 'lick' /~dǎb/ [nǎm] *nǎm* 'louse'

Before a vowel-initial suffix, geminate nasal /~b'/ is pronounced [mp.m]; note that in this context it does not condition laryngealization on the following vowel (example 53).

Compare /~p/ (= [p]) in this context in a nasal morpheme (example 54).

- (53) /~sĩb'-ĩt/ [čĩmp.mĩt̚] *cĩm'-ĩt* (basket + Oblique case) 'sifting basket'
 (54) /~j'ip-ĩy/ [čĩp.pĩy] *j'ĩp-ĩy* (tie up + Dynamic) 'tie up'

B. (p')

Glottalized /p'/ is an extremely marginal phoneme in Hup. It occurs in only one word: /p'ǎy/ [pǎy] 'priest' (probably from Nheengatú *pai*; cf. Grenand and Ferreira, no date: 124). Moreover, even this one occurrence of /p'/ is limited to certain dialect areas (the Tat Deh and Barreira regions), while the same word 'priest' is realized as /b'ǎy/ [ᵐbǎy] in the Vaupés area dialect (compare the homonym /b'ay/ [ᵐbay] 'return', found in all Hup dialects). This marginal existence of /p'/ suggests the possibility that these Hup dialects may someday develop a voicing contrast for the two phonetically voiced glottalized obstruents in morpheme-initial position, analogously to the voicing contrast which exists for non-glottalized obstruents generally.

C. /d'/

In initial position, /d'/ is realized as [ᵀdᵛ]. The words on the right illustrate the contrasts /d'/ ≠ /d/, /d'/ ≠ /t/.

- | | | | | | | |
|------|--------|---------|------------|-------|---------|---------------|
| (55) | /d'oʔ/ | [ᵀdʊʔ] | 'take' | /dóʔ/ | [ᵀdóʔ] | 'child' |
| | /d'ǎd/ | [ᵀdǎdᵀ] | 'genipapo' | /dód/ | [ᵀdódᵀ] | 'large worm' |
| | /d'ũç/ | [ᵀdũᵛh] | 'timbó' | /tód/ | [tódᵀ] | 'hollow tree' |

In reduplicated contexts, /d'/ may appear as [t.dᵛ], providing both a coda to the first syllable and an onset to the second; it may also occur as a flap [ɾ].

- (56) /d'id'fb/ [ᵀdʲt.dʲbᵐ] 'curly'

In final position, /d'/ appears as [dᵀ] or [tᵀ]. Without a following vowel-initial suffix, the distinction between [dᵀ] and the voiceless stop [tᵀ] (as in *tút* 'cold') is neutralized:

- | | | | | | | |
|------|--------|--------|---------------------------------|-------|--------|---------------|
| (57) | /tód'/ | [tótᵀ] | 'jar, bottle' | /tód/ | [tódᵀ] | 'hollow tree' |
| | /búd'/ | [bútᵀ] | 'roll around something' | /tút/ | [tútᵀ] | 'cold' |
| | /ʔěd'/ | [ʔětᵀ] | 'flute made from deer leg bone' | | | |

Once again, the underlying contrast between morpheme-final /d'/ and /t/ is brought out in the context of a vowel-initial suffix, where geminate /d'/ takes on voicing and a nasal contour: [t.ᵀd] or [dᵀ.ᵀd]. Again, the complex geminate consonant does not condition laryngealization on the following vowel. It can be contrasted with voiceless /t/ in the same context (example 59).

- | | | | | |
|------|-----------|-------------|----------------------|--------------------|
| (58) | /tód'-ót/ | [tót.ᵀdótᵀ] | (jar + Oblique case) | 'with jar, bottle' |
| (59) | /tút-úy/ | [tút.túy] | (cold + Dynamic) | 'be cold' |

In nasal morphemes, /~d'/ is realized as [nV] morpheme-initially (60), and unreleased [nt̚] morpheme-finally (61) (note that in nasal contexts, the difference between /~d'/ and voiceless /~t/ is not completely neutralized, as noted for /~b'/ above).

- (60) /~d'ád/ [nân] *n'án* 'foot flea (bicho-do-pé)'
 /~d'æb'/ [næmp̚] *n'æm'* 'lick' /~d'æb/ [næ̃m] *næ̃m* 'louse'
- (61) /~píd'/ [p̚int̚] *p̚ĩn'* 'puçanga (love-charm)' /~pít/ [p̚it̚] *p̚ĩt* 'paraná'
 /~wǒd'/ [w̚ǒnt̚] *w̚ǒn'* 'mingau' /~wǒt/ [w̚ǒt̚] *w̚ǒt* 'pull out'
 /~pǎd'/ [p̚ǎnt̚] *p̚ǎn'* 'beiju type'²⁹ /~pát/ [p̚át̚] *p̚át* 'hair'

Before a vowel-initial suffix, nasal /~d'/ appears as geminate [nt.n]; compare this with /t/ in the same nasal context (63):

- (62) /~pǎd'-át/ [p̚ánt.nát̚] *p̚ǎn'-át̚* (beiju + Oblique case) 'with beiju'
- (63) /~pát-át/ [p̚át.tát̚] *p̚át-át̚* (hair + Oblique case) 'with hair'

D. /j'/

Morpheme-initially and medially, /j'/ is phonetically voiceless: [čV]. As discussed in §2.1.2.5 above, this voiceless realization is consistent with the absence of the non-glottalized voiced palatal stop /j/ from morpheme-initial or medial position. Note that /j'/ ≠ /c/.

²⁹ In the Tat Deh and Barreira dialects, *p̚ǎn'* refers to a beiju-like flat bread that is made not from manioc (unlike ordinary beiju) but from umari seeds or other gathered foodstuffs. In the Umari norte region, *p̚ǎn'* is used to refer to manioc beiju as well as bread made from other sources.

- (64) /j'ǎy/ [čǎy] 'juí frog sp.' /cǎy/ [čǎy] 'centipede'
 /j'ǎk/ [čǎk^ː] 'buriti' /cǎk/ [čǎk^ː] 'mash
 (usu. manioc)'
 /j'óp/ [čóp^ː] 'tapuru parasitic worm' /cóp/ [čóp^ː] 'disposable drinking
 cup made from a leaf'
 /j'ǎʔ/ [čǎʔ] 'packet made from leaves' /cǎʔ/ [čǎʔ] 'shrimp'
 /j'ij'ib/ [čičip^ː] 'fly sp.'

Morpheme-final /j'/ is realized as [ʏd^ː] or [ʏt^ː], effectively indistinguishable from the voiceless palatal stop [ʏt^ː]. Final /j'/ also contrasts with /j/, in addition to other segments:

/j'/ ≠ /j/.

- (65) /cǎj'/ [čǎʏt^ː] 'cicada type' /pǎj/ [pǎʏd^ː] 'umari'
 /bǎj'/ [m^hbǎʏt^ː] 'dragonfly type'
 /wáj'/ [wáʏt^ː] 'tree frog type' /wǎc/ [wǎʏt^ː] 'pull off
 (clothes), pull out (plants)'

Before a vowel-initial suffix, the contrast between /c/ and /j'/ is no longer neutralized; geminate /j'/ is realized as [ʏt.ⁿd^ː] or [ʏd^ː.ⁿd^ː]. Compare /c/ in the same environment (example 67).

- (66) /cǎj'-ǎt/ [čǎʏt.ⁿd^ːǎt^ː] (cicada + Oblique case) 'with cicada type'
 (67) /wǎc-ǎy/ [wǎʏt.ⁿt^ːǎy] (pull off + Dynamic) 'pulling off'

In nasal morphemes, /~j'/ is [čǎ̃] morpheme-initially and [j̃n^ː] morpheme-finally:

- (68) /~j'áh/ [čǎ̃h] j'áh 'cará (potato-like tuber)'
 /~j'ip/ [čǎ̃p] j'ip- 'tie up'
 (69) /~b'ǎj'/ [mǎ̃j̃n^ː] m'ǎj' 'mud'
 /~bǎj'/ [mǎ̃j̃n^ː] mǎj' 'murici (edible fruit sp.)'

Before a vowel-initial suffix, /~j'/ is realized as [ỹn^ː.ⁿy] or [ỹnt.ⁿy]; compare this with /y'/ in the same context (71):³⁰

(70) /~b'ǎj'-át/ [mǎ^ỹnt.ⁿỹát^ː] m'ǎj'-ǎt̃ (mud + Oblique) 'in the mud, with mud'

(71) /~s'iy'-ít/ [čṛ̌t.ⁿỹít^ː] or [čṛ̌ỵ.ⁿỹít^ː] cṛ̌y'-ĩt̃ (poke in + Oblique)
'at the time of poking in'

E. /g'/

Like /j'/, the glottalized velar stop /g'/ is phonetically voiceless in morpheme-initial and medial position, where it is realized as [kʷ̚]. Also as in the case of /j'/, this fact is consistent with the absence of the non-glottalized voiced stop /g/ morpheme-initially and medially. Note that /g'/ ≠ /k/ and (in final position; example 73) /g'/ ≠ /g/.

(72)	/g'ɔp/	[kɔp̚ː]	'serve drink'	/kɔp/	[kɔp̚ː]	'be rotten'
	/g'ðh/	[kð̚h]	'minnow, tiny fish'	/kðh/	[kð̚h]	'fruit sp.'
	/g'a/	[kɑː]	'straighten'	/ká/	[káː]	'line (of people, etc.)'
	/g'ög/	[kög̚ː]	'titi monkey'			
	/g'ag'ǎw/	[kǎkǎw]	'lymph node'			

Morpheme-finally, /g'/ is pronounced [g̚ː] or [k̚ː] and, according to the general pattern, its contrast with the voiceless stop /k/ ([k̚ː]) is neutralized when no suffix follows:

(73)	/káɡ'/	[kák̚ː]	'forehead'		
	/tóɡ'/	[tók̚ː]	'room, compartment'	/tóɡ/	[tôg̚ː]
	/b'úɡ'/	[búk̚ː]	'hill'	/tők/	[tők̚ː]
					'daughter'
					'belly'

³⁰ Morpheme-final nasal /~j'/ ([yn̚ː]) may be difficult to distinguish from the phoneme /~y'/ in nasal contexts. This is because morpheme-final /~y'/, when it geminates in the context of a following vowel-initial suffix, forms an onset [̣y] to the second syllable, just as does nasal /~j'/.

Once again, the contrast becomes audible when /g'/ is followed by a vowel-initial suffix, and accordingly becomes geminate [k.^ɰg] or [g'.^ɰg]; compare non-glottalized /g/ and voiceless /k/ in the same context:

- (74) /tóg'-ót/ [tók.^ɰgót] (room + Oblique case) 'in the room'
- (75) /tóg'-ót/ [tôg'.^ɰgót'] (daughter + Oblique case) 'with daughter'
- /tók'-ót/ [tók.kót'] (belly + Oblique case) 'in the belly'

In nasal morphemes, /~g'/ appears as [k̃] morpheme-initially and as [ŋ'] morpheme-finally:

- (76) /~g'aʔ/ [k'ãʔ] g'ãʔ- 'be suspended'
- /~g'ɔc/ [k̃ɔ̃'t'] g'ɔc- 'pick by hand' /~kɔc/ [k̃ɔ̃'t'] k̃ɔc- 'scrape out fruit from shell'
- (77) /~ʔǫg'/ [ʔǫŋ'] ʔǫg' 'throat'

Before a vowel-initial suffix nasalized /g'/ is geminate and appears as [ŋk.ŋ]; compare voiceless /k/ in the same environment:

- (78) /~ʔǫg'-ót/ [ʔǫŋk.ŋót'] ʔǫg'-ót (throat + Oblique case) 'in the throat'
- (79) /~hɔk'-ót/ [h̃ɔk.kót'] h̃ɔk'-ót (cut/caw + Oblique) 'at the time of cutting with sawing motion'

II. Glottalized glides

Both of Hup's glide consonants have glottalized counterparts. These are always voiced, both phonemically and phonetically (as are the non-glottalized glides). In morpheme-final position the glottalized glides are phonetically equivalent to a glide + glottal stop cluster.

A. /wʰ/

Like Hup's other glottalized consonants, morpheme-initial and medial /wʰ/ is most easily identified by the laryngealization it conditions on the following vowel: [wʰV].

The contrastive words on the right illustrate /wʰ/ ≠ /w/.

- | | | | | | | |
|------|--------|---------------------|---------------------------|-------|---------------------|----------------------|
| (80) | /wʰob/ | [wɔb ^m] | 'set onto' (trans. verb) | /wob/ | [wɔb ^m] | 'rest on' (intrans.) |
| | /wʰət/ | [wət̚] | 'long' | | | |
| | /wʰəh/ | [wəh] | 'large sarapó (fish) sp.' | /wəh/ | [wəh] | 'River Indian' |
| | /wʰih/ | [βih] | 'small sarapó (fish) sp.' | /wih/ | [βih] | 'hawk' |

Morpheme-finally, /wʰ/ is realized as [wʰ̚]:

- | | | | |
|------|---------|---------|-----------------------|
| (81) | /ʔéwʰ/ | [ʔéwʰ̚] | 'small bird sp.' |
| | /púwʰ/ | [púwʰ̚] | 'rotten bits of wood' |
| | /j'ǎwʰ/ | [čǎwʰ̚] | 'dirtiness, filth' |

Before a vowel-initial suffix, geminate /wʰ/ is realized as [wʰ̚.w]; which contrasts with intervocalic /ʔ/ (82-83). (By contrast, the coincidence of a final /w/ and initial /ʔ/ across a morpheme boundary is realized as a simple [wʔ] sequence, whereas in the geminate the glide appears to 'copy' around the glottal component.)

- | | | | | |
|------|-----------|--------------|------------------------------|--------------------------|
| (82) | /ʔéwʰ-ét/ | [ʔéwʰ̚.wét̚] | (bird + Oblique case) | 'with small bird (sp.)' |
| | /púwʰ-út/ | [púwʰ̚.wút̚] | (rotten wood + Oblique case) | 'rotten bits of wood' |
| (83) | /túʔ-út/ | [túʔ̚.ʔút̚] | (vertical post + Oblique) | 'with the vertical post' |

In nasal environments, /wʰ/ is a target for nasalization:

- | | | | | |
|------|-------------|--------------|-----------|--------------------------------|
| (84) | /~wʰǎç/ | [w̃ǎç̃] | wʰǎç | 'smooth-billed ani (bird sp.)' |
| | /~tæh-díwʰ/ | [tæh̃-níw̃̚] | tæh̃-níwʰ | 'father-in-law' |

B. /y'/'

The glottalized palatal glide /y'/' appears morpheme-initially as [^dyʔ]; it demonstrates the same allophonic variation (between initial [^dyʔ] and medial/final [yʔ]) as does its non-glottalized counterpart /y/ (initial [^dy], medial/final [y]). Glottalized /y'/' contrasts with its non-glottalized counterpart (/y'/' ≠ /y/).

- | | | | | | | |
|------|--------|----------------------|---|-------|----------------------|--|
| (85) | /y'úʔ/ | [^d yúʔ] | ‘soft, flexible’ | /yuʔ/ | [^d yuʔ] | ‘burn (paper, cloth)’ |
| | /y'æt/ | [^d yætʔ] | ‘lay on ground, leave’
(transitive verb) | /yæt/ | [^d yætʔ] | ‘lie on ground’
(intransitive verb) |

Morpheme-finally, /y'/' is realized as [yʔ]:

- (86) /púy'/' [púyʔ] ‘younger brother’

Before a vowel-initial suffix, geminate /y'/' appears as [yʔ.^dy]:

- (87) /púy'-'út/ [púyʔ.^dyútʔ] (younger brother + Oblique case) ‘with younger brother’

In nasal morphemes, /y'/' appears morpheme-initially as [ⁿỹʔ], morpheme-finally as [ỹʔ], and before a vowel-initial suffix as [ỹʔ.ⁿy].

- (88) /~y'u'y'/' [ⁿỹũỹʔ] y'ũy'- ‘shake something that is planted at the base’

As the examples in this section illustrate, the most striking feature of the glottalized consonants generally in Hup is their extreme allophonic variation. The most audibly distinctive cue to their presence in onset position is the laryngealization of the following vowel; in morpheme-final position, most are essentially indistinguishable from voiceless stops—only the glottalized glides can easily be recognized for what they are.

Alternative analyses of these phonetic phenomena can be suggested, but they all prove to be much less effective ways of explaining the data than is the positing of a single distinct series of glottalized consonants. One such alternative would consider the glottalized consonants as not comprising a distinct series of their own, but rather as consonant clusters made up of two segments: Cʔ. Positing such clusters would accurately predict the existence of vocalic laryngealization, since some laryngealization on surrounding vowels (and especially the following vowel) does accompany the glottal stop when it appears elsewhere as a segment in its own right (cf. §2.1.2.2 above). However, it is unlikely that Hup would allow morpheme-internal Cʔ clusters when no other morpheme-internal consonant clusters are allowed elsewhere in the language at all (other than in a few intervocalic contexts; see §2.2 below). It is also not clear why only some consonants would form Cʔ clusters while others could not (namely /t/ and /p/; there is no /*tʰ/ and only marginally /*pʰ/).

An even more important argument against this cluster analysis is the fact that Cʔ clusters do not account for the phenomenon of consonant gemination in the context of a vowel-initial suffix, in which part of the complex segment appears on each side of the glottal component, as if the consonant material were being ‘copied’ around the glottal (e.g. /ʔéwʰ/ + /V́t/ → /ʔéwʰ-ét/ [ʔéwʰ.wét] ‘with small bird sp.’). If the consonantal coda in the root were truly a Cʔ cluster, rather than a unitary glottalized segment, we would expect there to be no such ‘copying’ phenomenon; instead, the glottal stop would simply form the onset of the second syllable, leaving the consonant segment behind to form the coda of the first syllable: [CVC.ʔVC]. We would also expect the vowel-initial suffix to

bear a trace of laryngealization from the preceding glottal stop, which likewise does not occur. In fact, this consonant ‘copying’ phenomenon is no different for glottalized consonants than it is for other single segments with complex realizations—the palatal and post-nasalized stops—which undergo the same sort of surface inversion of components when followed by a vowel-initial suffix: /CVd/ [CVdⁿ] → [CVdⁿ.ⁿdVC] and /CVç/ [CV^yh] → [CV^yh.h^yVC]. This parallelism can only be accounted for in a consistent way if the glottalized consonants are understood to be single complex segments and not clusters.

A second possible alternative analysis to the single distinct series of glottalized consonants proposed here would involve multiple phonemic entities: a series of laryngealized vowels, a series of unreleased voiced stops, and an additional set of consonant clusters made up of a glide + glottal stop (something along these lines has, in fact, been suggested for Yuhup; see Ospina 2002). Again, however, there are convincing arguments against this approach for Hup, and in favor of a single series of glottalized consonants. First, the glottalized consonants present a simpler, more streamlined system, in which a single feature—rather than three distinct phonemic entities—accounts fully for the data. Moreover, the three phoneme types suggested by the alternative analysis are internally inconsistent: one entire set of consonant phonemes (the unreleased voiced stops) could only occur in word-final position, while C? clusters would be found only with glides. In addition, to have an entire series of laryngealized vowels (which would increase the vowel inventory significantly) is typologically rare (cf. Macauley and Salmons 1995).

There are still other arguments against this three-fold approach, and in favor of a single glottalized consonant series. If a distinct set of laryngealized vowels is posited, there is no explanation for the fact that these laryngealized vowels never follow the voiceless stop /t/, and follow /p/ in only one marginal case. By contrast, the voicing neutralization in the glottalized consonant series accounts for this neatly. Likewise, the lack of contrastive laryngealization on vowels in syllables with /ʔ/ or /h/ as the onset is also not easily explained if laryngealized vowels are phonemically distinct; but again, this fits with the glottalized consonant approach, since we would not expect consonants that are already glottal by definition (as are /ʔ/ and /h/) to receive an additional phonemic glottal feature (/ʔʔ/ and /hʔ/).

Furthermore, we would predict that—were laryngealization a property of the vowel and not the consonant—it would carry over with the copied vowel in the context of a vowel-copying suffix (e.g. Oblique -*V́t*, Dynamic -*V́y*, etc.), which takes its vowel quality from the preceding syllable (usually belonging to the root). However, while *nasality* always spreads together with the copied vowel in this context, laryngealization never does so; e.g. /tóg'/ + /V́t/ → /tóg'-ót/ [tók.^hgót] 'in the room'. (This is also due to the fact that gemination does not result in the straightforward copying of a complex segment, but leaves the glottalic or nasal feature 'stranded' in the middle of the geminate; i.e. [C^NC] or [C^hC].) Conversely, laryngealization does carry over in reduplication contexts, in which the initial consonant and vowel are copied from the root;

laryngealization is always present on both syllables in reduplicated words: e.g. *b'ág* 'light'; *b'ab'ag-* [bap.bag^h] 'be bright'.

Finally, acoustic evidence also supports an analysis of laryngealization as conditioned by the preceding consonant, rather than being a property of the vowel. Laryngealization on vowels typically affects only the *first part* of the vowel segment, where it is contiguous with the glottalized consonant; moreover, the consonant itself may also show some laryngealization or ejective effects (cf. Figure 2.6 above).

There are thus clearly good arguments for positing a series of glottalized consonants in Hup to explain these phenomena. But one more question remains: why is voicing neutralized with the glottalized stops? This can be explained as motivated by phonetic distinctiveness (audibility). In word-final position, to begin with, the glottalized consonants surface as unreleased stops, and as such are too phonetically similar to the unreleased voiceless stops for a contrast to be maintained. As Blevins (2004: 99) has noted, for plain obstruents and ejective or glottalized obstruents to contrast in word-final position, the stops must be audibly released. In fact, syllable-final neutralization of ejective or glottalized obstruents as voiceless unaspirated obstruents—as we find morpheme-finally in Hup—is crosslinguistically quite common (Blevins 2004: 94).

In morpheme-initial and medial position, Hup already has a constraint barring voiced palatal /j/ and velar /g/ from appearing; this carries over to their glottalized counterparts /j'/ and /g'/, which are accordingly pronounced as voiceless [č̥] and [k̥] (respectively), as discussed above. Thus the only voicing contrast that would even be

possible for the glottalized stop series is limited to the bilabial and dental-alveolar stops /b'/ and /d'/ in non-final position—a very restricted environment.

As an intriguing final note, there are a few cases in Hup which suggest that ordinary voiced stops may occasionally have developed glottalized variants during a historical process of deriving new words. The pair in (89a) is particularly suggestive of a historical link between a (prior) voiced stop and a (later) glottalized stop:

- (89) a) /tóg/ [tóg^ɰ] 'daughter'
 /hutóg'/ [hutók^ɰ] 'niece'

The unmistakable parallelism with the pair in (b)—in which the final consonant /h/ in 'son' and 'nephew' could not be glottalized and remained the same—indicates that the similarity between 'daughter' and 'niece' is indeed due to a historical connection rather than to chance.

- b) /~tæh/ [tæh] 'son'
 /~hutæh/ [hũtæh] 'nephew'

Other similar pairs, of which one member is probably also derived historically from the other, are the following:

- (90) a) /tód/ [tódⁿ] 'hollow log, tree' (verb: 'hollow out, make hole in')
 /tód'/ [tót^ɰ] 'jar, bottle, hollow receptacle'
- b) /wob/ [wob^m] 'be resting on something' (intransitive verb)
 /w'ob/ [wɔb^m] 'set on something' (transitive verb)
- c) /yæt/ [^dyæt^ɰ] 'lie on ground' (intransitive verb)
 /y'yæt/ [^dyæt^ɰ] 'lay on ground' (transitive verb)

Such pairs suggest that glottalization is in some sense a distinct prosodic or suprasegmental feature that is associating with a consonant in Hup. They also suggest that, despite their neutralization for voicing, glottalized stops may (at least historically) have an underlying association with voiced segments.

Comparative Note:

What appears phonetically as vocalic laryngealization in Hup [C̥VC] is realized in many Yuhup words as [CV₁?V₁(C)] (i.e. a medial glottal stop surrounded by identical vowels):³¹

- | | | | |
|------|--------|---|---|
| (91) | Hup: | | Yuhup: |
| | /c'ĩw/ | [č'ĩw] 'pupunha' | [č'ĩ?ĩw] |
| | /d'ũç/ | [ⁿ dũ ^y h] 'timbó' | [ⁿ dú?u ^y h] ³² |

Brandão Lopes and Parker (1999) analyze such V?V sequences in Yuhup as involving a floating glottalic autosegment that associates with the vowel. Ospina (2002: 117-18), on the other hand, proposes a morpheme-level feature of laryngealization that is realized phonetically only on the vowel (Ospina also represents words such as those in (91) phonetically as [C̥VC], and makes no mention of a V?V structure). In my own brief sessions with a Yuhup speaker, I found the [V?V] structure to be in some variation with laryngealized [V̥]. To the extent that Yuhup CV?V does correspond to Hup C'V, it is not clear whether the Yuhup phenomenon is best considered to involve an initial glottalized

³¹ Not all such words correspond in this way, however; for example, Yuhup *ya ʔám* 'jaguar' takes the same CV?VC form as does Hup (*ya ʔám*).

³² These examples are from a word list I collected with a Yuhup speaker.

consonant, as seems to be the case in Hup, or a glottalized vowel, as Brandão Lopes and Parker suggest.

It is also noteworthy that a number of Hup words containing a glottalized initial consonant appear to have been borrowed from Tukano, but in Tukano (currently, at any rate) the corresponding words take the form CVʔV. Examples are Hup /jʔɔ/ and Tukano *so ʔo* ‘spade-fish’, and Hup /bʔi/ and Tukano *bi ʔi* ‘rat’. According to Kristine Stenzel (2005), the glottal in these Tukanoan words is best analyzed as a suprasegmental feature that associates with the vowel of the root.

A possible explanation for these CVʔV correspondences to Hup CʻV lies in the general flexibility of glottalic phenomena. As noted by Macauley and Salmons (1995), the association of glottalic suprasegmental features with other segments is potentially so flexible that its targets have been shown to differ even across dialects of a single language. Similarly, Blevins (1993) observes that there is a cross-linguistic tendency for glottalization and other laryngeal node features to start out as linked to a consonant slot and then to evolve into a floating feature, with an intermediate step in which both the linked and the root-level floating features are present (i.e. the two strategies coexist). It is possible that while the glottalic feature associates with the consonant in Hup, it targets the vowel in Tukanoan languages and perhaps in Yuhup as well.

2.2. Syllable, morpheme, and word structure

Hup exhibits a strong isomorphism between the syllable and the morpheme; approximately 80% of Hup morphemes have only one syllable. Hup strongly prefers

syllables with a CVC structure, and requires all syllables to have an onset (although this constraint is not always met; see below). The CVC syllable is accordingly the template for most morphemes, and also constitutes a well-formed word.

CV syllables are less common. A number of morphemes (belonging to various word classes) are underlyingly CV, but these normally surface as CV syllables only when they are immediately followed by a vowel-initial (-VC) suffix (which produces two syllables, each with its own stress/tone value); e.g. /j'ɔ-ɔt/ [čɔ.ɔt] (flower-Oblique) 'with the flower'. Elsewhere—particularly when word-final or even when followed by a consonant-initial root or formative—these CV morphemes undergo a phonetic vowel-lengthening effect (CV:) to produce a single heavy syllable: e.g. /j'ɔ/ [čɔ:] 'flower'.

VC syllables do exist, despite Hup's general requirement of syllable onsets. However, these are morphologically restricted to the set of vowel-initial suffixes (which are underlyingly VC; cf. §3.4.1), and have a surface realization as VC syllables only when they are directly preceded by a CV root; e.g. *yú-úy* [d'yú.úy] 'waiting'. The fact that no epenthetic consonant is inserted at the syllable/morpheme boundary shows that Hup's onset constraint may be overridden, and is also evidence that these suffixes do not involve an empty consonant slot (while they do involve an empty vowel slot). As noted above (§2.1.2.1), when the preceding root has a consonantal coda, the vowel-initial suffix takes an onset from the coda of the root, which becomes geminate: *wób-óy* [wób^m.^mbóy]. This results in two CVC syllables—Hup's preferred structure.

Given that VC morphemes (and syllables) are limited to this small set of bound suffixes, all words in Hup necessarily have an initial consonant. This may be a glottal stop. Evidence that word-initial glottal stops do indeed occupy an underlying consonant slot comes from the lexicalization of certain bimorphemic forms, which tends to preserve the glottal stop: $t\dot{h} + \dot{\lambda}y \rightarrow t\ddot{a}\dot{\lambda}y$ (3sg + FEM \rightarrow ‘woman’); $t\dot{h} + \dot{\lambda}g \rightarrow ta\dot{\lambda}g$ (3sg + FEM \rightarrow ‘the/its fruit’ (cf. §5.4). The same glottal-preserving phenomenon is also found in reduplication contexts: $\dot{\lambda}id$ - ‘speak’ $\rightarrow \dot{\lambda}i\dot{\lambda}id$ - ‘stammer’.

As noted above, Hup has no diphthongs and no syllable-internal consonant clusters. Adjacent consonants are normally only acceptable across morpheme boundaries, as in verb or noun compounds, with the marginal exception of the homorganic stop clusters in reduplicated forms and relexicalized former compounds (which, as noted above, are synchronically not clearly bimorphemic; cf. §2.6). The Hup preference for avoiding morpheme-internal clusters is illustrated by such borrowed Portuguese words as *escada* ‘ladder’, which Hup speakers typically pronounce *sikada*, and by the reduction of medial consonant clusters undergone by formerly bimorphemic forms in the process of relexicalization to create monomorphic words (see §2.6). The few exceptions to the generalization against non-homorganic morpheme-internal clusters are mostly cases involving glottal consonants in reduplicated or relexicalized forms (and possibly in certain borrowings): /ʔ/ as first-syllable coda in words such as /baʔtĩb’/ ‘spirit’, /baʔtúk/ ‘dark’, and reduplicated /wiʔwiʔ-/ ‘tremble’ (cf. §2.6); and /h/ as second-syllable onset (limited mainly to the Barreira dialect) in /wædhó/ ‘sun, moon’, and a few other forms.

While Hup strongly favors a syllable-morpheme isomorphism, it also permits words of more than one syllable; these, however, are almost all limited to two syllables. With the exception of ideophones (which are phonologically unusual; see §15.7), only a handful of words have three or more syllables. These are almost all names of birds or flying creatures, and probably have an onomatopoeic or ideophonic origin (a few may also be borrowed). Examples include *pitidih* ‘Tropical Cane Bird’, *kədʒhʒg* ‘morpho butterfly’, and *wədʒkʒw* ‘Speckled Chachalaca’.

Most bisyllabic monomorphemic words in Hup fall into two categories, defined by their medial consonant. Both categories share the general constraint that vowel quality should be the same across the two syllables. In the first group, the initial and medial consonants differ, but the medial consonant is either /h/ or /w/:

(92)	/~bəhǎy/	[mǎhǎy]	<i>məhǎy</i> ‘deer’
	/wəhǎd/	[wəhǎd ⁿ]	‘old (man)’
	/pihǎt/	[pihǎt ^ʔ]	‘banana’
	/yəhəy/	[yəhəy]	‘search for’
	/cuwũk/	[čuwũk ^ʔ]	‘cotton’
	/yiwík/	[yiwík ^ʔ]	‘heavy’

In the second category, the initial and medial consonants are identical. All of these words appear to be reduplicated forms (but, as noted above, for many the non-reduplicated ‘root’ is meaningless). Examples include the following:

(93)	/b’eb’ǎp/	[^m bǎp.bǎp ^ʔ]	‘butterfly’
	/~dudút/	[nun.nút ^ʔ]	‘moth’
	/totób’/	[tot.tóp ^ʔ]	‘Black-tailed Trogon (bird)’
	/~pəpəh/	[pǎp.pǎh]	‘blue, green’
	/kikid/	[kik.kid ⁿ]	‘tickle’

There are also a few exceptional forms which fall outside of both these categories. These are bisyllabic morphemes having different initial and medial consonants, where the medial consonant is not /h/ or /w/. In a very few cases, such exceptional forms also have different vowels, and/or include medial consonant clusters (usually involving /h/ or /ʔ/, as noted above). Examples include the following:

(94)	/~yɔʔɔb/	[yɔʔɔm]	yɔʔɔm	‘dangerous, powerful’
	/~puʔúk/	[pũʔũkʰ]	pũʔũk	‘coca’
	/cidíʔ/	[číríʔ]		‘bag’ (dialectal variant)
	/~bidíŋ/	[mĩníŋ]	mĩníŋ	‘straight, direct’
	/bɔtɔk/	[^m bɔtɔkʰ]		‘ear’
	/wɔhwæw/	[wɔhwæw]		‘dove’

There are a number of ways to account for the non-canonical forms of such words. Some, like /wɔhwæw/ ‘dove’, are undoubtedly onomatopoeic; the name closely mimics the bird’s call.

Many other such unusual words are derived historically from bimorphemic forms (cf. §2.6). Examples of what were probably once bimorphemic forms include /cug’æt/ [čuk’ætʰ] ‘leaf, paper’, possibly from /j’ŭg-g’æt/ ‘forest-leaf’, /yaʔamhǒʔ/ ‘dog’, from /yaʔám/ ‘jaguar’ and an unidentified form /hǒʔ/, and /~hutæh/ ‘bird’, possibly from /~hũ/ ‘animal’ and /tæh/ ‘small’. Words of more speculative origin are /wædhɔ/ ‘sun, moon’ (compare /wæd/ ‘eat, food’, and /hɔ/ ‘liver’??) and /~yɔʔɔb/ yɔʔɔm ‘powerful, dangerous, scary’, possibly from the ‘Intangible’ demonstrative /yi/ and /~ʔɔb/ ʔɔm- ‘fear’ (compare yaʔǎp ‘that’s all’, which is more clearly derived from /yi-ʔǎp/ [Dem + Quantifier]).

Still other bisyllabic Hup morphemes with non-canonical form are undoubtedly borrowings. Examples include /~sadǎ/ [čǎǎ:] *cana* ‘pineapple’ (from Tukano *sêra*), and /bisíw/ ‘spirit type’ from Tukano *biisú*.

Finally, there are also many cases in which the origin of the non-canonical word is not clear. Examples of such unexplained exceptions to the general rule are /~bidǐg/ [mǐnǐŋ] *mǐnǐŋ* ‘straight, direct’ and /bɔtɔk/ [ᵐbɔtɔk] ‘ear’.

In keeping with Hup’s strong preference for words of one to two syllables, borrowings from Portuguese of more than two syllables are usually shortened. Many examples are provided by personal names, such as *hóc* [hóʸt] ‘Rosineia’, *matéw* [matêw] ‘Mateus’, *céb* [čêbᵐ] nickname ‘Zebu’ (after the cow), and *cidi* [čírí:] ‘Selina’. The main exception to this reduction of borrowed Portuguese words to one or two syllables occurs where the Portuguese form has a word-final *r* or consonant cluster involving *r*. Because the Hup flap /r/ (an allophone of /d/ and /t/) can occur only between vowels, such words receive an epenthetic vowel before or after the *r*; e.g. /motúdu/ [motúru] ‘motor’ (from *motor*); /padátu/ [parátu] ‘plate’ (from *prato*).³³

The well-formed word in Hup is somewhat more constrained than are the syllable and the morpheme. Without exception, the Hup word must begin with a consonant and end with a bimoraic syllable (i.e. (C)VC or (C)V:). Hup words also conform to soft constraints (which can be violated). In particular, the ideal monomorphemic Hup word

³³ Note, however, that many of these words were likely borrowed through Tukano (the immediate source of many Portuguese words that enter Hup, since speakers are bilingual in Tukano but do not generally speak Portuguese). This epenthesis phenomenon therefore probably reflects phonotactic constraints of Tukano

should be composed of a single CVC syllable; if it has two syllables, then the vowel quality should be the same across both, and the medial consonant should be either /h/ or /w/ (or identical to the initial consonant in the case of reduplicated forms, which are not clearly monomorphemic). In general, bimorphemic words that are becoming relexicalized as monomorphemic forms are under pressure to conform to this ideal, and tend to undergo vowel harmonization and other processes to accommodate to it (cf. §2.6). These soft constraints thus yield a continuum of word types in Hup, beginning with the ideal CVC word and expanding outward to include words that are less and less consistent with this ideal. Such a continuum effect has also been identified for constraints on the lexicons of other languages; cf. Ito and Mester (1995) for Japanese.

A discussion of the various criteria for defining the phonological word in Hup — especially for multimorphemic words (involving root compounding, etc.) falling at the far end of this continuum—is provided in §3.2.1.

2.3. Prosodic features

Hup's primary prosodic features are nasalization and word-accent, the latter combining contrastive tone and lexical stress. Both of these are phonemic, and take the syllable (and usually the morpheme) as their primary domain.

(which also has an intervocalic flap as an allophone of /d/) rather than or as much as it reflects those of Hup.

2.3.1. Nasalization

Nasalization is a morpheme-level or—minimally—a syllable-level prosody in Hup. In other words, every syllable, and almost every morpheme, is specified as either fully nasal or fully oral. Nasality therefore targets all segments within this domain equally, and nasality or orality cannot be considered a property of the individual segment. As noted above, nasal morphemes in the phonemic transcriptions herein are represented with a leading tilde, e.g. /~báh/ (cf. 95-104 below).

As discussed in §2.1 above, all segmental phonemes in Hup—with the exception of voiceless obstruents, which are not targets for nasality—have both nasal and oral variants, depending on the nasal or oral value of the morpheme/syllable in which they occur. Thus [m], [n], [ñ], [ŋ] are all allophones of the voiced stop series /b/, /d/, /j/, /g/, and glottalized [m'], [n'], [ñ'], and [ŋ'] are allophones of the glottalized stops (see §2.1.2.3). The glides /w/ and /y/ and the fricatives /h/ and /ç/ are also nasalized in nasal contexts. The same applies to vowels, although the 9-vowel system is reduced to 6 vowels in nasal environments (see §2.1.1). Note, however, that some of these nasal and oral allophones of individual phonemes are represented with different symbols in the orthography used in this grammar; this approach to representing nasality was chosen as more user-friendly, and is discussed in §2.5 below.

Many Hup words contrast on the basis of nasalization. Examples of minimal pairs or near-minimal pairs are the following:

- (95) /wǎh/ [wǎh] 'River Indian'
 /~wǎh/ [wǎ̃h] wǎ̃h 'resin'

- (96) /báh/ [ᵐbáh] ‘acará fish (sp.)’
 /~báh/ [mǎh] *máh* ‘near’
- (97) /húʔ/ [húʔ] ‘pium (insect)’
 /~huʔ/ [hũʔ] *hũʔ-* ‘finish’
- (98) /dʼad/ [ᵐdadᵐ] ‘paint with genipap (dye)’
 /~dʼád/ [nḡn] ‘foot-flea’
- (99) /jʼáh/ [čǵh] ‘earth, land’
 /~jʼáh/ [čǵh] *jʼǎh* ‘cará’
- (100) /hoh/ [hoh] ‘smoke (fish, meat, etc.)’
 /~hoh/ [hōh] *hōh-* ‘make noise’
- (101) /páʔ/ [páʔ] ‘shallow aturá basket’
 /~páʔ/ [pǎʔ] *pǎʔ* ‘frog sp.’
- (102) /bōb/ [ᵐbōbᵐ] ‘matá-matá (tree sp.)’
 /~bōb/ [mǒm] *mǒm* ‘axe’
- (103) /dɔʔ/ [ᵐdɔʔ] ‘count’
 /~dɔʔ/ [nōʔ] *nɔʔ-* ‘give’
- (104) /yǒh/ [ᵈyǒh] ‘affinal relative’
 /~yǒh/ [ᵐyǒh] *yǒh* ‘medicine’

While almost all Hup morphemes are either fully nasal or fully oral, there are a few examples of words that are (at least synchronically) monomorphemic but combine one nasal syllable with one oral syllable. Some of these exceptional forms are listed in (105); note that most or all are probably derived historically from two morphemes, although synchronically they are lexicalized as a unitary morpheme.

- (105) a) *d'apuñ* [ˈdapũh̃] ‘hand’
 (from *d'ap* ‘flesh’?? + *ñh* ‘sibling/ reciprocal/ interactive’??)³⁴
 Compare the fully nasalized variant [nãpũh̃]
- b) *yã ðamhõʔ* [ỹãʔãmhõʔ] or *yã ðamboʔ* [ỹãʔãmbõʔ] ‘dog’
 (from *ya ðám* ‘jaguar’ + ??)
- c) *tðhód* [tðhód̃] ‘collared peccary’ (from *tðh* ‘pig’ + ??)
- d) *mðyðk* [mðyðk̃] ‘mirror’ (etymology unclear)

Mixed nasal-oral forms also include words borrowed from Portuguese, particularly personal names:

- (106) *mandú* ‘Manuel’
míngu ‘Domingo’
mingáw ‘Miguel’

While these bisyllabic cases are exceptional in their mixed nasal-oral quality, it is important to note that nasality and orality in Hup are still consistently a property of the syllable as a whole. This syllable-level prosody is completely exceptionless.

Accordingly, Hup speakers have trouble distinguishing between such Portuguese pairs as *bandeira* ‘flag’ and *madeira* ‘wood’, in which the contrast is syllable-internal.

Nasal spreading is extremely limited in Hup. In general, nasal spreading does *not* occur across morpheme boundaries. The only exceptions involve the vowel-copying suffixes, in which the copied vowel takes on the nasal or oral quality of the root vowel along with its other features (e.g. /~dæd/ + /Vy/ → /~dæd-æy/ *næn-æy*), and cases in which a historically bimorphemic form is relexicalized to form a synchronically monomorphemic form (e.g. example 107 below). Otherwise, nasal spreading does not

occur even between a root and a non-copying vowel-initial suffix. For example, the Inchoative suffix *-ay* is always oral (and accordingly conditions a nasal-oral medial consonant sequence via coda gemination when preceded by a consonant-final nasal root): /~pǎ/ + /ay/ [pǎ.ay] (Negative existence + Inchoative); /~hab/ + /ay/ [hǎm.bay] (‘go’ + Inchoative); /~dæd/ + /ay/ [nǎn.day] (‘come’ + Inchoative). The Object suffix *-ǎn*, which is always nasal, likewise does not undergo or condition spreading: /baʔtǐb’/ + /ǎn/ [baʔtǐp’.mǎn] (‘spirit’ + Object).

When nasal spreading does occur as part of the relexicalization process—in which over time a bimorphemic form (usually a noun or verb compound) develops an identity as a unitary or even monomorphemic lexical item—it usually proceeds from right to left. This directionality probably has to do with the fact that the phrase-final element is normally the syntactic (and semantic) head of the compound, and/or with the tendency of the final syllable in the word to bear the primary lexical stress. In most cases, nasal spreading simply accompanies vowel harmonization (which likewise proceeds from right to left; e.g. 107a). In a few cases, however, it applies even in the absence of any harmonization process (107b).

(107) a) $t\acute{h} + \acute{h}y \rightarrow t\tilde{a}\acute{h}y$
 3sg FEM woman
 ‘woman’

b) $d'ap\acute{u}h \rightarrow n'ap\acute{u}h$ [nǎp\acute{u}h] (variant) ‘hand’ (cf. 100a above)

³⁴ Compare Tukano *amú pa'ma* ‘hand’ (*amú* ‘superior part’; *pa'ma* ‘group of things connected one to the other’; cf. Ramirez 1997b: 7, 135).

Comparative Note:

As in Hup, nasalization generally appears as a morpheme-level prosody in Yuhup and in the neighboring Tukanoan languages. In Hup's more distant sister Dâw (which has only marginal contact with Tukano), on the other hand, nasalization is not a feature of the morpheme or the syllable, but is restricted to segmental phonemes. Both vowels and consonants in Dâw have distinctive nasality, and nasal consonants and voiced stops can co-occur in the same morpheme or syllable. The Dâw cognates of many morphemes that are either fully nasal or fully oral in Hup contain both nasal and oral segments. In the most distant relative Nadëb (which has no contact with Tukano), nasalization is likewise a property of individual segments, and not of the morpheme as a whole. These facts suggest that prosodic nasalization entered Hup (and Yuhup) via diffusion from Tukano, although the possibility that it arose autonomously via nasal spreading within the syllable cannot be conclusively ruled out.

2.3.2. Word-accent: tone and stress

Hup has a restricted system of contrastive lexical tone. Only stress-bearing syllables bear contrastive tone (and in such cases the tonal contrast, which depends on the contour, is only clearly audible on those stressed syllables that are word-final). This kind of restricted tone system has been characterized as a 'word-accent system' (Remiysen and van Heuven ms: 3). A system of 'word-accent' (also termed 'polytonicity' and 'tone accent') shares features with pitch-accent, tone, and stress systems, but is distinct from all of these. As in a tone language, the Hup word-accent system exhibits a paradigm of word-level tone contrasts; as in a pitch-accent language, the tone contrast is restricted to

one syllable per word; and finally, as in many stress systems, the accented syllable in the word is generally predictable and is ‘singled out’ by the same phonetic features that typically distinguish lexical stress in other languages—greater intensity, longer duration, and higher pitch.

In Hup, tone and lexical stress work together, and they are accordingly discussed side by side in this section. Note that to avoid orthographic redundancy, stress is indicated only by the tone diacritic (ǎ or â) over the vowel in these examples (rather than having both a stress diacritic and a tone diacritic on the same syllable)

2.3.2.1. Lexical stress patterns

Hup has relatively consistent lexical stress patterns. Independent words (i.e. those that are not cliticized or bound to other words) receive stress; for those that are monomorphemic and of more than one syllable, stress almost invariably falls on the final syllable of the word, according to an iambic pattern. The same final stress pattern occurs in many noun compounds and noun-adjective NPs (see §6.6). For independent lexical items, the only exceptions to this rule that have been encountered are borrowed Portuguese words (in which stress tends to conform to the stress pattern of the word as it is pronounced in Portuguese, e.g. /bóda/ ‘ball’, from *bola*), and one idiosyncratic Hup noun *húhu?* ‘pacu (fish sp.)’.³⁵

The stress patterns of multimorphemic words are more varied. Stress on noun compounds depends largely on the type of compound (see §5.1). More lexicalized

compounds (i.e. those having a meaning that is not predictable from the component parts) tend to conform to an iambic stress pattern on the model of monomorphemic words, but there are many exceptions.

The stress patterns of verbs follow certain regular rules, but are partially determined by the lexical identity of the particular Boundary Suffix that is attached to the stem. As discussed in detail in §3.4 and §8.3, a verb in most clause types is expressed as a grammatical word composed of multiple morphemes. Minimally, the verb word must normally include a root and a Boundary Suffix; maximally, it can be composed of multiple roots and other formatives, according to the following template (see §8.3). Note that the Boundary Suffix marks the end of the verbal ‘core’, while the verbal ‘periphery’ is made up of enclitics and particles.

Prefix – **Root** – [(Prefix) Root...] – Inner Suffix – [Inner Suffix...] – **Boundary Suffix** =
Enclitic = [Enclitic...] Particle [Particle...]

The Hup Boundary Suffixes are lexically marked for stress, and also determine the stress pattern of the phonological verb word as a whole (which may be composed of all the formatives in the above template except the particles, which lie outside the phonological word). As discussed in §3.4.1, some Boundary Suffixes take the primary stress of the phonological verb word, yielding the pattern (...stem-suffix), in which only the Boundary Suffix receives primary stress (underlined here). Other Boundary Suffixes condition stress on the final syllable of the stem (which may belong to a root or to an Inner Suffix); within this last type, the Boundary Suffix itself may also take stress equal

³⁵ This word *húhuʔ* may itself have been borrowed from Tukano *uhú* ‘pacu fish’, but it is not clear why this would have motivated the non-canonical stress pattern, since the Tukano form is stressed on the second

to that of the stem (...stem-suffix), or it may be unstressed (...stem-suffix).

Accordingly, verb compounds—which may be composed of as many as five roots, multiple Inner Suffixes, and one Boundary Suffix—normally receive no more than one to two primary stresses per (phonological) word, which occur(s) on the final syllable or two syllables of the word. Any prefixes that may be present are normally unstressed, as are all roots that precede the final root in the compound. To the extent that the non-root formatives in the template above also combine with nouns, the resulting word tends to conform to these same lexically determined stress patterns, although there are certain exceptions (see below).

Peripheral formatives (i.e. those formatives which follow the Boundary Suffix in a verb) are also lexically marked for stress or lack of stress. Enclitics are by definition unstressed; particles—which generally follow the enclitics—are by definition stressed and are therefore considered to be phonologically separate from the rest of the verb (cf. §3.4.2).

For certain bound formatives, stress patterns may vary somewhat depending on the part of speech they attach to or their position in the clause. However, this does not seem to be predictable for formative classes generally, but is a property of the individual morpheme. For example, the Dependent marker suffix *-Vp* is generally stressed when it occurs on clause-final nominal subjects (as a topic or emphasis marker), but is unstressed elsewhere (cf. §7.1.5):

- (108) *n'íp g'ét-ep=wəd-áh cǎw-ǎp*
 that stand-DEP=RESP-FOC other-DEP
 ‘That other old fellow standing there’ (serve drink to him!) (B-Cv.2.4)

Perhaps because word-level stress patterns are so intricate in Hup, secondary metrical stress does not appear to play an important role. There is some indication of an iambic metrical stress pattern; for example, alternating syllables of a compound verb may take a weak secondary stress, and certain formatives that normally appear as unstressed enclitics are stressed when they immediately follow another unstressed enclitic. In general, however, rhythmic stress patterns are minimally salient in Hup, and the nuances of metrical stress and its interaction with lexical stress are not at this point well understood.

2.3.2.2. Tone

Tonal contrasts in Hup are mainly limited to nouns and adjectives, although there is some evidence suggesting that verb roots may have underlying tonal values as well. Tones are also realized on stressed grammatical formatives.

Hup has two phonemic tones, realized as rising and high, which occur exclusively on stressed syllables; the Hup system is accordingly defined as a word-accent system, as discussed above (§2.3.2). Phonetically, Hup also has a falling contour tone, which is an allophone of the high tone (note, however, that it is not altogether clear which should be considered underlying; see below). Unstressed syllables take a default phonetic low tone. As mentioned above, orthographically tone and stress are both indicated together by a single diacritic on the vowel of the syllable: *ǎ* (stress and rising tone); *á* (stress and high (falling) tone).

The tonal value and/or its allophonic realization are partially predictable from the syllable template (CVCvoiced, CVCvoiceless, or CV). Stressed syllables in which the coda consonant is voiced (CVCvoiced) receive either a rising or a falling contour tone (109). As Figure 2.7a and b illustrate, the voiced coda consonant—such as a postnasalized obstruent—typically accommodates part of the contour; note the dip downward (a) or upward (b) in the level of the line indicating pitch (in the pitch graph) where it corresponds to the postnasalized segment [g^ŋ] (in the waveform graph).

- (109) /tɔ́g/ [tɔ́g^ŋ] ‘tooth’ (falling)
 /tě́g/ [tě́g^ŋ] ‘wood, stick’ (rising)

Figure 2.7a. Falling tone, CVCvoiced syllable (/tɔ́g/ [tɔ́g^ŋ] ‘tooth’)

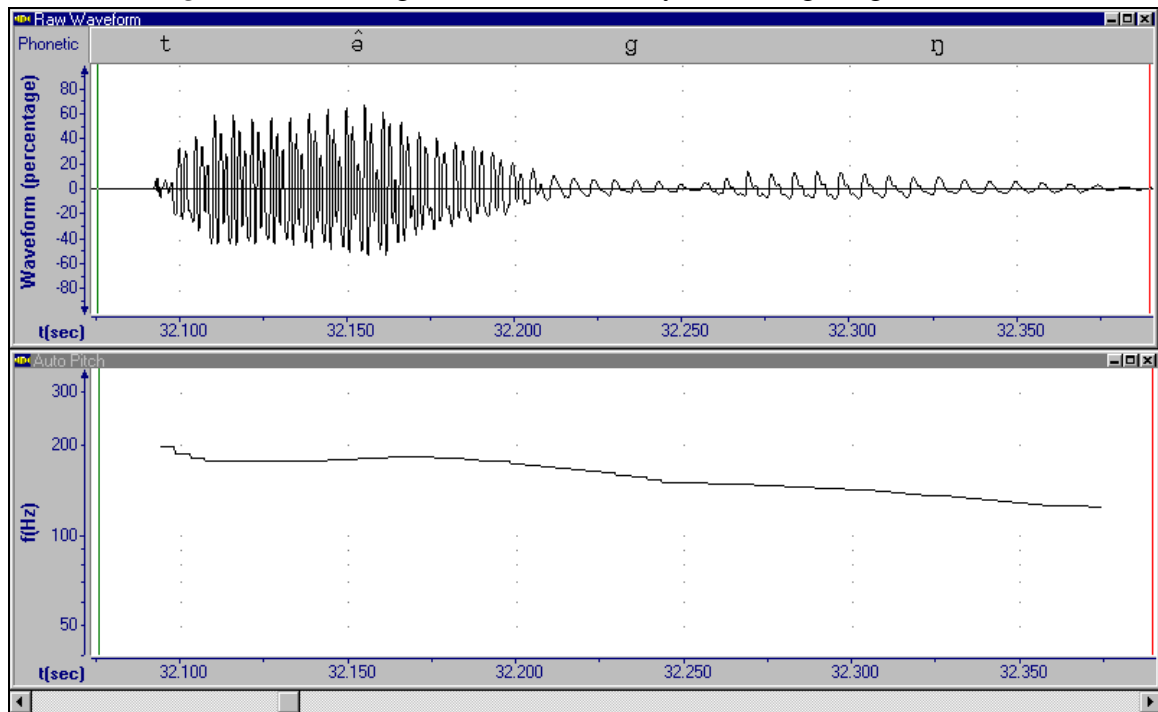
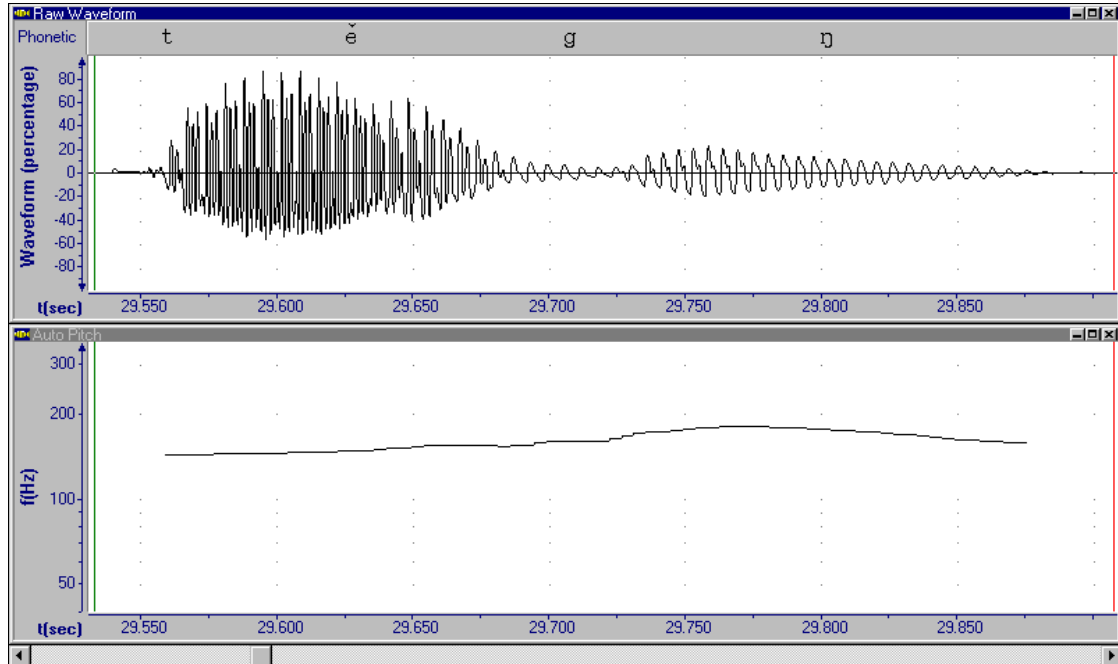


Figure 2.7b. Rising tone, CVCvoiced syllable (/těg/ [těg^ᵛ] ‘wood, stick’)



Syllables with a voiceless coda consonant (CVCvoiceless) can receive either high or rising tone:

- (110) /~dúh/ [núh̥] *núh* ‘head’ (high)
 /~dúh/ [nǔh̥] *nǔh* ‘tapioca’ (rising)

This is illustrated in Figure 2.8a and b; compare the high, nearly level pitch on the vowel in (a) with the rising pitch on the vowel in (b).

Figure 2.8a. High tone, CVCvoiceless syllable (/~dúh/ núh 'head')

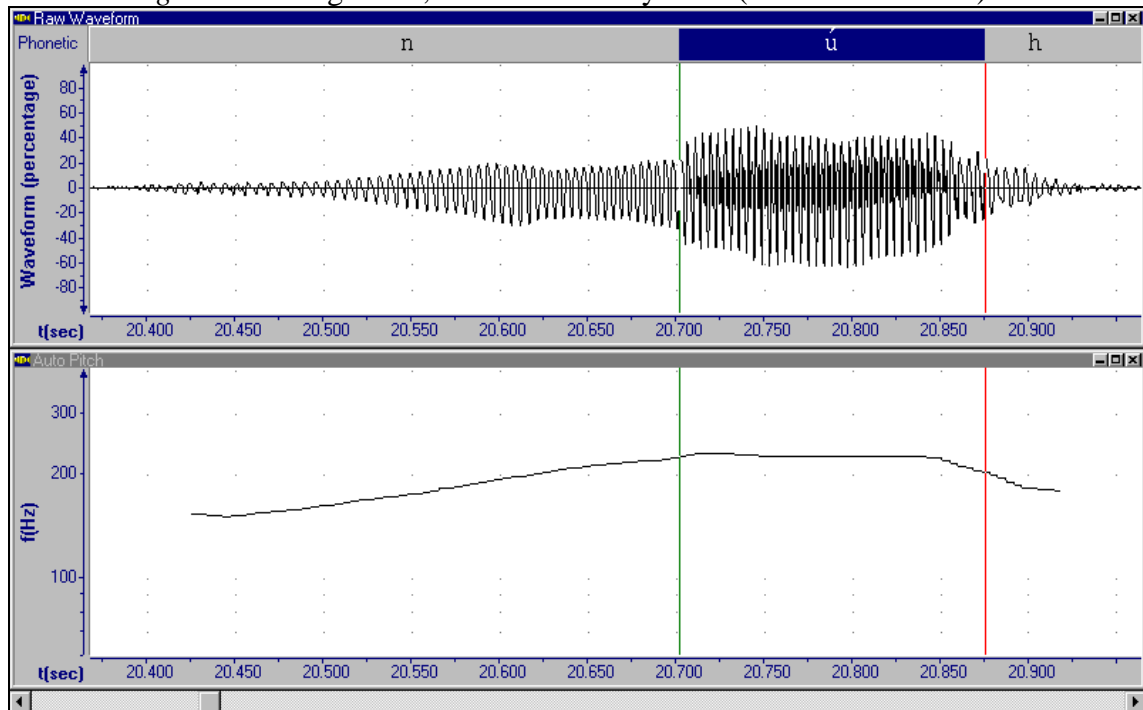
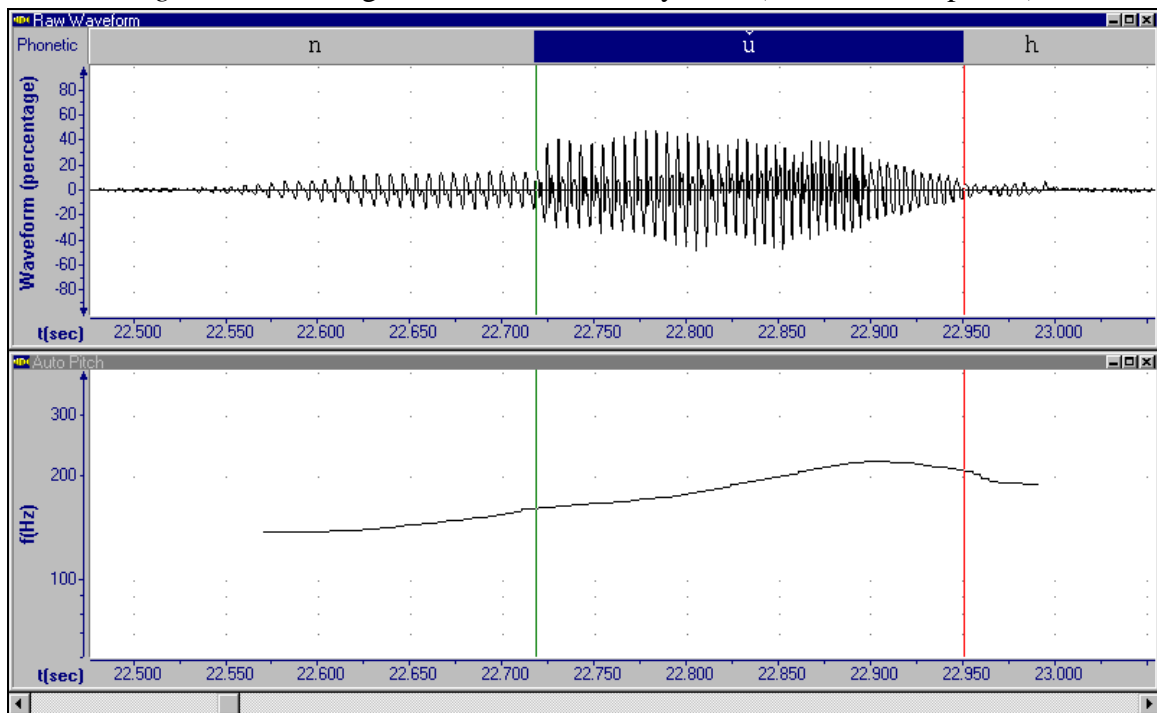


Figure 2.8b. Rising tone, CVCvoiceless syllable (/~dúh/ núh 'tapioca')



Syllables with an underlying CV template, realized as [CV:] when word-final, almost always take falling tone:

(111) /j'á/ [čġ:] 'black' (falling)

Only a very few exceptions to the latter rule have been encountered. These include:

(112) /ʔũ/ [ʔũ:] 'grandfather' (rising tone; note in some dialects this is /dú/ [ʰdũ:])
 /j'š/ [čš:] 'spade-fish' (rising tone; may be borrowed from Tukano *so ʔô*)
 cf. /j'ɔ/ [čɔ:] 'flower' (falling tone)

Some borrowings from Tukano and Portuguese also exhibit CV syllables with rising tone; e.g. /~sadă/ *cană* 'pineapple', from Tukano *sěrá*.

Falling tone and high tone are clearly allophones; they are in complementary distribution according to syllable coda.³⁶ A voiced coda can accommodate a falling contour,³⁷ whereas a voiceless coda cannot. Such a correlation between tone and syllable coda (such that a falling contour or downglide is possible with a voiced coda but not with a voiceless one) is reported to be fairly common cross-linguistically; for example, in

³⁶ Valteir Martins, in his dissertation (which has just become available) on the reconstruction of Proto-Maku, includes a short discussion of Hup tone (2005: 119-20). In this discussion, he claims that syllables receiving high tone are not limited to those with voiceless codas, and he considers all high-tone syllables to be atonal, while rising and falling contour tones are phonemic; in other words, high tone is considered not as an allophone of a falling contour, but rather as a default tone on stressed syllables (whereas low tone is the default on unstressed syllables). I consider this analysis to be suspect on several accounts. First, while there are many two-way tonal contrasts of both rising vs. falling and rising vs. high in Hup, I have discovered no minimal pair that contrasts falling vs. high tone (Martins also cites no such contrast). Second, I have found that consultants apparently do not find the high vs. falling distinction particularly salient; my pronunciation of a CVCvoiceless word with a falling contour or a CVCvoiced word with a high tone does not elicit any particular reaction on their part. Third, imperative mood in Hup is indicated by high or falling tone on the verb stem, depending only on the coda of the final syllable, suggesting that these have a single underlying value. Finally, Martins' analysis can offer no explanation for his claim that CVCvoiceless syllables can be atonal or take rising tone, but never take falling tone; in my account of high and falling tone as allophones, on the other hand, CVCvoiceless and CVCvoiced syllables can each take both phonemic tone values (rising and falling), and the allophonic distribution of high vs. falling corresponds to cross-linguistically typical patterns of interaction between tone and syllable weight.

Central Carrier (Pike 1986), high-tone syllables with a CV and CVCvoiced template downglide when word-final, while CVCvoiceless syllables do not downglide.

However, it is not entirely clear in Hup whether the high tone or the falling tone should be considered the basic underlying tone value, with the other representing the allophone. One possible scenario would be that high tone is underlying, yielding a symmetrical pattern of two opposing contour tones; a voiceless coda consonant would therefore reduce the tone contour, because the voiced part of the rhyme (i.e. the main tone-bearing unit of syllable nucleus + coda) would be relatively short.

However, this scenario does not explain why a CVCvoiceless syllable can accommodate a *rising* contour. If it can take a contour at all, then why can it not take a falling contour in just the same way as it takes a rising contour? A reasonable explanation for this would assume the high tone to be underlying, and the falling contour a default downglide that is accommodated by the voiced coda. Furthermore, the presence of both level and contour tones appears to be more common among the world's tone systems than is the presence of only contour tones. A phonetic downglide after a high tone is also cross-linguistically common and is presumably acoustically motivated by a word-final drop in pitch and intensity.

For the purposes of this discussion, then, the high contour will be assumed to be the underlying tonal value, and the falling tone the allophone, but this should be understood as a still tentative hypothesis that awaits further research to support or refute

³⁷ For CVCvoiced syllables that are stressed but not word-final, however, what would otherwise be realized as a falling contour is often truncated to a simple high tone, especially in faster speech.

it. A further feature of the Hup tone system that awaits explanation is the fact that open CV [CV:] syllables almost always take a falling contour rather than a rising one.

As Figures 2.7 and 2.8 above illustrate, the vowel is the main tone-bearing unit in Hup; but voiced coda consonants (such as the postnasalized stops in 2.7) also are able to accommodate part of the contour, especially in the case of falling tone. However, the tonal contour also appears to have an effect on the onset consonant: when the syllable-initial consonant is a sonorant (i.e. a glide or nasal), this sonorant tends to be significantly longer relative to the vowel in syllables with falling/high tone than in syllables with rising tone. In Figure 2.8 above, for example, the initial consonant [n] in the high-tone syllable *núh* ‘head’ is twice as long as the vowel in the same word (300 ms vs. 150 ms); in the rising-tone syllable *nuh* ‘tapioca’, on the other hand, the initial [n] is only about as long as the following vowel (about 225 ms vs. 225 ms). Similarly, as these figures also illustrate, the vowel in syllables with contour tone (rising or falling) tends to be longer than the vowel in CVCvoiceless syllables with high tone. Unstressed syllables, with their default low tone, likewise have relatively short vowel length.

Tone in Hup does nevertheless appear to be independent of the *type* of onset consonant present in the syllable. In particular, the presence of a glottalized consonant in onset position has no apparent influence on the tone of the syllable (cf. examples 114 and 116 below).

Hup has many minimal pairs that contrast solely on the basis of tone. In the following examples, the morpheme with falling (high) tone is listed first, followed by the morpheme with rising tone.

- (113) /cáʔ/ [čáʔ] ‘box, nest’
 /căʔ/ [čăʔ] ‘clump of roots’
- (114) /j’îw/ [čîw] ‘water snake sp.’
 /j’îw/ [čîw] ‘pupunha (palm sp.)’
- (115) /~tɔh/ [tɔh̃] *tɔh̃* ‘pig’
 /~tɔh/ [tɔh̃] *tɔh̃* ‘caterpillar’
- (116) /b’ɔk/ [ᵐbɔk̚] ‘skin, bark’
 /b’ɔk/ [ᵐbɔk̚] ‘mud, swamp’
- (117) /cúk/ [čúk̚] ‘tool handle’
 /cũk/ [čũk̚] ‘owl’
- (118) /~wáʔ/ [wǎʔ] *wǎʔ* ‘vulture’
 /~wǎʔ/ [wǎʔ] *wǎʔ* ‘belt’
- (119) /~yɔh/ [ᵐyɔh̃] *yɔh̃* ‘tipiti’
 /~yɔh/ [ᵐyɔh̃] *yɔh̃* ‘medicine’
- (120) /bĩg/ [ᵐbĩg̚] ‘anteater’
 /bĩg/ [ᵐbĩg̚] ‘a long time; old’
- (121) /~bɔh/ [mɔh] *mɔh* ‘lake’
 /~bɔh/ [mɔh] *mɔh* ‘inambu’

Two-syllable words can likewise take either of the phonemic tone values (rising or falling) on the stressed final syllable:

- (122) /wɔwɔy/ [wɔwɔy] ‘opossum sp.’
 /~bɔhɔy/ [mɔhɔỹ] *mɔhɔỹ* ‘deer’
- (123) /hudúk/ [hurúk̚] ‘Blue-crowned Mot-mot (bird sp.)’
 /cuwũk/ [čuwũk̚] ‘cotton’
- (124) /tutúd/ [tutúd̚] ‘toad sp.’
 /bəbǎd/ [ᵐbəpǎd̚] ‘toad sp.’

- (125) /kəwə́g/ [kəwə́g^ᵛ] personal name
 /kəwəǎ́g/ [kəwəǎ́g^ᵛ] ‘eye’

A noun may take a stressed suffix and also be stressed itself (e.g. when it takes the Oblique or Object case markers). In these cases, the tone contour on the noun stem is still audible in slow, careful speech (example 126); in faster speech, the stem tone usually sounds like a high tone, regardless of whether it is phonemically rising or high.

- (126) /~dũh-út/ [nũhút^ᵛ] *nũh-út* ‘in the tapioca’
 /~dúh-út/ [núhút^ᵛ] *núh-út* ‘on the head’

The question of whether or not tone contrasts exist for verb roots has not yet been fully settled. In general, tonal contours seem to be largely neutralized on verb roots. This is probably due at least in part to the fact that verb roots almost never appear word-finally, except in the Apprehensive and Imperative moods (in which tone values do appear; see below). Elsewhere in Hup, tone contours are maximally audibly salient on word-final syllables; in general, stressed syllables that are not word-final—particularly within verb compounds—receive what appears to be a default high tone. When asked to judge tone values of uninflected verb roots in elicitation contexts, consultants usually classify them as having falling/high tone, but are frequently inconsistent and seem uncertain. There are exceptions to this generalization, however. At least three minimal pairs for tone have been identified for verb roots:

- (127) /túk/ [túk^ᵛ] ‘want’
 /tũk/ [tũk^ᵛ] ‘(to) sting (ant or wasp)’

 (128) /túh/ [túh] ‘stay, pause’
 /tũh/ [tũh] ‘be blackened with soot; color something black with charcoal’

- (129) /tɔ̌h/ [tɔ̌h] ‘break’
 /tɔ̃h/ [tɔ̃h] ‘fall over in wind (tree)’

In each of these pairs, one member (the second in the above examples) is frequently used as a noun (i.e. ‘a sting’; ‘soot’; ‘wind-felled tree’), and in each case this root is the one that takes rising tone. Since nouns derived from verbs typically are assigned rising tone in Hup (see below), it is possible that these verbal tone contrasts are due to a process of conversion or association with the nominal form.

There is, however, at least one context in Hup in which verb roots are given consistent and non-predictable tone values. This is the Apprehensive mood (see §14.6), in which verb roots occur bare (i.e. without a Boundary Suffix), and are accordingly word-final:

- (130) *ʔam nɔ̃h !*
 2sg fall.APPR
 ‘(Watch out,) you’ll fall!’ (OS)

Whether the Apprehensive verb root receives falling or rising tone is not predictable (with the exception of CV syllables, which virtually always take falling tone), as the following list of Apprehensive forms illustrates. These verbs were elicited multiple times from several speakers in two different dialect areas (Tat Deh and Barreira), with almost no inconsistencies among the responses. Moreover, some of these verbs are not commonly used in this mode, but their tone values are nevertheless consistent across speakers. The tonal differences can thus safely be taken as reliably established.

(131)	<i>cĩy'</i>	‘poke, vaccinate’
	<i>ciʔ-d'aĩk</i>	‘urinate on’
	<i>g'ǽç</i>	‘bite’
	<i>wí</i>	‘give something back to’
	<i>mǽh</i>	‘hit, kill’
	<i>nɔ</i>	‘say (to)’
	<i>hǽ</i>	‘burn up’
	<i>hǽh</i>	‘make noise’
	<i>yǽʔ</i>	‘singe, get burned’
	<i>cob</i>	‘point out’
	<i>hup-yǽl</i>	‘hide oneself (from)’ [Reflexive-hide]

That verbs in Apprehensive mode receive consistent and non-predictable tone values suggests that Hup verb roots in general do in fact have underlying tone, just as do nouns and adjectives. The case for this is strengthened further by the fact that, for some of the verbs in the elicited list above, it seems unlikely that the tone values would have been learned through regular exposure to their Apprehensive forms (because these rarely occur in discourse). Moreover, when the verbs in the minimal pairs in (128-29) above appear in Apprehensive mode, their tone assignment is consistent with that identified by consultants for the roots themselves. One possible way in which speakers might learn these tonal values is in contexts in which a stressed verb stem combines with an unstressed Boundary Suffix, particularly the statistically frequent Dependent marker *-Vp* (e.g. *wǽl-æp* ‘eat-DEP’); since in this environment the (final syllable of the) stem is the only stressed element in the word, it is possible that a contour could be distinguished. However, this possibility must await further investigation.

At this point in the study of Hup, the question of whether or not verb roots are underlyingly marked for contrastive lexical tone must be left open. Tone contrasts are accordingly not indicated on verb roots in this grammar; stressed roots, which in most

(multimorphemic) contexts are pronounced as if they simply received high tone, are always marked as such (ṽ). It is hoped that future investigation will resolve this question.

Stressed grammatical formatives—i.e. particles and some Boundary Suffixes—also receive tone values, although no pairs of formatives have been encountered that contrast solely on the basis of tone contour. While Inner Suffixes may be stressed, their tone is usually realized as high—as is the case with compound-final verb roots—because contours are not usually realized in word-internal position (see above).

In addition to lexical tone, Hup also has two grammatical uses of tone. First, in the imperative mood (see §17.5.1), the verb stem appears bare (i.e. without a Boundary Suffix) and its final syllable (which may belong either to a root or to an Inner Suffix) invariably receives a falling (high) tone:

- | | | | | | |
|-------|-------------|-------------|----------------|--------------|---------|
| (132) | <i>key-</i> | ‘look, see’ | <i>kéy</i> | (look.IMP) | ‘look!’ |
| | <i>ham-</i> | ‘go’ | <i>ham-yĩʔ</i> | (go-TEL.IMP) | ‘go!’ |

Tone also plays a role in the derivation of nouns from verbs in Hup, although the productivity of this process is limited (see §4.6.1). When a verb stem without a Boundary Suffix acts as a derived noun, the default tone assignment for the noun is a rising contour (but many exceptions exist):

- | | | | | |
|-------|-------------|--------------|------------|----------------------------|
| (133) | <i>bĩʔ-</i> | ‘work, make’ | <i>bĩʔ</i> | ‘service, work to be done’ |
| | <i>hæp-</i> | ‘sweep’ | <i>hæp</i> | ‘work of sweeping’ |
| | <i>hĩʔ-</i> | ‘write’ | <i>hĩʔ</i> | ‘writing’ |

Comparative Note:

The most striking aspect of Hup's tone system from a comparative perspective is its nearly mirror-image resemblance to the tone (word-accent) system in Yuhup. While the word-final lexical stress pattern is essentially the same in the two languages, rising tone on Yuhup words corresponds quite consistently to high (falling) tone on their Hup cognates; likewise, high/falling tone in Yuhup corresponds to rising tone in Hup. The same allophony between falling tone and high tone (dependent on whether the coda consonant is voiced or voiceless, respectively) exists in both languages.

- (134) Hup /cúg/ [čûg^h] 'hummingbird'
 Yuhup /cǔg/ [čǔg^h] 'hummingbird'

- (135) Hup /~dúh/ [núh̃] núh 'head'
 /~dǔh/ [nǔh̃] nuh 'tapioca'
 Yuhup /~dǔh/ [nǔh̃] nuh 'head'
 /~dúh/ [núh̃] núh 'tapioca'

The historical reason for this mirror-image tone pattern in the two languages remains a mystery, but two possible general modes of explanation suggest themselves. In one scenario, the common ancestor of Hup and Yuhup could have been without phonemic tone, and the two daughter languages could have developed tone independently in response to the same segmental cues (such as vowel length, phonation, etc.). What those cues might have been, however, is also not currently clear. In a different scenario, the common ancestor of Hup and Yuhup could have had some contrastive tone—or at least the beginnings of a tone system—and either Yuhup or Hup could have undergone a tone reversal.

Phonemic tone also exists in Dâw, and Dâw's tonal contours tend in general to correspond to those on cognate nouns in Hup (although there are exceptions), rather than to those in Yuhup. This could be taken as evidence for Yuhup's having undergone a tone reversal; alternatively, all three languages may have developed tone semi-independently. Phonemic tone is not found in Nadëb at all.

Tone is also a feature of the Eastern Tukanoan languages. These—and many other languages of the wider region—have pitch-accent systems, in which the vowel of the accented syllable in a word receives high pitch (cf. Barnes 1999, Aikhenvald 2002: 50). This fact, together with the absence of tone in Nadëb, suggests that Hup, Yuhup, and Dâw may have developed tone through contact with neighboring languages. This question, like that of the Hup-Yuhup tone opposition, will hopefully be resolved by future research.

2.4. Phonological differences among Hup dialects

There are a number of phonological differences among the three main Hup dialect regions, as well as among sub-areas within these regions. In particular, the phonological processes of vowel harmonization (including nasal spreading) and medial consonant cluster simplification (cf. §2.2, §2.6) that accompany the lexicalization of erstwhile multimorphemic words into monomorphemic forms are more advanced in the Eastern and (especially) the Western dialect areas than they are in the more conservative Central dialect (cf. §1.3 and §2.6). Accordingly, more words in the Eastern and Western dialects exhibit vowel harmony; for example, while speakers in Barreira and along the middle

Tiquié River say /koʔăp/ ‘two’ and /b’ok g’ăb/ [ʰbɔkkăb^m] ‘griddle’,³⁸ speakers in

Umari Norte and in the areas of the Vaupés and Japú Rivers (and to some extent in Tat Deh) say /kaʔăp/ ‘two’ and /b’akg’ăb/ ‘griddle’.

A particularly clear example of consonant cluster simplification in the Eastern and Western dialect areas involves the loss of cluster-final /h/ in words such as /wædhó/ ‘sun, moon’ (Central dialect), pronounced [βæɾó:] in the Tat Deh area, and /~bɔbhũy/ *mɔmhũy* ‘arm’ (Central), pronounced [mũmũy] *mumũy* in Tat Deh. A further example is /~yaʔamhǒʔ/ *yăʔamhǒʔ* ‘dog’ (Central dialect), pronounced [ỹăʔămbǒʔ] in Tat Deh; here ‘dog’ clearly contains /~yaʔám/ ‘jaguar’ and an unidentified second morpheme /hǒʔ/.

The [b] present in the Tat Deh form was undoubtedly inserted after the original /h/ was lost, due to gemination of the medial consonant [m.b] across the syllable boundary; since vowel harmonization and the accompanying nasal spreading did not take place, the word remained half nasal and half oral. The [b] is simply the oral half of the geminate medial consonant /m/.

Other dialectal differences in phonology include the use of a flap [ɾ] for intervocalic /t/ in the Tat Deh region (e.g. /ʔɔt/ + /Vý/ ‘cry-Dynamic’: Tat Deh [ʔɔɾý] vs. Barreira [ʔótý]; also Tat Deh [bɔɾók] vs. Barreira [bótók] ‘ear’). Conventional (but optional) use of flap [ɾ] in place of medial /d/ is common to all the dialect areas.

³⁸ The probable etymologies of these forms are *kəwəg-ʔăp* ‘eye-quantity’ for ‘two’, and ‘skin/pot-?’ for ‘griddle’.

In the Umari Norte dialect area, the vowel in the first syllable of some bisyllabic, monomorphemic words is pronounced [i]—an interesting exception to the general rule of morpheme-internal vowel harmony. Examples include [kirô:] for [kerô:] /kedó/ ‘firefly’ (a Tukano borrowing); [kiyăkʷ] for [kayăkʷ] /kayăk/ ‘manioc’; and [βirô:] for [βærô:] or [βædhô:] /wædhô/ ‘sun, moon’. Note that the vowel that has presumably been replaced by [i] is variably [a], [æ], and [e], but this process is not regular; what drives it is not clear.

Morpheme-medial /y/ has been replaced by /h/ in some words in the Hup spoken along the Vaupés and Japú Rivers (but this replacement is rare in Tat Deh); examples include /kæhæk tɔʔ/ (elsewhere /kayak tɔʔ/) ‘manioc tuber’ (compare Yuhup *yák* and Dâw *yăk*, additional evidence that /y/ is historically prior), and /bihĩw/ (elsewhere /biyĩw/) ‘blood’ (compare Yuhup *yíw* and Dâw *yăw*). Note that /h/ and /w/ are the most common medial consonants in Hup, a generalization that may have motivated this change.

Finally, speakers in Barreira characterize the speech in Nova Fundação (which like Barreira is located within the Central dialect area) as having a noticeably more sing-song intonation.

2.5. Orthographic conventions

The orthographic conventions used in this grammar represent a compromise between two requirements. These are, on the one hand, to maintain consistency with the phonology of Hup; and on the other, to maximize user-friendliness to the reader.

This compromise comes to the fore especially in the representation of nasality. As a morpheme- or syllable-level prosody, nasality is realized equally on all segments within its domain except for voiceless obstruents (§2.3.1). Thus a word like /~d'ád/ [nǎn] 'foot-flea' (*bicho-do-pé*) could alternatively be represented orthographically as ~d'ád (as it is phonemically), or nasality could be marked on the vowels only (e.g. d'ǎd), or on the consonants only (e.g. n'án). Of these three alternatives, the most user-friendly choice (to anyone familiar with the Roman alphabet) is surely to mark nasality on some segment within the syllable, which may be either a consonant or a vowel. Accordingly, where the voiced obstruent and glottalized obstruent phonemes /b/, /d/, /g/, /b'/, and /d'/ are present, their nasal variants are represented as *m*, *n*, *ŋ*, *m'*, and *n'* (but note that the palatal stop /j/ and the glottalized stops /j'/ and /g'/ do not have nasal variants in this orthography, and are simply written *j*, *j'*, and *g'*). Where these consonants are not present, nasality is marked on the vowel: *ĩ*. All other unmarked segments in these nasal morphemes (with the exception of the voiceless obstruents) should be understood as nasalized; this includes vowels that are adjacent to the nasal-marked consonants, as well as other types of consonants (glides, glottalized glides, and fricatives).

In addition to being relatively user-friendly, this solution of marking morpheme-level nasality on some segment within the morpheme also avoids the problem of how to

represent the few words that are essentially monomorphemic (at least synchronically) but combine nasal and oral syllables, such as *ya ʔamboʔ* ‘dog’ and borrowed Portuguese names like *mandú* ‘Manuel’. A morpheme-level approach such as that exemplified by *~d’ád* (above) would not represent these words effectively.

Other orthographic conventions used in this grammar include the use of the symbol *c* to represent the voiceless palatal stop and its various allophones: [ʃ, č, s, ts, ty, ytʰ], and the letter *j* to represent the voiced palatal stop, which in IPA is *ɟ*. The glottalized stop series (in which voicing is neutralized) is represented using the voiced obstruent symbols *b’*, *d’*, *g’*, *j’*, even though /g’/ and /j’/ are always pronounced as voiceless ([kʰ] and [čʰ]); as mentioned in §2.1.2.6 (footnote 28), the use of the voiced set has the further advantage of allowing differentiation of the marginally phonemic voiceless /p’/ from phonetically voiced /b’/, and is consistent with the fact that both the voiced stops and the glottalized stops (but not the voiceless stops) have nasal allophones. Finally, the tone diacritic *ǃ* represents rising tone, and *´* is used for high tone (which is tentatively assumed to be underlying, with the falling contour as its allophone; cf. §2.3.2.2 above). In other respects, the orthography used here corresponds closely to Hup phonology and the IPA alphabet.

A practical orthography is also in the process of being developed. Its primary purpose is to be a tool for the Hupd’əh themselves, in beginning a native-language literacy program. This orthography has been proposed by Henri Ramirez, with some

input from myself. As the orthography now stands, the proposed symbols are the following:

Vowels:³⁹

/i/	i	ĩ	/e/	ë	/æ/	e	ẽ
/ĩ/	ĩ	ĩ̃	/ə/	ä	/a/	a	ã
/u/	u	ũ	/o/	ö	/ɔ/	o	õ

Consonants:

/p/	p	/b/	b	m	/p'/	p'	/h/	h
/t/	t	/d/	d	n	/d'/	d' n'	/w/	w
/c/	s	/j/	j		/j'/	s' j'	/y/	y
/k/	k	/g/	g		/g'/	k' g'	/w'/	w'
/ʔ/	'	/b'/	b'	m'	/ç/	ç	/y'/	y'

The general approach to marking nasality in the practical orthography is the same as that described above for this grammar, except that only the consonants /~b/ *m*, /~d/ *n*, /~b'/ *m'*, and /~d'/ *n'* are represented with distinct nasal symbols. The palatal stop /c/ is written as *s*, and diacritics used to mark tone are *̀* for rising tone and *́* for high (falling) tone. Finally, the voicing neutralization is not represented in the glottalized consonants; morpheme-initial /g'/ and /j'/ are represented essentially as they are pronounced, as voiceless *s'* and *k'*, while morpheme-finally they are written *g'* and *j'*.

There are still many problems to be worked out and decisions to be made for the practical orthography to function effectively. A distinct glottal stop symbol may be needed, because in the current system an adjacent consonant and glottal stop (Cʔ) (which occurs across morpheme boundaries) is indistinguishable from a glottalized consonant (C'). The initial glottal in ?VC morphemes is also not currently written in the practical

orthography, which may lead to confusion in multimorphemic contexts. Whether tone should be marked on all words (notably verbs, for which tone values are unclear) is presently in debate as well, and the current choice of tone/accent marks (particularly \hat{v} for a rising contour) is somewhat counterintuitive. The voicing neutralization is not represented in the glottalized stops, resulting in two more symbols than necessary. Finally, a further concern is whether or not to write compound verbs and other morphologically complex forms (including those containing enclitics, Inner Suffixes, and CVC Boundary Suffixes) as single or multiple words. It is hoped that, as more Hup speakers become familiar with the writing system, some of these issues will be resolved through discussions within the community.

2.6. Morphophonemics

Morphophonemic processes in Hup are limited primarily to two domains: the attachment of vowel-initial suffixes to the stem, and the lexicalization (fusion) of bimorphemic forms to yield monomorphemes.

As discussed in §2.1.2.1 above, vowel copying is limited to a subset of the vowel-initial suffixes (see the list of suffixes in §3.4.1.2). The majority of these can be considered primarily verbal, but most also occur with nouns and (in some cases) with other parts of speech. The vowel-copying suffixes have an empty vowel slot in the syllable template; in other words, their vowel is not underlyingly specified, but is rather a copy of the immediately preceding vowel (i.e. that found in a final stem or Inner Suffix of

³⁹ The choice of which vowel receives the diacritic is determined by Portuguese pronunciation of the corresponding symbols (i.e. *o* corresponds roughly to [ɔ], *e* to [æ]).

the host; see the examples below). As discussed above, vowel-initial suffixes in general (both those that involve vowel-copying and those that do not) also trigger ‘copying’ of the final consonant of the preceding stem or formative, which geminates in order to provide an onset to the following syllable.

Other phonological processes that apply across morpheme boundaries are vowel harmony and consonant cluster simplification, which are not limited to a particular class of formative (i.e. Boundary Suffixes, etc.). These processes are all internal to the phonological word, and primarily involve morphemes within the word core (particularly roots strung together to form compounds). On the periphery of the word, these processes affect proclitics, but not enclitics or particles; this probably has to do with the right to left directionality of vowel and nasal harmonizing processes, originating on stressed syllables (cf. §2.3.1).

Vowel harmony across morpheme boundaries is confined primarily to a series of (usually two) roots that form a compound and are becoming relexicalized (i.e. fused) to produce a single monomorphemic form (whereas in most compounds the component roots remain phonologically relatively independent from each other). This process is subject to lexical variation and some variation across dialects, as discussed in §2.4. It differs from vowel copying (which is limited to a subset of Boundary Suffixes) in that vowel harmony involves the spreading of vowel quality (including its nasal or oral quality) from one morpheme so as to *replace* the vowel quality of another, whereas vowel copying targets a suffix that has an unspecified underlying vowel slot to begin with. In other words, in vowel copying (unlike vowel harmony), the spreading simply fills in without pushing anything else out. In addition, vowel harmony has a right to left

directionality, whereas copying is left to right. Nevertheless, the two processes plainly have much in common, and both may be motivated by similar constraints on the Hup word, which favor the same vowel quality and no non-homorganic consonant clusters within the minimal word (cf. §2.2).

Consonant cluster simplification always accompanies vowel harmony; it too is subject to some dialectal variation. This process, whereby two adjacent non-homorganic consonants at an erstwhile morpheme boundary reduce to one (or to two homorganic consonants, which form the coda and onset of their respective syllables) is motivated by Hup's constraint against consonant clusters within the morpheme. Thus bimorphemic forms that are becoming relexicalized as monomorphemic, or whose components are otherwise phonologically dependent on each other, tend to undergo simplification of the consonants at the morpheme boundary—thereby reducing this boundary. Almost all examples of this simplification process involve an initial obstruent taking precedence over a following continuant; however, there are a few examples involving two obstruents, in which the first usually replaces the second (e.g. *tegd'úh* [teg^ŋgúh] 'tree', see below; also 16d).

The examples below illustrate forms that have undergone both vowel harmony and consonant cluster simplification in the process of lexicalization from bimorphemic to monomorphemic forms:

- (136) a) *kaday-*
 kæd-way-
 pass-go.out
 'go out fast'

- b) *kānam-*
kəd-ham-
pass-go
'go fast'
- c) *ka ʔáp*
kəwóɟ-ʔáp
eye-quantity
'two'
- d) *b'akab* (some Tat Deh and Japu area speakers)
b'ək-kab
clay? griddle?
'griddle'

The same processes affect the third person singular pronoun *tɪh*= when it acts as a proclitic. This applies both to the procliticization of subject *tɪh* to the verb in the Umari Norte dialect (see §3.4.2.1 below and §6.1), and to its use as a 'dummy head' with bound nouns and adjectives (§5.4 and §6.6), as in example (137)—although in the latter case, it should be noted that vowel harmony affects only a few relatively lexicalized forms, and even then is subject to considerable variation.

- (137) a) *ta ʔág* (some dialectal and individual variation)
tɪh=ʔág
3sg=fruit
'fruit'
- b) *tā ʔáý*
tɪh=ʔáý
3sg=FEM
'woman'
- c) *todó* (Umari Norte dialect)
tɪh=dó
3sg=red
'red'

A number of monomorphemic lexical items convey the impression of having undergone these reductive morphophonemic processes in the past, but are no longer etymologically transparent. Examples include *ya ʔǎp* (possibly from *yɛ ʔǎp* (DEM.ITG-QUANTITY)) and *pũ ʔũk* ‘ipadu (coca)’ (possibly involving *ʔuk*- ‘convey a powdery substance to the mouth’), among others (cf. §2.2).

While the forms in examples (136-137) above are lexicalized and relatively frozen, in fast speech speakers sometimes apply the same vowel harmony and consonant cluster simplification processes more generally to other phonological words. In example (138), the forms *tɪh=ʔp* (3sg=father) and *tɪh-ǎñ* (3sg=OBJ), which in slow speech are pronounced without any phonological changes, undergo these processes:

- (138) *tɪ=ʔp tǎh-ǎñ háy ʔah cóʔ d’o ʔ-way-g’et-yɛʔ-ɪh*
 3sg=father 3sg-OBJ outside LOC take-go.out-stand-TEL-DECL
 ‘Her father put her (the child) outside.’ (E.SB.1)

Nasal spreading across Hup morphemes usually accompanies vowel harmony, and involves nasalization of the entire syllable (in keeping with the morpheme-level prosodic nature of nasalization in Hup; cf. §2.3.1). In a few cases, however, nasal spreading occurs independently of vowel harmony:

- (139) *n’apũh*
 variant of *d’apũh*
 ‘hand; finger section of hand’
 (possibly from *d’ap* ‘flesh’ + *ʔũh* ‘interactive/together’?; cf. footnote 34, §2.3.1)

As noted above, consonant cluster simplification always accompanies vowel harmony, and in fact appears to be a prerequisite for vowel harmony to occur. This is

supported by the fact that no cases of vowel harmony have been encountered across a non-reduced, non-homorganic consonant cluster within a semi-lexicalized bimorphemic form (e.g. *togtúg* ‘son-in-law’ [*tóg* ‘daughter’; cf. *túg* ‘husband’ in Dâw], which is etymologically obscure for Hup speakers). On the other hand, cases of a reduced consonant cluster without vowel harmony do exist. Examples include the variant [teg^ɰgúh] (used by a few speakers in Tat Deh) of *tegd’úh* ‘tree’ (probably originally bimorphemic; cf. *teg* ‘wood, stick’, but no form *d’uh* is currently attested), and *d’apũh* ‘hand’ (possibly from *d’ap* ‘flesh’ and *ũh* ‘sibling; interactive’, cf. 139 above).

Similarly, in certain cases where vowel harmony *appears* to be present, but is in fact due to the chance similarity of the original morphemes, consonant cluster simplification is also present: e.g. *totóg* ‘granddaughter’, from *tóg tóg* ‘daughter’s daughter’; compare the unreduced *togtãh* ‘grandson’, i.e. *tóg tãh* ‘daughter’s son’.

Cases of lexicalization of an erstwhile bimorphemic form frequently result not in a single consonant, but in a homorganic cluster which provides both a coda to the first syllable and an onset to the second (cf. §2.1.2.1). This is typically the case when the consonant involved is a voiced obstruent (or its nasal allophone); it is then realized as a voiceless + voiced sequence. These homorganic clusters are found almost exclusively in reduplicated forms (which probably do not involve the reduction of a non-homorganic cluster, but rather the creation of a homorganic one) and those lexical items which are composed historically of two morphemes (and which do typically involve cluster reduction). The process is motivated by Hup’s preference for a consonant-initial syllable template for the morpheme, discussed in §2.1.2.1, which similarly motivates the

gemination of the final consonant of a root when a vowel-initial suffix is added; however, its result is in a sense more reduced than is a full geminate consonant. As such, it arguably marks the lexeme as *marginally* bimorphemic (see §2.1.2.1)—not easily broken down into two distinct morphemes, but also not really analyzable as a single one.

This phenomenon is illustrated for reduplicated forms involving medial voiced stops in example (140):

(140)	<i>b'eb'ěp</i>	[^m b'ep.b'ěp ^ʔ]	‘butterfly’
	<i>bəbəg</i>	[^m bəp.bəg ^ʔ]	‘cubiu fruit’
	<i>mamap-</i>	[māp.māp ^ʔ]	‘eroding ditch’
	<i>d'id'ib-</i>	[ⁿ d'it.d'ib ^m]	‘be curly’ (cf. <i>d'ib-</i> ‘rolled’)
	<i>d'od'ok-</i>	[ⁿ d'ot.d'ok ^ʔ]	‘be bent’
	<i>nənəy-</i>	[nət.nəy]	‘swing’

Reduplicated forms with a medial voiceless stop, fricative, or glide are frequently (though not invariably) pronounced with a geminate medial consonant:

(141)	<i>kə̌kə̌-</i>	[kə̌k.kə̌t ^ʔ]	‘spiral’
	<i>pə̌pə̌-</i>	[pə̌p.pə̌t ^ʔ]	‘circular’
	<i>tə̌tə̌-</i>	[tə̌t.tə̌n]	‘clumped together’ (e.g. jacu or maniwa)
	<i>cecew-</i>	[ses.sew]	‘turn dark when ripe’
	<i>yə̌yə̌-</i>	[yə̌y.yə̌p ^ʔ]	‘rub’

Reduplicated forms also provide a context in which the constraint against morpheme-internal non-homorganic consonant clusters is occasionally violated (cf. §2.2). When the reduplicated root ends in a glottal stop, this stop may appear in the coda of the first reduplicated syllable, forming a consonant cluster with the onset of the second syllable, as in (142). This phenomenon is probably due to the fact that reduplicated forms are historically bimorphemic, and—like some non-reduplicative forms that have

been relexicalized from historically bimorphemic forms—they are not governed absolutely by the constraints that apply to monomorphemic forms. Note also that the ability of the glottal stop to form a medial cluster in reduplicative contexts is consistent with the nature of glottal stops cross-linguistically, which tend to be more free in their patterning than are other consonants (cf. Macauley and Salmons 1995).

- (142) *peʔpeʔ* ‘grope, pat’
 wɪʔwɪʔ ‘tremble’
 cĩʔcĩʔ ‘lower back’
 w’ãʔw’ãʔ ‘stick up out of a pot, basket, etc.’

The same phenomena of medial consonants realized as homorganic clusters or geminates (with the occasional appearance of the glottal stop as a first-syllable coda) also occur in synchronically monomorphemic words that appear to be historically derived from compounds, and in certain derived forms involving a bound word-initial CV morpheme. As in the case of the reduplicated forms above, here too intervocalic voiced stops tend to be preceded by a homorganic voiceless stop, producing two heavy syllables. This is the case even where the word is not etymologically transparent, as in the following names of animals, which appear to involve the combination of a semantically opaque morpheme /cV-/ with a root (compare the cognate words having the same meaning in Hup’s sister languages):

- (143) *camáy* [čăp.măỹ] ‘opossum’ (compare Yuhup: [măỹ])
 cɔm’ɔh [č’ɔp.mǝh̃] ‘tayra’ (compare Yuhup: [m’ɔh])
 cɪb’ɪh [čip.bɪh̃] ‘bat’ (compare Dâw: [bɪh̃])
 cub’út [cup.bút̚] ‘electric eel’ (compare Yuhup: [b’út])
 cɔw’ɔb [čəʔ.wɔb^m] ‘aquatic lizard sp.’

A further example is *yɔmǝ* [yɔ̃p.mǝ̃] ‘anus’ (possibly from *mǝ* ‘hole’?). Note that the same kind of surface cluster pattern can also occur when the first consonant is present underlyingly: *b’uʔb’aʔk* [ᵐbʊʔ.bǎk̚] or [ᵐbʊp.bǎk̚] ‘termite nest’, from *b’uʔ* ‘termite’ and *b’aʔk* ‘nest, clump’.

The medial homorganic cluster phenomenon also occurs with those few bound forms in Hup that occur word-initially and have an underlying CV syllable structure—the Factitive prefix *hi-* and the bound demonstrative forms (*nu-* ‘proximate’, *n’i-* ‘distal’, *yu-* or *yí-* ‘distal intangible’, and *hĩ-* ‘interrogative’). When these CV forms are followed by other morphemes beginning with a voiced stop (or [k], for which voicing is neutralized in morpheme-initial position), they take a homorganic coda consonant from the onset of the following morpheme, resulting in a heavy syllable structure for both morphemes:

(144) a)	<i>hi-m’æ-</i>	[hip.m’æ:]	(FACT-cool)	‘make cool’
	<i>hibi-</i>	[hip.bí:]	(FACT+?)	‘be jealous’
b)	<i>hĩ-n’ĩh</i>	[hĩt.nǝ̃h]	(INT-COMP)	‘what’
	<i>n’i-d’ǝh</i>	[nĩt.dǝ̃h]	(PROX-PL)	‘these’
	<i>n’i-m’æ-</i>	[nĩp.mǝ̃:]	(DIST-MEAS)	‘that much, that time’
	<i>nukán</i>	[nũʔ.kǎn]	(PROX + DIR?)	‘over here, this way’

However, this homorganic cluster phenomenon does not apply equally to all lexical items with the appropriate phonological template: certain bisyllabic forms, including those that appear to be reduplicated, are nonetheless not typically pronounced with the medial homorganic stop. Examples include the nasal forms *mæmǝ̃* ‘jacamim bird’, *nunút* ‘moth’, *mæmǝ̃n* ‘bee sp.’; it is not clear why these lexical items should deviate from the more general pattern. Similarly, intervocalic /d/ is often pronounced as

a flap [ɾ] (cf. §2.1.2.3), rather than as a homorganic cluster. Borrowings such as *mamãw* ‘papaya’ (from Portuguese *mamão*) also lack a medial homorganic stop, which may reflect their truly monomorphemic identity. Finally, the homorganic cluster phenomenon does not extend to ‘normal’ compounding of noun or verb stems, even where a CV root is involved. This is because this compounding, which is fully productive, forms a phonologically less-integrated word than do unitary lexical items or combinations of root + phonologically bound affix; thus non-homorganic consonant clusters are acceptable in this context.⁴⁰

⁴⁰ Note that CV roots in compounds may be pronounced with a long vowel (CV:), as if they were independent words. This is consistent with their nature as words that are relatively less lexicalized, in contrast to those (including most reduplicated forms, etc.) that are formed via less productive processes and tend to be learned as discrete lexical units.

3. The architecture of the word: parts of speech and formatives

Hup morphology is relatively complex: a single grammatical word can be composed of a long string of concatenated morphemes, with varying degrees of bonding among them. This complexity is best handled by a definition of the word that distinguishes between morphosyntactic and phonological criteria. Accordingly, this discussion follows Bickel and Nichols (to appear) in establishing a distinction between the grammatical word, which is the smallest unit of syntax (i.e. the terminal node or minimal projection in phrase structure), and the formative, which cannot govern or be governed by words, cannot require or undergo agreement, and cannot head phrases. Crucially, the unit defined by the grammatical word need not be a single *phonological* word; likewise, while formatives are often bound morphemes (i.e. affixes or clitics), they can also be phonologically free (or relatively free) forms (i.e. particles).⁴¹

In Hup, the innermost core of the grammatical word is the root or string of component roots forming a compound, where the root is defined as “an unanalyzable form that expresses the basic lexical content of the word” (Payne 1997: 24). Associated with this core may be several layers of formatives, which for the most part follow the core (in other words, Hup morphology is predominantly suffixing, or otherwise post-stem). The term ‘stem’ is here taken to mean the association of one or more compounded roots and (verbal) prefixes, which form a relatively tightly integrated unit.

⁴¹ According to the conventions for indicating morpheme juncture in this grammar (as noted in §1.7), the hyphen (-) marks affixation and compounding of verb stems, the equals (=) marks cliticization and bound nouns, and a blank space marks the juncture between a word and a particle, as well as between most elements of noun phrases (other than bound nouns).

This chapter focuses on the architecture of the Hup word: the parts that make up the word and the details of their combination. It begins with a discussion of the basic parts of speech or word classes, and then moves to the definition of the phonological word and the question of polysemy vs. homonymy of forms. This provides the context for the discussion of formative classes, of the flexibility of certain morphemes to vary their form class within the verb, and finally, of the implications of this last phenomenon for grammaticalization.

3.1. Parts of speech

Three major word classes can be defined in Hup, in all of which the basic members are roots. There are two open classes of nouns and verbs, and a relatively small closed class of adjectives. Syntactic, semantic, and morphological factors establish the formal categorial differences among these classes. The following discussion begins with nouns and verbs, defining them partly through contrast with each other; the adjective class is then defined vis-à-vis nouns and verbs.

In Hup, the majority of roots are lexically pre-assigned to a particular word class. However, in certain cases the same root (i.e. the same segmental form) can occur as a noun, a verb, and/or an adjective. Because little or no derivational morphology may be required to express a change in word class, it can sometimes be difficult to determine whether one of these different word-class manifestations of a lexeme is more ‘basic’ than another. In some cases these different manifestations are probably best considered distinct lexical items; in others, zero derivations or polyvalent roots (i.e. distinguished at the level of the grammar, not the lexicon; see also §4.6.1).

3.1.1. Nouns

Prototypical members of the noun class are those roots that head noun phrases and typically function as arguments of the clause. Unlike verbs, nouns can regularly appear bare in the clause, without any inflectional morphology or other associated formatives, and they contrast lexically for tone (see §2.3.2.2). Examples of nouns are given in (1-2):

- (1) *tính mǎm nǎh-nh*
 3sg.POSS axe fall-DECL
 ‘His axe fell.’ (M.NS.65)
- (2) *yawǎç=mah tǎh cǎw-nh, ko ʔǎp*
 capuchin.monkey=REP 3sg shoot.with.blowpipe two
 ‘He had shot two capuchin monkeys with his blowpipe.’ (M.NS.65)

Nouns and verbs are also distinguished by the formatives with which they combine, and under what circumstances the formatives occur. Nouns regularly inflect for case and number, whereas members of the verb class can only take case- and number-marking formatives when they are themselves nominalized or head adverbial clauses (where the case marker arguably has a distinct function from its usual one; see §18.2.6.2). Unlike verbs, nouns can be possessed (alienably and/or inalienably), and can be quantified and otherwise modified by numerals, adjectives, demonstratives, etc. Moreover, nouns and verbs are negated via distinct strategies (‘existential’ vs. ‘clausal’ negation, see chapter 16). Example (3) illustrates inalienable possession and case marking on the noun:

- (3) *yín-y=mah, ʔǎh=yawám-ǎn híd mǎh-yǐʔ-nh*
 that.ITG.be.like.DYNM=REP 1sg=younger.brother-OBJ 3pl kill-TEL-DECL
 ‘Then (he said) they killed my younger brother.’ (TD.Cv04.28)

Hup's rich system of aspect-mode morphology is primarily associated with verbs; nevertheless, many of these markers can also combine with nouns. Nouns acting as predicates of clauses can take many (although not all) of these markers. Even when acting as arguments, nouns can take some formatives that are (sometimes primarily) associated with verbal predicates, although these markers often have distinct functions depending on what part of speech they combine with; for example, the verbal Inchoative aspect marker signals focus when occurring on nouns (see §7.1.1).

Nouns in Hup undergo regular compounding (which is also a feature of verbs), as example (4) illustrates. A distinction exists between nominal roots that are 'bound'—i.e. that can appear *only* in a compound construction—and those that are free; this formal difference corresponds roughly to the semantic distinction of inalienable vs. alienable possession (see chapter 5).

- (4) *tecáp* *hǎp* *yam* *ʔāh* *yam-té-h*
 tomorrow fish song 1sg sing-FUT-DECL
 'Tomorrow I'll sing the Fish Song.' (M.K.118)

The majority of the members of the noun class function exclusively as nouns, and have no derived variants in other word classes. However, as discussed below and in §4.6.1, some nouns can be considered to be derived from verbs (by removing the verbal inflection and allowing the stem to function as a bare form, and assigning it rising tone). In principle, this derivation can also go in the opposite direction, to derive verbs from nouns; however, this does not appear to be a particularly productive process. Where a verbal and nominal form of the same root do coexist, the verbal form usually appears to be more basic and the nominal form more derived. In other cases, however, there is no clear argument for directionality one way or the other; e.g. *coh-* 'walk with cane/stick',

coħ ‘cane/stick for walking’. A small subgroup of nouns yield derived verbal forms via a different process: noun-incorporation with the verb *ni-* (see §9.6); e.g. *hǎm* ‘wound’, *hǎm-ni-* ‘have a wound’, while as a bare verb stem itself **hǎm-* is ungrammatical.

3.1.2. Verbs

Prototypical members of the verb class are those roots that head predicates and cannot in general appear bare (i.e. as uninflected stems). Except in a few contexts relating to mood and clause chaining, they minimally require a Boundary Suffix (indicating aspect, mood, etc.; see §3.4.1.2 below) and they can also appear with multiple Inner Suffixes, enclitics, and prefixes (see §8.3 and §3.4 below). In general, unlike on nouns, tonal contrast is minimal on verbs (or at least minimally distinctive to the listener), but at least a few cases of contrastive tone do exist (see §2.3.2.2). Verb roots are transitive, intransitive, or ambitransitive (see §8.2). They occur singly or in compounds (see chapter 9); in the case of verbal compounds, the obligatory inflectional marking occurs at the end of the entire string of compounded roots. Examples of Hup verbs—in simple and compound form—are given in (5-6):

- (5) *kapíʔ ʔín ʔǎg-ǎh*
 caapi 1pl drink-DECL
 ‘We would drink *caapi*.’ (M.K.120)

- (6) *yǎ̃=mah hǎǎ nǎh-tú ʔ-úh, tapúh !*
 then=REP alligator fall-immense-DECL splash
 ‘Then, it’s said, the alligator went into the water, splash!’

yǎ̃=mah tǎh-ǎ̃=yǎ̃ʔ tǎh nǎh-tu ʔ-wǎ-kǎdd’ób-óh
 then=REP 3sg-OBL=TEL 3sg fall-immense-follow-pass.go.to.water-DECL
 Then right with him he (the spirit) fell into the water, following (the
 alligator).’ (M.BY.96)

Certain members of the verb class can also double as nouns; as such, they simply appear bare (crucially, without a Boundary Suffix). As discussed above and in §4.6.1, some of these noun-verb correspondences are quite productive and are best considered to involve zero-derivation of nouns from more basic verbal forms; the nominal variants usually are assigned rising tone (e.g. *bǎʔ* ‘to work’ and *bǎʔ* ‘work to be done’). In other cases, however, neither form is clearly derived from the other; for example, some nouns have more lexically specific meanings vis-à-vis the semantics of the corresponding verb forms (e.g. *wǎd* ‘eat’ and *wǎd* ‘food’; *tǎh* ‘be pregnant (animal only)’ and *tǎh* ‘offspring’), and are best considered synchronically to be distinct lexical items rather than derivations.

This ability of verb stems to appear by themselves as independent nouns is limited to a relatively small subset of the verb class. However, verbs do occur quite productively in nominal compounds, nominalized via their combination with a noun stem, as discussed in §4.6 and §5.1. Verb stems also appear in noun phrases in the form of relative clauses:

- (7) [*hǎ̃p tǎh kǎk-əp*] *yud*, [*mǎh tǎh cú ʔ-up*] *yud...*
 fish 3sg pull-DEP clothes turtle 3sg grab-DEP clothes
 ‘His fishing clothes, his turtle-catching clothes...’ (P.CC.84)

3.1.3. Adjectives

It is possible to define a formally distinct, though small, adjective class in Hup, whose members are distinguished by two primary features. First, adjectives can act as predicates in main clauses, and when functioning as such—unlike verbs—they do not require a Boundary Suffix or any other bound formative. However, they can optionally take aspectual and other verbal formatives (examples 8-9), and in this way they pattern very much like verbs (see §10.1).

- (8) *poǵ=mah yúw-úh, yúp ʔín-wæd-æh !*
 big=REP that.ITG-DECL that.ITG mother-eat-DECL
 ‘He was big, they say! that ‘Mother-eater’!’ (H.MT.63)
- (9) *nút yak pāt b’ʃk wob-hám-áh, dó náu !*
 here macaw hair skin rest-go-DECL red good
 ‘Here the headband of macaw feathers rested, red and beautiful!’

Second, adjectives can occur as modifiers in noun phrases, where they follow a nominal head—minimally the dummy head *tɪh* = (the third person singular pronoun). In this function, adjectives closely resemble the class of obligatorily bound nouns, which likewise must be preceded by another nominal form (again, minimally the dummy *tɪh*; see §5.4). However, adjective modifiers are distinct from bound nouns in that bound nouns cannot escape the bound construction to appear as predicates (i.e. as independent stems not involved in compounds); moreover, the order of head and modifier in the two types of noun phrase (bound noun and adjective NP) is arguably reversed (see §5.4 and §6.6). Note that members of the verb class can also function as nominal modifiers, but as such appear obligatorily in relative clause form, and usually precede the head noun (see §18.2.3). An adjective modifier is illustrated in (10):

- (10) *nút=mah tʰ-ǎn nɔh-g'ét-éh, wowōw pōǵ*
 here=REP 3sg-OBJ fall-stand-DECL fly.sp. big
 'Here, it's said, it hit and stuck to her, a big fly.' (M.KTW.108)

The members of the adjective class and their predicative function are discussed in detail in §10.1, while the function of adjectives as modifiers in the noun phrase is described in §6.6. Certain adjectives can act as adverbs and as such have a relatively all-purpose modifier function; however, the adverbial variants are frequently at least minimally morphologically derived (see §10.2).

While the adjective class has a concrete identity as a distinct word class in Hup, as this discussion shows, the most important distinction in Hup grammar remains that between verbal and nominal morphology. Where not otherwise explicitly discussed, predicate adjectives are therefore treated implicitly as part of the verb class in terms of their morphological properties (i.e. their ability to take tense-aspect-mode formatives, etc.), and adjective modifiers are considered together with the noun phrase.

3.1.4. Other word classes

Hup has several additional word classes, which play a relatively minor role in the grammar compared to the major classes of nouns, verbs, and adjectives. Small closed classes of words that can occur as heads or modifiers in noun phrases are pronouns, demonstratives, interrogative pronouns, and numerals (which can all be considered subsets of the noun class more generally; see chapter 6). Locative and temporal postpositions also form a closed class (itself made up of two sub-classes), whose elements occur either within noun phrases or independently as adverbs (§10.2.3). Interjections and ideophones form a (potentially open) class of phonologically and

morphosyntactically idiosyncratic words that are for the most part never modified or associated with formatives at all; these are discussed along with sentence-level affect-marking strategies (which mostly involve formatives) in chapter 15. Finally, *həʔ* ‘yes, all right’ and *ʔam ya ʔápaʔ* ‘I don’t know’ make up a small closed class of proclauses.

3.2. Morphological processes and the phonological word

The syntactic distinction between grammatical word and formative in Hup is cross-cut by the phonological distinction of free vs. bound units. In other words, the grammatical word in Hup is not necessarily equivalent to the phonological or prosodic word. This discussion and the sections that follow seek to clarify the status of Hup morphemes in terms of both the syntactic and phonological bonds that link them to other morphemes within the ‘word’, with the understanding that these syntactic and phonological criteria do not always match up (although there is a partial correlation).

Hup morphology is highly agglutinative and concatenative; that is, it involves the stringing together of morphemes (here defined as any indivisible unit of form/meaning, whether root or formative) such that they are easily segmentable. Each unit of form typically encodes only one category or unit of meaning at a time, with almost no multiple exponence (fusion) or suppletion; virtually the only really (phonologically) fused formative is *-nʼan*, from *dʼəh-an* (Plural number + Object case; see §4.4). Thus Hup has, in Comrie’s terms (1985: 43) a relatively high ‘index of synthesis’, coupled with a low ‘index of fusion’.

Morphologically conditioned allomorphy in Hup is also minimal, being limited to certain verbal suffixes/auxiliaries which undergo reduction or deletion of their final consonant when followed by a vowel-initial Boundary Suffix (such as the Habitual marker in example (11); see §3.6 below for a list and discussion of these forms). Furthermore, those Boundary Suffixes that copy their vowel from the host stem typically appear with no vowel at all in this context. Thus in (11b), where the Declarative suffix *-Vh* follows the Habitual formative *big* / *-bɨ*, we have *-bɨh* (instead of *-big-ɨh*), with both of the adjacent morphemes undergoing phonological reduction.

- (11) a) *ʔãh hám-áy bɨ*
 1sg go-DYNM HAB
 ‘I go regularly.’ (txt)
- b) *ʔãh ham-bɨh*
 1sg go-HAB-DECL
 ‘I go regularly.’ (txt)

Roots in Hup are typically concatenated via compounding, whereas formatives undergo affixation and/or cliticization. While compounding and affixation are considered to be distinct processes, they are linked both synchronically and diachronically. On the synchronic level, a compound-final verb stem is formally indistinguishable from an Inner Suffix (see below); diachronically, many Inner Suffixes can be shown to have developed from verb stems within compounds through processes of grammaticalization (i.e. processes whereby a formative is derived from a root; see §3.7 below). Similarly, affixation and cliticization are processes that are associated with each other; a number of formatives can appear in either Inner Suffix or enclitic position within the verb word, depending on the type of Boundary Suffix present.

Nonconcatenative morphological processes, on the other hand, are infrequent in Hup. Tone is used to mark the imperative mood, and also plays a role in the derivation of certain nouns from verbs (in cases where the bare verb stem can act as a noun, it is usually assigned rising tone; see §4.6.1). Stem reduplication is a marginally productive means for signaling iterative aspect in verbs.

3.2.1. Defining the phonological word

Together, the root and associated formatives make up a syntactic unit that can constitute, on its own, a single phonological or prosodic word. The phonological word in Hup—which may or may not be isomorphic with the grammatical word—is defined according to a number of features. These are pause phenomena, primary stress assignment, and morphophonemic processes (cf. Dixon and Aikhenvald 2002: 13).

A) Pause phenomena

Phonological word boundaries may be marked by a pause (at least optionally). However, while the presence of a pause is a reliable indicator of a phonological word boundary, its absence is not necessarily good evidence that a boundary is not there (usually within a grammatical word).

B) Primary stress assignment

Primary stress—realized as word-accent, as discussed in §2.3.2—is one of the most useful diagnostics of the phonological word in Hup. This is especially true for verbs: there are typically either one or two syllables—and no more—per verb word that receive

primary stress (depending on the lexical identity of the Boundary Suffix present).

These stressed syllables are the Boundary Suffix (such as the Declarative in example 12) and the syllable preceding it, which either belongs to the final verb stem or is an Inner Suffix (see §3.4 below for explanations of these formative labels).

- (12) *kayaŋ tɪh g'ɔʔ-yæɪ-æh*
 manioc 3sg pull-lay.down-DECL
 ‘She pulled manioc (from the earth) and set it down (on the ground).’ (TD04.3)

Different verbal constructions (involving different types of Boundary Suffixes) require different stress patterns, but one or both of these two syllables—and only these syllables—always bears the primary stress of the word. All preforms (i.e. prefixes and proclitics), verb stems within compounds, and Inner Suffixes preceding the last verb stem or Inner Suffix in the verb word are unstressed, as are enclitics, which follow the Boundary Suffix.

Stress is not as clear a diagnostic with nouns. It typically falls on the noun stem and/or on the following suffix(es) (depending on their lexical identity, as in verbal constructions), but is somewhat idiosyncratic in noun phrases and nominal compounds. The more lexicalized compounds typically have a single stress (whose assignment to the first or the last component is largely predictable according to the type of compound or NP), but in other compounds each member can receive equal stress (see §5.2). Similarly, in noun phrases involving noun + adjective modifier, stress typically falls on the adjective (which follows the noun), but—especially in slow, careful speech—it can occur on both noun and adjective.

For some nominal roots, lack of stress is a primary indication that the root also has at least a marginal status as a clitic to some other form. Perhaps the best example of

this phenomenon is the procliticization of subject pronouns to verbs (see §3.4.2.1 below and §6.1), which probably indicates an in-process historical transition from free word to bound formative.

C) Morphophonemic processes

Morphophonemic processes in Hup, limited though they are, are restricted to the domain of the phonological word, and as such provide a useful diagnostic of the phonological word. The most common of these processes, in which no more than two morphemes are usually involved, are vowel copying/ harmony, consonant gemination (to meet syllable structure requirements), and medial consonant cluster simplification, as discussed in §2.6.

3.3. Polysemy or homonymy?

An important issue in Hup grammar is the (sometimes extreme) multifunctionality of many individual Hup forms (i.e. units of segmental phonological material), which can appear in a variety of distinct morpheme classes or slots in the word template, and often combine promiscuously with various different parts of speech. In many cases, the functions of the different manifestations of a given form are clearly related or even identical, but in other cases they seem—at least at first glance—to be completely distinct.

An extreme example of this multifunctionality is the morpheme *ʔiɪh* (see §11.2, §11.3, §14.7, §14.8). This form functions as a lexical root meaning ‘sibling of opposite sex’ (example 13a), as a verbal prefix indicating reciprocal or pluractional interaction (13b), as a verbal Inner Suffix (i.e. between root and periphery) marking an applicative

construction (13c), as a verbal Boundary Suffix (i.e. marking the periphery of the word) indicating optative mood (13d), and as a particle (i.e. morphosyntactically within the periphery of the word, see §3.4.2) following nouns and verbs marking epistemic modality (13e):

- (13) a) *nĩ* *ũh=n'an* *núp* *j'áh-át* *kək-næn-g'et-yó?*
 1sg.POSS sibling=OBJ.PL this land-OBL pull-come-stand-SEQ
 'Having brought my siblings to stay in this land...' (txt)
- b) *ya lambóʔ=d'əh* *ũh=g'ə́-ə́y*
 dog=PL RECP=bite-DYMN
 'The dogs are fighting.' (lit. 'biting each other') (EL)
- c) *ĩh=təh ĩp* *ĩh* *tĩh* *d'oʔ-ũh-ũh,* *yěw*
 1sg=child.father 1sg.OBJ 3sg take-APPL-DECL armadillo
 'My husband took armadillos for me.' (MM.PN)
- d) *tĩh* *m'ə-ũh*
 3sg cool-OPT
 'Let it cool off (then I'll drink it).' (OS)
- e) *həp* *yəʔ=d'əh* *ũh!*
 fish roast=PL EPIST
 'Maybe it's people cooking fish.' (discussing a smell) (OS)

How best to represent such multifunctional forms is a recurrent question in this grammar. Clearly, some must be cases of homonymy, where two (synchronically and diachronically) distinct morphemes share a chance phonological resemblance. Others are just as clearly examples of polysemy, where multiple related functions are performed by a synchronically unitary morpheme. Still others—of which *ũh* is probably an example (see the Historical Notes in §11.2, §11.3 and §14.8)—are best treated as distinct morphemes on the synchronic level, but as a diachronically unitary entity, from which the functional variants have arguably been derived through grammaticalization.

This issue of polysemy and polyfunctionality on the synchronic and/or diachronic levels is an important key to understanding the historical origins and development of many morphemes in Hup, and is the focus of many of the Historical Notes in this grammar. Economy of form in expressing multiple functions is a phenomenon that is undoubtedly shared by all languages to varying degrees, but Hup can be said to take this to an extreme. In arguing for grammaticalization scenarios to explain the historical development of Hup morphemes, a formal resemblance and a plausible semantic and functional link between morphemes will be taken as grounds for hypothesizing a historical connection between them, especially where there is typological precedent for such a link and likely bridging contexts can be shown to exist—although homonymy can rarely be ruled out with absolute certainty. As Kemmer (1993: 4) observes, “recurring instances of different meanings being expressed by the same formal or structural means is an indication that the meanings in question are related. Furthermore, the more direct the semantic relationship between two meanings, the more likely they are to be subsumed under a single form of expression, both within and across languages.”

3.4. Formative classes and their combination

While roots—the smallest units of syntax—were discussed in §3.1, this section focuses on formatives. These are morphemes that do not head phrases, govern/ be governed, or trigger/ undergo agreement. Two general classes of formatives, and several finer distinctions, can be defined with respect to the structure of the Hup word (i.e. corresponding to slots in the word template). These are the ‘core’ formatives, which are

made up of prefixes and suffixes (including Inner Suffixes and Boundary Suffixes), and the ‘peripheral’ formatives, which include clitics and particles. Hup morphology is almost exclusively suffixing (or otherwise post-stem), a common feature of verb-final languages.

Definitional morphosyntactic criteria for classifying the Hup formatives include their distance from the root (i.e. position in the core vs. the periphery of the word, especially the verb) and the obligatoriness of the formative vis-à-vis the word class of the host. Important definitional phonological features for classifying formatives include stress/tone, vowel harmony and other morphophonemic processes, and underlying syllable structure. In general, the degree of phonological integration of formatives with their host stem corresponds to their degree of syntactic and semantic integration. There is some flexibility between the Inner Suffix and the enclitic position, an issue which is discussed in §3.5 below.

Hup nominal morphology is relatively isolating, whereas its verbal morphology is quite rich (note that this is largely focused on the marking of tense-aspect-mode and of discourse-related phenomena such as focus and emphasis, rather than agreement). Both nouns and verbs can associate with affixes, clitics, and particles, but prefixes are strictly verbal (with the exception of nominals derived from verbs). Likewise, the distinction between Inner and Boundary Suffixes only has a distinct reality with regard to verbs; in the few cases in which formatives identified as verbal Inner Suffixes (based on their behavior with verbs) associate with nouns, they appear formally indistinguishable from Boundary Suffixes or enclitics. In fact, most of the core formatives in general (with the exception of case markers) arguably are primarily verbal forms, although many do occur

with predicate nominals as well and even with nominal arguments. When they associate with nominal arguments, these suffixes often have significantly different functions from when they associate with verbs; for example, many verbal aspect/mode markers have focus- or emphasis-related functions when occurring in combination with nouns (see §7.1).

In relation to the semantic and functional categories by which reference grammars are typically organized (e.g. aspect, tense, mood, etc.), each subset of formatives (Boundary Suffixes, enclitics, etc.) in Hup is largely heterogeneous; in other words, it is in many cases impossible to predict the function of a formative based on its form-class, and vice versa. This organization of this grammar employs a breakdown of grammatical morphemes by semantics and function (such that formatives relating to aspect, valency, etc. are grouped together), which is judged more user-friendly, rather than attempting to organize according to the formal identity of each class of morpheme. The formatives are treated purely according to their slot-class membership in this chapter alone. However, there are certain broad generalizations that can be drawn to relate form-class to semantics and function; these will be discussed in this chapter and also addressed in the relevant chapters throughout the grammar.

The verbal template is summarized here (see also §8.3); note that the minimal verb word usually requires a stem and a Boundary Suffix (although the latter is absent in the imperative and apprehensive moods, and in some cases of clause chaining).

(Preform)—Stem—(Inner Suffix)—Boundary Suffix=(Enclitic) (Particle)

Nominal morphology typically corresponds to the following template:

Stem—(Suffix)=(Enclitic) (Particle)

3.4.1. Core formatives

This section describes formatives that are relatively closely associated—both phonologically and morphosyntactically—with the root. The distinctions made here are useful primarily for the verb class, but have some relevance to the nominal class (and other parts of speech) as well.

Hup has two main ‘layers’ of core formatives; these are here all labeled ‘affixes’, but this should be understood as a loose, relatively language-specific label vis-à-vis more general, typologically defined properties of affixes. Despite their affix-like identity, many of the core formatives in Hup tend to have features in common with verb roots on the one hand, and with peripheral formatives (i.e. clitics and morphosyntactically associated particles) on the other.

3.4.1.1. Prefixes

There are very few formatives in Hup that precede the root, as opposed to the very large number that follow it. Criteria for determining whether such preforms should be considered affixes or clitics are less clear than for formatives that follow the root, mainly because preforms are always unstressed (whereas stress is a crucial feature for distinguishing core and peripheral post-stem formatives in Hup). Nevertheless, the preforms clearly correspond to several distinct layers or levels, including a more peripheral or proclitic layer having just a single member (see §3.4.2.1 below), and a

relatively central set of what are here termed prefixes. This group of prefixes has only three members, which are strictly verbal forms and are all used for valence-adjusting (although they can appear on other parts of speech which are derived from verbs). The prefixes are summarized in Table 3.1:

Table 3.1: Hup prefixes

Function	Form
Reciprocal/ pluractional	<i>ʔĩh-</i>
Reflexive	<i>hup-</i>
Factitive	<i>hi-</i>

Hup's three prefixes fall into at least two sub-layers: in the outer layer are Reciprocal/pluractional *ʔĩh-* (§11.2) and Reflexive *hup-* (§11.1); in the inner is Factitive *hi-* (§11.4). Note that this sub-layering emerges in their relative linear ordering: the Factitive is always closest to the stem if it co-occurs with one of the other prefixes:

- (14) *tiyĩʔ hup-hi-páy-áy ba ʔĩb'-ǎñ*
 man RFLX-FACT-bad-DYNM evil.spirit-OBJ
 'The man is being made bad by the evil spirit.' (EL)

Various features of these prefixes support the characterization of at least two layers relative to the verb stem, with the outer layer relatively loosely associated (to the point that it might be considered clitic-like). First, the outer-layer Reflexive and Reciprocal prefixes have the CVC phonological form that is more typical of independent words in Hup, whereas the CV form of Factitive *hi-* is more common in bound formatives. These two outer-layer forms are polyfunctional and can appear as enclitics and as independent grammatical words (with meanings distinct from their Reflexive and Reciprocal values), but Factitive *hi-* exists only as a verbal prefix. Also, the outer-layer

forms are more productive in their combinability with verb stems than is the Factitive.

Finally, Factitive verb forms are frequently lexicalized to the point that the bare root (minus the Factitive) is no longer meaningful (e.g. the stem *hipāh*- ‘know’ in example 15 below). These are all criteria that have been applied cross-linguistically to distinguish clitics from affixes (cf. Klavans 1985, Aikhenvald 2002b: 42, Zwicky and Pullum 1983, Sadock 1991: 52). A final, unusual property of these two outer preforms is their ability to detach from the verb stem in the context of a ditransitive verb with an explicit object, appearing directly before the object (which is itself followed by the verb in an incorporating-like relationship), and acting as phonologically free, predicate-initial particles (see §11.1 and §11.2).

There is also some indication that the outer-layer forms, Reciprocal/pluractional *ññh*- and Reflexive *hup*-, are themselves ordered with respect to their integration with the verb, such that *ññh*- occurs in the outermost slot. Evidence for this includes the fact that the Reflexive *hup*- and Factitive *hi*- prefixes—but not Reciprocal *ññh*—can combine with roots to form stems which can then appear inside larger compounds, suggesting their relatively high integration with the particular root within the compound, as in (15). Note that this ability to occur compound-internally as part of an individual stem also distinguishes these prefixes from the more clearly proclitic-like use of the third person pronoun *tñh* (§3.4.2.1), and likewise from the post-stem (suffix and enclitic) forms to be discussed below, which in general do not occur between compounded roots.

- (15) *yúp=yiʔ d'oʔ-[hup-hipāh]-nñh-yóʔ...*
 that.ITG=TEL take-RFLX-FACT:know-NEG-SEQ
 ‘Having this caused them to have knowledge/awareness...’ (H.txt.65)

Finally, in the very few cases in which they co-occur, the Reciprocal precedes the Reflexive, which appears to form a more lexicalized unit with the verb root:

- (16) *hid ʔih-[hup-yɔd]-ɔy*
 3pl RECP-RFLX-hide-DYNM
 ‘They are hiding from each other.’ (EL)

3.4.1.2. Suffixes

As noted above, the distinction between the two classes of suffixes, Inner and Boundary Suffixes, is relevant only for verbs. Nouns in Hup can take many of the formatives here described as Boundary Suffixes, which in most cases maintain their affix-like morphophonological properties (stress patterns and morphophonemic processes) regardless of the word-class of their host. Otherwise, most nominal morphology is peripheral (i.e. expressed as clitics and particles), including formatives that appear as suffixes (especially Inner Suffixes) when they combine with verbs. Unlike verbs (in most contexts), nouns do not by definition require a suffix, but can stand on their own as fully-formed words.

A. Boundary Suffixes

Boundary Suffixes are defined as the group of suffixes that separate the core of the verb (in which prefixes, roots, and Inner Suffixes can co-occur to form a phonological unit) from the periphery, which is made up of unstressed enclitics and (phonologically relatively free) particles. Most Boundary Suffixes are considered to be primarily verbal forms by definition, but the same formative can in many cases occur with both verbs and nouns (and in some cases with other parts of speech).

As discussed in §8.3, verbs (in most moods) minimally require one, and only one, Boundary Suffix (arguably including certain -Ø marked forms) when acting as predicates, but may have anywhere from zero to multiple Inner Suffixes (preceding the Boundary Suffix) and peripheral formatives (following the Boundary Suffix). As a class of verbal formative, the Boundary Suffixes do in general have a functional common denominator: one appears on every verbal predicate to mark the clause type, in some cases almost like a marker of punctuation. Thus a subset of Boundary Suffixes indicates various types of main clause (declarative, interrogative, negative, etc.), as well as indicating finer distinctions such as strong vs. neutral imperative, optative, and apprehensive (all of which could be considered sub-types of imperative), etc. Another set of Boundary Suffixes indicates the various types of dependent or subordinate clause, including complements, relative clauses, and various adverbial clauses. While grouped accordingly in the discussion below, these suffixes are treated elsewhere in the grammar alongside other formatives to which they relate functionally and semantically, rather than formally (as noted above). A few forms can appear as either Boundary or Inner Suffixes (see B below); these are Future/Purpose *-téǵ*, Inchoative *-ay*, and Negative *-nʔh*.

As noted in §3.4.1 above, the label ‘suffix’ applied to these formatives is to some degree a language-specific convenience, which expresses their relative integration with the root vis-à-vis the more peripheral forms (‘clitics’ and ‘particles’). In fact, many of the Boundary Suffixes have certain clitic-like attributes: they can attach to different parts of speech, and often are attached at the phrasal or clausal level (i.e. with scope over a larger unit than their phonological host).

The Boundary Suffixes in Hup themselves fall into two sets. The first of these—the simple or regular Boundary Suffixes—are the more prototypical markers of clause type, and have either a VC or CVC form. The second group is morphophonologically internally complex, involving a copied vowel followed by a CVC formative; this CVC form can in most cases appear without the copied vowel (an essentially verbal phenomenon) as a peripheral formative in combination with other parts of speech. While here defined as Boundary Suffixes (because of their ability to combine directly with a verb stem and mark the right-hand boundary of the well-formed verb word), this second group of suffixes behaves quite differently from the first and larger set, and functionally relates more to marking of affect and discourse rather than clause type per se.

The simple Boundary Suffixes are listed in Table 3.2. They form a closed set and encode a variety of semantic information (aspect, mode, subordination, etc.). Most are more common with verbs and/or occur clause-finally, but many can also associate directly with nouns in certain contexts. Those that mark nominal case are arguably primarily nominal suffixes, but are here identified as Boundary Suffixes based on their performance in combination with verb roots (which in some cases actually produces a nominalization).

Table 3.2. ‘Simple’ Boundary Suffixes in Hup

Clause Type	Function (with verbs)	Form	Function with nominal arguments?
Main clauses	Declarative	- <i>Ṽh</i>	Clause-final marker
	Interrogative	- <i>V?</i>	Interrogative focus
	Dynamic (aspect-related)	- <i>Ṽy</i>	Attributive (limited use)
	Inchoative (aspect-related)	- <i>ay</i>	Inchoative focus
	Focus	- <i>áh</i>	Focus
	Clausal negation	- <i>ñh</i>	
	‘Acting alone’ markers	- <i>ké?</i> - <i>d’áh</i>	
	Cooperative	- <i>ñh̃</i>	
	Imperative (strong)	- <i>kǎm</i>	
	Optative mood	- <i>h̃h̃</i>	
	Verbal diminutive ⁴²	- <i>kodé</i>	
Dependent clauses (some have secondary function with main clauses)	Dependent clause	- <i>Vp</i>	Topic marker
	Relative clause as object	- <i>ǎn</i>	Object case
	Adverbial clause	- <i>Ṽt</i>	Oblique case
	Adverbial clause	- <i>an</i>	Directional oblique case
	Nominalizer (complement clauses)	- <i>n’h̃</i>	
	Sequential	- <i>yó?</i>	
	Conditional	- <i>tǎn</i>	
	Simultaneous	- <i>m̃?</i>	Locative postposition ‘under’
	Temporal adverbial	- <i>kamí</i>	
	Future (main clauses) Purpose (dependent clauses)	- <i>tég</i>	Generic nominalizer

These Boundary Suffixes may themselves be distinguished into two subsets, primarily on the basis of their morphophonological properties. The members of the first subset (listed in Table 3.3) are all vowel-initial, and for many the quality of this initial vowel is unspecified, being obtained via copying from the preceding syllable (which is

usually the root, but may also be a core suffix). Those that do not copy their vowel all begin with /a/ (perhaps due to some common historical origin). These vowel-initial suffixes also condition consonant gemination at the end of the preceding stem (see §2.1.2.1 and §2.6 above). Moreover, a particular stress pattern is required by these suffixes: they all condition stress on the preceding syllable (the root or Inner Suffix). The Boundary Suffix itself may be stressed or unstressed, depending mainly on its individual lexical identity.⁴³

Table 3.3: Vowel-initial Boundary Suffixes in Hup

Clause Type	Function (with verbs)	Form
Main clauses	Declarative	- <i>V̌h</i>
	Interrogative	- <i>Vʔ</i>
	Dynamic (aspect-related)	- <i>V̌y</i>
	Inchoative (aspect-related)	- <i>ay</i>
	Focus	- <i>áh</i>
Dependent clauses (primarily)	Dependent clause	- <i>Vp</i>
	Relative clause as object	- <i>añ</i>
	Adverbial clause	- <i>V̌t</i>

Within this set, those vowel-initial Boundary Suffixes that involve vowel copying (particularly Declarative -*V̌h*, Dynamic -*V̌y*, Interrogative -*Vʔ*, and Dependent -*Vp*) can themselves be distinguished from the others. In addition to their distinct phonological form, they are the most frequently occurring formatives in Hup, and mark several of the most basic (i.e. semantically neutral) distinctions in clause type (see §17.1; also compare

⁴² This form is borrowed directly from Tukano and is probably idiosyncratic in its patterning; it does not really appear to mark clause type, unlike most of the other Boundary Suffixes listed here.

⁴³ Note that the stress/tone patterns of Hup verbal constructions are not conditioned by or indicative of temporality, unlike the situation reported for Yuhup (Ospina 2002: 293-314).

the imperative and apprehensive modes, which are signaled by a -Ø form, or lack of a Boundary Suffix altogether).

However, even these vowel-copying forms do not pattern in identical ways. Declarative -*Vh* is obligatorily the final element of the grammatical word, and cannot be followed by any peripheral formatives; it is also always clause-final, regardless of the part of speech of its host (cf. §17.3.2). Dynamic -*Vy*, on the other hand (like the consonant-initial Boundary Suffixes discussed below) may be followed by clitics and particles (cf. §12.2 and §17.3.2). The Interrogative, Dependent, and Inchoative forms pattern much like the Declarative, but are more flexible in allowing following peripheral forms. The implications of this distinction for the structure of the verb word are discussed in detail in §3.5 below.

Examples (17-19) illustrate some of the vowel-initial Boundary Suffixes in use:

- (17) *húptok* *ʔəg-əy*
 person.belly drink-DYNM
 ‘(He’s) drinking caxiri.’ (OS)
- (18) *ʔəg-əp,* *ʔāh-āh*
 drink-DEP 1sg-DECL
 ‘Drinking is what I’m doing.’ (OS)
- (19) *núw-āñ* *tāh* *bĩʔ-āh*
 this-OBJ 3sg make-DECL
 ‘He made this one.’ (OS)

The second subset of Boundary Suffixes, listed in Table 3.4, are those that begin with a consonant (and for the most part have a CVC form). In addition to their initial consonant (which conditions corresponding differences in morphophonemic patterning), they differ from the vowel-initial forms above in their stress pattern, which is in most

cases [unstressed stem (or Inner Suffix) + stressed Boundary Suffix] (whereas the vowel-initial suffixes all require stress on the preceding stem syllable, and may or may not be stressed themselves). They also differ in that more of these consonant-initial forms are strictly limited to combination with verbs, whereas all of the vowel-initial forms can associate with nouns in certain contexts. They tend to express more fine-tuned variations in modality, whereas most of the vowel-initial forms mark broader clause-type distinctions; the vowel-initial forms also occur considerably more frequently.

Table 3.4. Consonant-initial Boundary Suffixes in Hup

Clause type in which suffix usually occurs	Function	Form
Main clauses	‘Acting alone’ markers	- <i>kéʔ</i> - <i>d’ǎh</i>
	Clausal negation	- <i>nǎh</i>
	Cooperative	- <i>nǎŋ</i>
	Imperative (strong)	- <i>kǎm</i>
	Optative mood	- <i>ǎh</i>
	Verbal diminutive	- <i>kodé</i>
Dependent clauses	Conditional	- <i>tǎh</i>
	Nominalizer	- <i>n’ǎh</i>
	Sequential	- <i>yóʔ</i>
	Simultaneous	- <i>mǎʔ</i>
	Temporal adverbial	- <i>kamí</i>
Both main and dependent clauses	Future (main clauses)	- <i>tég</i>
	Purpose (dependent clauses)	

Examples of consonant-initial Boundary Suffixes in main clauses (Optative -*ǎh* and Clausal Negative -*nǎh*) are given in (20-21), and in dependent clauses (Conditional -*tǎh*, Simultaneous -*mǎʔ*, and Sequential -*yóʔ*) in (22-23):

- (20) *děh d'oj-**ǎñ***
 water rain-OPT
 'Let it rain!' (RU)
- (21) *děh d'oj-**nñ***
 water rain-NEG
 'It's not raining.' (RU)
- (22) *deh=mí hɔp-hí-**tǎñ**, ʔm b'ák-áh*
 water=river dry-descend-COND 1pl beat.timbo-DECL
 'When the water level goes down, we'll fish with timbó.' (RU)
- (23) *"hǎʔ", nɔ-yóʔ, tñh-ǎñ tñh yók-ay-áh*
 OK say-SEQ sg-OBJ 3sg poke-INCH-DECL
 'Having said 'all right', he poked him.' (P.BY.90)

Distinct from the 'simple' or 'regular' Boundary Suffixes (of both the vowel-initial and the consonant-initial sets) are the 'internally complex' type. These suffix forms appear to be made up of two components, and involve the combination of a copied vowel (from the preceding syllable of the host) followed by a CVC or CV formative which has a certain degree of autonomy in its own right (see below). These suffixes' stress pattern usually (with the exception of the Emphatic Tag *-Vtiʔ*) involves stress on both the host stem (i.e. its final syllable) and the consonant-initial second syllable of the suffix, while the copied vowel (which may be preceded by a geminate stem consonant) forms an unstressed syllable (stem-V-CV[C]). These suffixes are also somewhat different functionally from the 'simple' Boundary Suffixes, in that they relate more to affect and discourse marking than to designation of clause-type; moreover, most are restricted to clause-final position, often having scope over the entire predicate. In their vowel-copying (V-CV[C]) form, most associate only with verbs, but all can also occur with nominal hosts (and other parts of speech). As such (and in certain cases even with

verbs in non-declarative clauses), they appear exclusively as CV[C] enclitics or particles with the exception of Exclusive -Vy \acute{h} k, which always keeps its copied vowel (cf. Table 15.1, §15.3.4).

The set of internally complex Boundary Suffixes is summarized in Table 3.5:

Table 3.5. ‘Internally complex’ Boundary Suffixes in Hup

Function	Form (with verbs)
Intensifier	-Vcá <p></p>
Emphatic Tag	-Vti?
Interactive Tag 1	-Vyá
Interactive Tag 2	-Vhǝ?
Emphasis	-V \acute{h} h
Exclusive	-Vy \acute{h} k

Examples of these suffixes—the Interactive Tag2 -(V)hǝ? and the Emphatic Tag -Vti?—are given in (24-25a); compare the encliticized CVC variant -ti? in (25b).

- (24) *t \acute{h} hã?ta?p \acute{h} d- \acute{h} ǝ?* *n \acute{h} ?*
 3sg put.in.hand-meet-DIST-TAG2 say
 ‘He too put his hand in (to the hollow), right?’ (A-WT.3)
- (25) a) *n \acute{h} ’ \acute{h} =nih j’ám, ǝǎn ǝp ǝ \acute{h} - \acute{h} i?*
 thus=EMPH.CO DST.CNTR 1sg.OBJ father speak-EMPH.TAG
 ‘Thus Father told me (long ago)’ (T-PN.4)
- b) *w’ \acute{e} h-éy=ǝǎy j’ǎ \acute{h} ǝǎ \acute{h} =ti?*
 far-DYNM=FEM DST.CNTR 1sg=EMPH.TAG
 ‘I am a woman who comes from far away.’ (Song)

This variation in the form of many of the internally complex Boundary Suffixes depending on their host suggests that the vowel-copying phenomenon seen in these forms (and possibly in the vowel-copying Boundary Suffixes listed above as well) may be best interpreted as a feature of the Hup verbal construction in general, as well as a property specific to these individual suffixes. The copied vowel in the ‘internally complex’

suffixes may be functioning to mark the verb ‘core’, acting like a default Boundary Suffix in its own right by marking off the verbal core from the periphery. If this is in fact the function of the copied vowel, then the rest of the formative (i.e. the CV[C]) syllable) would actually fall outside this core, and thus bear a resemblance to the peripheral formatives (enclitics and particles), whose location within the verb word falls by definition outside the Boundary Suffix. These questions will hopefully be teased apart by future investigation.

B. Inner Suffixes

The Hup morphemes labeled ‘Inner Suffixes’ fill a specific slot in the verbal template. They occur in the core of the word, between the verb stem and the Boundary Suffix: [Stem—Inner Suffix—Boundary Suffix]. As discussed above, this slot is not present in nouns; in the few cases where formatives that are normally identified as Inner Suffixes (based on their usual occurrence with verbs) can also combine with nominals (e.g. the Perfective), they are indistinguishable in their formal realization from peripheral formatives. Functionally, many of these suffixes relate to tense, aspect, or mood, but they are in general a mixed lot.

Those morphemes in Hup that appear as Inner Suffixes are summarized in Table 3.6. Note that many Hup formatives can optionally appear either in the Inner Suffix position or in the verbal periphery (and as such perform more or less the same function; see §3.5 below). These are not included in Table 3.6, but are considered together with the peripheral formatives in §3.4.2. Also, as discussed above, a few formatives can appear as either Boundary or Inner Suffixes.

Table 3.6. Inner Suffixes in Hup

Forms that exist primarily as Inner Suffixes	Function	Form	
	Applicative	-ʔũh-	
	Completive	-cĩp- / -cĩw-	
	Counterfactual	-tẽʔ-	
	Ventive	-ʔay-	
	Filler	-Vw-	
	Elativ	-kəd-	
	Inferred evidential 2	-ni-	
	Telic	-yiʔ-	
Forms that can act as either Boundary or Inner Suffixes	Clausal Negative	-nĩh	
	Future/ purpose	-téɡ	
	Inchoative	-ay	
Phonologically eroded Inner Suffixes (with CVC variants that are in most cases not restricted to Inner Suffix position)		CVC	CVC
	Emphasis	-po-	pog
	Future	-te-	teg
	Habitual	-bĩ-	bíg
	Perfective	-ʔe-	ʔeʔ
	Volition, Imminent future	-tu-	tuk

Because of their placement (preceding the Boundary Suffix) in the verb word, Inner Suffixes are almost always word-internal, but they can occur word-finally in a very limited set of modes or contexts in which a Boundary Suffix is not present on the verb stem (i.e. imperative and apprehensive modes, and certain cases of clause chaining). While—apart from these specific exceptions—verbs always have one and only one Boundary Suffix, they can have zero to multiple Inner Suffixes. Inner Suffixes (unlike Boundary Suffixes) play no role in determining word-level stress patterns; rather, stress is assigned to Inner Suffixes exactly as it would be if they were component verb roots in a verb compound.

Phonologically, Inner Suffixes in Hup are consonant-initial (with the single exception of the ‘Filler’ syllable), and are usually of the form CVC. However, as Table 3.6 illustrates, a subset of the Inner Suffix forms lack a final consonant and appear as CV; these are all phonologically reduced allomorphs of CVC morphemes. Most of the members of this set of CVC morphemes can also occur as Inner Suffixes, although not always exclusively. By contrast, these reduced CV Inner Suffix variants can only appear as Inner Suffixes, and occur exclusively in environments where they are directly followed by a vowel-initial Boundary Suffix. When any consonant-initial Boundary Suffix (or another Inner Suffix) follows, these CV Inner Suffixes must be replaced by their CVC variants (from which they have undoubtedly grammaticalized). This phenomenon is illustrated in (26) (for the Emphasis marker *-pog / -po-*), and discussed in detail in §3.6 below.

- (26) a) *nĩŋ-ǎñ tĩh tɔn-ham-pog-té-p !*
 2pl-OBJ 3sg hold-go-EMPH1-FUT-DEP
 ‘She’ll really take you away!’ (B-Cv.1.3)
- b) *kaninĩ cɔp-ham-pó-h*
 sleepy(Tuk) go.from.river-go-EMPH1-DECL
 ‘Sleepyhead’s gone up away from the river!’ (B-Cv.3.135)

The only true exception to the generalization that Inner Suffixes are consonant-initial is the idiosyncratic ‘Filler’ syllable *-Vw-* (see §15.2.4), which is obligatorily followed by a vowel-initial Boundary Suffix, but requires an initial copied vowel as if it were a Boundary Suffix itself. The Inchoative suffix *-ay*, which can occur as either a Boundary or an Inner Suffix, also represents a marginal exception.

Examples of Inner Suffixes include the CVC forms *-ʔay-* (Ventive) and the CV forms *-ʔe-* (Perfective) and *-te-* (Future; see (26a) above):

- (27) *ʔin ham-ʔay-ʔe-h*
 1pl go-VENT-PERF-DECL
 ‘We went (and returned).’

Inner Suffixes are among the most morphologically flexible components of the Hup verb. Only a few morphemes in Hup are actually restricted to the Inner Suffix position and allowed to appear nowhere else in the verb word (with the exception of the CV variants mentioned above). Many others can *optionally* occur in the Inner Suffix slot, but appear at least as often in a peripheral slot (i.e. as enclitics and particles, which *follow* the Boundary Suffix rather than precede it). At the same time, Inner Suffixes appear to be morphologically identical to verb stems within compounds, vis-à-vis their morphological properties of placement, stress pattern, and optionality in the verb word. The fact that they are semantically and syntactically more like formatives than roots does differentiate them as a class from compound-internal verb stems. However, this distinction is not always clear in individual cases, where the morpheme has an auxiliary-like status and appears to be semantico-syntactically intermediate between a root and a formative. As the following sections will make clear, Inner Suffixes occupy a morphosyntactic domain in Hup in which the distinctions between processes of compounding and several processes of affixation are both synchronically and diachronically blurred.

3.4.2. Peripheral formatives

Outside the ‘core’ of the word, whose rightmost edge may be (or usually must be, in the case of verbs) marked by a Boundary Suffix, is the periphery. There are two types of peripheral formatives in Hup, labeled ‘clitics’ and ‘particles’, which are respectively more and less integrated with the core. As with the other labels applied to Hup formatives in this grammar, these terms are intended to reflect some of their features vis-à-vis a more general typology of formatives in the world’s languages, but they should also be understood as language-specific.

In characterizing the peripheral formatives, it is important to note that the distinction between bound and free morphemes in Hup is not fully discrete. Although the ‘particles’ are defined as being relatively free phonologically (as opposed to the relatively bound clitics), they still exhibit some features of bound forms, and in fact have much in common with clitics. They are not only syntactically bound—so that free or phrasal elements cannot come between them and the preceding stem—but they are even marginally phonologically bound as well, in that there are in general no pause phenomena that separate them from the verb core.

In the attempt to distinguish among the various Hup formatives and to give them coherent labels, this discussion is informed by Zwicky’s (1985: 285) insight that there are “characteristic *symptoms* of a linguistic state of affairs.” In Hup, as in other languages, such ‘symptoms’, or diagnostics, are not invariant definitional criteria, since—as Zwicky puts it—“as in medical diagnosis, interfering factors can prevent even clear cases from exhibiting a certain symptom, and a particular symptom might result from some condition other than the one at issue.”

The peripheral formatives have a number of features in common. Their position in the word (most notably in the verb) following the Boundary Suffix is the single feature that differentiates them definitively from all the core formatives (i.e. prefixes, Boundary Suffixes, and Inner Suffixes). Other identifying features include the fact that their position tends to be syntactically unrestrained; in other words, most can attach to any clausal constituent as host, depending on information structure. They are optional in the word, and most also have phrasal or even clausal scope, attaching to the end of a phrase or clause, rather than simply to its head. These are all features that are typical of clitics cross-linguistically (cf. Bickel and Nichols (to appear): 6; Mithun 1999: 39).

Other characteristics of Hup peripheral formatives include their occurrence with main clauses, but not dependent clauses. Peripheral formatives always have the phonological form of a separate word—a heavy syllable (CVC or CVV)—as opposed to the -VC form common in Boundary Suffixes and the -CV- form of many Inner Suffixes; note that this phonological resemblance to a well-formed word is also a cross-linguistically typical property of clitics, as opposed to affixes (cf. Trask 1993: 46). Finally, both clitics and particles can be drawn into the verb core to act as Inner Suffixes when followed by vowel-initial Boundary Suffixes other than the Dynamic marker, as discussed in detail in §3.5 below.

3.4.2.1. Clitics

Only one clearly proclitic-like form can be determined for Hup, although it patterns so differently with various parts of speech that it might be considered as constituting at least

two distinct homophonous morphemes. This is the third person singular pronoun *tʰh*, which combines with bound nouns to act as a ‘dummy’ or default nominal component in the bound construction (e.g. *tʰh=g’æt* ‘the leaf’). It serves a similar function as a dummy nominalizer with adjective stems (e.g. *tʰh=põg* ‘the big one’). In verb phrases, on the other hand, the third person singular subject pronoun *tʰh* undergoes marginal proclisis to verb stems (see §6.1); this is especially noticeable in the Umari Norte dialect, where *tʰh* drops its final *-h* and assimilates to the vowel quality of the first syllable of the verb word (which in most cases is the first verb root):

- (28) “*hʰ tã=hám-aʔ?*” *tʰnɔ-máh-ah*
 where 3sg=go-INT 3sg=say-REP-DYNM
 ‘Where did he go?’ he said.’ (JA-AJ.4)

Hup has a fairly large class of enclitics, which are listed in Table 3.7. These are peripheral forms that follow any Boundary Suffix that is present, and can frequently pile up. They are distinguished from particles principally by their lack of stress (a feature that is typical of clitics; cf. Sadock 1991) and their relatively close integration with the word core.

Table 3.7. Enclitics in Hup

	Function	Form	Additional functions?
Primarily nominal enclitics	Plural	= <i>d'əh</i>	
	Contrastive emphasis/ Adverbializer	= <i>yíʔ</i>	Inner Suffix (verbs): Telic
	Reflexive Intensifier	= <i>hup</i>	Verbal prefix: Reflexive
	Parallel comparison	= <i>hin</i>	
	Diminutive intensifier	= <i>mæh</i>	Inner Suffix (verbs): Diminutive Intensifier
	Emphasis	= <i>pog</i>	Inner Suffix (verbs)
Primarily verbal enclitics	Counterfactual 2	= <i>tih</i>	
	Inferred evidential	= <i>cud</i>	Nouns: 'Deceased referent' marker
	Nonvisual evidential	= <i>hɔ̃</i>	Inner Suffix (verbs)
Enclitics that attach indiscriminately to nouns and verbs	Interrogative alternative	= <i>haʔ</i>	
	Verbs: Repetition Nouns: Topic-switch	= <i>b'ay</i>	Inner Suffix (verbs)
	Reported evidential	= <i>mah</i>	Inner Suffix (verbs)
	Emphatic Coordinator	= <i>nih</i>	

An example of an enclitic is given in (29) (see also (31) below).

- (29) *d'uč hid tətəd-d'óʔ-óy=mah*
 timbó 3pl beat.timbó-take-DYNM=REP
 'They beat timbó, it's said.' (I.M.52)

3.4.2.2. Particles

Particles in Hup differ from clitics in that they are relatively loosely integrated with the word core. By definition, they are grammatically associated with their host, but are phonologically relatively free in that they receive independent stress. Almost all particles in Hup follow their grammatical host, but there are a few examples of pre-verbal particles; these are the Reciprocal/pluractional form *ʔih* and the Reflexive marker *hup*, which can be separated from the verb stem (on which they usually appear as prefixes) by an object nominal (see §3.4.1.1 above), and—more marginally—the 'no reason'

adverbial particle *hĩ* (§10.2.1) and the bound demonstrative forms in association with the verbs ‘say’ and ‘be like’ (§6.2).

The Hup particles that follow their host stem are listed in Table 3.8:⁴⁴

Table 3.8. Hup post-stem particles

	Function	Form	Commonly appears as Inner Suffix?
Primarily nominal particles	Related Instance	<i>táʔ</i>	no
	‘Following’ marker	<i>hũy</i>	no
	Locative	<i>cóʔ</i>	no
	Measure (comparison)	<i>m’æ</i>	no
	Related Instance	<i>n’ũh</i>	no
	Possessive	<i>nĩh</i>	no
Primarily verbal particles	Adversative conjunction	<i>kāh</i>	no
	Contrast: Distant past	<i>j’ám, j’āh</i>	no
	Contrast: Temporally proximate	<i>páh</i>	no
	Contrast: Future	<i>tán</i>	no
	Frustrative	<i>yǎh</i>	yes
	Habitual	<i>bĩg</i>	yes
	Intensifiers	<i>mún</i> (verbs) <i>muhún</i> (adjs)	yes
	‘Ongoing event’	<i>tæ</i>	no
Particles that occur indiscriminately with nouns and verb	Distributive marker (Nouns: quantifier) (Verbs: repetition, iterativity)	<i>pĩd</i>	yes
	Epistemic modality	<i>ĩh</i>	no
	Identity negation	<i>ĩp</i>	no
Clause-level particles	Acquiescence particle	<i>bé</i>	no
	Emphasis	<i>tí</i>	no
	Emphasis 2	<i>tĩh</i>	no
	Interactive Tag 1	<i>yǎ</i>	no
	Interrogative emphasis	<i>tĩ</i>	no
	Protestive	<i>báʔ</i>	no

⁴⁴ Note that this table does not include most of the locative postpositions, which are discussed in §10.2.3.

Particles usually follow any unstressed enclitics that appear in the word:

- (30) *yĩñĩ=mah j'ám tĩh bĩʔ-ĩh*
 so=REP DST.CNTR 3sg make-DECL
 ‘Thus, long ago, they say, he made (people).’ (txt)

As noted in §3.5.2 above, the characterization of particles as free or bound is understood to be a fuzzy issue in Hup. Their independent stress and tendency toward final position in the word suggest that they are more independent from their host than are the members of the ‘clitic’ class, and should therefore be distinguished from clitics. However, other features suggest that this independence is only relative. The inability of other clausal constituents to come between all post-stem particles⁴⁵ and their host material indicates a close morphosyntactic association between the particle and the word, and the lack of preceding pause phenomena suggests a degree of phonological bondedness. Furthermore, post-stem particles and enclitics behave identically in their ability to appear in the verb core as Inner Suffixes (cf. §3.5 below). Both can pile up, and when they do so, the tendency of particles to follow clitics in the phrase is subject to exceptions—as in example (31), where the stressed Habitual particle *bĩg* is both preceded and followed by encliticized forms:

- (31) *yĩ-d' ǎh-ǎñ pe ʔ-nĩh=pog bĩg=nih j'ám hǎʔ*
 DEM-PL-OBJ hurt-NEG=EMPH1 HAB=EMPH.CO DST.CNTR TAG2
 ‘And (the insects) never bother those guys at all, huh?!’ (B.Cv.10)

The Hup ‘particles’ are therefore neither clearly clitics, nor clearly independent words. It is even possible that their differences in stress and (to some degree) relative ordering have individual historical explanations, such that the formal distinction between

⁴⁵ Note that this is not necessarily the case for pre-verbal particles, however.

‘clitic’ and ‘particle’ discussed here might be no more than the cumulative result of different historical accidents. Zwicky (1985: 291) actually argues against a separate grammatical class of ‘particles’, observing that all so-called particles can be classed as either clitics or separate words; he identifies clitics as inherently ‘bound’ forms, which in most cases cannot appear in complete isolation, whereas words meet the criteria for separability (i.e. they are set apart by pause phenomena, allow other free forms to come between them and their putative host, and in many cases take independent stress; cf. 1985: 287). Nonetheless, the fact that the Hup ‘particles’ meet some, but not all, of these criteria for separability suggests that they are best considered as something in between a clitic and an independent word. The term ‘particle’ thus seems useful here, both in highlighting their intermediate status and in distinguishing them from other Hup formatives within a language-specific perspective, and will therefore be used throughout this grammar.

3.5. Flexibility of formative positions in the verb

In the verb word—where the distinction between Inner and Boundary Suffixes is relevant—many formatives are flexible vis-à-vis their slot in the template. This applies primarily to the peripheral formatives (enclitics and particles), many of which can also occur (in the appropriate circumstances) as Inner Suffixes.

As discussed above, a morpheme’s identity as a peripheral vs. core formative is largely determined by its placement relative to the Boundary Suffix—particularly the Dynamic -*V̑*y, which necessarily follows the verb stem and Inner Suffixes, but precedes

clitics and particles (thus separating them from the verb core). Crucially, however, certain Boundary Suffixes cannot be followed by any clitics or particles at all, but are required to occur word- (or even clause-) finally. This is particularly the case with Declarative $-V\acute{h}$, as with the less common Focus morpheme $-áh$. The Interrogative $-V?$, Dependent marker $-Vp$, and Inchoative $-ay$ are somewhat more flexible as to their placement within the word, but also often occur word- or clause-finally, whereas the Dynamic $-V\acute{y}$ and certain consonant-initial Boundary Suffixes (e.g. Negative $-n\acute{h}$) occurring in main clauses obligatorily precede whatever clitics and particles are present. The ‘internally complex’ Boundary Suffixes of the $-VCV[C]$ type also occur word- and clause-finally, and are not generally followed by peripheral formatives.

However, the presence of Declarative $-V\acute{h}$ or other word-final Boundary Suffixes on the verb does not exclude the *presence* of peripheral formatives in the verb word. It only affects their *placement*: in the presence of Declarative $-V\acute{h}$ and other forms, clitics and particles must appear inside the verb core, where they may be formally indistinguishable from Inner Suffixes. Example (32) illustrates this phenomenon for the Frustrative particle $y\acute{a}\acute{h}$, which can occur either as a particle or as an Inner Suffix, depending on the following Boundary Suffix. Consultants judge the two constructions to be essentially interchangeable semantically.

- (32) a) $núw-\acute{a}\acute{n}$ $l\acute{a}h$ $túk-\acute{u}y$ $y\acute{a}\acute{h}$
 this-OBJ 1sg want-DYNM FRUST
 ‘I’d like this one (but I don’t expect to get it).’ (EL)

- b) *núw-ǎñ* *ʔǎh* *tuk-yǎñ-ǎñ*
 this-OBJ 1sg want-FRUST-DECL
 ‘I’d like this one (but I don’t expect to get it).’ (OS)

Morphologically, this seems at face value to be a very strange phenomenon:

formatives appear to be essentially ‘jumping over’ Boundary Suffixes to occur either inside or outside the verb core. What could motivate this flexibility? The explanation certainly has to do in part with the identity of the Boundary Suffixes in question themselves. As noted in §3.2.1.4, the Boundary Suffixes pattern in significantly different ways and perform distinct functions; in particular, the function of Dynamic *-Vý* relates largely to aspect, signaling that an event is on-going in relation to the speech moment or temporal frame of reference (see §12.2); thus we might expect *-Vý* to occur close to the verb stem, iconically reflecting the close conceptual association between the event and its aspectual value. The same is true for other Boundary Suffixes, such as the Future tense morpheme *-téǵ*. Declarative *-Vh* and various other Boundary suffixes, on the other hand, are primarily markers of clause type and associate with the clause as a whole, rather than simply with the verb; like markers of punctuation, they therefore occur clause-finally. In these cases, because the verb stem requires a Boundary Suffix but that suffix must be clause-final, the extra morphology is incorporated into the verb core—between the stem and the clause-final marker—in order to accommodate both requirements. However, this is at best only a partial explanation for this phenomenon, which will hopefully be clarified by future research.

There is considerable variation among individual formatives as regards their realization of this flexible placement. For example, while *yǎñ* (like other forms in Inner

Suffix position) in (32b) follows exactly the same stress pattern as would be expected were it a verb stem within a compound (i.e. the stressed stem *yǣh* immediately precedes the Boundary Suffix *-Vh*, which is also stressed), many enclitics (which are by definition unstressed) *remain* unstressed when they occur as Inner Suffixes, thus appearing virtually invisible to the verb's expected stress pattern. In (33), for example, the Reported evidential *=mah* is left unstressed in the Inner Suffix slot, while stress falls on the preceding Inner Suffix *pǣl* (which appears elsewhere as a particle) and on the following Boundary Suffix *-Vh*.

- (33) *hayám bǣl-wǣd-næn-pǣl-mah-áh, hib'ǣh=tǣh=ǣh-ǣh*
 town make-arrive-come-DIST-REP-DECL create=clan=MSC-DECL
 'The Ancestor(s) arrived and built a town' (LG.OS.51)

The same phenomenon and stress pattern are illustrated for the enclitic *=cud* (Nonvisual evidential) in example (34), and for the Repetitive clitic *=b'ay* in (35):

- (34) a) *ǣh himǣhǣn-yǣl-ǣy=cud*
 1sg forget-TEL-DYNM=INFR
 'I forgot it, apparently.' (OS)
- b) *ní-cud-ú? ?*
 be-INFR-INT
 '(She's) there, huh?' (OS)
- (35) a) *yúp=ǣy-ǣn ǣh b'uy-d'ǣh-yǣl-ǣp=b'ay*
 DEM=FEM-OBJ 1sg throw-send-TEL-DEP=again
 'I got rid of that woman, too' (JM-PN.59)
- b) *yúp=mah tǣh hí-b'ay-áh*
 that=REP 3sg descend-DYNM=AGAIN-DECL
 'Then he came down again.' (CO.1)

In example (36), a similar stress pattern marks the juncture between a canonical Inner Suffix (Perfective *-ʔe-*) and an erstwhile enclitic that has been ‘pulled into’ Inner Suffix position (Inferred evidential =*cud*). Here the Perfective gets stress—while Inferred =*cud* does not—in addition to the expected stress on the penultimate syllable (which in this case is Frustrative *yæh*, also a peripheral formative in an Inner Suffix slot) and on the Boundary Suffix (*-Vh*).

- (36) *n’íp cidídu tóg ham-ʔay-ʔe-cud-yæh-æh*
 that Cirino daughter go-VENT-PERF-INFR-FRST-DECL
 ‘That daughter of Cirino’s went and came right back, apparently’ (txt)

In a few cases, the more tightly integrated (Inner Suffix) variant of the formative is functionally somewhat distinct from its use as a peripheral form. The best example of this is the Distributive morpheme *pɪd*, which as a peripheral verbal form has clausal scope and indicates a repeated event distributed over different subjects (example 37a), while as a peripheral nominal form it acts as a quantifier (example 37b). As a verbal Inner Suffix, however, it can have an iterative or durative meaning, as well as a quantifier-like interpretation, depending on the context (example 37c). Note that this tighter *semantic* integration with the verb iconically reflects the tighter *formal* integration of formative and stem.

- (37) a) *hɪd næn-æy pɪd*
 3pl come-DYNM DIST
 ‘They also came/are coming.’ (subjects compared)
- b) *ʔayũp=tat pɪd tɪh nɔʔ-ʃh*
 one=fruit DIST 3sg give-DECL
 ‘He gave one fruit to each (person).’

- c) *hɪd næn-pɪl-ɦ*
 3pl come-DIST-DECL
 ‘They always, repeatedly came.’ (within a given period of time)
 ‘They were coming for a long time.’
 ‘They all came.’

Another variation on the theme of flexibility between the peripheral formative and the Inner Suffix is exemplified by Diminutive *mæh* in example (38), which is consistently an enclitic with nouns, but consistently an Inner Suffix with verbs:

- (38) a) *ʔɦn-ǎn yúd=mæh d’oʔ-nɔʔ-ɔy*
 1pl-OBJ clothes=DIM take-give-DYNM
 ‘(The Tukanos) gave us a few clothes.’ (P-B.2)
- b) *teghɔ̃=nɔg’oð ʔǎh wiʔ-mæh-æɦ, cípm’æh=yiʔ*
 Non.Indian=mouth 1sg hear-DIM-DECL little=TEL
 ‘I understand just a little Portuguese.’ (A-Int. 1)

Finally, note that several peripheral formatives may pile up in Inner Suffix position, just as they may pile up in peripheral position under other circumstances. In (39), multiple enclitics and particles appear as Inner Suffixes: Emphasis =*pog* (in the phonologically reduced form *wog*⁴⁶), Habitual *bɪg*, and Frustrative *yæɦ*.

- (39) ...*yíkán kəkəy-nɦ-yiʔ kədcak-wog-bɪg-yæɦ-æw-ah* *yǎʔ*
 there interrupted-NEG-TEL fast.climb-EMPH1-HAB-FRST-FLR-FOC INT.tag
 ‘...(Why the heck does Mom) always climb up there?!’ (txt)

As noted in §3.4.1.2B, Hup Inner Suffixes are formally identical (in terms of stress patterns and placement within the verb word) to component verb roots within verb compounds. This fact has interesting implications for Hup grammar. In a number of cases, a single form has two distinct formal identities, with a corresponding difference in

semantics; it can appear as a peripheral clitic or particle, and also as a verb root.

When the peripheral form is brought into the Inner Suffix position, however, the formal surface distinction between root and formative (determined primarily by placement relative to the Boundary Suffix) may be erased, and the difference in semantics must be inferred from the discourse context. This phenomenon applies in the case of *yǎh*, which occurs as a verb root meaning ‘request, command’, in addition to its use as a Frustrative marker (see §14.4). As example (40) illustrates, the verbal use is formally indistinguishable from the Frustrative use as an Inner Suffix in (41) (repeated from 32b above); in both cases, *yǎh* occupies the same position and shows the same stress pattern. However, a structural difference does exist: the Dynamic suffix *-V́y* can occur with verb roots (and could therefore take the place of Declarative *-V́h* in (40), where *yǎh-* is a verb root), but it cannot follow peripheral formatives occurring in Inner Suffix position (and so could not appear in (41), where *yǎh* is a grammatical formative).

- (40) *deh cǎy-ǎn tǐh hop-yǎh-ǎh*
 water beetle-OBJ 3sg immerse-**command**-DECL
 ‘He sent the water-beetle down into the water.’ (txt)

- (41) *núw-ǎn ǐǎh tuk-yǎh-ǎh*
 this-OBJ 1sg want-**FRUST**-DECL
 ‘I’d like this one (but I don’t expect to get it).’ (OS)

The formative *b’ay* ‘again’ likewise resembles the verb *b’ay-* ‘return’ (as the final stem in a compound) when it appears in Inner Suffix form; in this case, however, the formative and the verb root are differentiated by their stress patterns:

⁴⁶ A /p/ > /w/ sound change is attested elsewhere in Hup; compare the full and reduced forms of the Completive suffix *-cǐp-* / *cǐw-* (cf. Table 3.9).

- (42) *pěd wíd-b'áy-áh*
 Ped arrive-**return**-DECL
 'Ped came back' (EL)
- (43) *yúp=mah tîh hí-b'áy-áh*
 that=REP 3sg descend-DYNM=**AGAIN**-DECL
 'Then he came down again.' (CO.1)

3.6. Phonologically reduced formative variants

A striking characteristic of Hup Inner Suffix formatives is the co-existence, in certain cases, of two marginally distinct forms of the same morpheme (see also §3.4.1.3 above). One variant has the syllable structure CVC and is the historically older form, whereas the other variant has undergone phonological reduction involving loss (or, in one case, reduction from /p/ > /w/) of the final consonant, usually resulting in the form CV. This reduced form occurs only when the Inner Suffix is directly followed by a vowel-initial Boundary Suffix (such as the Declarative -*V́h*). Note that loss of final consonants when followed by vowel-initial suffixes is a natural phonological change that is also attested in other languages, such as Turkish (cf. Bickel and Nichols, to appear); likewise, phonological reduction is typical of processes of grammaticalization generally (cf. Bybee et al. 1994, Hopper and Traugott 1993).

The complete set of the formative pairs that are characterized by final consonant loss or reduction in the context of vowel-initial Boundary Suffixes is summarized in Table 3.9:

Table 3.9. Hup formative pairs with eroded final consonant before vowel-initial suffixes

Unreduced form	Function of unreduced form	Reduced form (Inner Suffix)	Function of reduced form
<i>bɨg</i>	Habitual aspect	<i>-bɨ-</i>	Habitual aspect
<i>-cɨp</i>	Completive aspect	<i>-cɨw-</i>	Completive aspect
<i>-ʔeʔ</i>	Perfective aspect	<i>-ʔe-</i>	Perfective aspect
<i>-pog</i>	Emphasis	<i>-po-</i>	Emphasis
<i>-teg</i>	Purpose, future	<i>-te-</i>	Future
<i>-tuk-</i>	Verb ‘want’; imminent future	<i>-tu-</i>	Volition; imminent future

This phonological reduction of Inner Suffixes is accompanied by a similar reduction of the vowel-initial Boundary Suffixes that follow them, although this is limited only to those suffixes that copy their vowel from the preceding stem (see example 44 below). When these follow a reduced (CV) Inner Suffix, the copied vowel in the Boundary Suffix disappears, and the consonant—which is now the Boundary Suffix’s only remaining segment—attaches directly to the vowel of the preceding Inner Suffix. Note that this elision of the Boundary Suffix vowel occurs *only* in combination with these reduced Inner Suffixes. It is morphophonologically conditioned, rather than simply phonologically conditioned, since it does not occur when the vowel-copying suffix combines with a CV verb stem; for example, the verb *yu-* ‘wait’ combines with the Dynamic suffix to form *yú-úy* (wait-DYNM) ‘waiting’.

Example (44) (repeated from (11) in §3.2 above) illustrates this phenomenon of phonological reduction for the Habitual formative (§12.8). The Habitual is one of those formatives that can appear in either the peripheral or the Inner Suffix slot in the verb. As a particle, it must have the CVC form *bɨg* (44a), and the same applies when it is an Inner Suffix followed by another consonant-initial form (example 39 above). In (44b),

however, the presence of the following Declarative Suffix (reduced from *-Vh* to *-h*)

provides the context for the reduced form *-bi-*.

- (44) a) *ʔāh hám-áy bǵ*
 1sg go-DYNM HAB
 ‘I go regularly.’ (txt)
- b) *ʔāh ham-bǵh*
 1sg go-HAB-DECL
 ‘I go regularly.’ (txt)

The same phenomenon of phonological reduction yields variants of the Emphasis marker *-pog-* / *-po-* (and *-wog-* / *-wo-*) (example 45; §15.3.1) and the Completive aspect marker *-cǵp-* / *-cǵw-* (example 46; §12.5). Both of these formatives occur in the verb word only as Inner Suffixes, rather than as peripheral forms, although Emphasis *-pog-* can appear as an enclitic with nonverbal parts of speech. The reduced variant *-cǵw-* of the Completive is somewhat idiosyncratic in that its final consonant is not completely dropped, but only reduced from a stop /p/ to a glide /w/; furthermore, it normally can only be followed by the Dynamic suffix *-Vý* (46c), and not by any other vowel-initial suffix (cf. 46b).

- (45) a) *ham-pog-tég nǵah?*
 go-EMPH1-FUT 2pl-FOC
 ‘Would you really go?!’ (B-Cv.1.3)
- b) *kaninǵ cǵp-ham-pó-h*
 sleepy(Tuk) go.from.river-go-EMPH1-DECL
 ‘Sleepyhead’s gone up away from the river!’ (B-Cv.3.135)
- (46) a) *ʔapíd nutkan puhu-hi-cǵp-kǵd-cak-yi?-iy=mah*
 right.away here.OBJ swell-FACT-COMPL-pass-climb-TEL-DYNM=REP
 ‘Right away it had already swelled up and spread quickly up to here’
 (on her leg) (M-KTW.109).

- b) *tedé-d'əh-ə́ tɪh biʔ-ni-cɸ-ɪh*
 three-PL-OBL 3sg work-be-COMPL-DECL
 'He's already worked with three (of them).' (P.Sp.110)
- c) *ʔəh-yiʔ-cɸw-ɪy hid, ʔin=təh=d'əh?*
 sleep-TEL-COMPL-DYNM 3pl 1pl=child=PL
 'Have they already gone to sleep, our children?' (I-M.11)

Another example of a formative having both CVC and CV variants is the Perfective marker *-ʔeʔ- / -ʔe-* (see §12.4). In keeping with the expected pattern, the variant *-ʔeʔ-* appears when no vowel-initial suffix follows, such as in imperative mode (47a) and with predicate nominals, while the reduced form *-ʔe-* precedes a Boundary Suffix (47b).

- (47) a) *n'i-coʔ way-ʔeʔ!*
 there-LOC go.out-PERF.IMP
 'Go outside for a while!' (OS)
- b) *ʔāh yamhidɔʔ-g'oʔ-ʔe-h*
 1sg sing-go.about-PERF-DECL
 'I used to go around singing (at drinking parties).' (MM.2)

Although the reduced variants of these Inner Suffix forms can only occur when followed by a vowel-initial Boundary Suffix, they are not in general the obligatory choice when such a suffix is present. They can occasionally be used interchangeably with their unreduced (CVC) variant, although the reduced (CV) form is by far the more common. In some cases, choice of the full variant over the reduced form has little semantic or pragmatic effect, and is simply associated with exaggerated precision in speaking, as some consultants report for example (48) (in comparison to (44b) above). Often, however, use of the full variant is associated pragmatically with a more emphatic utterance (as in example (50) below), and for some forms the choice may also be

semantically and functionally motivated (*-teg* / *-te-* in (49) and *-tuk-* / *-tu-* in (50-51) below).

- (48) *ʔāh ham-bɛg-ih*
 1sg go-HAB-DECL
 ‘I always go.’ (EL)

Some of Hup’s formative pairs exhibit a functional as well as a formal distinction between the two variants. The suffix *-teg* (which can act both as a Boundary Suffix and as an Inner Suffix) indicates both purpose (49a) and future tense (49b), whereas its reduced Inner Suffix variant *-te-* can only signal future tense (49b; see §13.1):

- (49) a) *tɪnɪh pɪb, tɪh wáy-át pɪd, tɪh wæd-tég-éh*
 3sg.POSS food.supply 3sg emerge-OBL DIST 3sg eat-FUT/PURP-DECL
 ‘His food supplies, in order for him to eat when he emerged again.’ (M-DT.80)
- b) *nɪŋ-ǎn tɪh tɔn-ham-pog-té-p, cún’! ham-pog-tég nɪŋ-áh?!*
 2pl-OBJ 3sg take-go-EMPH1-FUT-DEP INTERJ go-EMPH1-FUT 2pl-FOC
 ‘She’s really going to take you all off, hey! Would/will you all really go?!’ (B.Cv1.81)

Another case of a formal and functional distinction between the two variants is that of *-tuk-* / *-tu-* (volition and imminent future). Here, the variation is between a compound-final verb root (*tuk-*) and a verbal auxiliary or Inner-Suffix-like form (*-tuk-* / *-tu-*), whereas the above examples all clearly involve formatives, not roots. The original, unreduced member of this pair is the verb root *tuk-*, a normal transitive verb meaning ‘want’, which has developed a modal or auxiliary use in compounds. As such, it can optionally appear as either *-tuk-* or *-tu-*. As is typical for such formative pairs, the two variants can encode different degrees of forcefulness: the unreduced form *-tuk-* is preferred for an insistent request, while the reduced version *-tu-* is neutral (example 50). Moreover, the

grammaticalized variant *-tu-* is frequently used to indicate immediate future, as in example (51).

- (50) a) *cúg ʔǎh wiʔ-túk-úy=hɔ̃*
 fiddle 1sg hear-want-DYNM=NONVIS
 ‘I want to hear the fiddle!’ (emphatic) (OS)
- b) *cúg ʔǎh wiʔ-tú-y=hɔ̃*
 fiddle 1sg hear-want-DYNM=NONVIS
 ‘I’d like to hear the fiddle.’ (non-emphatic) (OS)
- (51) *děh d’oj-tú-y*
 water rain-want-DYNM
 ‘It’s about to rain.’ (OS)

Finally, it is important to note that this phenomenon of final consonant loss represents an ongoing process of grammaticalization. It affects different Hup formatives to different degrees, and is subject to individual and dialectal variation. The Telic Inner Suffix *-yiʔ-*, for example, is typically pronounced without the final glottal stop when followed by a vowel-initial suffix (especially Dynamic *-V́y*) in the Tat Deh dialect area, whereas speakers in the Barreira region tend to pronounce it in unreduced form.

3.7. Formative flexibility and grammaticalization

As the discussion in the preceding sections has illustrated, the flexibility among the different morpheme classes in Hup has provided the context for an extensive formal and functional overlap between verb roots and formatives. It has also fostered the development of alternative formal realizations of a given formative, often accompanied by functional distinctions. Clearly, the formal and functional resemblances among many

Hup morphemes (see §3.3) cannot be due to chance, but rather reflect historical processes of grammaticalization that are linked to this flexibility.

Many of the changes that Hup morphemes have undergone are typical of grammaticalization processes cross-linguistically. These include the phonological erosion experienced by Inner Suffixes, the increased semantic abstraction of many grammaticalizing formatives, and the tendency for formatives to have their apparent origins in roots (see §3.5 above); for example, the verb root ‘want’ (*tuk-*) has clearly given rise to an Inner Suffix indicating imminent future tense (see examples 50-51), and the verb ‘request, command’ (*yæh-*) is probably the source of the Frustrative formative (see examples 40-41).⁴⁷ These changes are consistent with the ‘unidirectionality principle’, which posits that the process of grammaticalization leads “from lexical to nonlexical or from less grammatical to more grammatical structures; ...more ‘concrete’ concepts serve as structural templates for the expressions of less ‘concrete’ or more ‘abstract’ concepts” (Heine et al. 1991: 120). While this principle is understood to have exceptions, it is an empirical fact that these exceptions are far outnumbered by the attested cases of historical change that support the rule (cf. Haspelmath 2004).

The flexibility between Hup roots and Inner Suffixes, and between Inner Suffixes and peripheral formatives, has interesting implications for grammaticalization theory, and particularly for the principle of unidirectionality. The synchronic ability of Hup formatives to appear both inside and outside the verbal core has arguably allowed

⁴⁷ As discussed in §14.4, the motivation behind this development may be the relative frequency of the verb ‘request, command’ in situations where a speaker is discussing an event that was *not* realized (i.e. ‘I requested him to do X (but it is still not done)’), as opposed to those situations in which the action has been carried out.

diachronic processes of formative grammaticalization to involve *bi-directional* movement between the verbal core and the periphery, as illustrated by the case studies of individual morphemes offered below. In other words, Hup grammar has the mechanisms in place by which, over time, morphemes originating in the verb core (where they are more bound) can migrate out to the periphery (where they are less bound), and likewise those originating outside the verb word can migrate from the periphery into the core. Although the choice and usage of the terms ‘clitic’, ‘particle’, and ‘affix’ in this grammar are understood to be somewhat language-specific (as discussed above), there is no debating the fact that the core formatives or ‘affixes’ in Hup are more closely integrated—both phonologically and morphosyntactically—with the verb stem, while the peripheral ‘clitics’ and ‘particles’ are less bound (see §3.5 above).

This bi-directional movement is exceptional from the point of view of the unidirectionality principle of grammaticalization theory, which posits a diachronic trajectory of less bound to more bound for grammaticalizing morphemes—usually realized as a transition from free form to clitic to affix. This process has been termed ‘morphologization’, whereby “loose, paratactic [discourse] structures develop into closed syntactic structures” (Heine et al. 1991: 13, 20, cf. Givon 1979). Although the grammaticalization of Hup formatives from roots (verbal, nominal, or adjectival) is consistent with this cross-linguistic unidirectional tendency to shift from lexical to nonlexical structures, the degree of the Hup forms’ bondedness is in many cases not at all consistent with ‘morphologization’; many forms have gone from more to less bound, involving a shift from affix to clitic/particle, rather than the reverse.

This aspect of their grammaticalization resembles what Haspelmath (2004) terms ‘antigrammaticalization’: “a change that leads from the endpoint to the starting point of a potential grammaticalization and also shows the same intermediate stages.” This term “is intended to cover any type of change that goes against the general direction of grammaticalization (i.e. discourse > syntax > morphology)” (2004: 28), including changes such as suffix > clitic > postposition. These are understood as “real exceptions” to the unidirectionality principle—unlike other cases of so-called ‘degrammaticalization’, defined as any change from grammar to lexicon (2004: 30; cf. van der Auwera 2002). Haspelmath observes that, cross-linguistically, “grammaticalization is far more common than antigrammaticalization” (2004: 37). However, this generalization does not hold *language-internally* for Hup, in which both of the historical trajectories ([root > affix > clitic/particle] and [root > clitic/particle > affix]) are attested, but the more bound → less bound pattern is arguably the more common. Note, however, that these trajectories are both consistent with standard paths of grammaticalization in that they start with a root and end with a grammaticalized formative; the only ‘antigrammaticalization’ that takes place concerns the path affix → particle.

The following discussion offers case studies of both of these historical paths in Hup, the one involving more straightforward grammaticalization, the other syntactic ‘antigrammaticalization’. All of the scenarios suggested below are consistent with grammaticalization theory’s other canonical generalization: that historical change usually involves a progression from semantically more concrete to more abstract. A crucial point in this discussion is that—were the cases of antigrammaticalization discussed here to be construed differently (i.e. were the historical transition assumed to be one of syntactically

less bound → more bound instead of the opposite path suggested here)—

antigrammaticalization would still be involved, because we would have to assume a *semantic* shift from abstract to concrete.

Examples of forms that have probably followed a path involving ‘antigrammaticalization’—a trajectory from verb root > Inner Suffix > enclitic or particle—are numerous in Hup. They include several of the forms illustrated above, including *b’ay*, which acts both as a verb ‘return’ and as an aspectual formative signaling repetition of an event or state (see examples 42-43), and *yæh*, which appears both as a verb root meaning ‘request, command’ and as a Frustrative formative (see examples 40-41). Another example of a predominantly encliticized formative that almost certainly derives historically from a verb root is the Nonvisual evidential *=hɔ̃*. The path of grammaticalization taken by this morpheme is detailed here, and is considered to be typical of a transition from verb → formative generally in Hup.

As discussed in §14.9.2, the Nonvisual evidential *=hɔ̃* typically appears as an enclitic, and is used to indicate that the speaker’s information source is firsthand but nonvisual—in other words, the information was acquired through hearing, smelling, tasting, or feeling:

- (52) *náciya pæ̃æ̃y=hɔ̃*
 boat go.upriver-DYNM=NONVIS
 ‘The boat is going upriver (I can hear it).’ (OS)

This evidential enclitic almost certainly derives from the verb root *hɔ̃h*- ‘produce sound, be audible’:

- (53) *tĩh h̥h̥-ɔ̃p, nukán-ay tán yúw-úh*
 3sg make.sound-DEP over.here-INCH FUT.CNTR that.ITG-DECL
 ‘When it (first) becomes audible, it (the boat) is still over there in this direction.’ (TD04.40)

How did this shift from verb to enclitic come about? In the first stage of its grammaticalization, the verb *h̥h̥-* ‘produce sound’ probably developed a frequent use as a productive compound-final form, with the meaning ‘do (verb) and produce noise’. It was only a short step from this to a more manner-related meaning, ‘be audible while doing (verb)’. As discussed in detail in chapter 9, verb compounding is extremely productive in Hup, and stems within compounds frequently take on modal or Aktionsart functions with varying degrees of abstraction; examples of this are found in compounds like *?id-hipāh-* (speak-know-) ‘know how to speak’, and *wæd-hũ?-yi?* (eat-finish-TEL-) ‘eat (it) all up’. Such integrated compounds involving the verb *h̥h̥-* ‘produce sound’ are in fact currently attested in Hup:

- (54) *yam-h̥h̥-nĩh=yi? níh!*
 sing-make.sound-NEG=TEL be.IMP
 ‘Don’t make (so much) noise singing!’ (RU)

Through more and more frequent use, the compound-final verb ‘make noise’ would have taken on an increasingly secondary status vis-à-vis the preceding stem, until it became a true auxiliary.⁴⁸ This process is illustrated by the many other co-existing, functionally distinct pairs of verb roots and verbal auxiliaries in Hup, such as *tuk-* (root: ‘want’; auxiliary: ‘imminent future’; see 50-51 above) and *key-* (root: ‘see’; auxiliary: ‘try’, as in the compound *bi?-key-* (work-see) ‘try to make/do (something)’; see also

§9.4.2.4). It was probably at this stage that *-hɬh-* was phonologically reduced by loss of the final consonant (*hɬh* → *hɕ*), just as occurred in the case of *-tuk-* / *-tu-* ‘want / imminent future’, and other grammaticalizing forms (§3.6 above). This Inner Suffix stage of *hɕ* is still attested in the occasional occurrence of the Nonvisual evidential enclitic in the Inner Suffix slot when followed by a vowel-initial suffix, as in (55); note that this corresponds to the flexibility of enclitics to occur as Inner Suffixes generally in Hup, as discussed above.

- (55) *ĩcána má-át ni-hɕp=ĩh*
 Içana river-OBL be-Noise-DEP=MSC
 ‘The person that I believe/hear is living on the river Içana...’ (txt)

At this stage in its existence, the verb stem ‘produce sound’ would have had two distinct realizations—one primarily lexical (as the independent verb root ‘make noise’), and the other primarily grammatical (as an auxiliary or Inner Suffix with a marginal evidential function). However, both would have occurred in formally identical constructions. Possibly in response to a need to differentiate these, the next stage would have involved the more grammaticalized form of the verb detaching itself from the core of the verbal construction (i.e. moving outside the Boundary Suffix) and migrating to the periphery as an enclitic. This movement was almost certainly made possible by analogy with the other Hup formatives that can move flexibly between the verb’s Inner Suffix position and the periphery (see §3.5). At this point in the process, the verb stem and the

⁴⁸ This development was probably motivated in part by language contact with Tukano; see Epps (to appear-a).

evidential particle would have become formally and functionally distinct, as evidenced by their ability to co-occur:

- (56) *náciya* ***hǎh-ǎy=hǎ***
 boat make.noise-DYNM=NONVIS
 ‘There’s the sound of the boat (I can hear it)’ (Lit. ‘The boat is sounding.’) (OS)

As the final stage in this process, the enclitic *=hǎ* would have lost its strict association with the verb, and gained the ability to associate with any part of speech, so long as this is functioning as a clausal predicate. This would include predicate nominals, as in (57). Through this process, then, a verbal root has grammaticalized to a predicative enclitic, after passing through stages as an auxiliary and an Inner Suffix.

- (57) *pǎj=hǎ*
 umari=NONVIS
 ‘It’s umari fruit.’ (smelling mess on baby’s foot) (OS)

Of the grammaticalization paths that can be identified for formatives in Hup, the majority appear to follow this cross-linguistically non-canonical transition from morphologically more bound to less bound—i.e. verb root in compound > Inner Suffix > enclitic/particle. However, grammaticalization of forms in the opposite direction—from less bound to more bound, or from free lexical item > clitic > affix—is also attested, although fewer examples can be clearly identified. In general, the first stage of this type of grammaticalization involves a *nonverbal* root (whereas the alternative trajectory always involves a verb within a compound), i.e. a noun or an adjective.

One of the best examples is the development of the Future particle *-teg / -te-* from the noun ‘stick, tree’. (The argument is only summarized here; it is presented in detail in

the Historical Note in §13.1). This form—which exists as a free noun (*těg*) meaning ‘firewood, wood’—also occurs as a bound noun meaning ‘tree, stick’ (example 58). Over time, this bound noun took on a secondary function as a generic nominalizer meaning ‘thing’, as in example (59). This form, in turn, grammaticalized into a marker of purpose on non-finite verbs in dependent clauses, where it took on the role of a consonant-initial Boundary Suffix; this usage is also attested in modern Hup (example 60). The stress shift which accompanied this process (from [stem=*teg*] to [stem-teg]) allowed the erstwhile nominal construction to conform to the formal template for a verbal construction (i.e. consistent with the typical stress pattern found with CVC Boundary Suffixes; see §3.4.1.2 above).

- (58) *púp=teg*
 paxiuba=STICK
 ‘paxiuba tree’

- (59) *pəpəd=teg*
 roll=STICK
 ‘rolling thing’ = ‘automobile/tractor’

- (60) *dóʔ=d'əh híd pəhɔ́tég, ham-ní-íy yúw-úh*
 child=PL 3pl grow.plump-FUT/PURP go-be-DYNM that-DECL
 ‘In order for the children to grow plump; that’s how it (the blessing) went.’ (H.32)

At some point after this had occurred, the use of the suffix *-teg* in dependent clauses was generalized to main clauses (as has apparently occurred with a number of verbal formatives in Hup; see chapter 18). Once within the main clause, the verbal purpose construction subsequently developed future semantics; this step is also attested synchronically in Hup, since *-teg* currently doubles as a purpose marker (example 61a and above) and as a future marker (61b). (Such a transition from purpose to future is

typologically common; cf. Bybee et al. 1991.) Finally, *-teg* was phonologically eroded to produce the variant *-te-*, which can only have a future tense meaning (example 62), and which occurs exclusively in the Inner Suffix slot when followed by a vowel-initial Boundary Suffix (as is typical of reduced variants; see §3.6 above). A free nominal root has thus become a bound verbal Inner Suffix, after passing through an intermediate stage as a Boundary Suffix.

- (61) a) *dóʔ=d'əh mūhūʔ-tég*
 child=PL play-FUT/PURP
 ‘(It’s) for kids to play with.’ (OS)
- b) *tāh ham-tég ūhníy*
 3sg go-FUT maybe
 ‘Maybe he will go.’ (OS)
- (62) *tán ūāh næn-té-h*
 FUT.CNTR 1sg come-FUT-DECL
 ‘I’ll come later.’ (OS)

A similar process probably led to the development of the Habitual morpheme, which has a likely source in the adjective root *bīg* ‘old’ (example 63). This adjective typically combines with inanimate nouns to form adjective NPs, just as do other adjectives in Hup. However, in this particular case, this ability to combine with a root was apparently generalized to verb phrases, where *bīg* appears as a particle indicating habitual aspect (example 64). As discussed in §12.8, the semantic link between the adjective ‘old’ and a marker of habitual aspect is not entirely obvious, but it does appear to be motivated: just as an *old* object (e.g. a path) is typically one that has been used or experienced again and again over a long period of time, so a habitual activity is one that has been performed over and over.

- (63) *tiw bǝg*
 path old
 ‘(That’s an) old path’ (OS)
- (64) *ʔid-íy bǝg ʔǎh-ǎh*
 speak-DYNM HAB 1sg-DECL
 ‘I habitually speak (Tukano)’ (int.txt)

As we have already seen in §3.6 above, the Habitual particle *bǝg* can also occur in Inner Suffix position, where it alternates with the phonologically eroded form *-bǝh* when followed by a vowel-initial Boundary Suffix (example 65). Thus a verbal affix appears to have grammaticalized from an adjectival root, with an intermediate stage as a particle.

- (65) *ʔǎh ʔid-bǝh*
 1sg speak-HAB-DECL
 ‘I habitually speak (Tukano)’ (int.txt)

This concludes the discussion of the architecture of the Hup word, and of the processes of formative combination and grammaticalization which it involves. In the chapters that follow, the facts and concepts discussed in this chapter will be an important basis for understanding the behavior of Hup morphemes within the word and the clause, as well as the possible historical connections between them.

4. The noun and nominal morphology

The noun stem in Hup is identified as the minimal nominal word, which in most cases is monomorphemic. As discussed in §3.1.1, the defining features of the noun include its ability to occur as a bare stem lacking a Boundary Suffix (unlike verbs, which usually require inflection), its functioning as an argument of a predicate or as an attributive modifier of another noun, and its bearing of lexical (contrastive) tone. Unlike verbs and adjectives, nouns can in general be possessed, and can be negated with the existence negator *pǎ̃* (see §16.2).

In this chapter, I present the simple noun stem and the categories of nominal morphology that are most basic to it, case and number. I also offer a brief discussion of the lexical phenomenon of reduplication in nouns, and summarize the processes of nominal derivation. Processes of nominal compounding are treated in chapter 5, and multi-word noun phrases are covered in chapter 6.

4.1. Types of nouns

Noun stems in Hup fall into two basic classes: bound nouns, which are obligatorily bound to another nominal form (a phenomenon akin to inalienable possession), and nouns that are free (akin to alienable possession). Bound nouns in Hup include almost all generic human nouns, referential kin terms, animal body parts, plant parts, and a few other nouns. These are discussed in detail in §5.4, but are also necessarily mentioned here in the discussion of case and number marking.

Hup proper nouns include clan names (see Table 1.1, §1.4) and personal names, of which most people have several: a Hup *bi ʔd hǎʔ* or ‘spell (blessing) name’ (see Table 1.2, §1.4), a Portuguese name, and sometimes a nickname. Place names are mostly compounds of the ‘productive’ type (see §5.1.2.2), such as *tát deh* ‘Taracuí Ant Creek’ (Taracuí Igarapé); *b’óʔpaç* ‘Tucunaré Hill’; *g’áj paç* ‘Cutivara Hill’, etc. (cf. §1.3). Kin terms in Hup occur both as bound referential forms and also as free vocative variants.

4.1.1. Human nouns

Human entities get special treatment in Hup grammar, as this chapter and chapter 5 will clarify. Unlike most nouns referring to animals and inanimate objects, generic human nouns are obligatorily bound when singular (see §5.4-5), and receive obligatory object and number marking in environments where these categories apply. The special place human nouns hold in Hup grammar can be explained as manifesting a conceptualization of humans as maximally discrete entities, the most significant participants in any event. Such a prioritization of human entities is to some degree cross-linguistically common, reflected in the fact that many languages’ grammatical organization corresponds to an animacy hierarchy (cf. Silverstein 1976); nevertheless, the split between humans and other entities seems to be relatively strong in Hup.

4.1.2. Closed nominal classes

Closed classes of nominals in Hup include pronouns, demonstratives and interrogative pronouns. These are comprised of small sets of base forms from which more specific forms are derived, via the addition of bound morphemes.

The Hup pronouns and their basic derived forms are summarized in Table 4.1, and discussed in more detail in §6.1. Note that most of the irregularity in the paradigm (resulting from the morphological fusion of derived forms) is limited to the first person singular forms. In addition to the derived forms given here, pronouns can take a variety of other regular Boundary Suffix forms, such as the Dependent and Declarative markers, as well as certain enclitics.

Table 4.1. Simple and derived pronouns

	Subject PN	Object PN (PN + - <i>ǎn</i>)	Oblique PN (PN + - <i>Ví</i>)	Possessive PN (PN + - <i>nǎh</i>)	
				Downriver Hup dialects	Umari Norte dialect
1sg	<i>ǎǎh</i>	<i>ǎán</i>	<i>ǎǎh-ǎí</i>	<i>nǎí</i>	<i>nǎh</i>
2sg	<i>ǎám</i>	<i>ǎám-án</i>	<i>ǎám-át</i>	<i>ǎámǎh</i>	<i>ǎám-nǎh</i>
3sg (M or F)	<i>tǎh</i>	<i>tǎh-án</i>	<i>tǎh-ǎí</i>	<i>tǎnǎh</i>	<i>tǎh-nǎh</i>
1pl	<i>ǎǎn</i>	<i>ǎǎn-án</i>	<i>ǎǎn-ǎí</i>	<i>ǎǎnǎh</i>	<i>ǎǎn-nǎh</i>
2pl	<i>nǎǎ</i>	<i>nǎǎ-án</i>	<i>nǎǎ-ǎí</i>	<i>nǎǎǎh</i>	<i>nǎǎ-nǎh</i>
3pl (M or F)	<i>hǎǎ</i> <i>yíǎd'ǎh</i>	<i>hǎǎ-án</i> [híran] (TD)	<i>hǎǎ-ǎí</i> [hírit] (TD) <i>yíǎd'ǎh-ǎí</i>	<i>hǎǎnǎh</i> <i>híǎǎh</i> [híh] (TD) <i>yíǎd'ǎh-nǎh</i>	<i>hǎǎ-nǎh</i>

Hup demonstratives include three basic bound forms: *nu-* (variant *nǎí*)

‘proximate’, *n’i-* ‘distal’, and *yu-* (variant *yǎí*) ‘intangible’ (i.e. relatively abstract; outside accessible sphere). These forms are obligatorily inflected—for the most part with Boundary Suffixes, but also with a number of enclitic-like forms; these are (with a few

exceptions) mutually exclusive. The basic and derived forms are summarized in Table 4.2, and are discussed in detail in §6.3.

Almost all of the Hup interrogative pronouns are derived forms which pattern like the demonstratives, and are built on a single bound interrogative particle *hž*. The sole exception to this is the form *žũ* ‘who’, which is restricted to human referents (yet another illustration of the special priority placed on humans in Hup grammar). The derived interrogative forms are summarized together with the demonstratives in Table 4.2, and again in detail in §6.2.

Table 4.2. Demonstratives and interrogative pronouns: derived forms

Inflection		Demonstratives (forms and meanings) ⁴⁹		Interrogative	
Basic uninflected form	<i>nu-</i> / <i>nĩ-</i> Proximate	<i>n'i-</i> Distal	<i>yu-</i> / <i>yĩ-</i> Intangible, outside accessible sphere; generic	<i>cã-</i> 'Other'	<i>hĩ-</i> Interrogative
<i>-p</i> (From Dependent marker?)	<i>núp</i> 'this'	<i>n'íp</i> 'that'	<i>yúp</i> 'that' (inaccessible)	<i>cãp</i> 'another'	<i>hĩp</i> 'which?'
<i>-t</i> (From Oblique?)	<i>nút</i> 'here'	<i>n'ít</i> 'there'	<i>yĩt</i> 'thus, then'		<i>hĩt</i> 'where?'
<i>-ãñ</i> Object ⁵⁰ (cf. §4.3.1)	<i>núw-ãñ</i> ⁵¹ <i>nú-uw-ãñ</i> 'this-(FLR)- OBJ'	<i>n'íw-ãñ</i> <i>n'í-iw-ãñ</i> 'that-(FLR)- OBJ'	<i>yúw-ãñ</i> <i>yú-uw-ãñ</i> 'that-(FLR)- OBJ' <i>yĩ?íw-án</i> (S.A.)	<i>cãw-ãñ</i> <i>cã-ãw-ãñ</i> 'another- (FLR)-OBJ'	<i>hĩw-ãñ</i> 'which one?'
<i>-Vt</i> Oblique (cf. §4.3.4)	<i>núw-út</i> <i>nú-uw-út</i> 'this-(FLR)- OBL'	<i>n'íw-ít</i> <i>n'í-iw-ít</i> 'that-(FLR)- OBL'	<i>yúw-út</i> <i>yú-uw-út</i> 'that-(FLR)- OBL'	<i>cãw-ãt</i> <i>cã-ãw-ãt</i> 'another- (FLR)-OBL'	<i>hĩw-ĩt</i> 'with which one?'
<i>-Vp</i> Dependent marker (cf. §18.2.4)	<i>núw-úp</i> <i>nú-uw-úp</i> 'this-(FLR)- DEP'	<i>n'íw-íp</i> <i>n'í-iw-íp</i> 'that-(FLR)- DEP'	<i>yúw-úp</i> <i>yú-uw-úp</i> 'that-(FLR)- DEP'	<i>cãw-ãp</i> <i>cã-ãw-ãp</i> 'another- (FLR)-DEP'	<i>hĩp</i> 'which; how, in what manner?'
<i>-Vh</i> Declarative (cf. §17.3.2)	<i>núw-úh</i> <i>nú-uw-úh</i> 'this-(FLR)- DECL'	<i>n'íw-ih</i> <i>n'í-iw-ih</i> 'that-(FLR)- DECL'	<i>yúw-úh</i> <i>yú-uw-úh</i> 'that-(FLR)- DECL'	<i>cãw-ãh</i> <i>cã-ãw-ãh</i> 'another- (FLR)-DECL'	
<i>-V?</i> Interrogative ⁵² (cf. §17.4)	<i>núw-u?</i>	<i>n'íw-i?</i>	<i>yúw-u?</i>	<i>cãw-ã?</i>	
<i>-có?</i> Locative (cf. §7.9)	<i>nú-có?</i> 'in this place here'	<i>n'í-có?</i> 'in that place there'	<i>yĩ-có?</i> 'over there'	<i>cã-?ah=có?</i> 'in another place'	<i>hĩ-có?</i> 'at/to what location?'

⁴⁹ As noted in §2.6, inflectional forms beginning with obstruents all condition a preceding glottal stop or homorganic consonant at the morpheme/syllable boundary; e.g. [hitn'ɪh] 'what', [nu?kán] 'over here', [yitd'əh] 'those', etc. (a general morphophonological process in Hup). This morphophonologically conditioned change is not shown in the orthography.

⁵⁰ Case inflection can also follow the basic modifier form (ending in *-p*) of the demonstrative; e.g., *nup-an*, but this is not common.

⁵¹ The [w] in these forms is a reflex of the 'filler' syllable *-Vw-*, which also appears in unreduced form.

⁵² The interrogative marker *-V?* (see §13.3) can also follow most other inflectional forms, such as the modifier form *-p* and the case-markers *-ãñ*, *-Vt*; e.g. *núp-u?*, *núwán-a?*.

<i>-kán</i> Directional	<i>nu-kán</i> 'to here, this way'	<i>n'í-kán</i> 'over there, that way'	<i>yí-kán</i> 'over/out there, that way'		<i>hí-kán</i> 'in/from what direction?'
<i>-d'əh</i> Plural/ collective ⁵³ (cf. §4.4)	<i>ní-d'əh</i> 'these'	<i>n'í-d'əh</i> 'those'	<i>yí-d'əh</i> 'those, they'	<i>cā-d'əh</i> 'others'	
<i>-n'ñh</i> Nominalizer (cf. §4.6.3, §18.2.5)	<i>nñ-n'ñh</i> 'these, this, about here' (plural inanimate, mass)	<i>n'í-n'ñh</i> 'those, about there' (plural inanimate, mass)	<i>yí-n'ñh</i> 'those, thus' (plural inanimate, mass)	<i>cā-n'ñh</i> 'whatever'	<i>hí-n'ñh</i> 'what, what kind?'
<i>-lap</i> Quantity, number (cf. §6.5.3)	<i>ná-lap</i> 'this many'	<i>n'íp-lap</i> 'that many'	<i>yí-lap</i> or <i>yá-lap</i> 'this many, all that'		<i>hí-lap</i> 'how many?'
<i>-m'æ</i> Amount, measurement (cf. §10.2.2.1)	<i>nú-m'æ</i> 'this much, (at) this time'	<i>n'í-m'æ</i> 'that much, (at) that time'	<i>yú-m'æ</i> 'that much (intg)'		<i>hí-m'æ</i> 'when, what quantity?'
<i>-wag</i> 'day'	<i>nú-wag</i> 'these days'	<i>n'í-wag</i> 'those days; earlier days'	<i>yú-wag</i>	<i>cā-wag</i> 'another day'	
<i>-wəd</i> 'old/respected m.' <i>-wa</i> 'old/respected f.' (cf. §7.4)	<i>nú-wəd (-wa)</i> 'this old/ resp. man (woman)'	<i>n'í-wəd (-wa)</i> 'that old/resp. man (woman)'	<i>yú-wəd (-wa)</i> 'that old/resp. man (woman)'	<i>cā-wəd (-wa)</i> 'other old/ resp. man (woman)'	
<i>nñh-</i> (‘be.like’) Manner (verbal form) (cf. §10.2.2.1)	<i>nñ nñh-</i> (TD) <i>nup-yí? nñh-</i> (B) ‘in this way’		<i>yí⇒ nñh-</i> 'in this way, thus'		<i>hí⇒ nñh-</i> 'in what way?' <i>hí-nñy</i> (from <i>nñh-íy</i>) 'what did you say?'
<i>nɔ-</i> 'say' (verbal form)	<i>ní nɔ-</i> 'saying this'		<i>yí nɔ-</i> 'saying that, thus'		<i>hí nɔ-</i> 'saying what?'
<i>-nñykeyó?</i> (<i>-nñh-íy key-yó?</i>)			<i>yí nñykeyó?</i> 'for that reason'		<i>hí nñykeyó?</i> 'why, for what reason'

⁵³ The plural marker *-d'əh* receives primary stress in these pronominal forms, whereas it is unstressed when occurring with nouns.

Most of the bound inflectional forms in the above table are productive with nouns in general in Hup, as discussed in the relevant listed chapter sections. Exceptions are the ‘directional’ form *-kán* (possibly formed from the ‘locational/directional object’ marker *-an*, see §4.3.2 below), which has not been encountered anywhere else in Hup, and the form *-wag* ‘day’, which occurs elsewhere only as a free noun. The forms *-p* and *-t* are also not productive with nouns (but they, and the mono-consonantal variants of other Boundary Suffixes, do occur with the phonologically reduced versions of certain Inner Suffixes, such as *-te-* (FUTURE) *-bĩ-* (HABITUAL); see §3.6). The semantics of the *-p* and *-t* demonstrative variants (relating to nominal modification and location), as well as their form, suggests that they are in fact reduced versions of the Dependent marker *-Vp* (see §18.2.4) and the Oblique *-Vĩ* suffixes (see §4.3.4), which also combine with the bound demonstrative and interrogative pronoun forms in unreduced form. A further idiosyncrasy of the demonstrative and interrogative forms is their ability to occur as marginally free particles when followed by the verb stems *nĩh-* ‘be like’ and *nɔ-* ‘say’, exclusively (see §6.2-3 for more detail).

4.1.3. ‘Verby’ nouns

A small group of Hup nouns are semi-verbal in their morphosyntactic patterning. This is presumably because of their semantics, which involves periods of time and so is inherently progressive and impermanent. Nevertheless, these lexical items belong primarily to the noun class: unlike members of the verb class, they do not require aspectual inflection, typically appear as arguments of a clause, and can in general be

possessed and existence-negated. It should also be noted that they do not pattern as a fully coherent set, in that they do not all take the same aspectual forms.

The ‘verby’ nouns include those dealing with human ages, in particular *(tɪh=)wəhɛd* ‘old man’, *(tɪh=)wá* ‘old woman’, and *(tɪh=)dóʔ* ‘child’, and with periods of time, namely *wág* ‘day’ and *j’əb* ‘night’.⁵⁴ When they appear as predicates, the human nouns often (and in some cases must) appear without the bound preform *tɪh=*, which they usually require when appearing as arguments; its removal apparently has something of a de-nominalizing function.

The verb-like qualities of these nouns include the ability of some members of the set—in particular ‘day’ and ‘night’—to occur in verbal compounds (something normally possible only with verb stems):

- (1) *məh tɪh yæʔ-wæd-hi-wág-áh*
 inambu 3sg roast-eat-FACT-day-DECL
 ‘He cooked and ate inambu until daybreak.’ (P.BT.94)

These nouns are also able to occur with a limited subset of verbal aspectual forms, which are otherwise restricted to the verb class. For example, (with the exception of ‘child’) they can take the Completive marker (§12.5), as in *wag-yiʔ-cɰwɰ* (day-TEL-COMPL.DYNM) ‘already day’, and in example (2). ‘Night’ and ‘day’ may also take the verbal Factitive prefix (§11.4), as in (2) and (1) above.

- (2) *(hi-)j’əb-yiʔ-cɰwɰ* *ʔm-ɪh!*
 (FACT-)night-TEL-COMPL-DYNM 1pl-DECL
 ‘It’s already become night ‘on’ us!’

⁵⁴ This may not be an exhaustive set. Also note that a related phenomenon apparently exists in Hup’s sister language Yuhup, in which ‘night’ and ‘day’ are reported to be verb roots (Ospina 2002: 403).

‘Day’ and ‘night’ have lexicalized variants involving the Inchoative marker (§12.3): *wág-ay* (day-INCH) ‘dawn’ (beginning of day), and *j’əb-ay* (night-INCH) ‘dusk’ (beginning of night). The primarily verbal ‘Ongoing event’ marker *tæ* (§12.11) is also grammatical with these forms, as in *j’əb tæ* ‘still night/dark’ (compare the adverbial expression *j’əb-tæ-yi?* ‘dawn’), *wág tæ* ‘still day/light’, and *tɪh=dó? = muhún tæ* ‘still a very young child’ (note that this form also uses the exclusively verbal intensifier *muhún*; §15.1.2). Finally, the ‘old man/woman’ lexemes can take the verbal Future form *-teg* (§13.1), as in (3), although they are *not* able to take its more grammaticalized variant *-te-* without a copula; this fact may be evidence both for the semi-nominal status of the verbal form *-teg* (see §13.1 Historical Note), and for the semi-verbal status of the ‘old man/woman’ lexemes.

- (3) $yú \Rightarrow wəhəd-tég-ay-áh$
 João old.man-FUT-INCH-DECL
 ‘João will get old’

4.2. Nominal morphology

Hup’s nominal morphology is considerably less complex than its verbal morphology. Nevertheless, a given nominal root can often take multiple formatives, including suffixes as well as enclitics. In keeping with Hup morphological patterns in general, these always follow the stem—with the marginal exception of the procliticization of the third person singular pronoun *tɪh* to some bound nouns (see §5.4). In general, formatives attach to the

last element of the noun phrase in Hup, rather than to the head noun within the NP, regardless of how phonologically integrated the bound morpheme is with its host stem.⁵⁵

A morphological slot sequence for the noun is given here:

STEM—Number[-*d'əh*]—(Filler[-*Vw*])—Case[-*añ*, -*an*, -*Vt̃*]/Dependent marker[-*Vp*]
—Aspect/Focus—Declarative[-*Vh̃*]

The discussion of nominal morphology in this chapter concentrates on the inflectional marking of case and number; these forms are considered to be morphosyntactically maximally ‘basic’ to the noun, since they relate intrinsically to the identity of the individual nominal referent and to its syntactic role in the clause. However, the list of formatives that can be associated with nouns is in fact much longer, and most of these are addressed in chapter 6. In general, the primary function of these latter forms is one of marking pragmatic focus and other functions related to the larger focus of the discourse context. In addition, many of them are highly ‘promiscuous’, in that they are also found on other parts of speech and in a variety of constructions, often with quite distinct functions for a single form; for example, several occur as aspect markers on verbs. Still other promiscuous forms can be associated with virtually any part of speech—which frequently functions as a convenient host in a key position within the clause—with no substantial difference in semantic contribution; most of these are discussed in chapter 15 (see also Appendix I).

⁵⁵ As noted in §3.4, this is a feature that is typically associated with clitics; in Hup, it is a property both of formatives that are labeled clitics and of those that are labeled suffixes.

4.3. Case marking and grammatical relations

Hup has a case system that marks both core and oblique arguments of verbs.

Grammatical alignment is strictly nominative-accusative, both morphologically and syntactically. Subjects in Hup are unmarked, while nouns occurring in a variety of non-subject roles are object-marked with the suffix *-ǎn*, provided they conform to certain semantic restrictions relating to the noun's placement on the animacy/ definiteness hierarchy. Oblique arguments (which are not subject to any animacy restrictions) are marked with the suffix *-V́t* in instrumental, comitative, and locative roles, and with what is apparently an unstressed variant of the Object marker *-an* (glossed 'Directional') in locative and allative/ablative roles. A noun can take no more than a single case marker at a time. These patterns are summarized in Table 4.3.

Table 4.3. Grammatical relations and case markers in Hup

Grammatical function	Nouns	Nouns marked for number	Pronouns, demonstratives
S, A (subject of transitive and intransitive clauses)	-Ø	-Ø	-Ø
O (direct object, other directly affected entities)	Human: <i>-ǎn</i> Animal: Optional <i>-ǎn</i> Inanimate: -Ø	<i>-ǎn</i> (PL+OBJ: <i>-n'ǎn</i>) ⁵⁶	<i>-ǎn</i>
O (beneficiary, recipient in ditransitives)	<i>-ǎn</i>	<i>-ǎn</i> (PL+OBJ: <i>-n'ǎn</i>)	<i>-ǎn</i>
Directional oblique (locative, directional goal/source)	<i>-an</i>	[?]	
Oblique (instrumental, comitative, locative)	<i>-V́t</i>	<i>-V́t</i>	<i>-V́t</i>

4.3.1. Object case *-aň*

The patterning of core case marking—depending both on the semantic role of the nominal and on its semantic status (with respect to animacy and definiteness)—is discussed in this section. When marking core arguments, the stress on the object marker *-aň* is quite strong: it is often equal to that on the noun stem itself, and in certain cases it may be noticeably stronger (especially with pronouns and demonstratives) and could arguably be considered to be primary stress.

The interaction between the semantic roles of core non-subject participants and object marking is considered in §4.3.1.1, and the phenomenon of differential object marking (reflecting animacy and definiteness) is addressed in §4.3.1.2.

4.3.1.1. Semantic roles and object marking

The Object marker *-aň* marks a variety of core non-subject participants. These include prototypical patients, recipients, beneficiaries, and other directly affected entities, as illustrated in the examples below.

A. Prototypical patients (direct objects of transitive clauses).

- (4) *hĩd-aň, húptok g'ɔp=n'aň, hid wæd-huĩʔ-yĩʔ-ĩy*
 3pl-OBJ person.belly scoop=PL.OBJ 3pl eat-finish-TEL-DYNM
 'They ate up all of them, those who were serving caxiri.' (H.YP.68)

- (5) *tĩh=tæh ʔĩn-aň=mah tĩh mæh-æh*
 3sg=child,mother-OBJ=REP 3sg hit-DECL
 'He beat his wife, it's said.' (P.BWB.86)

⁵⁶ As discussed below, case marking is to some degree dependent on number marking.

- (6) *hĩd-ǎñ g'əç-tuk-yóʔ=mah*
 3pl-OBJ bite-want-SEQ=REP
 'Having tried to bite them, it's said...' (H.Rad.107)

B. Recipients/ beneficiaries/ maleficiaries (ditransitive clauses)

Examples of typical recipients are given in (7-9). Note that if both objects of a ditransitive construction are semantically qualified to receive Object marking (according to their placement on the animacy/definiteness hierarchies), they both appear with identical marking (see E below).

- (7) *'máý! teghɕ=ʔǎy-ǎñ dadánya ʔín du-wæd-ʔáy-ay-áh*
 let's.go Non.Indian-FEM-OBJ orange 1pl sell-eat-VENT-INCH-DECL
 'C'mon! Let's go sell some oranges to the Non-Indian girl.' (P.txt.92)
- (8) *huĩ, hɔpkək-ɕh... tĩw biʔ-tég=n'ǎñ tĩh nɔʔ-ɔp*
 tobacco fish.pull-DECL path work-FUT=PL.OBJ 3sg give-DEP
 'There was tobacco, fishhooks...that he gave to those who worked on the road.'
 (H.txt.64)
- (9) *ʔǎy-hiyóʔ=mah hĩd-ǎñ ʔəg hĩd g'ɔp-ɕh*
 together-above=REP 3pl-OBJ drink 3pl scoop-DECL
 'All together they served them drink.' (H.YP.74)

Ditransitive constructions involving beneficiaries are given in (10-12).

- (10) *nǎm ʔám-ǎñ ʔǎh key-nĩŋ*
 louse 2sg-OBJ 1sg see-COOP
 'I'll look for lice for you.' (T.C.70)
- (11) *ʔín ʔám-ǎñ tĩw y'æt-té-h*
 1pl 2sg-OBJ path lay-FUT-DECL
 'We'll lay down (clear) a path for you.' (H.BY.88)

Hup uses the same strategy to mark the source (here also a maleficiary) in ditransitive constructions, as in (12).

- (12) *lam tʃn-ɔw-ǎñ, g'æŋ-tæh lam-ǎñ toh-tég=mah*
 2sg hold-Filler-OBJ Bone-Son 2sg-OBJ steal.away-FUT=REP
 'That which you have, Bone-Son will steal (it) from you, it's said' (H.MTL.53)

Object marking of recipients/ beneficiaries/ maleficiaries in ditransitive

constructions differs formally from that of prototypical patients in one crucial respect: it is *required* on all recipients/beneficiaries of ditransitives, regardless of their animacy.

While recipients are only very rarely inanimate, an example of such a case ('tree') is given in (13), and of an animal recipient (which in other contexts would be optionally object-marked) in (14).⁵⁷

- (13) *tiyĩ? tegd'úh-ǎñ deh nɔʔ-ɔy*
 man tree-OBJ water give-DYNM
 'The man gives the tree some water' (EL)

- (14) *tiyĩ? cadakaʔ-ǎñ pñhíyúm nɔʔ-ɔy*
 man chicken-OBJ corn give-DYNM
 'The man gives corn to the chicken' (EL)

C. Other affected entities (monotransitive clauses)

The forms treated in this section are Object-marked like the patients and recipients in the examples above, but they are arguably less prototypical objects. This is also reflected formally in the fact that derived passive variants of most prototypically transitive clauses (like those in A above) are possible, but passive variants cannot be derived from the clauses below (see §8.2 for more discussion). In other words, Hup clauses that contain an Object-marked argument may be of varying Transitivity, as defined by Hopper and Thompson (1980).

⁵⁷ I am grateful to Seppo Kittilä for suggestions in exploring these parameters relating to animacy and argument-marking.

Examples of affected entities marked with Object case are given in (15-17).

- (15) *húptok ʔín-ǎn ʔam ʔəg-næ-ǎy*
 person.belly 1pl-OBJ 2sg drink-be.together-DYNM
 ‘You drank caxiri together with us (to our benefit).’ (I.M.81)
- (16) *ʔǎh=ʔín ʔǎn na ʔ-yíʔ-ní-h*
 1sg=mother 1sg.OBJ die-TEL-INFR2-DECL
 ‘My mother died on me.’ (T.PC.5)
- (17) *ʔín ʔám-ǎn hicocó-óh*
 1pl 2sg-OBJ happy-DECL
 ‘We are happy because of you.’ (I.Mon.)

D. Animate actors in a reflexive (passive) construction

As discussed in §11.1.2, the animate actor (i.e. that which would be the agent of an active clause) is marked with Object case in a passive-type reflexive construction (example 18).

Inanimate actors in these constructions occur in Oblique case (see §4.3.4.1.D).

- (18) *ʔam ya ʔám-ǎn hup=wæd-té-h*
 2sg jaguar-OBJ RFLX=eat-FUT-DECL
 ‘A jaguar will eat you!’ (OS)

E. Discussion: multiple object marking in the clause

Because Hup uses the same object-marking strategy for different core participants of a clause, as many as three identically marked participants can co-occur when the animacy/definiteness requirements are met. However, this is very rare in normal discourse, where participants that can be recovered from the context are typically left unstated. Elicited examples are provided in (19-21).

- (19) *hocaý deníci-**añ** tih=dóʔ-**añ** d'oʔ-be-y^h**añ**-^h**añ**, teréca-**añ***
 Rosalino Denise-OBJ 3sg=child-OBJ take-show-order-DECL Teresa-OBJ
 'Rosalino makes Denise show the child to Teresa.' (EL)
- (20) *ʔectedimá pawdína-**añ** h^hʔ d'oʔ-nɔʔ-^hʔíh-^húy, yubínu-**añ***
 Esterimar Paulina-OBJ fish take-give-APPL-DYNM Jovino-OBJ
 'Esterimar gives fish to Paulina for Jovino.' (EL)
- (21) *núp h^hʔ-**añ** ʔ^h**añ** nɔʔ-^hʔíh-^hʔáy hám, pawdína-**añ***
 this fish-OBJ 1sg.OBJ give-APPL-VENT.IMP go.IMP Paulina-OBJ
 'Go give this fish to Paulina for me.' (EL)

Constituent order in these examples is fairly free, as it is generally in Hup (see §17.3.1), and the respective roles of participants would under normal circumstances be largely recoverable from the discourse context. In elicitation, however, the general pattern seems to be that the least prototypically 'core' participant is clause-final, following the verb. This pattern can be avoided without ambiguity in (21), where the directional verb form makes it clear that the speaker cannot be the recipient, but only the beneficiary. The identity of the *-añ*-marked nominal as direct object vs. recipient seems to be primarily dependent on pragmatics, rather than word order, with consultants maintaining that the interpretation of 'show the child to X' was the same whether the word order was Recipient-Object or vice versa, and preferring a more complex series of clauses to communicate 'show X to the child'.

4.3.1.2. Differential object marking

With the exception of recipients/ beneficiaries of ditransitive constructions, object marking crucially depends on the semantics of the nominal. In general, object marking is

obligatory for human nouns, pronouns, and demonstratives, optional for animals, and ungrammatical for inanimates.

It is relatively common cross-linguistically for object marking to be sensitive to animacy, specificity, and even topicality (cf. Silverstein 1976, Croft 1990: 112, Blake 2001: 119-20). This phenomenon, by which some objects are marked and others are not, depending on their semantic features, has been termed ‘differential object marking’ (Aissen 2003, Bossong 1998; cf. Zuñiga 2004). Aissen (2003: 437) discusses two dimensions along which prominence of objects can be assessed for the purposes of object-marking: animacy and definiteness. With respect to animacy, she posits a cross-linguistically general ranking to be the following: Human > Animate > Inanimate, and with respect to definiteness, the following: Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Non-specific NP. The higher an entity falls on these hierarchies, the more cross-linguistically likely it is to be overtly object-marked. Examples of other differential object-marking languages include Hindi, in which nouns are marked only when the referent is both specific and animate (Blake 2001: 120); Sinhalese, where optional object marking is limited to animate-referring objects; and Hebrew, where object marking is obligatory but limited to definite objects (Aissen 2003: 436).

Aissen (2003) characterizes the degree to which differential object marking extends across the class of nouns in different languages as being determined by the tension between two factors, economy and iconicity. Economy pushes the language to avoid unnecessary additional morphological material, whereas iconicity fosters the use of morphological complexity to facilitate comprehension. In a slightly different

interpretation of differential object marking, Hopper and Thompson (1980) consider the presence of object marking in such languages to register a high degree of Transitivity in the clause, specifically vis-à-vis the degree of individuation of the nominal entity.

In Hup, differential object marking corresponds closely to the animacy and definiteness hierarchies. When examined in more fine-grained detail, certain idiosyncrasies in this pattern only serve to reinforce the conclusion that the phenomenon has to do with the individuation of entities, as the examples and discussion below illustrate.

Despite the fact that both subjects and some objects are unmarked and that constituent order is fairly free in Hup (see §17.3.1), ambiguity is easily avoided. Given that differential object marking reflects the fact that humans are more prototypical agents, whereas inanimate objects are more prototypical patients, any potential ambiguity between agents and patients in Hup discourse is mostly limited to cases of interaction between animals. When such cases do come up, context and the optional application of object marking are the primary means of differentiating agents from patients, but if no other clues are available speakers interpret the clause according to SO constituent order (see §17.3.1).

A. Pronouns and demonstratives

Marking with *-añ* is required on all objects that are pronouns (examples 22-25) and demonstrative heads of NPs (examples 26-27).

- (22) *ʔám-ǎñ ʔɔt-yóʔ tɪh ham-yɪʔ-ɪy*
 2sg-OBJ cry-SEQ 3sg go-TEL-DYNM
 ‘After crying over you, he left.’ (B-Cv.136)
- (23) *ʔám cóʔ-óy ʔǎñ wɪɪ-ʔúh*
 2sg LOC-DYNM 1sg.OBJ pull.out-APPL.IMP
 ‘You take (my eyes) out for me!’ (CO.77)
- (24) *yúp=mah tɪh-ǎñ tɪh kəwəʔ wɪɪ-ay-áh*
 that.ITG=REP 3sg-OBJ 3sg eye pull.out-INCH-DECL
 ‘So he took his eyes out for him.’ (CO.77)
- (25) *mangǎ táʔ-ay, hɪd-ǎñ yamhidɔʔ-nɪh tɪh?*
 Margarita REL.INST-INCH 3pl-OBJ sing-NEG 3sg
 ‘What about Margarita, didn’t she sing to them?’ (TD.Cv.103)
- (26) *ʔǎh hipǎh-ǎy yúw-ǎñ-áh*
 1sg know-DYNM that.ITG-OBJ-DECL
 ‘I know this one (story).’ (32)
- (27) *cǎw-ǎñ yǎwǎc-yɪʔ, n’í-cóʔ=b’ay, tɔk cóʔ*
 other-OBJ meet-TEL there-LOC=AGAIN belly LOC
 ‘(She) had already gotten another (child), there, in the belly.’ (H.txt.17)

B. Personal names and kin terms

All require object marking, as in examples (28-30).

- (28) *hɪd-nɪh ʔántúg=tǎh-ǎñ, tiʔcɪk-nɪh nɪŋ-ɪp*
 3pl-POSS mother’s.husband=son-OBJ dislike-NEG 2pl-DEP
 ‘You all didn’t dislike their step-brother either!’ (sarcastic) (TD.Cv.103)
- (29) *mændí=tog-ǎñ*
 Bernadito=daughter-OBJ
 ‘(She said it) to Bernadito’s daughter.’ (TD.Cv.105) (response to question)
- (30) *páti-ǎñ húp-út ʔǎh ʔɪd-ɪhɔʔ*
 Pattie-OBJ Hup-OBL 1sg speak-TAG2
 ‘I speak Hup to Pattie.’ (P.Sp.109)

Personal names and kin terms in Hup discourse usually correspond to human referents, as one would expect. However, their obligatory object marking applies equally when the

referents are animals or even inanimate entities, as in example (31), which refers to a canoe nicknamed *haĩ* ('Alligator'), owned by people of Barreira Alta.

- (31) *haĩ-aĩ* *ʔāh d'óʔ-óh*
 Alligator-OBJ 1sg take-DECL
 'I took Alligator.' (EL)

Object marking does not, however, extend to place-names, on the relatively rare occasions that they occur as prototypical objects of the clause:

- (32) *ba ʔĩb' paç* *ʔāh káy-éy*
 spirit hill/rock 1sg see-DYNM
 'I'm looking at Spirit Hill.' (EL)

C. Human nouns

In general, *-aĩ* is obligatory on all human objects, as in examples (33-34).

- (33) *yub=ʔāy-aĩ,* *děh hən-yóʔ... tĩh d'oʔ-macá-b'ay-áh*
 cipó.vine-woman-OBJ water vomit-SEQ 3sg take-gain.consciousness-AGAIN-DECL
 'Having vomited water, he created cipó vine-woman.' (LG-C.17)

Example (34) is a case of possessor 'raising' (see §5.3.1), in which the human 'possessor' of the body part receives the object marker:

- (34) *tĩh=dóʔ-aĩ* *păť ʔāh j'id-íy*
 3sg=child-OBJ hair 1sg wash-DYNM
 'I wash the child's hair.' (EL)

Obligatory object marking for humans also applies to indefinite referents which are specific:

- (35) *húp-ǎñ hipǎñ-ǎy yúw-úh*
 person-OBJ know-DYNM that.ITG-DECL
 ‘They (divining bones) know/are aware of people (who are approaching).’
 (H.txt.21)
- (36) *ʔayúʔ=ʔh-ǎñ ʔǎh kéy-éy, j’úǵ-ǎñ*
 one=MSC-OBJ 1sg see-DYNM forest-OBJ
 ‘I saw a man in the forest.’ (RU)

However, human referents that are both non-specific and indefinite are *not* case-marked, the only example of such an exception. This underscores the insight that differential object marking has to do with the conceptual individuation of referents—an observation which is further supported by the fact that the exceptions to obligatory object marking of human referents parallel the exceptions to their obligatory participation in the bound construction, which also arguably has to do with individuation (see §5.4-5). When the human referent is specific, the kin terms in examples (37-38) require *both* the default bound preform *tʰh=* and the Object marker, whereas neither occur when it is nonspecific. Likewise, ‘leader’ in (39) lacks the object marker when nonspecific.

- (37) a) *wǎʔ tǎh ʔh túk-úy*
 buzzard child.mother want-DYNM
 ‘Buzzard wants a wife.’ (OS) (he wants to get married)
- b) *wǎʔ⇒ tʰh=tǎh ʔh-ǎñ túk-úy*
 buzzard 3sg=child.mother-OBJ want-DYNM
 ‘Buzzard wants his wife.’ (e.g. they have separated)
- (38) a) *tǎ ʔǎy tǎh cúʔ-úy*
 woman offspring grab-DYNM
 ‘The woman is having a baby.’
- b) *tǎ ʔǎy tʰh=tǎh cúʔ-úy*
 3sg=small
 ‘The woman grabs the small (inanimate) thing.’

- c) *tã ʔăy tɪh=tæh-ăh cú ʔ-úy*
 3sg=offspring-OBJ
 ‘The woman grabs her son.’ (EL)
- (39) a) *yɔʔɔm=ʔh tɪh d'əh-d'əh-yé-éh*
 powerful=MSC 3sg send-send-enter-DECL
 ‘He picked out (someone to be) a leader.’ (H.txt.62)
- b) *yɔʔɔm=ʔh-an tɪh d'əh-d'əh-yé-éh*
 powerful=MSC-OBJ 3sg send-send-enter-DECL
 ‘He picked out the (already existing) leader.’

D. Animals

Object marking is optional on nouns referring to animals (whether dead or alive); these nouns may accordingly be left unmarked, as in examples (40-41). Object-marked variants of the nouns in these examples are also judged acceptable, with no difference in interpretation reported.

- (40) *cɔʔ cæg-æp=mah tɪh hám-áh*
 shrimp net-DEP-REP 3sg go-DECL
 ‘She went netting shrimp.’ (I.M.43)
- (41) *hɔhɔh=mah tɪh ʔey-yɔhɔy-ɔh*
 frog=REP 3sg call-search-DECL
 ‘He was calling and searching for the frog.’ (FS.2)

Examples (42-43) illustrate the case-marking of animal objects; this marking probably reflects a relatively higher topicality or focus of the referent in the discourse (but is nevertheless also judged here to be optional).

- (42) *mɔh-ăh=mah cǎp tɪh hitæʔ-ăh*
 inambu-OBJ=REP other 3sg imitate-DYNM
 ‘The inambu is another that he imitates.’ (T.C.68)

- (43) *tínñh cápu-ǎñ=yíʔ tñh léy-cudññnáy*
 3sg.POSS frog(Pt)-OBJ=TEL 3sg call-INFR2.maybe
 ‘He’s apparently calling for his frog.’ (FS.4)

When animals figure as main characters in stories, their names are almost invariably object-marked. This is undoubtedly due to the fact that they are specific personalities and key participants; moreover, the animal name often functions essentially like a personal name in this context (for example, it may take the honorific-type ‘old/respected’ markers *-wǎd* and *-wa*, as in example 44).

- (44) *tñh pǎd-hi-y’ǎt-yíʔ-póʔ-ay-áh, tñh=tǎññp=pog-ǎñ, mǎñǎy=wǎd-ǎñ*
 3sg roll-descend-lay-TEL-EMPH1-INCH-DECL 3sg=child.father=EMPH1-OBJ Deer=RESP-OBJ
 ‘She rolled him out onto the ground, her husband, the Deer.’ (M.I.55)

- (45) *tañh-ǎñ=mah j’ám tñh wǎn-máh-ah*
 tapir-OBJ=REP DST.PST 3sg follow-REP-DECL
 ‘He followed the tapir, long ago, they say.’ (JA.AJ.64)

The names of spirit beings pattern like those of animals in Hup.

E. Inanimates

For inanimate entities unmarked for number, Object case marking is ungrammatical (and note that number is usually unmarked on inanimates even if conceptually plural; see §4.4.1).

- (46) *hídnñh húptok yñ=yíʔ píd b’ǎh-ham-pǎm-yíʔ-ay, ñǎñ-ǎw-ǎñ*
 3pl.POSS person.belly thus=TEL DIST pour-go-sit-TEL-INCH 1sg-FLR-DECL
 ‘I kept pouring out their caxiri (lit. person-belly) as I sat there.’ (TD.Cv.98)
- (47) *yíkán mǎñ híd bíʔ-píd-ñh, póg!*
 over.there house 3pl make-DIST-DECL big
 ‘There they built a house, (it was) big!’ (H.YP.69)

- (48) *dəh hi-wǎy hám=d'əh yúp, hǝpkǝ, mǝm-b'ǝ híd tɔn-hám-áh*
 water FACT-go.out go=PL that.ITG fish.pull iron-pot 3pl hold-go-DECL
 'Those who go out in the igapó (to fish), they take along fishhooks and pots.'
 (P.F.125)

F. Plural nouns

Object marking is always required when the Plural/collective marker =*d'əh* is present, regardless of the animacy or definiteness of the noun. Typologically, this appears at first glance to be a peculiar twist on differential object marking. However, it in fact makes sense in light of the fact that number marking in Hup involves essentially the same semantic parameters as does differential object marking, conforming to an animacy/definiteness hierarchy (see §4.4.1 below). Moreover, Hup is not alone among languages in displaying an interaction of plural with case marking. For example, animate nouns in Russian have a different way of forming the accusative case in the plural, as do male human nouns in Polish (cf. Comrie 1981: 132)—which may reflect an interaction between differential object marking and an animacy-based plurality 'split' like that found in Hup.

The combination of Plural marker + Object marker in Hup is usually realized as the fused form =*n'ǎn*, although the unreduced form =*d'əh-ǎn* is heard occasionally and is typical of exaggeratedly slow speech.⁵⁸ This unreduced form is also always found with plural demonstratives (see Table 4.2), and corresponds to their unique stress pattern (i.e. unstressed stem and stressed plural marker, the opposite of the normal stress pattern).

The order of the Plural and Object markers in this form is important; compare the distinct

⁵⁸ Note that the fusion results in a phonologically monomorpheme-like form which is fully nasalized, in keeping with nasality's role as a morpheme-level prosody in Hup generally (see §2.3.1).

form *-aň-d'əh* (Associative plural, §4.4.6 below), which is apparently formed from the same two morphemes in the opposite order.

An example of a plural-marked animal object with obligatory case marking is given in (49). While inanimate nouns are almost never marked for plural in ordinary discourse, they may be—and are then Object-marked—as in example (50).

- (49) *həp=n'aň tih w'ób-óh*
 fish=PL.OBJ 3sg place-DECL
 'She placed the fish (on the smoking-platform).' (T.C.73)

- (50) *lāh cug'əť=n'aň puɦuť-d'əh-hi-yi?-ťy*
 1sg leaf/paper=PL.OBJ blow-send-descend-TEL-DYNM
 'I blew the papers down.' (EL)

4.3.1.3. Object marking on NPs and relative clauses

Case marking in Hup is not limited to the individual nominal word, but also occurs on noun phrases and relative clauses. In these cases, it marks the phrase as a whole, rather than attaching to phrase-internal nominal heads or other constituents, and occurs phrase-finally—even following nominal enclitics.⁵⁹ In this section, I provide a short discussion of the patterning of object marking with demonstrative and adjective NPs (which are discussed in more detail in §6.3 and §6.6.), and with headless relative clauses (see §18.2.3)

A. Demonstrative + Noun NPs

Just as object marking is required on all demonstratives acting as nominal heads, NPs containing a demonstrative also receive obligatory object marking, regardless of their animacy or number. The case marker usually attaches to the final constituent of the NP, as in examples (51-54).

- (51) *yúp yuđ-ǎn=mah yúp t̪h cud-d'óʔ-ay-áh*
 that.ITG clothes-OBJ=REP that.ITG 3sg be.inside-take-INCH-DECL
 ‘It was these clothes that he put on’ (P.CC.84)
- (52) *cǎp=ʔh=b'ay yúp t̪h̥ǎ-ǎn mæh-p̥id-ǐp=b'ay*
 other=MSC=AGAIN that.ITG snake-OBJ kill-DIST-DEP=AGAIN
 ‘Then someone else killed that snake (after it had killed so many people).’
 (H.txt.44)
- (53) *núp=g'æt-ǎn key-tú-y=hɔ̃ ʔám?*
 this=LEAF-OBJ see-want-DYNN=NONVIS 2sg
 ‘Do you want to see this book?’ (EL)
- (54) *ya ʔamboʔ=b'ay póh núp yɔʔ=b'ak-ǎn key-d'əh-cak-g'ét...*
 dog=AGAIN high this wasp=CLUMP-OBJ see-send-climb-stand
 ‘As for the dog, (he’s) standing up (against the tree), looking at this wasp nest.’
 (FS.5)

The NP-final marking of case applies even when both members of the NP are individually marked as plural:

- (55) *“cɔʔ niŋ cæg-ʔáy hám!” nɔ-d'əh-d'ób-óh, yɪ-d'əh ʔáy=n'ǎn-áh*
 shrimp 2pl net-VENT go.IMP say-send-go.to.river-DECL that.ITG-PL FEM=PL.OBJ-DECL
 ‘“You all go net shrimp!” (he) said, sending those women to the river.’ (LG-C.18)

⁵⁹ This ability of Hup case markers to attach to whatever constituent is phrase-final gives them a resemblance to enclitics themselves, although they bear the (somewhat language-specific) label ‘suffixes’, in keeping with their other properties (see §3.4).

However, if a demonstrative and non-human noun themselves form distinct, co-referential NPs in an appositional relationship, the demonstrative alone may take the case marker, with the non-human noun remaining unmarked.⁶⁰

- (56) a) *núp hǎp-ǎn ʔm wæd-té-h*
 this fish-OBJ 1pl eat-FUT-DECL
 ‘We’ll eat this fish.’
- b) *núw-ǎn hǎp ʔm wæd-té-h*
 this-OBJ fish 1pl eat-FUT-DECL
 ‘We’ll eat this fish.’ (EL)

Unlike demonstratives, numerals in NPs without overt plural-marking do not require the presence of the Object marker:

- (57) *bodáca ʔyту=b’ah, yǎ pǎd j’ǎh ʔm-ǎn tǎh nɔʔ-ɔy*
 cookie eight=SPLIT thus DIST PST.CNTR 1pl-OBJ 3sg give-DYNM
 ‘Eight cookies, that’s what she gave to each of us.’ (P.txt.3)

B. Adjective NPs

Object marking on (N + Adj) NPs follows the general animacy/definiteness-related rules, as illustrated by (58-59). When it occurs, *-ǎn* typically attaches to the adjective, as last member of the NP (example 59).⁶¹ Case marking can optionally occur on both members of the NP only when the adjective modifier is nominalized by the bound preform *tǎh=* (example 59).

- (58) *j’ám nǎ b’éj tǎh=pǎǒg híd d’o ʔ-way-yǎʔ-ní-h!*
 yesterday 1sg.POSS jandia.fish 3sg=big 3pl take-go.out-TEL-INFR2-DECL
 ‘Yesterday they took my big jandiá fish!’ (B.Cv.94)

⁶⁰ When asked, one consultant thought that (b) might be somewhat more restrictive, but no consistent answer to this question has yet been established.

⁶¹ Note that the pattern of NP-final case marking also applies to noun compounds.

- (59) *tiyĩʔ(-aň) (tɬh=)pöğ-aň túk-úy=mah*
 man-OBJ (3sg=)big-OBJ want-DYNM=REP
 ‘She likes the big man, it’s said.’ (EL)

In general, adjectives standing alone as nominal heads require the default 3sg pronominal form *tɬh=* (just like bound nouns in Hup), and are obligatorily object-marked, regardless of number marking or animacy, as in (60-61). The same is true for numerals appearing alone as heads.

- (60) *tɬh=pöğ-aň tɬh túk-úy=mah*
 3sg=big-OBJ 3sg want-DYNM=REP
 ‘He wants the big one, he says.’ (EL)

- (61) *tɬh=náw=n’aň b’ɣiʔ tɬh túk-úh*
 3sg=good=PL.OBJ only 3sg want-DECL
 ‘He only wants the good ones.’ (H.txt.55)

C. Headless relative clauses

Headless relative clauses standing in for object nominals are subject to essentially the same rules for object marking as are nouns, with one exception. As discussed in §18.2.3, relative clauses in object position may occur either with or without a head noun. While object marking follows the normal rules relating to animacy and definiteness when this noun is present, it is obligatory when the noun is absent. In this case, the Object marker is always separated from the verb by the ‘Filler’ form *-Vw-* (see §15.2.4 and §18.2.3); an example is given in (62).

- (62) *ba ʔtɬb’ ham-ʔe ʔ-ní-iw-aň ʔám-aň ʔãh ʔíd-té-h*
 spirit go-PERF-be-FLR-OBJ 2sg-OBJ 1sg speak-FUT-DECL
 ‘I’ll tell you the one about the spirit that was going along.’ (P.TB.1)

4.3.2. Directional oblique case *-an*

The form *-an* is phonologically almost identical to the Object case marker *-ǎn*, differing from its sister suffix only in its lack of stress. The two are probably closely related historically, but synchronically they are distinct, not only in their form but also in their functions and semantic patterning. The preferred use of Directional *-an* is to express allative/ablative case, relating to directional goals and sources; but it can also function to express location in general, where it seems largely interchangeable with Oblique *-Vt* (see §4.3.4).

Examples (63-66) illustrate the use of *-an* in marking directional goals (allative case).

- (63) *n'íkán ɬam ɬid-d' əh-hám-ap=b'ay, hayám-an*
 over.there 2sg speak-send-go-DEP=AGAIN town-DIR
 'You called on the telephone to the town.' (I.M.83)
- (64) *yág-an g'ǎɬ-ɬáy hám!*
 hammock-DIR suspend-VENT.IMP go.IMP
 'Go lie in the hammock!' (TD.Cv.99)
- (65) *tɪh kɪ-j'ap-d' əh-hi-yɪɬ-ay-áh, dəh-an*
 3sg cut-divide-send-descend-TEL-INCH-DECL water-DIR
 'He cut (the cord) and sent her down, into the water.' (P.BWB.90)
- (66) *núp=b'ay hođ-an tɪh waŋ-yæt-ní-b'ay-áh*
 this=AGAIN hole-DIR 3sg spy-lie-be-AGAIN-DECL
 'He is lying there spying into this hole.' (FS.5)

Example (67) illustrates a directional source, or ablative use of *-an*, while location-related uses like those in (68-69) appear to involve a point along a real or conceptual path (i.e. a perlocative use).

- (67) *mæʔʔah-an hid næn-d'oʔ-ní-p=b'ay*
 downstream-DIR 3pl come-take-INFR2-DEP=AGAIN
 'They come from downriver.' (H.txt.50)
- (68) *yíkán yǎh mǎy-an ʔǎn hid y'æʔ-æh*
 over.there medicine house-DIR 1sg.OBJ 3pl leave-DECL
 'There they left me at the hospital.' (T.PC.5)
- (69) *næn-d'oʔ-yóʔ... ʔínǎh j'áh nút, n'ikán... híó yapú-an b'ǎy kəd-an*
 come-take-SEQ 1pl.POSS land here over.there Rio Japu-DIR traíra bench-LOC.OBJ
 '(They) came... our land was (between) here and there... (over by) the Rio Japu,
 (at the place) Traíra-Bench.' (H.txt.36)

Directional *-an* is very common on locative postpositions (see §10.2.3), as in expressions like *cáʔ g'od-an* (box inside-DIR) 'inside the box', and *hǎd máh-an* (3pl near-DIR) 'near/with them', and example (70) (as well as example (71) below).

- (70) *mǎy g'od-an j'ǎ-y'æʔ-nǎh=yíʔ níŋ níh!*
 house inside-DIR spit-leave-NEG=TEL 2sg be.IMP
 'Don't spit inside the house!' (RU)

Directional *-an* can also combine with verb phrases in adverbial clause constructions relating to location (see §18.2.6.2), as illustrated in example (71). Unlike complement clauses (which often take object *-ǎn*, see §4.3.1.3.C above), adverbial clauses do not require the 'Filler' form *-Vw-*.

- (71) *děh hǎy-an=mah, tǎh j'ǎn-an=mah, tǎh tǎx-ǎh*
 water in.water-DIR=REP 3sg bathe-DIR=REP 3sg break.wind-DECL
 'In the water, where he was swimming, it's said, he broke wind.' (H.BY.90)

That the Object marker *-ǎn* and the Directional marker *-an* may have been one and the same form in the past is supported by several observations, in addition to their segmentally identical forms. First, there is cross-linguistic precedent for subsuming both

the syntactic role of direct object and the semantic role of destination under a single case specification; this is found, for example, in Latin (Blake 2001: 32), as well as in Spanish and Portuguese. Second, although stress plays an important role in defining different types of constructions in Hup, it is already subject to flexibility on the synchronic level, which in turn can lead to diachronic changes (for example, the plural morpheme gets stress when it occurs in fused demonstrative forms, whereas it is elsewhere always unstressed). Finally, it is important to note that the use of Directional *-an* is confined to inanimate referents, while (as discussed in §4.3.1.2 above) Object *-añ* is almost never found on inanimates, so that the two are essentially in complementary distribution. Moreover, with human referents, the locational sense of ‘to them/where they are’ is often functionally the same as ‘affected/relevant participant’ (§4.3.1.1), marked by the stressed Object marker, as in (72).

- (72) *dóʔ=n’añ=mah cǎp tɪh wɪd-yé-éh*
 child=PL.OBJ=REP other 3sg arrive-enter-DECL
 ‘Someone came in to the children.’ (BY.85)

4.3.3. Other constructions involving *-an*

The formative *-an* can co-occur with several other morphemes in a number of distinct constructions; these combinations are all discussed in detail in the sections relating to the respective second morphemes, but are summarized briefly here. It is not always clear which variant of *-an* (Object or Directional) occurs in these forms (or even whether it is not some other, homonymous form)—a question which may be irrelevant from a historical point of view, if the two diverged after these constructions had already come

into being. Note that the nominal forms resulting from these constructions can themselves take object case, as illustrated in examples (73) and (74) below, suggesting that the fused/combined forms are functionally quite distinct from the marking of case within the clause.

The forms in question include the ‘Associative plural’ *-an-d’əh* (*an* + PL/COLL; see §4.4.6 below), as in example (73); the ‘indefinite associative’ construction *-an-ŋŷ* (*an* + ‘who’; see §7.5), as in (74); and the ‘temporal adverbial’ construction *-an-ay* (*an* + INCH; see §18.2.6.2), as in (75).

- (73) *yũ-an-n’añ* *híd* *ŋéy-éy*
 João-OBJ-PL.OBJ 3pl call-DYNM
 ‘They’re calling John and his group.’ (EL)
- (74) *ŋectádu* *ŋunídu-an-ŋŷ=ŋǎy-ǎñ* *ŋǎh* *hicocó-op* *ŋǎd* *ŋǎh* *ŋíd-té-h*
 estados unidos-DIR-who=FEM-OBJ 1sg happy-DEP speech 1sg speak-FUT-DECL
 ‘I’ll tell the story of my happiness to the girl from the USA.’ (I.M.81)
- (75) *yǎkán* *bǎg* *ŋǎh* *ní-an-ay* *yúp,* *yǎn’ñ* *wíŋ-yó?* *ŋǎh* *ŋǎd-ay-áh*
 over.there long.time 1sg be-DIR-INCH that.ITG all.that hear-SEQ 1sg speak-INCH-DECL
 ‘During the long time I was there, having heard these (Portuguese and Tukano), I began to speak (them).’ (T-PC)

4.3.4. Oblique case -*Vít*

A variety of non-core participants in the clause are marked with the catch-all oblique case form *-Vít*. The Oblique marker is always required where applicable; unlike the Object marker, its presence is not dependent on the animacy, definiteness, or number specification of the noun. Nonetheless, the interpretation of the semantic role of the oblique-marked referent is necessarily somewhat dependent on the parameter of animacy.

The semantic roles indicated by this form include locative (inanimates), instrumental (inanimates), and comitative (animates);⁶² such an overlap of semantic roles and grammatical relations is not particularly uncommon (cf. Blake 2001: 63).

In certain cases (see discussion in §18.2.6.2), the ‘Filler’ form can intervene between the noun stem and the Oblique marker (although elsewhere this is usually found only between verb stem and case marker in a relative clause). When the ‘Filler’ form is present, an optional variant of *-Vt* is *-ñ* (or, with some speakers, nasal *-ñ̃*), as in example (84) below. The two forms appear to be in free variation in this context.

The different semantic roles indicated by the Oblique case are discussed below.

4.3.4.1. Semantic roles and oblique marking

A. Comitative

The comitative use of the Oblique indicates that X carries out an activity together with Y, where Y is animate, as in examples (76-79). Examples (76-77), in particular, also illustrate the fact that the comitative semantics actually subsumes a locative association as well.

- (76) *ʔāh=ʔp-ít ʔāh ni-ʔe ʔ-ní-h*
 1sg=father-OBL 1sg be-PERF-INFR2-DECL
 ‘I lived with my father.’ (T.PC) (i.e. I lived in the same place as my father)

- (77) *wʒh=d'əh-ǎ ʔāh hám-tǎñ, wʒh ʔāh ʔid-tǎʔ-ǎñ*
 River.Indian=PL-OBL 1sg go-COND River.Indian 1sg speak-CNTRFACT-DECL
 ‘If I went with River Indians, I’d speak Tukano.’ (D.int.112)

- (78) *ʔñ-ñ=yíʔ ʔam wíd-b'ay-yíʔ-b'ay-áh*
 1pl-OBL=TEL 2sg arrive-return-TEL-AGAIN-DECL
 ‘You returned together with us.’ (I.M.82)

⁶² Body parts are treated as inanimate entities.

- (79) *tedé=d'əh-ǎ tih biʔ-ni-cǐp-ǎh, haymídu-út, henátu-út, yoceditu-út*
 three=PL-OBL 3sg work-be-COMPL-DECL Ramirez-OBL Renato-OBL Joselito-OBL
 'He's already worked with three (people), with Ramirez, with Renato, with Joselito.' (P.Sp.110)

B. Instrumental

The instrumental use of the Oblique indicates that X performs an activity by means of inanimate Y (an animate Y would essentially result in comitative semantics).

- (80) *m'áč-út pǐd híd bib'-ní-h, dǎh=teg-éh*
 mud-OBL DIST 3pl close-INFR2-DECL water=tree-DECL
 'They would stop it up again with mud, the water tree.' (LG-O.9)
- (81) *ʔam ʔǐd d'əh-d'əh-hám=teg-ét ʔam ʔǐd d'əh-d'əh-hám-b'ay-áh*
 2sg speech send-send-go=THING-OBL 2sg speech send-send-go-AGAIN-DECL
 'With the thing you send speech with (i.e. telephone) you sent your words.' (I.M.83)
- (82) *yú-uw-ǎ=yiʔ=mah tih coh-tud-kǎdcak-yiʔ-ay-áh*
 that.ITG-FLR-OBL=TEL=REP 3sg use.cane-support-pass.climb-TEL-INCH-DECL
 'With that (staff) he propelled himself up (and out of the fight).' (H.YP.76)

Example (83) illustrates two Obliques in a single clause, one marking an instrumental role, the other a locative role. Note that the case marker occurs on the final constituent of the (N + Adj) NP and of the compound nominal, as is standard for all case markers in Hup (see §4.3.1.3).

- (83) *pídiya pǒg-ót ʔǎh j'ám hǎy=hǎb-ǎ*
 battery(Pt) big-OBL EPIST DST.PST um=HOLLOW-OBL
 'It was with big batteries, I think,
- tǎʔ-yóʔ j'ám tih wǐʔ-ǎh*
 be.end.to.end-SEQ DST.PST 3sg hear-DECL
 stuck end-to-end in a whatchamacallit-hollow-stick that he listened (to his radio).' (B.Cv.91)

C. Locative

The Oblique's locative function indicates that X is at the place of Y. In this semantic role (but not in the comitative or instrumental), consultants usually judge Oblique -*Ví* to be grammatically interchangeable with the (object-like) Directional marker -*an*, and can give no insights into any semantic difference between the two options (this is the case, for example, in 84-88 below).⁶³ Nevertheless, a comparison of how the two pattern naturally in discourse suggests that -*an* is preferred where the spatial range in question extends beyond the point of reference, while -*Ví* is preferred when the event is carried out completely within the given location, without reference to directional movement from, to, or through it.

- (84) *ʔāh yamhidʔ-ʔh, cāw-yucé-ét*
 1sg sing-DECL São.José-OBL
 'I sang at São José Village (during a drinking party).' (MM.PN.2)
- (85) *nup tīhǣ=d'əh, j'úǵ-út, nút ʔh-ǎn mǣh=d'əh ní-íh*
 this poison.snake=PL forest-OBL here 1pl-OBJ kill=PL be-DECL
 'Here in the forest, the poisonous snakes, here those who kill us live.' (H.txt.46)
- (86) *cāp húp=d'əh nǣh j'áh-út, yǣt-tuk-kéy yǣh ʔǎh=nih*
 other people=PL POSS land-OBL lie-WANT-see FRUST 1sg=EMPH.CO
 'I will be buried in another peoples' land.' (T.PN.20)
- (87) *pídiya-ap núw-út b'ǣiǣ-ay*
 battery-DEP this-OBL only-INCH
 'As for batteries, I have only what's in this (box).' (P.Sp.105)
- (88) *tǣǵ=hod-ót hid d'o ʔ-yǣǣ-ǣ-ay-áh*
 wood=hole-OBL 3pl take-roast-TEL-INCH-DECL
 'They baked it in the fireplace (lit. 'wood-hole').' (H.txt.22)

⁶³ Note, however, that oblique -*Ví* is virtually never found in place of -*an* on locative postpositions.

These examples can be contrasted with those involving the Directional locative *-an* (see also §4.3.2 above):

- (89) *b'ǎ-an ham-yóʔ, kayǎk g'ɔʔ-yé-éh*
 roça-DIR go-SEQ manioc pull.up-enter-DECL
 'Having gone to the roça, (they) pull manioc and bring it back.' (T.PN.21)
- (90) *mɔhɔ̃ tɪh-ǎn tɪh=cǎn'-an nukán d'oʔ-cæcæŋ-wob-ham-yíʔ-ay=cud*
 deer 3sg-OBJ 3sg=horn-DIR here take-straddle-rest.atop-go-TEL-INCH=INFR
 'The deer has put him up here astraddle his antlers and gone off, apparently.'
 (FS.9)

In example (91), the body part 'anus' is marked as Oblique, in a locative role, while the raised human 'possessor' is Object-marked (and 'thorn' has an instrumental role).

- (91) *cípm'æh=n'ǎn ɬǔt-út=mah tɪh-ǎn tɪh yók-óh, yɔʔmɔ̃-ǎ*
 small=COMP thorn-OBL=REP 3sg-OBJ 3sg poke-DECL anus-OBL
 'With a smallish thorn, they say, he poked him, in the anus.' (H.BY91)

Although Directional *-an* seems to be preferred to express directional movement to/from a location, *-Vt* is also acceptable in this function, as the examples in (92-93) illustrate.

- (92) *yúp wáb-út w'ob-ʔéʔ=n'ǎn d'əh-d'əh-hí-íh*
 that.ITG smoking.platform set.on-PERF=PL.OBJ send-send-descend-DECL
 '(He) brought down those that had been put on the smoking-platform.' (H.txt.47)
- (93) *núp nǎ yǎh=ʔǎy=d'əh-ǎ, tát deh hayám-út, ʔǎh wíd-nǎn-ǎh*
 this 1sg.POSS affine=FEM=PL-OBL taracua.ant water town-OBL 1sg arrive-come-DECL
 'To my female affinal relations, to Tat Deh village, I came.' (A.int.118)

There is some evidence that the instrumental function is in some sense more basic to Oblique *-Vt* than is the locative function. In cases where the interpretation of the noun's semantic role is potentially ambiguous between instrumental and locative, *-Vt* is

preferred for the instrumental role, and Directional *-an* for the locative, as in example (94a) and (b). That this preference only surfaces in cases of ambiguity is illustrated by the related but locative *-Vt*-marked example in (95).

- (94) a) *hɔhtěg dɛh-an tɬh j'id-íy*
 canoe water-DIR 3sg wash-DYNM
 'He washes the canoe at the water (i.e. the port).' (EL)
- b) *hɔhtěg dɛh-ét tɬh j'id-íy*
 canoe water-OBL 3sg wash-DYNM
 'He washes the canoe with water.' (EL)
- (95) *búg' tuʔ-póg-óy=mah, dɛh-ét*
 pile be.in.water-EMPH-DYNM water-OBL
 'There was a big pile (of it), in the water.' (H.TY.79)

D. Temporal

Oblique *-Vt* can also have a temporal function. This is limited to a very small set of nouns denoting specific points in time, as in examples (96-97), and resembles its use with verbs in temporal adverbials (see §4.3.4.2 below and §18.2.6.2).

- (96) *cetémbudu-ut ʔāh maca-ní-h*
 September-OBL 1sg come.to.senses-INFR2-DECL
 'I was born in September.' (RU)
- (97) *n'íp g'i-ɬ tɬh naʔ-yiʔ-ní-h*
 that hot.season-OBL 3sg die-TEL-INFR2-DECL
 'He died last year.' (EL)

E. Inanimate actor of a reflexive (passive) construction

One further use of the Oblique marker *-Vt* is to mark the inanimate actor (i.e. that which would be the agent in the corresponding active clause) in a passive-type reflexive

construction (see §11.1.2). While *animate* actors in passive constructions take the Object marker *-ǎn* (§4.3.1.1.D), inanimates must take the Oblique, as in example (96).

- (98) *mɔhɔy hup=mæh-æy tegd'uħ-út*
 deer RFLX=kill-DYNM tree-OBL
 'The deer was crushed by the tree (that fell in the wind).' (EL)

4.4.4.2. Oblique marking and subordinate clauses

Like the other case markers in Hup, Oblique *-Vt* is also used to form adverbial and relative clauses (see §18.2.3 and §18.2.6.2 for more discussion). In its adverbial function, Oblique *-Vt* can have either a temporal or a spatial function. As such, it usually attaches directly to a verb root, as does Directional *-an* (§4.3.2 above); however, it can occasionally appear as its variant *-#*, with the intervening 'Filler' syllable *-Vw-*. It signals either a temporal overlap (examples 99-100) or a location (example 101).

- (99) *wɔh=d'əh ɔǎn hid ɔid-# ɔǎh ɔid-bɛh*
 River.Indian=PL 1sg.OBJ 3pl speak-OBL 1sg speak-HAB-DECL
 'When the River Indians speak to me, I always speak (Tukano).'
- (100) *tɪh hɔp-hí-út-ay=mah j'ám... tu-d'o ɔ-kədpæ-æy=mah*
 3sg dry-descend-OBL-INCH=REP DST.CNTR push-take-pass.go.upstream-DYNM=REP
 'When it (the water) was nearly gone... he pushed (the fish) quickly upstream, they say.' (M-DT.80)
- (101) *tɪmħ mɔy, tɪh g'ét-ét, pǎ-ay*
 3sg.POSS house 3sg stand-OBL NEG:EX-INCH
 'His house, where he stays, (he was) not there.' (H.txt.56)

Oblique *-Vt* also combines with verb phrases to form relative clauses (see §18.2.3), as described in §4.3.1.3 above for Object *-ǎn*. When no relative-clause-final bound nominal is present for the case marker to attach to, it attaches directly to the verb

stem. The intervening ‘Filler’ form -Vw- and Oblique variant -*ñ* are required for headless relative clauses used as oblique arguments, whereas -*Ví* is usually preferred for adverbial clauses.

- (102) *tih hɔhtěg-ét hám-áy, [tñ=báb’ biʔ-ʔé]-ew-ñ*
 3sg canoe-OBL go-DYNM 3sg=brother make-PERF-FLR-OBL
 ‘He’s going in the canoe, in the one his brother made.’ (EL)

4.4. Number

Hup marks non-singular number on nouns and noun phrases with the form =*d’əh*.

Formally, =*d’əh* is unstressed, and is best considered part of the set of relatively peripheral inflectional forms in Hup which are labeled clitics. The form =*d’əh* is homonymous with the verb ‘send’, but there is no indication that this resemblance is due to anything other than chance.

The Hup plural construction is largely regular. However (as discussed below), it does not usually occur with the masculine or gender-neutral animate bound noun =*ñh*, and there is also the additional marginal exception of the phonologically fused plural object marker =*n’an* (§4.3.1.2). All nouns that have a non-singular form also have a singular form; there are no morphologically marked *pluralia tantum*, although some nouns may take both a bound noun (which, like a measure term, can individuate a single entity from a mass; see §5.5) and the Plural marker, even at the same time.

Hup =*d’əh* usually acts as a general marker of plurality, but it can also serve a specifically collective function; as such, it signals that a group of items should be

“considered together as a unit” (Corbett 2000: 118). The collective use of $=d'\partial h$ in

Hup, as distinct from the general plural use, is most obvious in cases where a lexically plural or singular noun optionally takes $=d'\partial h$ to signal a conceptually grouped association of entities, as in the examples discussed in §4.4.1.A and §4.4.2 below.

4.4.1. Differential plural marking (plurality split) and animacy

Plural marking in Hup conforms to an animacy hierarchy, and follows essentially the same parameters as does differential object marking. This accounts for the fact that object marking and number marking pattern together, as discussed in §4.3.1.2 above; that is, if an entity is conceptually distinctive enough to be number-marked, then it should also be case-marked.

Smith-Stark (1974) uses the term ‘plurality split’ to describe the phenomenon of differential plural marking, and observes that “plurality *splits* a language in that it is a significant opposition for certain categories but irrelevant for others” (Smith-Stark 1974: 657). Plurality splits are almost always closely linked to animacy. They occur in many of the world’s languages (Corbett 2000: 55), and are reported as common in North America (cf. Mithun 1988: 212).

In Hup, nouns with inanimate referents are generally unmarked for number, although—unlike the restrictions governing differential object marking—number marking on inanimates is possible. When counting inanimates, the numeral alone usually suffices to indicate plurality (e.g. *kaʔap mɔ̃y* [two house] ‘two houses’); classifiers are also used in certain cases (see §4.4.3). Nouns referring to animals are found both with

and without number marking, whereas it is required for humans. While languages with split plurality systems have many options in arranging their systems of differential number marking, languages like Comanche and Kannada (Corbett 2000: 70) exhibit patterns very much like that found in Hup.

A. Humans

For plural nouns referring to humans, number marking is generally obligatory, as in (103-4).

- (103) *næ tukáno=tæh=d'əh pǎ*
 NEG:DB Tukano(Pt)=offspring=PL NEG:EX
 'There are no Tukano children.' (P.Sp.97)

- (104) *tiyĩʔ=d'əh-əwəc ʔəg-náʔ-áy!*
 man=PL-FLR-EXCL2 drink-lose.senses-DYNM
 'Only the men got drunk!' (TD.Cv.100)

Number marking is always used with the names of ethnic or other human groups, as in examples (105-8); this is essentially a collective specification.

- (105) *kəh=d'əh, j'æç=d'əh, cəkʷ'əi=d'əh, yaʔám=tæh=d'əh... niɦúʔ!*
 Wananos=PL Tarianas=PL Tukano=PL Jaguar=clan=PL all
 'There were Wananos, Tarianas, Tukanos, Jaguar-Clansmen, everyone!' (H.txt.63)

- (106) *yʔnəh-yóʔ j'ám núp húp=n'əh=b'ay*
 that.ITG-be.like-SEQ DST.CNTR this person=PL.OBJ=AGAIN
 'Then for the Hupd'əh

yɔʔm=ʔih tih d'əh-d'əh-yé-éh
 powerful=MSC 3sg send-send-enter-DECL
 'he picked out a leader.' (H.txt.62)

- (107) *nutæh-ay teghʔ=d'əh nih yág-ay, nutæh-əp*
 today-INCH Non-Indian=PL POSS hammock-INCH today-DEP
 'Nowadays we use the hammocks of the Non-Indians, these days.' (I-M.9)

- (108) *cudádu=n'añ, hid ʔid-ʔay-pɨd-ay-áh*
 soldier(Pt)=PL.OBJ 3pl speak-VENT-DIST-INCH-DECL
 'They went to speak to some soldiers.' (H.Rad.108)

With the names of human groups, as in the examples above, the singular form is typically marked by the bound nouns =*ʔh* 'masculine or unspecified gender' or =*ʔá* 'feminine', which act as a kind of singulative marker. Whereas most bound nouns (including female =*ʔá*) are pluralized simply by the addition of =*d'əh*, the masculine or gender-neutral nominal =*ʔh* is usually replaced altogether by plural =*d'əh*; in other words, a plural masculine or gender-unspecific noun like 'Hup person' is simply realized *húp=d'əh*, rather than *húp=ʔh=d'əh*. This idiosyncrasy can probably be explained by the fact that the basic value of =*ʔh* is simply 'animate', whereas that of =*d'əh* is (in most cases) 'animate plural'; thus a combination of the two is under normal circumstances redundant.

The regular plural variant =*ʔh=d'əh* is nevertheless possible, although rarely used. In general, it indicates maximally specific reference; for example, while *húp=d'əh* means 'men or people in general', *húp=ʔh=d'əh* could be used to refer to 'those (specific) men', as in the case of a group of men from another village who arrive in our village to visit relatives. This variant can be explained as a reflection of the individuating function of the bound construction, as discussed in §5.6.

The obligatory number marking of humans is subject to one major exception: non-specific human referents do not generally take number marking—just as they are exempt from the object marking requirement (§4.3.1.2) and from obligatory participation

in the bound construction (§5.5.2). This is illustrated in examples (109-10). Note, however, that the non-specific noun ‘person’ in (110) is then referred back to with a plural pronoun, whereas unmarked inanimate nouns are more often referred to by a singular pronoun, regardless of their underlying number (see section C, example 130 below).

- (109) *húp-añ tǎw-ǎy, húp-añ dóh-óy...*
 person-OBJ scold-DYNM person-OBJ curse-DYNM
 ‘(Some people) scold people, cast curses on people...’ (LG-C.46)

- (110) *hup dǎb, híd bǐʔ-ǐh*
 person many 3pl work-DECL
 ‘Lots of people worked.’ (H.txt.63)

Another minor exception is found with kin terms. In their vocative form (i.e. as a form of address), the plural marker is not grammatical, as illustrated in example (111). However, the plural *possessed* form of the kin term is acceptable as a vocative; e.g., *nǎ / ǎh=tǎh=d’ǎh* [1sg.POSS / 1sg=offspring=PL] ‘my children’.

- (111) *nǐŋ j’ǎm-ǎy-áy tǎh! (*tǎh=d’ǎh)*
 2pl bathe-VENT-INCH.IMP offspring
 ‘You all go bathe, children!’ (I.M.47)

On the other hand, kin terms used referentially—like any other specific human noun—require number marking, as in (112-13). With parental kin terms, the plural (or the Associative plural; see §4.4.6) refers to classificatory fathers and mothers (i.e. the male siblings and parallel cousins of the father, or the female siblings and parallel cousins of the mother), as in example (113).

- (112) *nř báb'=d'əh təhɔ-huĩʔ-yĩʔ-ř*
 1sg.POSS sibling=PL end-finish-TEL-DYNM
 'My siblings are all dead.' (H.int.129)

- (113) *ʔĩn=ʔip=d'əh, tĩh=wəhəd=d'əh...*
 1pl=father=PL 3sg=old.man=PL
 'Our classificatory fathers, the old ones...' (T.int.144)

In some cases, the number marker does not indicate a plural number of referents of the noun with which it occurs, but rather a group of animate (usually human) entities that are *associated* with the noun. As such, it serves a primarily collective function. This function is illustrated in example (114), which relates to the group of stars, mythologically embodied by a group of young men, that make up the Pleiades ('Star-Hollow') constellation.

- (114) *wədhɔʔm'əh tod=d'əh-əh, cəhdeh ham-tég=d'əh-əh*
 star hollow=PL-DECL rainy.season go-FUT=PL-DECL
 'The Star-Hollow (Pleiades) ones, those that go (across the sky) during the rainy season.' (H.txt.48)

This collective function of the number marker is also manifested when it occurs with (nominalized) verb roots, such as *ʔĩd=d'əh* (speak=PL) 'those who speak the same language'.

It should also be noted here that while almost all generic nouns referring to humans are obligatorily bound (usually preceded by the default 3sg pronoun *tĩh=*), they (like most other bound nouns) may appear unbound in plural form. For example, the form *tāʔāy* 'woman (sg)' (a reduced form of *tĩh=ʔāy*, involving the bound noun =*ʔāy*) can appear as *ʔāy=d'əh* in the plural, as in example (115). The explanation for this

phenomenon lies in the individuating function of the bound construction, as discussed in §5.5; this is essentially incompatible with generic semantics.

- (115) *ʔáý=n'ǎñ ʔǎh kéy-ep, yúp hayám-át-áh*
 FEM=PL.OBJ 1sg see-DEP that.DST town-OBL-DECL
 'I saw women in that town.' (JM-PN.58)

B. Animals

Number marking is common on nouns referring to animals, as in examples (116-18), but it may be absent (examples 119-20). In general, an animal-referring noun that is conceptually plural but lacks number marking is judged grammatical by speakers, whereas most human nouns in this context are not. In discourse, the presence or absence of number marking on animal nouns patterns according to specificity; more specific references to animals are usually marked, whereas more generic references are not—this is especially typical for game animals, as in (119-120). This is consistent with the pattern of differential object marking on animal nouns (§4.3.1.2), as well as with the absence of number marking on certain generic human nouns, as in examples (109-110) above.

- (116) *híd nɔ-pǎd-ǎh, yúp, ya ʔám=d'ǎh cóʔ-óy-óh*
 3pl say-DIST-DECL that.ITG jaguar=PL LOC-DYNM-DECL
 'They were saying, those jaguars.' (H.txt.70)
- (117) *núp nutǎñ ya ʔám=d'ǎh híd wǎd-nǎh-ay-áh*
 this today jaguar=PL 3pl eat-NEG-INCH-DECL
 'So today jaguars don't eat (people).' (H.txt.78)
- (118) *j'ám-áp dǎh mí-ít, hǎp wǎd=n'ǎñ ʔǎh nɔ-ɔp, yǎk=d'ǎh*
 DST.CNTR-DEP water creek-OBL fish eat=PL.OBJ 1sg say-DEP otter=PL
 'I'm talking about those that eat fish in the river, the otters.' (H.txt.51)

- (119) *huỹǎw mæh-yóʔ, hǎt mæh-yóʔ, tʃhód' mæh-yóʔ, híd ʔũh=nɔʔ-ɔy*
 paca kill-SEQ alligator kill-SEQ collared.peccary kill-SEQ 3pl REC-give-DYNM
 'Having killed paca, alligator, collared peccary, they gave (meat) to each other.'
 (LG.C.43)

- (120) *hǎp tǎh g'et-wǎd, mǎh tǎh g'et-wǎd, ní-íy=mah*
 fish 3sg stand-eat inambu 3sg stand-eat be-DYNM=REP
 'He provided (her) with fish to eat, inambu to eat, it's said' (I.M)

A referent may be inherently non-specific in a negative clause, and in this case number marking is actually judged ungrammatical, as in (121). This may be compared with the negative clause in (122), which makes reference to a specific bunch of fish, and is therefore marked for number.

- (121) *hǎp ʔǎh kək-d'oʔ-nǎh (*hǎp=d'əh)*
 fish 1sg pull-take-NEG
 'I didn't catch any fish.' (EL)

- (122) *hǎp=d'əh pǎ*
 fish=PL NEG:EX
 'The fish are not there.' (specific fish) (OS)

Certain nouns referring to types of insects that typically occur in large swarms are essentially mass nouns. These may occur in a bound construction with the singulative bound noun = *ʔǎw* 'swarming insect', or with the Plural marker, or even with both, as illustrated in (123).

- (123) *yɔʔ* 'wasp' (number unspecified: can refer either to an individual or to a swarm)
yɔʔ=ʔǎw 'single wasp'
yɔʔ=d'əh 'wasps'
yɔʔ=ʔǎw=d'əh 'wasps'

C. Inanimates

Although number marking is not ungrammatical on countable nouns with inanimate referents (unlike object marking), these nouns are almost always formally unmarked for number in discourse, as illustrated in (124-29). This is the case regardless of whether or not number is otherwise specified with a numeral or other quantifier. Like non-specific humans and animals, inanimate entities are typically of relatively low conceptual salience, and differentiation for number is thus apparently of low importance.

- (124) *dadánya tñh-ǎñ ǎh nɔʔ-b'ay-áh*
 orange 3sg-OBJ 1sg give-AGAIN-DECL
 'I gave her the oranges (that I'd brought).' (P.txt.94)
- (125) *pídaya=hin nutǎñ pǎ-ay, ǎh-ǎp*
 battery=also today NEG:EX-INCH 1sg-DEP
 'Batteries too are all gone today, for me.' (P.Sp.104)
- (126) *huǎ, hǎpkǎ-ǎh, díbma, b'ǎh-óh, tñh nɔʔ-ǎh*
 tobacco fish.pull-DECL file salt-DECL 3sg give-DECL
 'He gave tobacco, (there were) fishhooks, files, (there was) salt.' (H.txt.64)
- (127) *náǎp hupáʔ=mah pǎʔ-ǎh, dapúh=d'ǎh pǎl=mah híd pǎʔ-pǎd-ǎh*
 this.many flat.basket=REP present-DECL hand=PL DIST=REP 3pl present-DIST-DECL
 'This many baskets they presented, two hands' worth (10) they presented.'
 (H.txt.74)
- (128) *kaǎp tǎ, nú-cáǎh d'ǎh-d'ǎh-hám, nú-cáǎh*
 two string this-side send-send-go this-side
 'Two strings, coming down on this side, and on this (other) side.' (H.20)
- (129) *cínku fórnú tñh d'ǎh-hám-áh*
 five(PT) griddle(PT) 3sg send-go-DECL
 'He brought 5 griddles.' (P.Sp.106)

Note, moreover, that even when their referents are non-singular, inanimate entities unmarked for number are typically referred back to with a singular pronoun, as in

(130)—unlike non-specific unmarked human nouns like ‘people’ in example (110)

above, which take a plural co-referential pronoun.

- (130) *yǎñf̃y híd d’oʔ-ham-yǎʔ-ay-áh... tǎh=g’ǎǵ-ǎh, mǐh g’ǎǵ-ǎh...*
 thus 3pl take-go-TEL-INCH-DECL 3sg=bone-DECL turtle bone-DECL
 ‘Thus they make (them) go up... the bones, the turtle bones...’

tǎh hi-yǎt-yǎʔ-ay-áh
 3sg descend-lie-TEL-INCH-DECL
 (then) it (i.e. they) comes down.’ (H.txt.21)

4.4.2. Number and other noun types: demonstratives, numerals, and pronouns

As nominal heads referring to non-singular entities, demonstratives occur as the

lexicalized free-pronoun forms *nǐ-d’ǎh* ‘these’, *n’i-d’ǎh* ‘those (distal)’, and *yǐ-d’ǎh*

‘those (intangible)’ (see Table 4.2 in §4.1.2 above), as in examples (131-32). Note that

the lexicalized stress pattern of these forms results in stress falling on the Plural marker,

whereas *=d’ǎh* is always unstressed elsewhere in Hup. The Plural marker can also occur

with various other derived demonstrative forms, such as that in (133). It is important to

note that the combination of a bound demonstrative morpheme with the Plural marker

results in a nominalization; in other words, *=d’ǎh* has a nominalizing effect on these

forms.

- (131) *ʔǎǵ=wag nǐ-d’ǎh nǐh-nǐh-ay=pog’, páy-ay*
 drink=day this-PL be.like-NEG-INCH=EMPH1 bad-INCH
 ‘On drinking days, these (people) don’t do like this, (it’s) no good.’ (T.int.147)

- (132) *hǐ⇒ j’ek-yǎhǎy-yǎʔ-ǎy, yǐ-d’ǎh-ǎh!*
 only steal-search-TEL-DYNM that.ITG-PL-DECL
 ‘They’re just looking (for something) to steal, those ones!’ (B.Cv.94)

- (133) *yáʔǎp=d’ǎh=yǎʔ*
 that.ITG.QUANT=PL=TEL
 ‘That’s all of them (her siblings).’ (D.int.112)

Hup's animate/ inanimate distinction in number marking applies to adnominal demonstratives. When occurring within an NP, the (DEM + *d'əh*) forms above are usually restricted to animate referents, and can only modify an inanimate referent when the inanimate-referring noun is explicitly number-marked with *=d'əh* (which, as we have seen, is almost never the case in natural discourse). For inanimate referents, corresponding fused forms built on the nominalizer *-n'ih* (see §4.6.3 below and §18.2.5) are used. These (DEM + *n'ih*) forms are realized as *nɪ-n'ih* 'these', *n'i-n'ih* 'those (DST)', and *yɪ-n'ih* 'those (ITG)', and are never used for animate referents. For a countable inanimate noun like 'fruit', the *-n'ih* demonstrative form requires a plural interpretation; thus *nɪ-n'ih=tat* means 'these fruits', whereas *núp=tat* means 'this fruit' (compare *nɪ-d'əh dóʔ=d'əh* 'these children'). For a mass noun, the demonstrative may be either inanimate plural or singular; e.g. *nɪ-n'ih j'ik*; *núp j'ik* 'this smoke'.

Numerals (other than 'one'), like demonstratives, also require the Plural marker when acting as nominal heads, i.e. when they stand for an explicitly plural (usually animate) referent, as in examples (134-36). Also as in the case of demonstratives, Plural *=d'əh* has a nominalizing function here, and may take the place of a head noun. This is supported by the fact that numerals representing inanimate referents are usually accompanied by a bound or classifying noun (see §4.4.3 below, especially example 153, *koʔap=təg* 'two [helicopters]'), whereas adnominal numerals need not, but may, take

=*d'əh* (example 137). Numerals themselves are discussed in detail §6.5.1, while their use as adnominals within the plural noun phrase is covered in §4.4.4 below.

- (134) *ka ʔəp=d'əh-ay=cud, tɪnɪh hɔhɔh=d'əh*
 two=PL-INCH=INFR 3sg.POSS frog=PL
 'There are two of them apparently, his frogs.' (FS.)

- (135) *tedé=d'əh-ɛ tɪh biʔ-ni-cɛp-ɪh*
 three=PL-OBL 3sg work-be-COMPL-DECL
 'He's already worked with three of them.' (P.Sp.110)

- (136) *nɪ báb'=d'əh mɔa ʔəp=d'əh*
 1sg.POSS sibling=PL three=PL
 'My siblings are three.' (E.int.136)

- (137) *ko ʔəp=d'əh tɪh=tɛh=d'əh náʔ-áh*
 two=PL 3sg=offspring-PL die-DECL
 'Two of his children died.' (B.Cv.134)

In (138), the number marker occurs at the end of a numeral string, uttered as the speaker counted a row of frogs in a picture.

- (138) *doy, cíngu, cé... ʔóytu=d'əh=cud ʔúhníy*
 two(Pt) five(Pt) six(Pt) eight(Pt)=PL=INFR.maybe
 '(There are) 2, 5, 6, 8 of them, apparently.' (FS.12)

The Plural marker's collective function is especially clear when it follows the numeral 'one' in reference to a single set of countable entities, as in (139-41).

- (139) *ʔayúʔ=d'əh ʔɪn-ɪh!*
 one=PL 1pl-DECL
 'We are of one set!' (OS) (referring to clan membership)

- (140) *mɔa ʔəp=d'əh nɪ báb'=d'əh=cáp-áh; ʔayúʔ tɛh=d'əh... ʔɪn-ɪh*
 three=PL 1sg.POSS sibling=PL=INTS1-DECL one offspring=PL 1pl-DECL
 'My siblings are three; we are of one clan / one father.' (P.int.140)

- (141) *ʔayúʔ (hup) yóy=d'əh*
 one person line=PL
 'A line of people' (EL)

Note this collective use of $=d'\partial h$ with ‘one’ is not generally found with inanimate nouns, which are not expected to be specified for number, as in (142).

- (142) *ʔayup mʷ(=*d'∂h) kʃw-∂h*
 one mound (*PL) hot.pepper-DECL
 ‘One pile of hot peppers’ (EL)

The use of the Plural marker with pronouns also illustrates its collective function. Although the first, second, and third person plural pronouns are already lexically specified for number, they can nevertheless occur with $=d'\partial h$, indicating a well-defined set or group of individuals, as illustrated in examples (143-45). On the other hand, $=d'\partial h$ is ungrammatical with the first, second, and third person singular pronouns.

Corbett (2000: 118) observes that collectives derived from pronouns appear to be very rare in the world’s languages, but the Hup collective pronoun construction does seem to be a bona fide collective in Corbett’s sense of a group of items “considered together as a unit”. As the examples below illustrate, the collective is not spatial so much as conceptual; it is usually used in reference to an ethnic group, as distinct from a more contextually defined group of referents (which would be referred to with the simple pronominal form).

- (143) *nɪŋ=d'∂h wɪd-nɔ́n-tɔ́n=hín, ʔãh ʔid-tuk-yɔ́h-ɔ́p*
 2pl=PL arrive-come-COND=also 1sg speak-want-FRUST-DEP
 ‘When you types (Non-Indians) come here, I’d like (in vain) to talk (with you).’
 (but can’t speak Port.) (T-PN.5)

- (144) *ʔh=d'∂h húp=d'∂h j'ũg-an ní-ty*
 1pl=PL person=PL forest-LOC.OBJ be-DYNM
 ‘We Hupd’ah live in the forest.’ (RU)

- (145) ***hɨd=d'əh*** *wəh=d'əh* *dəh=mí* *cóʔ* *ní-íy*
 3pl=PL River.Indian=PL water=creek LOC be-DYNM
 'The River Indians live by the river.' (EL)

Similarly, *=d'əh* can occur as a collective marker on the interrogative pronoun *hɨn'ɨh*

'what', in reference to a set (but only the Associative plural *-an-d'əh* is possible with *ɨy* 'who'):

- (146) ***hɨn'ɨh=d'əh*** *núp* *ɨǎn=b'ay*, *matěw?*
 what=PL this 1sg.POSS=AGAIN Mateus
 'What's this bunch of things on me, Mateus?' (B.Cv.88)

4.4.3. Uncountable or mass nouns

Inanimate nouns conceived as a mass cannot, in general, receive plural marking at all (whereas countable inanimate nouns usually do not, but in principle can):

- (147) *ɨadócu* (*=*n'ǎn*) *ɨin* *wæd-ǎy*
 rice(*=PL.OBJ) 1pl eat-DYNM
 'We're eating rice.' (EL)

- (148) ***kǎn=mæh***, ***kǎn*** *d'o ʔ-yóʔ* *ʔég-əp* *ʔáp*
 farinha=REP farinha take-SEQ drink-DEP NEG:ID
 'A little farinha, having taken farinha (and) drinking; not doing this.' (T.PN.22)

An inanimate mass noun can be made countable by specifying a unit; this is usually done by means of a bound noun (see §5.4), as in the following example:

- (149) *peyǎw* 'beans'
peyǎw=wíg 'bean seed' (=individual bean)
peyǎw=tat 'bean fruit' (=bean pod)

For a few mass nouns, the plural marker may in fact be grammatical, but only in a collective-type sense:

- (150) *pǎt* 'hair'
pǎt tǎ 'strand of hair'
pǎt=d'əh 'lots of hair'

The use of measure terms (which are frequently bound nouns) is required when mass nouns are modified with numerals, as in examples (151-52).

- (151) *ko ɽap b'ɔʔ d'uç deh tih ʔəg-yiʔ-ay-áh, ko ɽap b'ɔʔ*
 two cuia timbó water 3sg drink-TEL-INCH-DECL two cuia
 'He drank **two cuias of timbó juice**, two cuias (full).' (P.B.9)
- (152) *hɔp kək tǎ pɔ ɽayup, hɔpkək ɽayup dúciya, kũnyeħ ɽayup,*
 fish pull string roll one fish.pull one dozen(Pt) spoon(Pt) one
 'One **roll of fishing line**, a dozen fishhooks, one spoon,

ya ɽap=yiʔ tih nɔʔ-əh
 that.much=TEL 3sg give-DECL
 she gave all this.' (P.txt.93)

This use of measure terms has a formal parallel in the common (though not obligatory) use of noun classifiers or other bound nouns when numerals modify *countable* inanimate nouns, as in examples (153-54). This supports the notion that nouns unmarked for number in Hup are conceptually akin to mass nouns; in the same way, it suggests that the function of the bound construction—and more specifically, the noun classifiers—is one of individuation, closely linked to that of measure terms (see §5.5-6).⁶⁴

- (153) *ʔɪn-ǎn cúku tih nɔʔ-əh, bodáca ʔóytu=b'ah*
 1pl-OBJ juice(Pt.) 3sg give-DECL cookies(Pt.) eight(Pt)=SPLIT
 'She gave us juice, and eight cookies...' (P.txt.94)

- (154) *ka ɽap=təǵ!*
 two=THING
 'Two of them!' (helicopters: *pípɪh=təg*) (OS)

⁶⁴ Also compare the use of the 'singulative' bound noun =*ɽw* 'swarming insect' (§4.4.1.B above) with mass-like insect nouns, and the obligatory participation of human nouns in the bound construction (§5.4.2 and §5.5).

Finally, there are a few other uncountable nouns in Hup which are truly conceptually unitary, rather than simply uncountable; these include *páč* ‘sky’ and *pǎ̃y* ‘thunder/lightning’.⁶⁵

4.4.4. Number marking and the noun phrase

In the noun phrase, number marking—like object marking—generally occurs on the final element of the NP. However, if the plural-marked noun is preceded by a demonstrative, the demonstrative is virtually always number-marked as well, as in example (155). Consultants judge a plural-marked NP preceded by a singular demonstrative to be acceptable, but less so.

- (155) *hĩcóp? yĩd’ǎh vinte=d’ǎh hám-a??*
 INT-LOC those(ITG)-PL twenty(Pt)=PL go-INT
 ‘Where did those twenty go?’ (P.Sp.107)

In the case of NPs involving numerals, number marking is preferred on both the numeral and the remainder of the NP (especially for human referents), and appears to be required if the numeral follows the rest of the NP (which probably means that these are in fact two distinct appositional NPs):

- (156) *mǎta ǎp(=d’ǎh) tiyĩ? pǒg=d’ǎh*
 three(=PL) man big=PL
 ‘Three big men’
- (157) *tiyĩ? pǒg=d’ǎh mǎta ǎp=d’ǎh*
 man big=PL three=PL
 ‘Big men, three of them’ (EL)

⁶⁵ Interestingly, almost all of these conceptually singular nouns have homonymous variants with quite distinct meanings, which are countable—for example, *páč* also means ‘rock’, and *pǎ̃y* is the name of a species of fish.

When nouns are modified by adjectives, number marking often occurs only once, at the end of the NP, as in *[tiyĩʔ pōg]=d'əh* (man big=PL) ‘the big men’, and in example (158). However, the noun and its modifier can also occur as two appositional nominal forms with number marked on both, as in *[tiyĩʔ]=d'əh [tĩh=pōg]=d'əh* ‘the men, big ones’. In this case, the bound nominalizing form *tĩh=* is required on the adjective.

- (158) *hǎp=mah hĩd tən-ní-h, hǎp tĩh=pōg=n'añ b'ǎyĩʔ!*
 fish=REP 3pl hold-INFR2-DECL fish 3sg=big=PL.OBJ only
 ‘They carried fish, it’s said, all big fish.’ (H.txt.70)

The general rule that number must be marked on the final member of the NP is waived if this element is a quantifier, in which case the (NP-initial) head noun usually is the only number-marked entity. Some quantifiers (in particular, *dəb* ‘many’ and *nihũʔ* ‘all’) are nevertheless able to take the plural marker *=d'əh* (although others, such as *ǎpyĩʔ* ‘all’, cannot), with the same variable combinations as those described in the preceding paragraph for adjective NPs. The NP-final number-marking rule also seems to be waived for number-marked inanimate referents, if and when these occur at all (so, for example, *mǎy=d'əh tĩh=pōg* [house=PL 3sg=big] ‘the big house’ is said to be grammatical)—but evidence for this is restricted to consultants’ grammaticality judgements, since number marking of inanimates is so rare in actual discourse.

Given the multiple positions which number marking can fill in the NP, it is grammatically possible to get number marking on every element of an NP (with the exception of a possessor). It is not altogether clear, however, whether this phenomenon

should be taken as multiple appositional NPs, or as an actual (although extremely marginal) case of agreement within the noun phrase; but it is clear that each of the number-marked elements has its own distinct nominal identity (compare the similar phenomenon found with noun classifiers, discussed in §5.6.4).

- (159) *n id' əh yũ nĩh ya ʔamboʔ=d' əh tĩh=põg=d' əh ka ʔǎp=d' əh*
 this.PL João POSS dog=PL 3sg=big=PL two=PL
 ‘Those two big dogs of João’s’ (EL)

4.4.5. Number marking and the relative clause

The (clause-final) boundary slot of a relative clause is typically filled by a bound noun, which—in the case of animate referents—is most often the masculine or gender-neutral bound noun = *ʔĩh* (although it can also be the feminine form = *ʔǎy*). Given the fact that number marking typically does not occur on nominals with inanimate referents at all, most plural-marked relative clauses therefore involve the plural equivalent of = *ʔĩh*. In these cases, the number marker = *d' əh* usually replaces both the bound noun = *ʔĩh* (as mentioned above in §4.4.1.A), but also the Dependent marker -*Vp* of the relativized verb. Thus *V-DEP*= *ʔĩh* ‘one who Vs’ will virtually always appears in the plural as *V=d' əh* ‘those who V’, as illustrated in example (160), and occasionally this pattern is extended (optionally) to bound nouns other than = *ʔĩh* as well.⁶⁶ More detailed discussion of the relative clause construction is given in §14.2.3.

⁶⁶ It is tempting to speculate that a situation like that found in Hup might represent an early stage in the historical development of verbal number agreement.

- (160) *həp̚kəʃk d'o ʔ-g'ét=d'əh, hɪd ham-yɪʔ-ɦ, ʔayup̚ mɪnɦɪ=yɪʔ*
 fish.pull take-stand=PL 3pl go-TEL-DECL one straight=TEL
 'Those who set down fishhooks, they go (along), just straight ahead.' (P.F.125)

4.4.6. Associative plural *-and'əh*

The primary meaning of the 'Associative plural' form in Hup (probably from *-an* 'OBJECT' and *=d'əh* 'PLURAL') is 'N and those associated with him/her'. As such, it occurs only with nouns having human referents, usually proper names and kin terms, as in examples (161-63).

- (161) *ʔána-ǎnd'əh hɪd-ǎn g'əp-əh*
 Ana-ASSOC.PL 3pl-OBJ scoop-DECL
 'Ana-and-they (her children) were serving them.' (TD.Cv.103)

With 'father' and 'mother', the Associative plural usually refers to classificatory fathers and mothers (which can also be conveyed by the simple plural form *=d'əh*, see §4.4.1A above):

- (162) *j'ũg-út, yaʃk pǎt-ǎt... ʔp-ǎnd'əh w'ob-ʔé-h*
 forest-OBL macaw hair-OBL father-ASSOC.PL set.on-PERF-DECL
 'In the forest, with macaw feathers...(our) classificatory fathers used to put (them on themselves).' (T.int.146)
- (163) *ʔəg ʔəg-yóʔ, ʔʔ-ǎnd'əh yɪnɦ-yóʔ yamɦɪdɔʔ-wáy-áy*
 drink drink-SEQ Mom-ASSOC.PL that-be.like-SEQ sing-go.out-DYNM
 'Having drunk drink, with that (our) classificatory mothers would go out singing.' (T.int.148)

The Associative plural can also have the comitative sense 'together with N', and can even occur on non-human nouns, although this is considerably less common. Example (164) comes from a telling of Mercer Meyer's *The Frog Story*, in which the boy was accompanied (and even assisted) by his dog in his search for his missing frog.

- (164) *tɪh ham-yǽh-b'ay-áh, tɪ́nh ya ʔamboʔ-and'əh*
 3sg go-FRUST-AGAIN-DECL 3sg.POSS dog-ASSOC.PL
 'He went (in vain), together with his dog.' (FS.2)

Finally, *-and'əh* can function as a kind of 'inclusory plural' form: it occurs on the second of two coordinated participants to indicate their association with *each other*, vis-à-vis the event specified in the predicate—even where the first is a plural pronoun like 'we' that subsumes both referents, as in example (165). In this usage, the Associative plural does not indicate a group that acts independently, as one of two distinct participants; rather, this form crucially has to do with the interaction between the two named participants. This use is especially common with the reciprocal/ interactive pluractional construction (see §9.3).

- (165) *ʔɪn tǽh=mæh-ánd'əh hup=d'o ʔ-tubúd-úh*
 1pl offspring=DIM-ASSOC.PL RFLX=take-INTS3-DECL
 'My son and I were made to take a lot (of beer).' (TD.Cv.103)

Comparative Note

Several aspects of the number-marking system in Hup may be identifiable as areal features common to Vaupés languages in general. In particular, both Tukanoan languages and Tariana (apparently under Tukanoan influence) distinguish plural primarily for humans and animates (Aikhenvald 2002: 96), as does Hup. In addition, an 'associative plural' form that is functionally similar to that found in Hup occurs in a number of Tukanoan languages, as well as in Tariana, into which it is argued to have spread by diffusion (Aikhenvald 2002: 98). The fact that the Hup form appears to be morphologically transparent—involving the combination of the Object (or Directional)

marker *-an* and the Plural form *=d'əh*—also suggests that it may be a relatively new grammatical category in the language, and therefore a likely candidate for a diffusional origin (from Tukano into Hup). Moreover, although the ‘associative plural’ forms in Tukano and Tariana are both derived from these languages’ respective words for ‘also’, they resemble the Hup form in that all three share a final syllable that is identical to the plural marker in these languages.

4.5. Reduplication in the noun stem

Reduplication in noun stems, while almost completely unproductive, is almost certainly related to the morphological process that is semi-productive in verbs and encodes iterative aspect (§12.9.3). While the nominal forms are all frozen, and only in one case can a non-reduplicated root be identified, they may be the remnants of a process that was more productive in the past. As discussed in §7.1, moreover, there is considerable precedent in Hup for verbal aspectual forms to have an additional, often distinct, function with nouns. There is only one other environment in which reduplication is found in Hup; this is in certain nominal compounds, in which it has an attributive function (see §5.1.4).

Below is given a near-exhaustive list from my corpus of those noun stems that appear to involve reduplication (and are not derived transparently from reduplicative verb roots). The majority of these reduplicated forms are the names of small living creatures that tend to have quick, repetitive movements. This is clearly reminiscent of the iterative aspectual function that reduplication serves with verbs, and is a cross-linguistically common feature of nominal reduplication. The largest group comprises names of insects,

as in (166), while the names of birds (167) and small animals like squirrels, opossums, and a few fish (168) are also represented. Other subsets (169-72) include the names of a few plants, some musical instruments (which tend to be played repetitively), and body parts⁶⁷. The only reduplicative noun for which a non-reduplicated root can be suggested is *hohód* ‘clearing in forest’, which appears to correspond to the noun *hód* ‘hole’.

(166) Insects:

<i>yíyǎw</i>	‘ant sp.’
<i>b’eb’ěp</i>	‘butterfly’
<i>nunút</i>	‘moth’
<i>kədəhəǵ</i>	‘morpho butterfly’ (also <i>kədəhǵ</i>)
<i>j’ǵ’ǵb’</i>	‘small fruitfly sp.’
<i>j’aj’ǎp</i>	‘fly sp.’ (type that buzzes around eyes)
<i>bobob</i>	‘ant sp.’
<i>b’ob’óy</i>	‘tocandira (ant) sp.’
<i>wowow</i>	‘mamanga (biting fly sp.)’
<i>pūpūy</i>	‘fly/bee sp.’
<i>huhuý</i>	‘lightning bug’
<i>mæmæn</i>	‘insect sp.’
<i>d’id’ĩ?</i>	‘cricket sp.’

(167) Birds:

<i>bobó</i>	‘bird sp.’
<i>bebé</i>	‘small bird sp.’
<i>pəpəp</i>	‘small owl (generic)’
<i>totób’</i>	‘Black-Tailed Trogon (bird)’
<i>mæmæç</i>	‘Grey-Winged Trumpeter (jacamim bird)’
<i>pəpəç</i>	‘Marbled Woodquail’

(168) Small animals:

<i>b’ib’ǵb’</i>	‘small squirrel (generic)’
<i>wəwəy</i>	‘opossum’
<i>kukúy</i>	‘Night Monkey’

⁶⁷ It is possible that some of these forms are historically truncated forms of nominal compounds in which reduplication occurs, where it apparently serves to link the first element of the compound to the second, and does not seem to relate to aspect (see §5.1.4).

<i>b'ab'ǎw</i>	‘usu snake’
<i>bəbǎd</i>	‘toad sp.’
<i>kākǎy</i>	‘daquirú (fish sp.)’
<i>wowód</i>	‘mandi type (fish sp.)’

(169) Plants:

<i>b'ab'á?</i>	‘embaúba (tree sp.)’
<i>bəbǎg</i>	‘cubiu (plant sp.)’
<i>wǎwǎm núh</i>	‘broad-leafed epiphyte sp.’ (from <i>wǎm núh</i> ‘squirrel head’?)
<i>yǎyǎw tǎ</i>	‘vine sp.’

(170) Musical instruments:

<i>heheh</i>	‘pan-flute (instrument), its music, and/or accompanying dance’
<i>wowó</i>	‘mawaco’ (small tube-shaped whistle held vertically)

(171) Animal and human body parts:

<i>(tǎh=)cǎcǎn</i>	‘fish spine’
<i>g'ag'ǎw</i>	‘lymph nodes’
<i>j'ib kǎkǎw</i>	‘ankle bone’
<i>hahád</i>	‘underarm’
<i>pǎpǎŋ</i>	‘hip’
<i>cǎcǎ?</i>	‘lower back’
<i>j'ǎj'ǎg</i>	‘chin’
<i>cǎcǎp</i>	‘vein’
<i>hohó? b'ah</i>	‘rib cage’

(172) Other:

<i>ǎaǎab</i>	‘wave’
<i>hohód</i>	‘clearing in forest’

4.6. Nominal derivation

Hup has several strategies for deriving nominals from other parts of speech. These are summarized here briefly; most are discussed in more detail elsewhere.

4.6.1. Nouns formed from free verb stems

Many verb stems are capable of shedding their otherwise obligatory bound morphology and appearing as bare stems acting as nouns, as discussed in §3.1. To the extent that the verb stem can be characterized as more ‘basically verbal’ than its nominal counterpart—i.e. it is in much more frequent use as a verb and has more prototypically verbal semantics—this process can be characterized as derivational. However, it is not fully productive.

This strategy is most regular in the case of verbs related to activities or tasks, where the nominalization usually has the meaning ‘activity, work of doing V’. In such cases, the derived nouns typically have rising tone. Arguably, however, this is better considered a default tone assignment rather than a defining morphological feature of the derivational process, because it does not apply in all cases. In particular, when those verb stems that have a CV syllable structure (phonetically [CVV] when word-final) act as nouns, they always receive high (phonetically falling) tone, as is typical of CV noun stems generally in Hup.

Examples of derived nominals include *bĩʔ* ‘work to be done’, from *bĩʔ-* ‘work’; *g’ɔʔ* ‘work of pulling manioc’, from *g’ɔʔ-* ‘pull up manioc’; and *hæp* ‘work of sweeping’, from *hæp-* ‘sweep’. Nouns derived in this way may also have the meaning ‘thing produced by activity V’, as in *hĩʔ* ‘writing’, from *hĩʔ-* ‘write’—for example, in referring to a piece of paper that a child has been pretending to ‘write’ on, as in example (173):

- (173) *tínʔh* *híʔ* *yúw-úh*
 3sg.POSS writing that.ITG-DECL
 ‘That’s his writing.’ (OS)

In other cases, however, it is not so clear which member of the pair should be the ‘derived’ one—is the noun derived from the verb, or vice versa? Examples include *bí* ‘domesticated animal, animal raised to be tame’ and *bí-* ‘rear an animal’; *b’áh* ‘split piece of wood, any flat thing’ (bound/classifying noun with semantic extension) and *b’ah-* ‘split lengthwise’; *coh* ‘cane (for walking)’ and *coh-* ‘use a cane for walking’. Other stems are even more idiosyncratic, and are best considered as simply listed twice in the lexicon—once as a verb and once as a noun—rather than as derived one way or the other. While they may have been derived historically, neither stem has synchronic priority. Examples of such pairs include *wǎd* ‘food’ and *wǎd-* ‘eat’; *ʔǎg* ‘drink (n.)’ and *ʔǎg-* ‘drink (v.)’; and *tǎh* ‘offspring (human or animal)’ and *tǎh-* ‘be pregnant (animal only)’. The latter stem can also occur as an adjective modifier, *tǎh* ‘small’; note too that the nominal form does not have the typical rising tone of a derived nominal. Such stems that occur as both nouns and verbs were labeled by Moore and Franklin (1979: 9) as ‘free radicals’, and may be best analyzed as polyvalent roots (see also the discussion in §3.1).

For many other verbs, consultants say that no derived nominal form exists at all. Examples of these include *b’ay-* ‘return’, *j’ap-* ‘render into pieces’, etc.

4.6.2. Derivational uses of bound nouns

The addition of a bound (usually a classifying) noun to a verb stem often serves a nominalizing function, as discussed in more detail in §5.6. This produces either an

instrument nominalization (‘thing for doing V’), as in (174a), or an object nominalization (‘thing that does V’), as in (174b). The default classifying noun *teg* ‘tree, stick, thing in general’ is the most common of the bound forms found in these constructions. It is not altogether clear to what extent the addition of a bound noun to a verb stem actually *derives* a noun, however, since (via the strategy described above) a bare verb stem can itself act as a nominalization.

- (174) a) *hĩʔ=teg* (write=STICK/THING) ‘pencil’ (stick for writing)
táč=tat (kick=ROUND) ‘soccerball’ (round thing for kicking)
- b) *pəpəd=teg* (roll=THING) ‘tractor, car’ (thing that rolls)

4.6.3. Other nominalizations

Subordinated clauses, formed by the addition of Dependent marker *-Vp* or the Plural/collective marker *=d’əh*, function as nominalizations, as discussed in §18.2.3-4.

Addition of the bound preform *tʔh=* to adjective modifiers also produces a nominalization, as discussed in §6.6. Finally, as covered in §18.2.5, the form *-n’ʔh* follows verb stems and nominalizes entire clauses, which usually appear as complements (example 175).

- (175) *ʔāh wĩʔ-ʔéʔ-n’ʔh, ʔāh ʔid-té-h*
 1sg hear-PERF-NMZ 1sg speak-FUT-DECL
 ‘That which I heard, I will tell.’ (LG-O9)

5. The complex noun: compounding, possession, and noun classification

Hup has several strategies for combining full nouns, pronouns, or nominal elements into complex or compound nouns (i.e. noun combinations that act as phrasal constituents). Syntactically, all involve the juxtaposition of two or more nominal components, and these combinations serve a range of semantic functions. The slot sequence for the Hup complex noun is the following:

(Possessor [+Alienable possession marker]) [N1...[N1 N2]]

On the most basic, productive level, we find simple noun compounding, which can be used to express several distinct relationships between the associated entities. The expression of alienable possession likewise involves the combination of nouns in an NP, but in this case the possessor is crucially marked with an additional possessive morpheme. Hup also has a heterogeneous set of obligatorily bound and/or inalienably possessed nouns, which *must* occur in a compound construction, preceded by some other nominal element. Finally, a subset of these bound nouns occur in combination with other nouns and serve a primarily classificatory function, by which they categorize the noun they occur with on the basis of some abstract semantic component.

In Hup, the phenomena of compounding, possession, and noun classification are all functionally closely related. I therefore consider them together in this chapter, while other word classes (adjectives, demonstratives, etc.) that occur as modifiers with nouns and form NPs are considered in chapter 6. Below, I discuss each of the three nominal construction types in turn, and also address clausal alternatives in the expression of

possession. Finally, I consider the classificatory function of certain bound nouns in terms of an incipient system of noun classification.

5.1. Noun compounding

Noun compounding in Hup is a highly productive process. In general, it creates a syntactic construction composed of two juxtaposed nominal forms, the second of which counts as the head:

N1 N2
[Modifier Head]

Semantically, the compound construction can indicate relationships of three types: a possessor-possessioned relationship, a whole-part relationship, or a property-entity relationship. The use of compounding to indicate possessor-possessioned or whole-part (metonymic) relationships is reported to be common in South American languages; examples include the compound *laka lawe* (chin hair) ‘beard’ in Pilagá, and *pike lamo* (arm trunk) ‘upper arm’ in Toba (Klein 2000: 85-6).

In compounds expressing a possessor-possessioned relationship, the two entities are understood to be directly associated with each other, such that the N1 can be considered in some sense the possessor or proprietor of the N2 (examples 1-2; NB: the order of constituents in these examples corresponds to their order in the translations).

- (1) *bɔyʃʔ yág* ‘spider web’
cadakaʃʔ mɔy ‘chicken house’
- (2) *póg=mah tɰ̃ɰ̃ tód-óh, w’ǎt=mah*
 big=REP snake hole-DECL long=REP
 ‘The snake’s hole was big, they say, long.’ (H.44)

In compounds expressing a whole-part relationship, the N2 is a part of the whole expressed by N1 (example 3).

- (3) *mǎ tú?* (house sink-in) 'house post'
tój mǎ (nose hole/house) 'nostril'

Finally, property-entity compounds encode the relationship between an inherent or defining property and an entity defined by that property, as in examples (4-6).

- (4) *hǎp cǎg* 'fish net'
hǎp wáb 'fish jirau' (grid above fire for smoking fish, meat)
b'ǎk mác 'pot clay' (clay for making pots)
tǎk cǔd 'pants' (lit. thigh-clothes)

- (5) *kǎd tǎh y'ǎt=mah-áh, yám mǎy-an*
 bench 3sg leave=REP-DECL dance house-OBJ
 'He left (them) on a bench, it's said, in the dance house.' (LG.19)

- (6) *hǎp cǎg d'o?-yǎt-ǎy=mah!*
 fish net take-TEL-DYNM=REP
 '(Someone's) taken the fish net!' (B.Cv.92)

Either the N1 (example 7) or N2 (examples 8-9) in a compound may be a verb stem. However, it does not seem to be possible for both N1 and N2 to be verb stems; no examples of this have been encountered. These verb stems are nominalized simply by their lack of otherwise obligatory tense-aspect inflection; they require no overt marker of nominalization.

- (7) *nút, pandoré-ét, wǎk hod=mah yúw-úh*
 this Ipanoré-OBL boil hole=REP that-DECL
 'There at Ipanoré was the Boiling Hole, it's said.' (place of creation) (LG.C.29)

- (8) *hǎp tǎh yó pay-nǎh mún yǎh núw-úh!*
 fish small dangle bad-NEG INTS2 FRUST this-DECL
 'This would make a not-bad minnow fishing-line!' (B.Cv.79)

- (9) *nuh-kəbək=d'əh wáy-áh*
 head-break=PL go.out-DECL
 'The sauva ants (lit. head-breakers) were coming out.' (txt)

Nominal compound constructions can involve multiple nested or embedded components. Example (10a) juxtaposes a compound expressing a property-entity relationship (iron pot) and a deverbal form '(that which) is made to grab' to form the compound 'pot lid'. Example (10b) embeds a whole-part compound into a property-entity compound.

- (10) a) *[məm b'ək] hi-cuʔ*
 [iron pot] FACT-grab
 'pot lid' (lit. 'thing that is made to grab the metal pot')
- b) *[j'ak j'ɔ] yág* 'buriti-flower hammock'
 (made from fibers from the buriti palm)

Hup's use of a single construction to encode possessor-possessioned, whole-part, and property-entity relationships is not uncommon cross-linguistically (cf. Heine 1997). In fact, such a functional overlap occurs in English, which can encode all of these relationships via the 'of' construction; for example, 'a book of mine' (possession); 'the leg of the table' (part of a whole), and 'a ball of rubber' (property/entity).

5.1.1. Hup compounds and metaphorical extensions

Klein (2000: 94) observes that the metaphorical expression of whole-part relations is common in South America; for example, Pemon (Cariban) uses the compound *yei-yenu* (tree eye) to mean 'burl'. In Hup, such metaphorical semantic extension is common in compounds.

It is usually the N2 that undergoes the semantic extension:

- | | | | |
|------|----------------|---------------------|-------------------|
| (11) | <i>nɔ cúg</i> | (mouth hummingbird) | ‘moustache/beard’ |
| | <i>děh tañ</i> | (water tapir) | ‘capybara’ |
| | <i>pũd núh</i> | (breast head) | ‘nipple’ |
| | <i>tǣh yud</i> | (offspring clothes) | ‘uterus’ |

Note that the form of the last compound in (11) prevents it from being taken literally as a normal possessive construction; compare example (12).

- (12) *ʔǎh=tǣh* *nñh* *yũd*
 1sg.POSS=offspring POSS clothes
 ‘my son’s/child’s clothes’

While semantic extension normally involves the N2, it may apply to the N1 instead:

- (13) *puñ mɔyɔ* (water.foam house.opening) ‘glass window’

Finally, the entire compound may have a meaning that is clearly distinct from either that of N1 or N2:

- (14) *húp núh* (person head) ‘radio’

5.1.2. Two types of compounds

Hup compound constructions fall into two general types, best conceived as poles of a continuum: lexically specific compounds and productive compounds. These are defined by formal and semantic features, in particular productivity and stress (word-accent).

5.1.2.1. Lexically specific compounds.

The lexically specific noun compounds must be learned as individual units, and in most cases the compound has semantics of its own that is more than the sum of its parts.

Prototypically, stress (word-accent) falls on the second noun; this pattern mirrors that typical of monomorphemic, bi-syllabic Hup words, such as *məhəy* ‘deer’ and *bəʔbəʔg* ‘cubiu fruit’. Examples of these compounds are provided in (15):

- | | | | |
|------|-------------------|------------------------|---------------------|
| (15) | <i>kayak dəh</i> | (manioc water) | ‘tucupí, manicuera’ |
| | <i>dapūh d’ák</i> | (finger stick.against) | ‘ring’ |
| | <i>həp kək</i> | (fish pull) | ‘fish hook’ |
| | <i>məm b’ək</i> | (iron pot) | ‘cooking pot’ |

5.1.2.2. Productive compounds

The second type of compound involves those that occur in productive, paradigm-like sets, in which one member of the compound can be substituted for by a member of an entire set of nouns. In most cases, it is the first slot (N1) that is more variable, while the second noun (N2) is held constant. These compounds are almost always semantically transparent. Prototypically, their stress pattern is the opposite of that of the lexically specific compounds, with stress falling on N1; thus these productive compounds are formally less like Hup monomorphemic words than are the compounds in (15) above.

Productive compounds usually refer to a type of something, of which numerous variants are available; for example, types of plants (example 16), types of fish (example 17), names of creeks (18), the names of juices or fermented drinks made from various kinds of fruit (19), and even the names of different kinds of clothes (example 20).

- (16) (*d’uḥ* ‘timbó’ [fish-poison plant])
- | | |
|------------------|-------------------|
| <i>pəd d’uḥ</i> | ‘cunuri timbó’ |
| <i>m’əʔd’uḥ</i> | ‘dye-plant timbó’ |
| <i>wǎʔd’uḥ</i> | ‘buzzard timbó’ |
| <i>j’uḡ d’uḥ</i> | ‘forest timbó’ |
| etc. | |

(17) (*hǝp* ‘fish’)

<i>wih hǝp</i>	‘hawk fish’
<i>tát hǝp</i>	‘taracuá (ant sp.) fish’
<i>yak hǝp</i>	‘macaw fish’
etc.	

(18) (*děh* ‘water’)

<i>tát deh</i>	‘Taracuá (ant sp.) Water’
<i>cĩ? deh</i>	‘Slug Water’
<i>pĩŋ deh</i>	‘Cucura (wild grape sp.) Water’
<i>yĩw deh</i>	‘Ant sp. Water’
<i>pæj j’ ĩh deh</i>	‘Unripe Umari (fruit sp.) Water’
etc.	

(19) (*děh* ‘water’)

<i>mǝh deh</i>	‘ucuqui fruit juice’
<i>caná deh</i>	‘pineapple juice/beer’
<i>j’ ĩw deh</i>	‘pupunha beer’
<i>múh=teg deh</i>	‘sugar cane beer’
etc.	

(20) (*yũd* ‘clothes’)

<i>tiyĩ? yud</i>	‘men’s clothes’
<i>tã ĩǎy yud</i>	‘women’s clothes’
<i>j’ Ńm yud</i>	‘bathing clothes’
<i>bĩ? yud</i>	‘work clothes’
<i>b’ oý yud</i>	‘school/church clothes’

Especially when such a set already exists, it appears to be flexible in allowing the formation of new or non-typical compounds on the same template. For example, the compound ‘clothing of sores’ (which were worn as a disguise by a mythical hero) in (21) corresponds to the compounds in (20).

- (21) *yíkán=mah yúp, tǎnǎh hǎm yud ni-ǎé-ew-ǎh,*
 over.there=REP that.ITG 3sg.POSS wound clothes be-PERF-FLR-OBJ
 ‘Out there, they say, that which had been his **clothing of sores**,
tǎh po ǎ-d’ ǎh-hi-yǎǎ-áh
 3sg open-send-descend-TEL-INCH-DECL
 he stripped it off.’ (KTW.106)

Why do the productive compounds and the lexically specific compounds have opposite stress patterns? The most plausible answer to this question is that when a compound is perceived as part of a variable, paradigmatic set, the second or constant component is in some sense perceived as given or backgrounded information, while the first or variable component is relatively foregrounded. The stress pattern reflects the speaker’s perception of this difference, in that he/she naturally pays more attention to the variable component (this point is taken up again in §5.4.2).

It is important to note that, because the compound-initial and compound-final stress patterns represent the two poles of a continuum between maximally lexically specific and maximally productive compounds, compounds that fall in between may have either of these patterns, or may take stress on both elements. In some cases, it may be possible to motivate an in-between compound as transitional between the two types. For example, *kayak deǎh* ‘tucupi, manicuera’ (the liquid left over from processing manioc, or the boiled drink made from this liquid) takes stress on N2 (the pattern typical of lexically specific compounds), despite its resemblance to the vegetable/fruit-drink paradigm in (19) above. From a syntactic point of view, there is no reason why manioc liquid should not be part of this paradigm and have N1 stress. However, that this particular compound should be more lexicalized is no surprise considering its frequency—the preparation and

consumption of *kayak deħ* is a daily focus of Hup life, whereas the other fruit drinks are only available intermittently, on special occasions and when the fruits are in season; thus its name is more lexicalized. Other compounds simply appear idiosyncratic; for example, *húp tok* ‘caxiri (manioc beer)’, literally ‘person belly’ (example 22) and *cǎħ deh* ‘rainy-season period’ (*cǎħ* ‘island produced by high water’; *deħ* ‘water, rain’) have lexically specific meanings but receive N1 stress, like productive compounds.

- (22) *húp tok ʔəg-nǎh-ay bǝg ʔǎħ-ǎħ*
 person belly drink-NEG-INCH HAB 1sg-DECL
 ‘I never drink caxiri’ (lit. ‘person belly’). (TD.Cv.99)

5.1.3. Lexification and phonological reduction of compound forms

As noted in §5.1.2.1 above, lexically specific compounds resemble monomorphemic Hup words in their stress pattern. In fact, they appear to be under some pressure to *become* monomorphemic Hup words, and in many cases have undergone morphohomemic processes that bring them closer to the prototypical monomorphemic Hup word, including vowel harmony (usually N2→N1), medial consonant cluster simplification, and nasal spreading (see §2.6). In (23), for example, the N2 in the compound has become relatively opaque. The form in (a) has undergone vowel harmonization among some speakers (particularly from the Tat Deh/Japu dialect areas), while other speakers reduce the consonant cluster in (b) to be homorganic.

- (23) a) *b’ǝk káb* (*b’ǝk* ‘clay, pot’; *káb* ?) ‘griddle’
 (sometimes pronounced [ᵐb’ak-kâᵐ])
- b) *tegd’úh* (*těg* ‘tree/wood’; *d’úh* ?) ‘tree’
 (sometimes pronounced [teᵑg’úh])

In other cases, lexemes that are now essentially monomorphemic forms were probably once compounds, but they have become etymologically obscure and no longer vary across speakers in their pronunciation. One example is *pũʔik* ‘coca’. In the Vaupés region, coca is consumed regularly as a powder, produced from toasted coca leaves, and the name may be formed from the verb root *ʔik-* ‘handle a loose substance’ (e.g. manioc flour, seeds, etc.), in combination with an unidentified N1. This N1 probably underwent vowel harmonization to the vowel of the N2 (the most common direction), but may have contributed its nasal quality to the N2.

5.1.4. Nominal compounds involving adjectives: attributive uses of aspect

Certain complex nominal expressions in Hup are formed from the combination of a noun and an adjective. This role of adjectives is distinct from their typical use as productive modifiers in noun phrases (see §6.6), in that they do not simply modify a nominal head within the noun phrase, but themselves are an intrinsic component of a complex nominal head, that in most cases can itself be modified. The adjectives in this distinct role are morphologically marked, setting them apart from the more conventional modifiers. It is a peculiar feature of Hup grammar that there is a formal overlap between the morphological means for marking these compound-internal attributives, and the marking of aspect (primarily on verbs) elsewhere in the language.

Hup has two types of these compounds or complex nominals, which both form very small, closed sets; the productivity of these strategies appears to be extremely limited. In one, the adjective follows the noun (the typical order for adjective modifiers

and nouns in Hup), and the adjective is marked as a compound-internal attributive by reduplication. In the other, the adjective precedes the noun, and is marked by the suffix -V́y, which appears elsewhere as a Boundary Suffix on verbs and marks Dynamic aspect within a declarative clause.

A near-comprehensive list (in my corpus) of the nominal compounds involving reduplication is given below (24-25). Elsewhere in Hup, reduplication appears semi-productively in Hup verbs (see §12.9.3) and in Hup nouns (see §4.5), and relates to iterative aspect; its use in compounds, however, appears to be completely unrelated to this aspectual function. In these noun-adjective compounds, the reduplication signals that the adjective is involved in a nominal unit with its own specific semantics, rather than simply modifying a noun; for example, the reduplicated form *cob popoǵ* ‘thumb’ can be contrasted with the modified noun *cob poǵ* ‘big finger’. Primary stress in reduplicated compounds is on the N2, as expected for lexically specific compound forms.

- | | | | |
|------|-------------------------|-----------------------|----------------------|
| (24) | <i>cob tǣtǣh</i> | (finger RED-small) | ‘pinky finger’ |
| | <i>cob popoǵ</i> | (finger RED-big) | ‘thumb’ |
| | <i>nuh totoǵ</i> | (head RED-support) | ‘neck’ |
| | <i>kākāy’ j’ ij’ ĩg</i> | (fish sp. RED-sharp) | ‘mandi (fish) sp.’ |
| | <i>tōj yayāg</i> | (fish.sp. RED-spotty) | ‘jacundá (fish) sp.’ |

To the extent that the second (reduplicated) component of these forms is identifiable, it is always an adjective or adjectival verb root. However, there are also a number of forms in which the reduplicated component cannot be identified (example 25); most are names of animals (note that animal names is one of the most common domains for ostensibly aspect-related reduplication in Hup nouns; see §4.5).

(25)	<i>nuh yəyəg</i>	(head RED-?)	‘upper neck in back’
	<i>yɔɭ j’æj’æp</i>	(wasp RED-?)	‘wasp sp.’
	<i>ya lam wāwāt</i>	(jaguar RED-?)	‘bush dog’
	<i>j’ib’ih j’uĭ’uĭ’</i>	(bat RED-?)	‘Sheath-Tailed Bat’
	<i>j’ib’ih kəkəc</i>	(bat RED-?)	‘Fruit bat (?)’
	<i>cūg puṽpū=mæh</i>	(hummingbird RED-?=DIM)	‘hummingbird sp.’

The second attributive strategy for complex nominals involves the opposite order of modifier + noun, in which the modifier is marked by the suffix *-V̇y* (elsewhere a Boundary Suffix on verbs and predicate adjectives indicating Dynamicity—i.e. temporal continuity, usually vis-à-vis the speech moment—in declarative clauses; see §12.2). This strategy differs from that involving reduplication in several respects. Perhaps most importantly, this construction bears perhaps a greater resemblance to a relative clause than to a compound, in that it involves a modifier + subordinating morphology + head noun (compare the prototypical relative clause: verb + Dependent marker *-Vp* + head noun; see §18.2.3.1). Unlike relative clauses, the first element of the construction is not a verb; however, it is also not invariably an adjective, but in a few cases is a nominal form, or even an interrogative pronoun, as in (28) below. Finally, some of these complex nominals are marginally productive in the sense that the same adjective + *V̇y* can appear with different head nouns, as is the case of *póh-óy* ‘high’ in example (26) below. In keeping with this semi-productivity, stress in these constructions falls on the first component rather than on the second. However, these forms are semi-lexicalized, and are not productive in the sense that any adjective can combine freely in this way with any noun.

A near-comprehensive (in my corpus) list of complex nominals involving -Vý

is given in (26-28).

- (26) *póh-óy deh* (high.place-DYNM liquid) ‘water from roof’
j’əb-əy wædhɔ (night-DYNM sun/moon) ‘moon’
wág-áy wædhɔ (day-DYNM sun/moon) ‘sun’
nutəñ-əy wag (now-DYNM day) ‘nowadays’
núp j’əb-əy=d’əh (this night-DYNM= PL) ‘those of tonight’
núp póh-óy=d’əh (this high-DYNM=PL) ‘those high-up ones’
j’ám-yiʔ-əy=ʔh (past-TEL-DYNM=MSC) ‘someone from long ago’
- (27) ...*nɔ́-əy=mah* *yúw-úh*, *tɔ́h=yawám-əñ*, *huý-úy=ʔh-əñ-ay*
 say-DYNM=REP that-DECL 3sg=younger.brother-OBJ following-DYNM=MSC-OBJ-INCH
 ‘...Said that one, to his younger brother, to **the one who came after.**’
 (C-LG.33)
- (28) *hɔ́kán-ay=ʔəy* *ʔám?*
 where-DYNM=FEM 2sg
 ‘A **woman-from-where** are you?’ (i.e. ‘where are you from?’) (OS)

It is not entirely clear why the complex forms in (26) that involve nominals in the N1 are not expressed like normal Hup compounds, where N1 and N2 are simply juxtaposed. However, this looser morphological integration of the -Vý compounds appears to be reflected in their semantics: all involve temporal or spatial concepts, and all are in some way transitional, temporary, or otherwise dynamic—in keeping with the aspectual identity of -Vý as a marker of dynamicity. Thus water may come from high up (off a roof), but once it is collected it is not really different from any other water; the sun and moon lose their tangible identity every twelve hours; and the time understood as ‘nowadays’ is constantly in flux. In contrast, compounds formed by the juxtaposition of N1 + N2 typically do not change or lose their identity with the time of day, place of storage, or temporal or spatial reference point; for instance, a jaguar tail (*ya ʔam d’úb*

[jaguar tail]) can never be anything but a jaguar tail, and a food dish (*wǎd b'ɤk* [food dish]) made to hold solid food will have this identity as long as it retains its original form. The difference in morphological complexity may reflect a more general tendency in Hup, in which a looser conceptual relationship between entities is morphologically more marked than a tighter conceptual relationship. This occurs in the expression of nominal possession between alienable (possession-marked) and inalienable (unmarked) relationships (§5.2 and §5.4 below), and it also occurs with verb-based relative clause vs. compound constructions, in which the looser relationship requires a full relative clause, while a tighter relationship reduces the relative clause to a compound form; for example, *tɪh g'et-ep mɔy* (3sg stand-DEP house) 'the house where she stays', vs. *tɪh g'et=mɔy* (3sg.POSS stand=house) 'her staying-house; the house she stays in all day, every day' (see §18.2.3.1).

5.2. Alienable possession

Like noun compounding, the expression of possession in Hup involves the conjunction of two nouns into a noun phrase. Most Hup nouns are non-obligatorily or alienably possessed; that is, they can appear by themselves as complete NPs. When these nouns are possessed by another entity, an additional morphological marker of the possessive relationship is required. This is the postpositional particle *nɪh* (which receives stress and rising tone); this marker is associated with the possessor (phonologically so in the case of pronouns), and usually precedes the possessum, as in examples (29-30). (Note that this form is homonymous with the clausal Negative suffix *-nɪh*.)

- (29) *tæ=d'əh nɛh, yɛ=d'əh nɛh dɛh*
 ant.sp=PL POSS that-PL POSS water
 'The water (saliva) of those ones, those *tæ*'ants.' (M.70)
- (30) *tɪnɛh mɔy g'od-ót, hib'ah-tæh=ɛh nɛh mɔy g'od-ót...*
 3sg.POSS house inside-OBL created-son=MSC POSS house inside-OBL
 'Inside his house, the created one's house...' (MD.DT.82)

The possessive pronouns are formed from the fusion of the subject pronoun and the possessive suffix. These forms are somewhat phonologically reduced (via simplification of consonant clusters) in the Tat Deh and Barreira dialects, but are almost fully transparent in the dialect spoken in Umari Norte, with the exception of the 1sg form. The paradigm for the possessive pronouns is given below in Table 5.1 (restated from §4.1.2), and examples of their use in text are provided in (31-33).

Table 5.1. Hup possessive pronominal paradigm

	Subject PN	Possessive PN	
		Tat Deh/Barreira dialects	Umari Norte dialect
1sg	<i>ʔāh</i>	<i>nɛ</i>	<i>nɛh</i>
2sg	<i>ʔám</i>	<i>ʔamɛh</i>	<i>ʔam-nɛh</i>
3sg (M or F)	<i>tɪh</i>	<i>tɪnɛh</i>	<i>tɪh-nɛh</i>
1pl	<i>ʔɪn</i>	<i>ʔɪnɛh</i>	<i>ʔɪn-nɛh</i>
2pl	<i>nɛŋ</i>	<i>nɛŋɛh</i>	<i>nɛŋ-nɛh</i>
3pl	<i>hɛd</i>	<i>hɛdnɛh</i> <i>hɛdɛh</i> [hɪrɪh] (Tat Deh only)	<i>hɛd-nɛh</i>

- (31) *nɛ kayak=tɪg, nɛ=yiʔ ʔāh wæd-æh!*
 1sg.POSS manioc=stem 1sg.POSS=TEL 1sg eat-DECL
 'My manioc plants, I eat only mine!' (JM.PN.62)
- (32) *n'ikán, téw, ʔamɛh teg-cáʔ páh, ʔāh d'óʔ-ʔay-áh!*
 over.there Thelma 2sg.POSS wood-box PRX.CNTR 1sg take-VENT-DECL
 'Over there, Thelma, your matches (lit. wood-box), I went and took them!' (B.Cv.136)

- (33) ...*tɪ̃h* *hɔ̃p kək cúk*, *tɪ̃h* *mũh*, *tɪ̃h* *kapíʔ b'ɔ̃k*;
 3sg.POSS fish pull pole 3sg.POSS arrow 3sg.POSS caapi pot
 'His fishing pole, his arrow, his caapi pot;

těg təʔ-yóʔ=mah tɪ̃h d'oʔ-yǎʔ-yǎh-ǎh
 wood light-SEQ=REP 3sg take-singe-FRUST-DECL
 having lit a fire, he burned (them) (in vain).' (M.KTW.109)

The marked possessor usually precedes the possessum, as in (34a), but it can also follow it, as in (34b) and examples (35-36). Although the possessive particle is more or less phonologically free, it is obligatorily associated morphosyntactically with the possessor, as demonstrated by the ungrammaticality of (34c-d).

- (34) a) *pedú nɪ̃h cug'ǎt*
 Pedro POSS book
 'Pedro's book'
- b) *cug'ǎt pedú nɪ̃h*
 book Pedro POSS
 'Pedro's book'
- c) **cug'ǎt nɪ̃h pedú*
 book POSS Pedro
- d) **pedú j'ug'ǎt nɪ̃h*
 Pedro book POSS

- (35) *ʔāh nɪ̃-ʔeʔ-yǎh-ǎh*, *yúp=b'ay tɪ̃h*, *j'ek-huʔ-yíʔ-ǎy keyóʔ*
 1sg keep-PERF-FRUST-DECL that=AGAIN 3sg.POSS steal-finish-TEL-DYNM CAUSE
 'I put it away (for safekeeping, in vain), that (stuff) of hers, since they were stealing it all.' (P.B.8)

- (36) *ʔectúdu-da-bówca tɪ̃h-íw-ɪ̃h*
 study.grant(Pt) 3sg.POSS-FLR-DECL
 'The study-grant (*bolsa de estudo*) of hers.' (B.Cv.87)

Possessive forms in Hup can occur independently of a possessum, although this is relatively uncommon. They may be used as nominal heads in their own right, and can take nominal morphology such as the Reflexive Emphasis marker (example 37), the

Telic/emphasis marker =yí? (example 38), and the Dependent and Declarative markers (example 39).

- (37) *ʔamʔh=hup* *núp=b'ay*
 2sg.POSS=RFLX.INTS this=AGAIN
 'This one is your own.' (RU)
- (38) *nĩ* *kayak=tĩg*, *nĩ=yí?* *ʔāh wæd-æh!*
 1sg.POSS manioc=plant 1sg.POSS=TEL 1sg eat-DECL
 'My manioc plants, I eat only my own!' (JM-PN.62)
- (39) *moycé nʔh-ɸ* *pǎ=mah* *kāh*, *b'oy=d'əh* *nʔh-ɸw-ʔh*
 moisés POSS-DEP NEG:EX=REP ADVR study=PL POSS-FLR-DECL
 'But that which belongs to Moises (i.e. his money) isn't there; the teachers' money).' (B.Cv.87)

A possessive pronoun in object position conforms to the general restrictions on object marking for Hup nouns (see §4.3.1); accordingly, it takes the Object marker -*ǎn* (and its plural form -*n'ǎn*), as in (40).

- (40) *nĩ=n'ǎn* *páy* *muhún* *ʔam* *bĩʔ-ʔh*
 1sg.POSS=PL.OBJ bad INTS2 2sg make-DECL
 'You've done bad things to my (creations).' (LG-C.20)

Historical Note

It is likely that the Possessive marker *nʔh* in Hup is of relatively recent origin.

Yuhup has what appears to be a cognate possessive suffix -*nəh*, which likewise associates with the possessor (Ospina 2002: 243), but Dâw has instead an optional genitive marker -*ẽj* (Martins 1994: 34), and Nadëb is reported to have no specific morphological marker of possession at all (Weir 1984: 86).

Two possible sources for the Hup Possessive marker are proposed here. The first is the verb *nĩ-* ‘keep, put away’ (see §5.3 below). However, this may be an unlikely source for the Possessive, despite its semantics; this verb itself appears to be a borrowing from Tukano (*nĩrô* ‘keep, put away’), and it would have had to undergo a /*ø*/ → /*h*/ sound change to derive *-nĩh*. While a /*h*/ → /*ø*/ sound change is attested in Hup (e.g. the change from the verb root *hǝh-* to the Nonvisual evidential =*hǝ*), no examples of the reverse have been encountered in the language.

The second possible source candidate is the simulative verb *nĩh-* ‘be like’ (§10.2.2.1), which could perhaps have become reanalyzed as associated with the preceding subject, rather than with the following verbal material (other compounded roots or bound formatives). Use of the verb ‘be like’ in examples where a possessive interpretation might be accessible is illustrated in (41-42). However, whether any connection actually exists between these morphemes is a matter for future research.

- (41) *yĩ tĩh nĩh-ǝ-y=yi?*, *tegd’uh=ǝg wǝd-ǝh*
 thus 3sg be.like-PERF-DYNN=TEL tree=fruit eat-DECL
 ‘That’s what he would do (i.e. his habit); eat the fruits of trees’ (H.CO.72)
- (42) *nǝh-kǝdhi-yó?*, *hĩ tĩh nĩh-ǝ...* *tĩh nĩh-cudǝĩhny,* *nǝyha?*...
 fall-pass.descend-SEQ how 3sg be.like-OBL 3sg be.like-INFR.maybe say.ALT.INT
 ‘After falling, what did he do then (i.e. what was his doing)...he did like...I guess...’ (A.FS.7)

5.3. Other possessive constructions: clausal strategies

In expressing possession, Hup has several alternatives to the noun-phrase-building strategies that are the focus of this chapter. These all belong to the general phenomenon

of ‘external possession’, defined loosely by Payne and Barshi (1999: 8) as the expression of a possessor in a distinct constituent from a possessum.

5.3.1. Possessor ‘raising’

Primarily with humans (and some other animates), Hup exhibits the strategy commonly known as ‘possessor raising’ or ‘possessor ascension’, by which the possessor is treated as a distinct constituent from the possessed entity (as a direct object). However, it has been pointed out in the literature on possession (Blake 1990, Chappell and McGregor 1995, Mithun 2001, etc.) that calling this phenomenon ‘raising’ or ‘ascension’ is something of a misnomer, since it is “based on an assumption that the possessor nominal has been removed from its basic position as a modifier within the noun phrase” (Mithun 2001: 287), but there is no reason to assume such movement. In fact, the clausal strategies generally have the specific function of signaling the intimate or significant affectedness of a participant (Mithun 2001). Examples (43-46) illustrate this phenomenon in Hup.

- (43) *tʰh-ǎñ tʰh cuj-d’ak-way-pó-ay-áh...*
 3sg-OBJ 3sg have.diarrhea-stick.against-go.out-EMPH1-INCH-DECL
 ‘He (tapir) caused her (arm) to be expelled by covering her with diarrhea...

tʰh-ǎñ tǎh hi-cuj-d’ák-aw-ay
 3sg-OBJ tapir FACT-have.diarrhea-stick.against-FLR-INCH
 the tapir caused her to be covered with diarrhea.’ (H.81).

- (44) *yǎ=mah tʰh-ǎñ núh kít-j’ap-b’uy-d’əh-ham-yǎʔ-ay-áh*
 thus=REP 3sg-OBJ head chop-divide.in.two-send-go-TEL-INCH-DECL
 ‘Then, they say, (they) cut her (i.e. off her) head and threw it away.’
 (M.KTW.113)

- (45) *yĩ=mah tĩh-añ tĩh g'əç-d'oʔ-póg=b'ay-áh,*
 thus=REP 3sg-OBJ 3sg bite-take-EMPH1=AGAIN-DECL
 'Then, they say, it bit him,

hăť=b'ay-áh, tĩh mumuỹ=cúm
 alligator=AGAIN-DECL 3sg.POSS arm=beginning
 the alligator, (on) his upper arm.' (M.BY.96)

- (46) *ĩam-añ ĩah yĩĩmỹ yók-tán-áh!*
 2sg-OBJ 1sg anus stab-FUT.CNTR-DYNM
 'I'll stab you in the anus!' (H.TY.79)

These examples crucially all involve body parts, through which the animate possessor is directly affected and is thus more relevant or salient than the actual possessed body part itself. This possession strategy can be contrasted with the more typical single-constituent NP possession strategy in (47), where the action of setting fire to the house can only indirectly affect the house's possessor, Vulture.

- (47) *tĩh mỹ tĩh tuj-d'ak-yăh-ay-áh*
 3sg.POSS house 3sg set.alight-stick.against-FRUST-INCH-DECL
 'He (Bone-Son) set his (Vulture's) house on fire (in vain).' (M.KTW.109)

An important point here is that while this external possession or 'raising' strategy in Hup always appears to involve human body parts, these do not in fact belong to the set of inalienably possessed nouns in Hup (see §5.4.4 below). Discussions of clausal possession ('possessor raising') strategies have tended to consider inalienability as the key distinction underlying the choice between the nominal and the clausal possessive constructions. However, Mithun (2001: 291) argues on the basis of clausal constructions in a set of North American Indian languages that this distinction is not in fact one of inalienability, but of affectedness: "the clausal construction is used when the individual translated as a possessor is considered the most significantly affected participant in an

event or state”. The Hup case supports Mithun’s argument—clausal possession in Hup is completely distinct from the phenomenon of inalienability.

5.3.2. Other possessive strategies

Hup has several ways of expressing possession by means of a predication involving a verb of possession. One of the most common of these is the verb *tɔn-*, literally ‘hold in hand’, but used more generally as ‘have possession of’ (examples 48-51).

- (48) *huʔ=teg tɔn-ɔy ʔǎh-ǎh*
 tobacco=STICK hold-DYNM 1sg-DECL
 ‘I have/am holding a (blessed) cigar.’ (TD.Cv.102)
- (49) *dóc teg-cá? tɔn-pó-y=cud!*
 Jocemar wood-box hold-EMPH1-DYNM=INFR
 ‘Jocemar has the matches (lit. ‘wood-box’), apparently!’ (B.Cv.135)
- (50) *ʔamádu ʔǎn tɔn-ɔy*
 Armando 1sg.OBJ hold-DYNM
 ‘Armando has me (as his wife).’ (OS)
- (51) *hɛ́n’ɛh ʔɛ́n, hup=ʔǎy=d’əh, yũm tɔn-nɛh ʔɛ́n ní-i??*
 Q-NMZ 1pl Hup=FEM=PL plant hold-NEG 1pl be-INT
 ‘Why do we Hup women have nothing to plant?’ (B.Cv.132)

The verb *nɛ́* ‘keep, put away’ (probably borrowed from Tukano *nɛ́ô* ‘keep, put away’) is also used to express possession, especially in the sense of keeping or looking after something temporarily, as in (52-53). The verb *nɛ́* is also used in reference to marriage to a second spouse, especially in cases where the first has died; compare use of *tɔn-* ‘hold, have’ for the first spouse (50 above). In (52), the speaker was referring to his (partially unsuccessful) attempt to safeguard someone else’s things against pilferers.

- (52) *ʔāh ni-ʔe ʔ-yæh-æh*
 1sg keep-PERF-FRUST-DECL
 ‘I kept/ put it away (for her) in vain.’ (P.B.)
- (53) *ʔāh b’ɣiʔ cáp ni-nih tih tɔn-næn-æw-ǎn, ʔāh-ǎh!*
 1sg only INTS1 keep-NEG 3sg hold-bring-FLR-OBJ 1sg-DECL
 ‘I don’t keep what she brings all to myself!’ (P.Sp.104)

Finally, the verb *ni-* ‘be’ is also commonly used in expressions of possession; these can be translated as ‘my X exists’, or ‘X exists to me’, as in (54-55).

- (54) *ʔāh=báb’=d’əh ní-íy*
 1sg=sibling=PL be-DYNM
 ‘I have siblings/ my siblings are alive.’ (E.Int.136)
- (55) *hɣp=hin ní-áh ʔm-ǎn hɔʔ*
 grater=also be-FOC 1pl-OBJ TAG2
 ‘We have manioc graters too, you know?’ (lit. ‘graters also are there for us, huh’)
 (P.Sp.106)

Finally, predicative possession strategies (marked with Perfective aspect and the Frustrative ‘in vain’) are often used in reference to an entity that was once possessed but is no longer, as in (56-57); alternatively the possessum can act as a nominal predicate and take the Perfective and Frustrative markers directly, as in (58).

- (56) *j’ám=yiʔ ya ʔamboʔ ʔāh tɔn-ʔe ʔ-yæh-æh*
 DST.CNTR=TEL dog 1sg have-PERF-FRUST-DECL
 ‘I used to have a dog.’ (EL)
- (57) *núp ní mɔmb’ɔk ni-ʔe ʔ-yæh-æh*
 this 1sg.POSS pot be-PERF-FRUST-DECL
 ‘This used to be my pot.’ (RU)
- (58) *núp=ʔh ʔāh=tæh ʔp-ʔe ʔ-yæh-æh*
 this=MSC 1sg=child.father-PERF-FRUST-DECL
 ‘This man is my ex-husband.’ (EL)

5.4. Syntactically bound nouns

The majority of nouns in Hup—including most of those that occur in the compounds in §5.1 and the alienably possessed nouns discussed in §5.2—are able to occur as free nominal constituents in their own right, outside of a compound construction (with the exception of certain nouns that appear to be archaic forms, now preserved only in certain semi-lexicalized compounds). However, Hup also has a heterogeneous class of nouns whose presence in a compound is obligatory; these *must* occur in an N2 slot, preceded by another nominal (or functionally equivalent) modifier (which can in most cases be a pronoun, noun, demonstrative, numeral, or relative clause). The members of this set are the ‘bound nouns’, which are lexically specified as such. Bound nouns in Hup fall into several semantic subsets (and, with a few exceptions, comprise all the members of these sets): kin terms, human nouns, plant parts, animal body parts, and a few other nouns.

For purposes of typological comparison, the bound construction in Hup can be characterized as closely akin to the phenomenon of inalienable possession. Most of the bound-noun sub-types—kin terms, plant parts, and body parts—are cross-linguistically typical candidates for inalienable possession, which has as its semantic core possession that is “inborn, inherent, not conferred by purchase”, as opposed to alienable possession, which is “roughly, ownership, socially and economically conferred” (Nichols 1988: 568). However, the syntactic construction of the obligatorily bound noun in Hup is not in fact so easily explained in terms of a semantic basis of ‘inherent possession’. For example, the bound construction in Hup does not necessarily signal possession per se, as in the case of the bound human nouns (discussed in §5.4.2 below); moreover, alienable possession and the bound construction are not mutually exclusive in Hup. In addition,

Hup *excludes* human body parts from the set of bound nouns, even though human body parts are—especially from a typological perspective—semantically inalienable *par excellence*.

The literature on inalienable possession points out that the difficulty in matching the formal identity of inalienable possession—as a “purely structural type”—with a consistent semantic core applies cross-linguistically (cf. Nichols 1988, Chappell and McGregor 1995). As Nichols (1988: 561) observes, the terms ‘alienable’ and ‘inalienable’ are fairly standard in the literature, but “their reference is highly variable”. They are used to refer to a “broad range of structural types...and to a considerable range of semantic properties, some of them irreducible to any common denominator”. For example, the set of inalienably possessed or bound nouns in Boumaa Fijian (Dixon 1988) includes referential kin terms, primary body part terms, and nouns having to do with abstract qualities of things; in Tinrin (Oceanic; Osumi 1995) it includes kin terms, external body parts, and parts of plants; and in Nanai (Tungusic, Nichols 1988: 573) body parts, relational terms, and domestic animals (but not kin terms) are treated as inalienable.

To reconcile this cross-linguistic variability, Nichols (1988: 572) suggests the following hierarchy of inalienable possession:

Kin terms and/or body parts < Part-whole and/or spatial relations < Culturally basic possessed items

Crucially, body parts and kin terms occur at the top of the hierarchy (together with plant parts, which are considered as “analogs to body parts for inanimate beings”, [Nichols 1988: 573]), and Nichols observes that “if a language includes nouns other than kin terms

and body parts among its ‘inalienables’, usually it includes both kin terms and body parts as well” (1988: 572). A similar hierarchical characterization is given in Haiman (1985). However, Chappell and McGregor (1995: 8) point out that this hierarchy is not at all universal; for example, spatial orientation terms in Ewe and Mandarin appear alone at the top of the hierarchy as the most inalienable category. Accordingly, they suggest that the characterization of inalienability within a given language is crucially dependent on the socio-cultural and pragmatic knowledge of its speakers, and cannot be adequately captured by a universal hierarchy.

Hup is clearly another case of a language which violates this hierarchy of inalienable possession, particularly in its treatment of human body parts as being alienably possessed. Hup’s inclusion of generic human nouns in the set of obligatorily bound nouns is likewise typologically atypical and is not predicted by the hierarchy. In the following sections of this chapter, I present each of the subsets of the Hup bound nouns in turn, and I argue—in agreement with the statement by Chappell and McGregor (1995)—that the set of inalienably possessed or bound nouns in Hup must be understood in terms of language-specific and culturally specific factors.

5.4.1. Referential kin terms

Referential kin terms in Hup (as opposed to vocative kin terms) are obligatorily bound.

They are typically preceded by a subject pronoun (i.e. a pronoun that is not morphologically marked as a possessor), a proper name, or another kin term. This combination essentially produces a compound encoding a possessor-possessioned relationship, like the type described in §5.1 above. The kin terms can form paradigmatic

sets (where one member is held constant and the other varied) that are based either on N1 (as in 59 below) or on N2 (as in 60). The possessor (N1) and the kin term (N2) both receive essentially equal stress; this stress pattern may reflect the fact that—unlike most ‘productive’ compounds in Hup—the bound kin term is conceived as belonging more or less equally to both kinds of paradigm (i.e. Hup speakers arguably conceptualize a given kin noun in terms of either set with similar frequencies).

- (59) *ʔǎ́h=ʔp* ‘my father’
 ʔǎ́h=ʔn ‘my mother’
 ʔǎ́h=cǎ́t ‘my older brother’
 ʔǎ́h=yawám ‘my younger brother’
- (60) *tǎ́h=ʔǎ́h* ‘his/her grandmother’
 ʔǎ́h=ʔǎ́h ‘our grandmother’
 ʔám=ʔǎ́h ‘your grandmother’
 ʔǎ́h=ʔǎ́h ‘my grandmother’

Further examples of bound kin terms are given in (61-64):

- (61) *núp* *tǎ́h=yawám*, *pǎ́y=wǎd-ǎ́h*
 this 3sg=younger.brother thunder=RESP-DECL
 ‘This was his younger brother, Full-of-Thunder.’ (LG)
- (62) *cǎ́b=tǎ́h ʔp* *nǎ́h-iʔ?*
 (name)=offspringfather POSS-INT
 ‘Sib’s husband’s?’ (husband=‘offspring’s father’)
- (63) *n’ip* *cidídu=tóg* *ham-ʔáy-ní-h*
 that Cirino=daughter go-VENT-INFR2-DECL
 ‘And that daughter of Cirino’s went and returned.’ (P.Sp.107)
- (64) *hǎ́d=ʔn=wa*, *tǎ́hǎ́y=d’ǎ́h=ʔn=wa*
 3pl=mother=old.woman snake=PL=mother=old.woman
 ‘Their respected mother, the snakes’ mother.’ (H.46)

Like the compounds in (§5.1.3) above, bound kin term nouns can combine to produce lexicalized or semi-lexicalized compound expressions—themselves inalienably possessed, forming nested compounds—such as those in (65-67).

- (65) *=tæh-ʔip* (offspring-father) ‘husband’ ([tæʔíp] or [tæíp] in fast speech)
 =tæh-ʔin (offspring-mother) ‘wife’ ([tæʔín] or [tæín] in fast speech)
 (regardless of whether children have been born)
- (66) *=tog-túg* (daughter-[form cognate with ‘husband’ in Dâw]) ‘son-in-law’
 =tæh-ʔæm (son/offspring-[form cognate with ‘wife’ in Dâw and Yuhup])
 ‘daughter-in-law’
- (67) *yíh ʔám=ʔn=tæh wid-ye-hɔ̃h*
 thus 2sg=mother=son arrive-enter-NONVIS-DECL
 ‘Your kinsman (lit. mother’s son) has arrived, I think.’ (P.BY.89)

As noted above, participation in the bound construction and in expressions of alienable possession (i.e. those involving morphological marking of possession on the possessor) are actually not mutually exclusive in Hup, which suggests that the Hup bound noun cannot be taken simply as a prototypical inalienably possessed form. In the case of the referential kin terms in particular, the bound kin term must be preceded by/possessed by some other noun, but this is sometimes expressed as an alienable possessor, marked with the Possessive *nɔ̃h*, as in examples (68-71). It is not fully clear why Hup speakers choose one form of possession over the other, and consultants accept both forms interchangeably (as in examples 68-71 below, which were judged grammatical when phrased as inalienably possessed as well as alienably possessed). However, certain kin terms are more likely to be expressed alienably than others, particularly those relating to children. The choice probably has to do with the relative salience (to the speaker) of the possessor as opposed to the possessum, as discussed in §5.5 below.

- (68) *tɪh-ǎn tɪnɪh toǵ d'əh-nǎn-ǎp=mah yúw-úh*
 3sg-OBJ 3sg.POSS daughter send-come-DEP=REP that-DECL
 'His (brother's) daughter sent it to him, it's said.' (B.Cv.87)
- (69) *nɪ tǎh=d'əh ʔəg-na ʔ-yíʔ-ǵy, hup-hipǎh-nɪh!*
 1sg.POSS offspring=PL drink-lose.consciousness-TEL-DYNM RFLX-know-NEG
 'My kids got drunk, (they were) out of their senses!' (TD.Cv.103)
- (70) *hɪdnɪh ʔn-túg=tǎh-ǎn, ti ʔcɪk-nɪh nɪŋ-íp j'ám=b'ay*
 3pl.POSS mother-(husband)=son-OBJ dislike-NEG 2pl-DEP DST.CNTR=AGAIN
 'You all didn't dislike their step-brother (mother's husband's son) either!'
- (71) *pedú nɪh ʔp, nɪ báb' yúw-úh, ʔn ʔayǔp=d'əh!*
 Pedro POSS father 1sg.POSS sibling that-DECL 1pl one=PL
 'Pedro's father, that's my (classificatory) brother, we are of one set!' (MD.K.119)

Whatever the alienable/inalienable distinction as morphologically defined, the kin terms in these examples nevertheless remain bound. As illustrated in (72), the kin term must be *preceded* by the (marked or unmarked) possessor—unlike the non-bound nouns in (34-36) above, where the possessor + *nɪh* can (though rarely does) follow the possessum.

- (72) a) *tǎ ʔǎy nɪh ʔp w'ǎ*
 woman POSS father tall
 'The woman's father is tall.' (EL) [morphologically alienable]
- b) *tǎ ʔǎy=ʔp w'ǎ*
 woman=father tall
 'The woman's father is tall.' (EL) [inalienable]
- c) **ʔp tǎ ʔǎy nɪh w'ǎ*
 father woman POSS tall
- d) **ʔp tǎ ʔǎy w'ǎ*
 father woman tall

5.4.2. Human nouns

Almost all generic human nouns (i.e. excluding proper names) are, like kin terms, obligatorily bound to a preceding form; the only basic human nouns encountered that do not occur in the bound construction is *hɔwǎ̃* ‘infant’ (probably a Tukano borrowing) and (somewhat more variably) *húp* ‘human, person’. The most common N1 with human nouns is the default 3rd person singular pronoun *tɬ=*, which in this case—as opposed to its use with the kin terms in §5.4.1—does not indicate an inalienable third person *possessor* per se. It essentially acts as a dummy N1, although a clue to its meaning—that of an unspecified, associated group—is given in §5.5.C. Designations corresponding to human groups or types of humans—such as *teghɔ̃* ‘non-Indian’⁶⁸, *húp* ‘Hup Indian, human in general’, and *p’ǎy* ‘priest’, among others—are also common as N1s in combination with bound human nouns, e.g. *p’ǎy=ɬǎy* (priest=FEM) ‘nun’ (and are also usually able to stand alone, with the exception of ‘non-Indian’).

As with most of the bound nouns described in this chapter (but with the exception of the kin terms), the primary stress of the bound human-noun construction falls on the N2 or bound noun when this is preceded by the default *tɬ=* (or, in some cases, a numeral), but with all other preceding nominals the N1 receives the primary stress. Crucially, this stress pattern for bound nouns corresponds to the *type* of paradigm-like set in which the noun typically occurs, in that the stress-bearing form tends to be the most paradigmatically marked or variable form in the compound. In other words, the

⁶⁸ Literally ‘fire-people’, and a calque of the corresponding Tukano form. Non-Indian people probably got this name because of their firearms.

pronominal N1 (most often *tʰh=*) is in some sense the most predictable or ‘given’

information vis-à-vis the paradigm set of pronominally possessed bound nouns (so in this case N2 is stressed), whereas the bound noun itself is the least variant form in all other cases (so N1 is stressed). This supports the analysis of stress for productive compounds generally, presented in §5.1.2.2 above.

Examples of human nouns in the obligatorily bound construction are given in (73) and (74). This can be contrasted with animal names, which do not occur in the bound construction, as illustrated by (75).

- (73) *tʰh=dóʔ=mæh=dʰəh=mah... híd ʔʃh-yíʔ-ʰh*
 3sg=child=DIM=PL=REP 3pl sleep-TEL-DECL
 ‘The little children, it’s said, they went to sleep.’ (I.M)

- (74) a) *tʰh=pæcæw ní-íy*
 3sg=adolescent.boy be-DYNM
 ‘A/the boy is there.’

- b) **pæcæw ní-íy*
 adolescent.boy be-DYNM

- (75) a) *yā lamboʔ ní-íy*
 dog be-DYNM
 ‘A/the dog is there.’

- b) **tʰh=yā lamboʔ ní-íy*
 3sg=dog be-DYNM

The bound human nouns themselves fall into two subsets. The forms for ‘male’ and ‘female’ pattern somewhat differently from the other ‘generic human’ nouns.

5.4.2.1. ‘Generic human’ nouns

A comprehensive list of these is given in (76). They occur most frequently with the default 3rd singular pronominal form *tɬh=*, as illustrated in examples (77-79). (Note that *tɬh=* may appear regardless of whether the noun is singular or plural, although in plural forms—marked with the Plural enclitic =*d’əh*—these nouns may appear without *tɬh=* or any N1 form at all. See §5.5.2 for discussion of this phenomenon.)

- (76) *(tɬh)=cəw* ‘shaman’
(tɬh)=dóʔ ‘child’
(tɬh)=wá ‘old woman’
(tɬh)=wəhəd ‘old man’
(tɬh)=pæcəw ‘teenage boy’
(tɬh)=ʔacáw ‘teenage girl’
 (usually pronounced *ta ʔacáw*)

- (77) *tɬh=wá* *hən-g’āʔ-kədway-hám-áh!*
 3sg=old.woman vomit-be.suspended-pass.go.out-go-DECL
 ‘The old woman ran staggering out to throw up!’ (TD.Cv.101)

- (78) *tɬh=dóʔ=məh* *ʔəh-wób-óy=mah*
 3sg=child=DIM sleep-rest.on-DYNM=REP
 ‘The little child went to sleep (on the bed), they say.’ (FS.1)

- (79) *yínfý*, *tā ʔāy=d’əh*, *ta ʔacáw=d’əh* *ʔān* *nəh-əh*
 then women=PL adolescent.girl=PL 1sg.OBJ come-DECL
 ‘Then women and girls came to me.’ (H.56)

In (80), the human noun combines with a kin term to form a more complex compound.

- (80) [*tɬh=wəhəd*] = *təh ʔín* *g’əh-əy=nih*, *húʔ=teg* *ʔam* *tən-pəh-əh*
 3sg=old.man=child.mother be-DYNM=EMPH.CO tobacco=STICK 2sg hold-sit-DECL
 ‘Since you’re the wife of the old man (shaman), you’re sitting there with a (blessed) cigar.’ (TD.Cv.txt)

Bound human nouns can be preceded by a group term such as ‘River Indian’ or ‘Non-Indian’ (as in 81), a demonstrative, a numeral, or a relative clause.

- (81) *wəh=pæcəw=d'əh* *b'ɣi?* *ni-iy*
 River.Indian=adolescent.boy=PL only be-DYNM
 'There are only River Indian boys (there)!' (B.Cv.131)

In (82), *cəhdeh* 'rainy season' acts as a type of group term, relating to those entities that are present during/ defined by the rainy season.

- (82) *núp* *cəhdeh=wəhəd=n'añ* *tih* *y'æt-ní-h*
 this rainy.season =old.man=PL.OBJ 3sg leave-INFR2-DECL
 'He (creator) left these old rainy-season lords (constellations).' (H.49)

As discussed in detail in §7.4, the forms 'old woman' and 'old man' have undergone semantic extension, accompanied by phonological reduction in the case of 'old man' (from *=wəhəd* to *=wəd*; note reduction to one syllable and loss of stress). These 'old man' and 'old woman' terms are used both referentially and vocatively to indicate respect (real or joking/endearing). A further use of the male forms *=wəhəd* and *=wəd* is to indicate 'one who is characterized by a great deal of N', where N is the host noun (see §7.4). These 'respect' markers may co-occur with another (preceding) bound human noun, kin term, proper name, or other nominal form.

5.4.2.2. 'Male' and 'female' nouns

These bound forms are given in (83). The bound form 'female' has an exceptional stress pattern, in that it always takes stress equal to that of the N1, regardless of the latter's identity; 'male' is like most other bound nouns in that it is unstressed. This phonological markedness of the female form corresponds to its semantic markedness: the masculine

form is typically used in reference to an entity of unspecified gender (see 86 below, for example), whereas the female form is only used for specifically female referents.

- (83) = *ʔǎy* ‘female’
= *ʔh* ‘male’

The male and female terms commonly occur with a wide variety of N1s—to a greater extent than the other human nouns discussed above (§5.4.2.1), and often in their place. These include group names and clan names, as in (84-85).

- (84) *wʔh*=*ʔǎy* ‘River Indian woman’
húp=*ʔh* ‘Hup man’

- (85) *cɔkw’ə*=*nɔg’od*=*tǎh*=*ʔǎy*
toucan=mouth=offspring/clan=FEM
‘Toucan’s-Beak Clanswoman’

The bound male and female forms are also common with numerals and demonstratives, as in (86-87). Note that the masculine form in (86) is actually used gender-neutrally, in reference to a woman.

- (86) *yúp* *ʔayup*=*ʔh-ǎh*=*mah...* *tʔh* *g’əc-j’ap-d’o* *ʔ-yǎh-kamí*=*mah...*
that one=MSC-OBJ=REP 3sg bite-divide.in.two-take-FRUST-moment.of=REP
‘Then to **one person**, they say...at the moment he fell on (her) and bit her...’
(H.Y.75)

- (87) *yí-nʔh*=*mʔʔ*=*mah* *póh* *cǎp*=*ʔh* *wób-óh*
that.ITG-be.like=UNDER=REP high other=MSC be.set.on-DECL
‘At the same time, **another person** was sitting up high (in a tree).’ (P.TB.1)

They also occur with nouns indicating the person’s identity, as in (88-89).

- (88) *tínʔh* *huĩ* *túj*=*ʔh* *nu-có* *ʔ-óh*
3sg.POSS tobacco light=MSC here-LOC-DECL
‘His **cigar-lighting-man** was over here.’ (LG.23)

- (89) *yub=ǎ́y=d'əh=mah yúw-úh*
 cipó.vine=FEM=PL=REP that-DECL
 'They were **cipó-vine women**, it's said.' (LG.19)

Finally, they are common with relative clauses, as in (90-91). In example (91), two bound N2 forms share a single relative-clause N1; however, consultants differ in judging this acceptable.

- (90) *dəh máh [hǎp kək-pǎm-əp]=ǎ́h-íh*
 water near fish pull-sit-DEP=MSC-DECL
 'Beside the water there was **a man who was sitting there fishing**' (M.BY.95)

- (91) *yí-níh yúp, [tǎh-ní-ip]=ǎ́h,*
 that.ITG-be.like that.ITG offspring-be-DEP=MSC
 'So, the **man and woman who have a new baby**

=ǎ́y... *hup-hi-cíh-íh*
 =FEM RFLX-FACT-observe.restrictions-DECL
 observe ritual restrictions' (H.41)

The free lexemes for 'man' and 'woman' (examples 92-93) appear to be lexically reduced forms that incorporate the *tíh*= preform. As such, they resemble the other human forms given above in (76), in particular *taʔacáw* 'girl'. However, it is not clear whether an etymological link exists between =ǎ́h 'masculine' and -yíʔ (cf. *tiyíʔ* 'man').

- (92) *tǎ ǎ́y (< tíh = ǎ́y)* 'woman, female'
tiyíʔ (< tíh = yíʔ) 'man, male'

- (93) *m'ǎc... tǎ ǎ́y-ǎ́n, tiyíʔ-ǎ́n*
 mud woman-OBJ man-OBJ
 '(With) mud... (he made) a woman, a man.' (LG.18)

Further evidence that the lexemes 'man' and 'woman' involve the bound preform *tíh*= comes from their plural variants, in which the *tV*- syllable may be optional, as in (94).

- (94) (tā) ʔāy-d'əh 'women'
 (ti) yĩʔ-d'əh 'men' (limited to some dialects)⁶⁹

This ability of the *plural* bound noun to appear without an N1 is a feature of the bound construction generally (see §5.5.2), but in the case of the 'man' and 'woman' terms this is subject to dialectal variation, reflecting their relatively more lexicalized, monomorpheme-like status. A further example of this is provided in (95), which also illustrates the ability of two human bound nouns (= ʔāy, =dóʔ) to co-occur in a single compound.

- (95) ʔñ ʔāy=dóʔ=d'əh yĩʔ=n'āñ ʔñh-nəh-d'ák-n'ñ ʔāp
 1pl FEM-child=PL MSC=PL.OBJ REC-fall-stick.against-COMP NEG:ID
 'We as girls weren't ones to go running after men like that!' (TD.Cv)

Table 5.2: Summary of forms for 'male' and 'female'

	Bound	Free	Plural
FEM	= ʔāy	tā ʔāy	ʔāy=d'əh tā ʔāy=d'əh
MSC	= ʔñh	tiyĩʔ	yĩʔ=d'əh (some dialects) tiyĩʔ=d'əh

While the free lexemes 'man' and 'woman' almost certainly include the preform *tñh*= historically, they have also become lexicalized to the point that they are distinct from transparent *tñh*=N2 compounds like those relating to the other human nouns in (76) above. Accordingly, *tñh*= can also combine directly with the bound forms = ʔñh and

⁶⁹ But *ʔñh=d'əh is not grammatical. Rather, if the bound masculine form = ʔñh (in association with N1) is pluralized, it is usually *replaced* by the Plural marker =d'əh; e.g. *tegh.ʃ*=ʔñh 'non-Indian man/person', *tegh.ʃ*=d'əh 'non-Indian people'. Other bound forms are usually followed by the Plural marker, including = ʔāy=d'əh.

= ʔǎy , according to the productive, transparent pattern, yielding an unreduced, non-

lexicalized form in a construction indicating emphasis and definiteness, as in (96-97).

- (96) $t\dot{h}h = \text{ʔǎy}$ ‘that female person’
 $t\dot{h}h = \text{ʔh}$ ‘that male person’

- (97) $\text{ʔok-n}\dot{h}h$ *key-ham-g’et-yíʔ-ay*, $t\dot{h}h = \text{ʔǎy-áh}$!
 stir-NEG see-go-stand-TEL-INCH 3sg-FEM-DECL
 ‘(She) stood there looking, without moving, **that girl!**’ (TD.Cv.104)

5.4.2.3. Possession and human nouns

In contrast to kin terms, the nominal form preceding bound human nouns (especially the default 3rd singular pronoun $t\dot{h}h$) does not usually indicate possession per se, i.e. the relationship between a possessor and a possessum. On the other hand, the N1 in these constructions *can* indicate a possession-like relationship, as in examples (98-99); these indicate ‘one of us’ and ‘our children’, i.e. people belonging to our group, Hupd’əh. The relationship encoded in these bound constructions is best characterized as that of whole to part, just as we saw in a subset of the noun compounds in §5.1 above, rather than one of ‘possession’ per se; i.e. not so much ‘our children’ as ‘children in our group’.

- (98) $\text{ʔh}h = \text{ʔh}$ ʔǎp $t\dot{h}h - \dot{h}h$
 1pl=MSC NEG:ID 3sg-DECL
 ‘He’s not **one of us.**’ (LG.22)

- (99) $\text{ʔh}h = \text{dó ʔ=d’əh-ay}$ $yúp$ nutǎñ=yíʔ $yám=hin$ $yam-n\dot{h}h-ay-áh$
 1pl=child=PL-INCH that today=TEL song=also sing-NEG-INCH-DECL
 ‘Our kids today don’t sing the *kapiwaya*.’ (H.23)

In the case of ‘shaman’, alienable possession is considered preferable, regardless of the presence of the *tɬh*= preform, as in (100).

- (100) a) *ʔɪnɪh cɔw nɪh biyɬw=n'æm'=tæh=ɪh*
 1pl.POSS shaman POSS blood=lick=offspring/clan=MSC
 ‘Our shaman’s Blood-Lick-Clansman.’ (LG.C.39)
- b) *ʔɪnɪh tɬh=cɔw=wəd ní-íy*
 1pl.POSS 3sg=shaman=old be-DYNM
 ‘We have a (respected/old) shaman here; our (resp./old) shaman is here.’
 (EL)

In many cases, the expression of any direct possessor-possessioned relationship between two human referents is judged ungrammatical or inappropriate; this usually depends both on the noun itself, and on the intended possessor. Similarly, in certain cases where human terms may be possessed by an alienable, morphologically marked possessor, the construction may yield a very specific interpretation. Some of these variations are compared in Table 5.3.

Table 5.3. Semantics of pronouns and possession with human referents

	1sg (Inalienable): <i>ʔāh</i> + Noun	1sg Alienable: <i>nī</i> + Noun	1pl Alienable: <i>ʔmīh</i> + Noun
<i>dóʔ</i> ‘child’	‘my child’	‘my childhood’	‘our childhood’
<i>pæcæw</i> ‘adolescent boy’	*	‘my youth (msc)’	‘our youth (msc)’
<i>ʔacáw</i> ‘adolescent girl’	*	‘my youth (fem)’	‘our youth (fem)’
<i>wəhəd</i> ‘old man’	<i>ʔāh=wəd</i> ‘old me (msc)’	‘my old age (msc)’	‘our old age (msc)’
<i>wá</i> ‘old woman’	<i>ʔāh=wa</i> ‘old me (fem)’	‘my wife/ girlfriend’ (joke)	‘our old lady’
<i>ʔh</i> ‘man, male’	‘person of my clan (msc)’	‘my boyfriend’	‘person (msc) of our clan’
<i>ʔāy</i> ‘woman’	‘person of my clan (fem)’	‘my girlfriend’	‘person (fem) of our clan’
<i>cəw</i> ‘shaman’	*	*	‘our (group’s) shaman’ cf. * <i>ʔm=cəw</i>

5.4.3. Plant parts

Almost all terms for plant parts are obligatorily bound nouns; i.e. they must be preceded by an N1 form. This is often a full noun—the plant name—but it can also be a demonstrative, numeral, relative clause, or the default *tʔh=*, as we saw for the human nouns in §5.4.2. The stress pattern (stressed N1 except where this is *tʔh=* or a numeral) is the same as that found with human and other (non-kin-term) bound nouns.

A near-comprehensive list of bound plant parts is given in (101).

- (101) =*g’æf* ‘leaf’
 =*tég* ‘tree, stick’
 =*b’ah* ‘split section of tree’

- =*tát* 'fruit' (preferred for edible fruit; includes pods and bananas as well as round fruits)
- =*b'ǝk* 'bark'
- =*wĩg* 'seed; small individual-seed fruit'
- =*b'ák* 'clump of fruits' (i.e. lump clinging to tree)
- =*tĩh* 'root'
- =*tĩg* 'stem'
- =*tǝk* 'stalk'
- =*ʔǝʔ* 'segment' (of cane-like stalks)
- =*nǝw* 'branch'
- =*hǝb* 'hollow' (stiff curled thing that grows behind the flower on certain trees)
- =*ǎg* 'fruit' (any fruit, regardless of edibility, other than small seed-like fruits in clumps)
- =*dǎe* 'tuber'

The only known plant part terms that can occur outside of a bound construction as free lexemes are *j'ǝ* 'flower' and *tĩ* 'vine'. These are bound when used in reference to a particular plant, but when free they function as generic forms. Also, *děh* 'water' can be optionally used in a bound plant part construction, where it means 'sap'.

Lexicalized or semi-lexicalized generic forms also exist for 'leaf' and 'tree' (example 102). These involve bound forms, but are phonologically reduced, and only partially etymologically transparent. Note that they take stress on the second syllable, like most monomorphemic lexemes and lexically specific compounds in Hup, but unlike the productive compounds or the typical bound construction.

- (102) *cug'ǎt* 'leaf' (possible etymology: *j'ug g'ǎt* 'forest leaf'??)
tegd'úh 'tree' (??*d'úh*)

The presence of the default 3rd singular pronoun *tĩh*= refers (directly or implicitly) to the 'possessing' entity, the whole to which the part belongs:

- (103) *tɪh=g'æʔ* 'its leaf' (of some plant)
tɪh=tát 'its fruit' (of some plant)
- (104) *yúw-ǎn, tɪh=nɔw ní-n'ɪh cək-huʔ-yíʔ-yóʔ...*
 that-OBJ 3sg=branch be-NMZ cut.off-finish-TEL-SEQ
 'Having cut off its little branches that are on it (a sapling)...' (P.F.123)

Very often, the N1 in plant part compounds is the name of the plant. These can be understood in terms of paradigms based either on the N1, as in example (105), or on the N2, as in example (106). In (105), the paradigm is clearly expressing the various parts that make up the whole, the plant. In (106), on the other hand, the N2-based paradigm—here a list of different types of leaves—closely resembles the productive compounds formed from free nouns given in (16-20) above, expressing various types of fish-poison plant, etc. In this type of paradigm, the whole-part relationship of the leaf (or other part) to the plant is also a property-entity relationship, relating to the identity of the leaf (i.e. as having a certain quality, defined by the plant).⁷⁰ As discussed in §5.1, both the expression of whole-part relationships and property-entity relationships is typical of the Hup compound construction in general.

- (105) Parts of a banana tree
- | | |
|------------------|---|
| <i>pɪhɪ</i> | 'banana' (fruit or whole plant) |
| <i>pɪhɪ=g'æʔ</i> | 'banana leaf' |
| <i>pɪhɪ=teg</i> | 'banana tree' |
| <i>pɪhɪ=b'ak</i> | 'clump of bananas' |
| <i>pɪhɪ=tat</i> | 'banana fruit' |
| <i>pɪhɪ=tih</i> | 'banana root' |
| <i>pɪhɪ=b'ək</i> | 'banana peel/skin ~bark of tree' |
| <i>pɪhɪ=hɔb</i> | 'banana flower hollow' (stiff curled part that grows behind flower) |

⁷⁰ Virtually any whole-part relationship can likewise be cast as a property-entity relationship; however, conceiving of the relationship in this way is an especially important feature of plant parts, as discussed below.

(106) Different kinds of leaves

<i>cug'æʔ</i>	'leaf' (generic)
<i>pʰhʃ=g'æʔ</i>	'banana leaf'
<i>b'ab'ǎʔ=g'æʔ</i>	'embauba leaf'
<i>pũʔũk=g'æʔ</i>	'coca leaf'
<i>púp=g'æʔ</i>	'paxiuba leaf'
<i>pehé=g'æʔ</i>	'palm (sp.) leaf'

While expression of a whole-part relationship as inalienable possession makes sense from a theoretical point of view, the paradigm in (105) that foregrounds this relationship (different parts of a single plant) is actually less central in Hup life than is that in (106), which foregrounds the identity of different kinds of leaves. The identity of a leaf, stick, seed, etc. is a frequent topic of discussion in the daily life of the Hupd'əh, since these are the raw materials that the Hupd'əh use to manufacture the things they need, as can be seen from the examples in (107-9). This is consistent with the proposal offered in §5.1.2.2 above, that the stress pattern of these productive types of compounds reflects the speaker's attention to the foregrounded component.

- (107) *nihuʔ, b'ʃʔ=tat, naháw=tat, núp g'ob=tat... híd d'oʔ-píd-ʃh*
 all gourd=fruit macucú=fruit this tucumá=fruit they take-DIST-DECL
 'All (kinds), gourds, mucucú-fruit, these tucumá-fruit... they took them all.'
 (H.18)

- (108) *yúp=mah yǎh=g'æʔ d'óʔ-ʔay-áh*
 that=REP vacú=leaf take-VENT-DECL
 'Then, it's said, he went and got the vacú leaf.' (LG.C.13)

- (109) *himuñ=həb d'oʔ-d'əh-ʔáy hám!*
 paxiuba=hollow take-send-VENT.IMP go.IMP
 'Go fetch a paxiuba-palm hollow!' (KTW.100)

To refer to the entire plant, only the free lexeme (N1) is used, as in example (110).

The simple plant name may also be used by itself in reference to the fruit, with the optional addition of the bound form =*tat*.

- (110) *ʔayũp p̥h̥h̥=mæh=hín... canaʔ=mæh=hín, ya ʔáp=yiʔ ʔh̥h̥h̥-h̥h̥*
 one banana=DIM=also pineapple=DIM=also all.that=TEL 1pl.POSS-DECL
 ‘One little banana (plant)... a little pineapple (plant), that’s all that’s ours.’ (i.e. that’s all we plant) (P.Sp.100)

5.4.4. Other obligatorily bound nouns

There are a few other obligatorily bound nouns in Hup, in addition to plant parts, human terms, and kin terms. These include eggs, jars/hollow items, holes belonging to insects, rivers, and a generic term for swarming insects, as listed in (111) (and illustrated in example 112). Most of these occur in paradigms like those in (106) above, where the bound N2 can be modified by a range of N1s.

- (111) =*típ* ‘egg’ (*cadakaʔ=típ* ‘chicken egg’)
 =*tód* ‘can, jar, hollow thing’ (*ʔáwkow=tód* ‘alcohol bottle’)
 =*nɔ* ‘hole in ground (insects)’ (*huđ=nɔ* ‘sauva ant hole’)
 ‘mouth (of stream)’ (*yíyíw deh=nɔ* ‘mouth of Yíyíw Creek’)
 =*mí* ‘stream, river’ (*deh=mí* ‘stream, river’⁷¹)
 ciwib-nɔwá=mí ‘Bacaba-Sprout-Creek’
 =*ʔáw* ‘swarming insect’ (*yɔʔ=ʔáw* ‘(one) wasp’;
 cɔw=ʔáw ‘(one) biting ant (sp.)’)
 (refers to a single member of a species that typically occurs in groups)

- (112) *p̥ĩŋ deh=nɔ pótʔah... wəhəd=d’əh j’ɔm-b’eh-ʔeʔ-ní-p*
 cucura water=mouth above old.man=PL swim-cross.water-PERF-INFR2-DEP
 ‘Above the mouth of Cucura Igarapé... the Ancestors swam across.’ (H.39)

⁷¹ This bound form is usually found in the semi-lexicalized compound *deh=mí*, with stressed N2 (a non-standard pattern for bound nouns).

Example (113) illustrates the obligatorily bound nature of a noun like ‘egg’, in comparison to a noun like ‘fish’.

- (113) a) *tɬh=típ* (**típ*) *ʔāh d’o ʔ-té-ay-áh*
 3sg=egg 1sg take-FUT-INCH-DECL
 ‘I’m going to get the egg.’ (EL)
- b) *hɬ̥p* (**tɬh=hɬ̥p*) *ʔāh d’o ʔ-té-ay-áh*
 fish 1sg take-FUT-INCH-DECL
 ‘I’m going to get the fish.’ (EL)

Terms for the more abstract parts of a whole (spatial or temporal) are also obligatorily bound in Hup, as listed in (114) and in examples (115-17).

- (114) (*tɬh*)=*g’ætd’oḥ* ‘its end’
 (*tɬh*)=*cúm* ‘its beginning’
 (*tɬh*)=*pəw* ‘its edge’
 (*tɬh*)=*tú-an* ‘its depth, bottom (+DIR)’
- (115) *yɬ̥=mah tɬh-añ tɬh g’əç-d’o ʔ-póg=b’ay-áh... tɬnɬh mumuy=cúm*
 then=REP 3sg-OBJ 3sg bite-take-EMPH1=AGAIN-DECL 3sg.POSS arm=beginning
 ‘Then it (alligator) bit him, on his **upper arm**, it’s said’ (M.BY.96)
- (116) *hɬ̥pkəḥ d’o ʔ-d’ak-yóʔ pɬd... hɬd d’o ʔ-g’et-hám-áh, ʔaté tɬh=tú-an*
 fish-pull take-stick.against-SEQ DIST 3pl take-stand-go-DECL until 3sg=bottom-DIR
 ‘Having set out all the fishhooks... they go along setting them, until they run out (lit. until **the bottom**).’ (P.F.125)
- (117) *tɬh=cúm tɬh biʔ-pɬd-ɬh, núp hǎwíg tɬh bɬʔ-ɬw-ay*
 3sg=beginning 3sg make-DIST-DECL this heart 3sg make-FLR-INCH
 ‘**First** he made (them), he made our hearts.’ (H.60)

5.4.5. Body parts: both bound and free realizations

Body parts provide an intriguing twist on the question of inalienable possession in Hup.

Contrary to the implicational hierarchy suggested by Nichols (1988: 572), whereby kin

terms and body parts are cross-linguistically the most basic members of the class of ‘inalienable’ entities, body parts in Hup are treated as more ‘alienable’ than are kin terms, plant parts, human nouns, and the other entities listed above. Moreover, it is paradoxically *human* body parts that do not participate in the bound construction, while animal body parts are normally treated as bound. This is exactly contrary to the cross-linguistically typical patterning of possession, where human body parts—which typically stay on their ‘possessors’—are treated as more inalienable than animal body parts, which are routinely physically separated when butchering game and when encountered in the stewpot (cf. Chappell and McGregor 1995; compare e.g. Paamese, Crowley 1995).

A. Game animal body parts.

A search of my Hup text corpus revealed game animal body parts to be consistently bound, as illustrated in examples (118-21). In elicitation contexts, consultants judge elicitation phrases involving possession of animal body parts by a morphologically alienable possessor to be grammatical, but these are almost never a first choice. In the examples below, consultants noted that were ‘feather’ or ‘hair’ alienably possessed, this would imply that the part came from a *specific* individual animal; compare the fact that obligatorily bound nouns such as kin terms may occasionally be preceded by an alienable possessor (which may indicate that the possessor is more salient; §5.4.1). The body part nouns usually take the N1 stress pattern (when N1 is a full lexical noun), but this is considerably more variable than it is with the other bound nouns.

- (118) *tɪh=tok* ‘its belly’ (gutting fish) (I-M.25)
mæt=b’ɔk ‘cutia-skin’ (OS)
hɔ̌p=tok ‘fish-stomach’ (OS)
tɪh=təg cáʔ ‘its chin’ (lit. its chin-box) (when stringing fish) (I-M.24)
- (119) *tɪh=toj* *tɪh ʔún’-uɪ́*, *búʔ=toj-oh*
 3sg=nose 3sg suck-DECL anteater=nose-DECL
 ‘She sucked its nose, the anteater’s nose.’ (P-BWB.2)
- (120) *yaʔk=páť* *pǎ-ay* *nutǎh-ǎh*
 macaw=feather NEG:EX-INCH today-DECL
 ‘There are no more macaw feathers these days.’ (Md.121)
- (121) *nút tuǵ=pát* *wób-óh*
 here howler.monkey=hair set.on-DECL
 ‘Here howler-monkey fur would be placed.’ (Md.120)

B. Human body parts

A text search revealed human body parts to be consistently alienably possessed—the exact opposite of animal body parts—as illustrated in (122-25).⁷² In this case, consultants judge their expression as inalienably possessed to be ungrammatical.

- (122) *tínɪh núh* ‘her head’ (T-C.7)
tínɪh pǎť ‘her hair’ (B-Cv.1.1)
- (123) *ʔamɪh tok yúp hǎy-ǎp*
 2sg.POSS belly that wide-DEP
 ‘Your belly is this wide!’ (TD.Cv.102)
- (124) *tínɪh mumuý-an d’oʔ-cud-yóʔ*
 3sg.POSS arm-DIR take-be.inside-SEQ
 ‘Having dressed his arm (with bark)...’ (A-WT.3)

⁷² Note that most body parts terms can refer to human and animal body parts alike; there are very few actual lexical differences. Thus the syntax of the construction can actually be said to carry lexical information relating to the type of body part involved.

- (125) *tɪnɪh tɪb tɪh yɔyɔp-j'ap-tuʔ-d'əh-hám=b'ay-áh*
 3sg.POSS penis 3sg rub-break.off-immersed-go=AGAIN-DECL
 'His penis, it rubbed and fell off into the water and went away' (LG-C.17)

That the body part is clearly not bound is also revealed by the fact it can occur with no possessor at all, as illustrated by example (126). Compare this to the occasional examples of obligatorily bound nouns (especially kin terms) that can nevertheless be preceded by an alienable possessor.

- (126) *wæd-j'ap-y'æt-yiʔ-píd-ɪh, núh, núh b'ɣiʔ*
 eat-divide-leave-TEL-DIST-DECL head head only
 'He ate up all that and left the head, only the head.' (H.txt)

At least two apparent exceptions to the rule of alienably possessed human body parts have turned up in my corpus, but all involve *disembodied* parts. Example (127) refers to a human head left over by feasting jaguars (but compare the non-bound example of the same in (126)). Example (128) was uttered regarding a 'disembodied' skin, as a joke to a small child who had just had his insides 'sucked out' by a teasing adult. In example (129), first the body part 'lower leg' is stated with no possessor at all (compare 126 above), and then is referred to again by the bound construction 'human foot'.

- (127) *tɪh=núh, híd b'uy-tuʔ-ní-h, húp núh*
 3sg=head 3sg throw-immersed-INFR2-DECL person head
 'They (jaguars) threw the head into the water, the person's head.' (H.70)

- (128) *tɪh=b'ɬ b'ɣiʔ-ay !*
 3sg=skin only-INCH
 'Only his skin is left!' (OS)

- (129) *cɪʔ w'aʔw'aʔ-kæd-cak-yiʔ-pó-ay, húp=j'ib=pog !*
 lower.leg stick.out-pass-climb-TEL-EMPH1-INCH human=foot=EMPH1
 'A lower leg was poking out (of the pot), a human foot!' (P.BY.87)

C. Sentient, mythical animal beings' body parts

While the body parts of spirit entities are treated like those of humans in my corpus, the treatment of mythical animals' body parts as alienably or inalienably possessed in Hup texts is crucially variable. This corresponds to the identity of these beings in Hup myth as conceptually midway between animal and human. This variation is tellingly illustrated by the two pairs of examples from the same texts, given in examples (130-31). Examples (130a) and (b) are even taken from the same paragraph, and refer to the same participants, with no particular contextual difference. It is likely that this variation correlates with the degree to which the narrator is currently thinking of the animal as a human-like and agent-like entity, with special salience relative to the body part in question.

(130) a) Inalienable:

tɪh=hatɪpwɪg *yoyo-yæt-pó-t=maám*
 3sg=testicles dangle-lie-EMPH1-OBL=REP.DST.CNTR
 'There where his (Tapir's) testicles were lying, dangling' (JA)

b) Alienable:

wid-ham-kéy-éy=maám, *tɪnɪh* *hatɪpwɪg-ɪ*
 arrive-go-see-DYNM=REP.DST.CNTR 3sg.POSS testicles-OBL
 '(Turtle) came looking at his (Tapir's) testicles' (JA)

(131) a) Inalienable:

tɪh=yɔɪmɔy *máh* *tɪh* *wók-ay-áh*
 3sg=anus near 3sg rub-INCH-DECL
 'She rubbed (the hot pepper) around his (Tapir's) anus.' (H.TY.80)

b) Alienable:

tɪh *yok-d'əh-ham-yæh-kamí=mah* *tɪnɪh* *yɔɪmɔy...*
 3sg poke-send-go-FRUST-moment.of=REP 3sg.POSS anus
 'At the moment that she poked his (Tapir's) anus (in vain).' (H.TY.79)

Example (132) appears to combine a clausal possession strategy (third person plural affected participant as direct object [*hĩd-ǎñ*]) with a bound construction involving the default third person singular pronoun.

- (132) *hĩd-ǎñ tĩh=ké cĩy'-huĩ?-cĩw-ĩy=cud=mah hĩd=hin-ĩh*
 3pl-OBJ 3sg=wing poke-finish-COMPL-DYNM=INFR=REP 3pl=also-DECL
 'They also (the birds) had already stuck their wings full (of feathers).' (I.M)

I return to the question of why human and animal body parts should be treated in this typologically backwards-seeming way in §5.5.D below.

5.5. Making sense of the bound noun construction

Why should such a heterogeneous group of phenomena—kin terms, humans, plant parts, game animal body parts, and a few other entities—be expressed by a single syntactic construction type? And why should human body parts not be encoded in the same way?

Taking a step back, we can ask what the bound construction has in common with the nominal compound construction in general (§5.1). Syntactically, these are clearly equivalent; both involve a N1 N2 combination in which N2 is the head noun, N1 the modifier or possessor. I propose that the formal and constructional similarity among all of these forms in fact reflects a functional unity: all of the Hup compound constructions have to do with the individuation of the head noun out of the indeterminate mass of potential referents.

In the case of the noun compounds composed of free lexemes, this individuation is signaled via a possessive relationship, a whole-part relationship, or qualification by a certain property; in the case of the bound nouns discussed above, the relationship

between them is likewise that of possessor-possessed or whole-part (or more loosely, an inherent association between two entities). The set of bound nouns in Hup thus bears a resemblance to the class of inalienable nouns in the Australian language Mayali; Evans (1995) describes these as characterized by the existence of some other entity, a ‘whole’ to which they belong or are associated. In Hup, these relationships between the components of the compound construction all entail that the N2 or head of the compound is defined and specified by the N1, or modifier. The functional relationship between this individuating function and the more general phenomena of definiteness and specification is illustrated by the use of forms like *tʰh=ʔāy*, *tʰh=ʔh* (3sg-FEM ‘that woman’; 3sg-MSC ‘that man’) in examples (96-97) above.

Furthermore, I argue that this individuating function of the bound construction in Hup applies specifically in the context of human interaction. While Chappell and McGregor (1995: 8) propose a cross-linguistic characterization of the inalienable construction as a function of the ‘personal domain’, this is not in itself enough to explain the patterning of the bound construction in Hup, since human body parts are not included in the set. Finally (in keeping with Chappell and McGregor 1995), a full account of the membership of the set of bound nouns in Hup must appeal to the socio-cultural context of its speakers.

Below, each of the subsets of obligatorily bound nouns is considered in turn, vis-à-vis the proposal that their participation in the bound construction is determined by their association with another entity, and that this in turn relates to their individuation relative to a set of potential referents.

A) Kin terms

In the case of kin terms, the inherent association between the ‘possessor’ and the ‘possessed’ is obvious. In addition, the characterization of one particular person (N2) by his/her relationship to another individuates this person from within the set of people who are characterized by the corresponding relationship to others. For example, ‘his father’ selects one particular referent from the set of all fathers.

B) Plant parts

For plant parts, the head of the compound (N2) is clearly involved in a whole-part relationship with the entity specified by N1. At the same time, the part is defined and identified by the whole, which thereby individuates the part from the mass of other potential referents that are equivalent parts. In other words, one picks out the banana leaf from the set of leaves in general. Other entities, such as eggs, are similarly specified by reference to the bird that produced them (i.e. the bird that they are both inherently associated with and defined by). As noted above, the most common paradigmatic associations of compounds involving bound plant parts (and most of the miscellaneous entities) reflect a higher importance of the identity function (i.e. type of leaf, etc.) vis-à-vis the whole-part function (i.e. part of plant) in Hup life. This has to do with the dynamics of human interaction with plant parts; in the rain forest environment of the Hupd’əh, plant parts provide the primary raw materials for making almost all the necessities of life.

C) Human terms

The inclusion of the set of human nouns (e.g. ‘male’, ‘female’, ‘child’, ‘shaman’; with the exception of ‘(Hup) person’ and ‘infant’; also compare ‘priest’ above) in the obligatorily bound class is perhaps the most difficult to explain. Why should human nouns be lexically specified as bound, just like parts of a whole and possessed or inherently associated entities? I stress that this is essentially a linguistic problem: Should we consider the participation of human nouns in this construction type to be a formally ad hoc feature of Hup?

I suggest that it is not ad hoc—there is in fact a semantic and cultural basis for the participation of human nouns in this formal set. All the other nouns that occur in these constructions involve the narrowing-down or individuation of a referent from an indeterminate mass of possible referents, defined in terms of their inherent association with some other entity or whole. Humans, arguably, can be perceived in this way too: a human being in Hup culture is first and foremost part of a social group—whether it be the set of River Indians, Hup Indians, members of the Toucan’s Beak Clan, or the inhabitants of a particular house.

The fact that Hup grammar treats human beings as associated *by default* makes sense in the Hup cultural context. The Hupd’əh have a very different perspective on the role of the individual relative to the social group than that found in contemporary ‘Standard Average European’ culture. The Hupd’əh are almost never alone, and it is in fact considered socially peculiar or suspicious if a person spends much time alone

without a good reason for it. In my experience, when a family goes on a trek and leaves the grandmother behind, she never stays on alone in the house by herself; instead she moves her hammock to another relative's house—which may only be ten feet away, already crowded with perhaps a dozen people in a tiny space—and she stays there until her family returns, while their house stands empty. For the Hupd'əh, the human referent is obligatorily conceived as a part of a larger relational whole, the social group, which at the same time defines and individuates the referent.

Such a perception of the individual as first and foremost a member of the group is quite distinct from the atomized view of the individual that members of Standard Average European culture take for granted, but it is hardly unique to the Hupd'əh; many cultures around the world have been reported to take this perspective (e.g. Barnouw 1963, Schweder and Bourne 1984). However, Hup may be unique in encoding this cultural fact into its grammar of inalienability.

One further piece of evidence in support of this explanation for the bound nature of human nouns comes from the only bound noun that relates to the animal world: =ʔǎw 'swarming insect'. As discussed in §5.4.4, this form is used to indicate an *individual* insect that typically occurs in a swarm or colony, such as wasps, various kinds of ants, etc., as in yɔʔ=ʔǎw 'one individual wasp'. Here, the form =ʔǎw clearly has an individuating function of picking one referent out of a group, and is both structurally and semantically parallel to the human bound nouns.

D) Body parts

Body parts present a different puzzle. Why should animal body parts be inalienably possessed, while human body parts are alienable?

The inclusion of animal body parts in the class of obligatorily bound nouns is easily explained, and is consistent with the Hup system of conceptualization vis-à-vis the other bound noun constructions. Like plant parts, animal body parts are associated with a whole. Also like plant parts, they are likely to be characterized by Hup speakers in terms of a paradigmatic set-like relationship, vis-à-vis other equivalent referents from which they must be individuated. In other words, Hup speakers often choose among sets of potential materials to meet a specific requirement for personal adornment or use, such as a jaguar tooth, monkey tooth, and dog tooth, or a parrot feather, macaw feather, and buzzard feather—in the same way that they select among a palm leaf, banana leaf, or a coca leaf for their cooking, wrapping, thatching, or eating needs. Similarly, one may encounter a range of legs in one's stewpot, which may be identified as paca legs, sloth legs, etc.

Human body parts, on the other hand—while undoubtedly an inherently associated part of a whole—are not often in need of individuation from a set of equivalent referents. While Hup speakers often refer to animal body parts in terms of sets of teeth, feathers, or fur that are all potential referents vis-à-vis some purpose or task, they have little need to talk about the teeth or hair of different people in this way.

This lack of a need to individuate and define body parts arises precisely *because* they are always attached to their 'possessor', and not available as objects of manipulation (other than by the possessor him/herself). Moreover, it is the human possessor who is

usually conceived as the primary participant or most salient referent, not his/her body part. This is not really compatible with the bound construction, in which the N1 (here, the human possessor) is the modifier of the N2 head and therefore is relatively backgrounded. Thus the alienable construction with the full possessive pronoun is iconic in that it reflects the greater importance of the human possessor as distinct from the body part—though it is not iconic in the sense conventional to inalienable possession, i.e. the sense of reducing the conceptual distance between the possessor and the entity. The same rationale—salience of the possessor rather than the possessum—is probably also behind the occasional possession of kin terms with alienable possessor forms, as discussed in §5.4.1.

This formal separation of the possessor and the possessed body part is also reflected in the clausal possession (‘possessor raising’) strategy in Hup, as discussed in §5.3.1, which likewise appears to be used exclusively with human (or sentient, mythical animal) body parts, and profiles the ‘possessor’ as the most significantly affected participant. As noted above, the Hup case provides additional evidence for the argument presented by Mithun (2001) that clausal possession relates crucially to the salience of the affected participant, rather than to the phenomenon of inalienable possession. A comparable phenomenon is found in German, which need not state a human body-part ‘possessor’ at all. Even English has a possession strategy comparable to that of Hup, in that it can use compounding (the functional equivalent of inalienable possession) in reference to animal body parts (a dog tooth; a dog’s tooth), but not usually in reference to human body parts (*?a boy tooth; a boy’s tooth)—except for ‘human tooth’ and ‘baby tooth’, which are also acceptable as such in Hup. In other words, Hup grammar encodes

a cross-linguistically common fact about our interaction with the world: a possessed animal body part (e.g. ‘dog’s tooth’) typically tells us about the *kind* of tooth, rather than about the individual canine possessor—whereas a possessed human body part (‘boy’s tooth’) tells us primarily about the tooth’s owner, and not about the kind of tooth.

In spite of the fact that the Hup strategy thus appears to be motivated, we are still left with the question of why Hup privileges this realization of inalienability, while so many languages of the world approach the same phenomenon from a different perspective. I suggest that we can consider these grammatical choices as meeting language-specific functional constraints, comparable to the ranked phonological constraints proposed by Optimality Theory. In other words, Hup ranks a focus on highly animate (i.e. human) entities above the iconic encoding of inherent possession. The distinct treatment of human entities and human body parts with respect to alienability in Hup is in keeping with the special focus on humanness found in Hup grammar generally; compare the sensitivity of human referents to object and number marking (see §4.3.1.2).

5.5.1. Non-obligatorily bound nouns and the bound construction

The bound construction is not limited to the class of lexically specified bound nouns discussed above. Virtually any noun can occur in a bound construction; that is, it can optionally assume the same syntax as the obligatorily bound nouns. In other words, inalienability or bound-ness in Hup depends on how a phenomenon is construed, as well as being a lexical property of nouns.⁷³ This flexibility according to construal provides

⁷³ Such flexibility is not unique to Hup, but occurs in a number of languages (cf. Chappell and McGregor 1995).

additional evidence for the claim that the bound construction has to do with an inherent association between two entities.

In general, nouns appear bound or inalienably possessed when they are understood to be part of a whole, as in (133-34).

(133) Making a toy top:

yí-níh-yóʔ, *tíh=cíʔ* *híd* *bíʔ-íh*
 that.ITG-be.like-SEQ 3sg=stick 3pl make-DECL
 ‘Then, they made **its stick**.’ (H.txt)

(134) Making a fishing pole:

tíh=tíh *d’oʔ-d’ak-yóʔ*, *tíh=tíh* *d’oʔ-d’ák*,
 3sg=string take-stick.against-SEQ 3sg=tooth take-stick.against
 ‘Having put on **its string**, put on **its hook**,

yí-níh-yóʔ *tíh=paçtuđ* *d’oʔ-d’ák* *ní-íy*
 that.ITG-be.like-SEQ 3sg=sinker take-stick.against be-DYNM
 after this **its sinker** gets put on.’ (P.F.123)

The bound form can also refer to an inherently associated, possessor-like entity, as in (135), and it may have a specific meaning, distinct from its meaning as a free lexeme, as in (136). Finally, the bound form may itself be a compound formed from a verb stem and an associated noun, as in (137) (see §18.2.3).

(135) *tíh=íuç* ‘its sack’ (referring to the thing that belongs inside; compare
 alienably possessed: *tíh=íh íuç* ‘his sack’, referring to a human owner)

(136) *tíh=déh* ‘sap, juice of’ (unbound= ‘water’)
tíh=cíh ‘sliver of’ (unbound= ‘grass’)
tíh=mǿy ‘hole of an animal, insect’ usually in ground (unbound: ‘house’)

(137) *núp* *cǿhdeh* *wag*, *yǿk* *cǿhdeh*, *tíh=hám=wag*
 this rainy.season day otter rainy.season 3sg=go=day
 ‘This rainy season time, the Otter Rain, the time when it goes (lit. ‘its going-days’) (across the sky; referring to a constellation) (H.51)

5.5.2. Exceptions to obligatory participation in the bound construction

Further evidence that individuation of a referent from a mass is the basic function of the bound construction comes from the systematic exceptions to the phenomenon, whereby nouns that are lexically defined as obligatorily bound may nonetheless appear unbound.

An unbound plural form is acceptable (though not obligatory) with human nouns and kinship terms, as in (138-40) (although plural plant parts and some other plural nouns, such as eggs, still require a preceding N1). In these cases, generic plurality intrinsically precludes individuation from a mass.⁷⁴

- (138) *dóʔ-d'əh* 'children'
 ʔǎy-d'əh 'women'
 tōg-d'əh 'daughters in general'

- (139) *dóʔ=d'əh* *híd* *pəhɔ-tég*
 child=PL 3pl grow.plump-PURP
 'In order for the children to grow plump and healthy.' (H.32)

- (140) *dəb*, *pæxəw=d'əh-əh!*
 many adolescent.boy=PL-DECL
 'There are lots of boys (there)!' (B.Cv.131)

Similarly, a completely generic (singular) referent is also typically expressed as unbound, as in the compound *təh yud* 'uterus' (lit. 'offspring clothes'), and example

- (141) (note that the bound/ inalienably possessed form *tih=təh ʔin* in this expression would mean 'his (own) wife').

- (141) *wǎʔ* *təh ʔin* *túk-úy=mah*
 buzzard child.mother want-DYNM=REP
 'Buzzard wants **a wife**, it's said.' (OS)

⁷⁴ When a preceding N1 is present with a plural form, it is generally singling out a specific group of referents vis-à-vis a larger group; e.g. 'those children' as opposed to 'children in general'.

For most bound nouns (though with the exception of human nouns), negative existence expressions also render the singular unbound form grammatical (and obligatory in the case of kin terms), as in (142-43).

- (142) *tip pǎ* ‘no eggs’
 g’æt pǎ ‘no leaves’

- (143) *ʔp pǎ=mæh=d’əh hid ʔəh=yiʔ-ty*
 father NEG:EX=DIM=PL 3pl sleep-TEL-DYNM
 ‘The little fatherless ones fell asleep.’ (I.M.3)

5.6. Bound nouns and semantic extension: noun ‘classification’

As we have seen, obligatorily bound nouns relating to plant parts, eggs, and other entities tend to occur in paradigmatic sets, and individuate a referent out of a mass of potential referents. As such, particularly in the case of plant parts, the bound construction typically serves a classifying function—types of leaves, types of wood, types of feathers, etc. The bound N1 and N2 correspond either to a whole and its parts, or to two entities in a possessor-possessed or otherwise inherently associated relationship.

In other cases, the same bound construction, with the same set of bound nouns—most relating to plant parts—does *not* indicate a possessor-possessed or whole-part relationship between two entities, but instead serves merely to relate a property or other identifying feature to an entity (i.e. the third type of relationship that is typically encoded in the more general compound construction; §5.1). The examples of this subtype of bound noun construction all involve some level of semantic extension (which again is a

typical property of noun compounds generally; see §5.1.1), usually of the head noun (N2).

These extended bound constructions can be characterized according to two types of extension: (a) extension involving the semantic type of the construction as a whole (from whole-part to property-entity) and (b) extension involving the N2 (from a literal part of a plant to an entity with some abstract semantic feature characteristic of that plant part). Like the non-extended plant-part compounds, these constructions also have to do with the classification of types of entities—but according to a distinct classification strategy, resembling that found in noun classification systems in other languages.

As Grinevald (2000: 54) has observed, a functional-typological perspective allows us to recognize the various grammatical systems encountered in the world's languages, such as noun classification, “as more or less prototypical, and at various stages of development and disintegration”. Accordingly, the following discussion will consider the arguments for characterizing the extended bound constructions in Hup as an incipient system of nominal classification, and as an example of how a noun classification system may arise in a language (see also Epps, to appear-b). For reasons that will become clear, I will examine names for native objects and for culturally foreign objects separately.

5.6.1. Semantically extended bound constructions and names for native items

Relatively few native items have names arising from the semantic extension of a bound construction; the list of examples below is close to exhaustive (in my corpus). In these compounds, the bound forms involved are almost always plant parts, and the degree of semantic extension varies widely.

One type of extended compound involves the use of the plant-part relationship (conventionally N1:whole—N2:part) to produce names for certain types of plants, but where the second component (‘leaf’) is not a part of N1 (example 144). In these cases, ‘leaf’ has been metonymically extended to refer to the plant as a whole.⁷⁵

These compounds are lexically specific, yet still correspond in some sense to the plant-part paradigms in (105-6) above, in that they are primarily designations for types of leaves. However, instead of N1 being the whole (e.g. banana plant) and N2 the part (e.g. leaf of plant), here N1 is some other noun that is simply associated with the plant and identifies it in terms of a property-entity relationship (e.g. leaf for shelter). These compounds also maintain the productive-type stress pattern of the other plant-part constructions (primary stress on N1).

- (144) *tʃp=g’æt* ‘caraná’ (lit. ‘shelter-leaf’; used for thatching houses)
mɔhʃy=g’æt ‘deer-leaf’ (caruru or pokeweed; edible leaves)
yæʃʔ=g’æt ‘roast-leaf’ (use unknown)
tahcɛb=g’æt ‘tick-leaf’ (small thick leaves that resemble ticks, used for treating insect stings)

While the examples in (144) involve metonymic extension of N2, most such semantic extensions involve metaphor, as in (145).

- (145) *tɪh=b’ák* ‘clump of fruits’, extended to:
 ‘wasp or termite nest’ (i.e. both are a lump clinging to tree)

Metaphorical semantic extensions are also used for the names of certain manufactured items. Some of these are only marginally semantically extended. For example, the use of ‘tree, stick’ in (146a) is based on the fact that canoes are made from

⁷⁵ But note that ‘deer-leaf’ (caruru or pokeweed) is calqued directly from Tukano (according to my bilingual consultants). It is possible that this particular kind of extension in Hup may have begun with calqued forms and spread by analogy.

- The examples in (147) are further extended semantically in an important way.

(147) *huř=teg* ‘cigar’ (tobacco=STICK)
ták=tat ‘rubber ball’ (rubber=FRUIT) (made from native rubber)

Many of the extended compound forms combine a verb stem and a bound noun, as in example (148). This is a productive but much less common feature of (non-bound) noun compounds, as we saw in §5.1 (see examples 7-9). Since verb stems need no additional morphology to create a derived nominal, but can simply stand alone without tense-aspect inflection, such compounds can be considered to involve two nominal components. Note that while the examples in (148) involve a property-entity rather than a whole-part relationship, they again involve little or no semantic extension of the N2; bows and paddles are carved from split lengths of wood, and native flutes are made from

hollow sticks (while flutes made from deer leg bones have a different, non-compound name, *ʔed'*).

- | | | | |
|-------|------------------|-----------------------------|----------|
| (148) | <i>g'íg=b'ah</i> | (arrow-shooting=split.wood) | 'bow' |
| | <i>hæy'=b'ah</i> | (paddle=split.wood) | 'paddle' |
| | <i>pĩh=teg</i> | (play.flute=stick) | 'flute' |

Among the names of native items, the most productive realm for semantic extensions of N2 nouns is that of body parts, as in (149); most of these are highly lexicalized.

- | | | | |
|-------|-----------------------|-----------------------------|--|
| (149) | <i>[cíʔ-deh]-tod'</i> | 'bladder' | ([urinate-water]-container) |
| | <i>hohoʔ-b'ah</i> | 'rib' | (?-split.wood) |
| | <i>cuj-tĩh</i> | 'spine' | (diarrhea?-root) |
| | <i>cĩʔ-tat</i> | 'round part of calf of leg' | (calf-fruit) |
| | <i>tok-tĩ</i> | 'intestines' | (belly-vine/string) |
| | <i>hatĩp-wíg</i> | 'testicles' | (<i>wíg</i> 'seed'; maybe <i>tip</i> 'egg') |
| | <i>wɔn'-dæ'</i> | 'knee' | (mingau?-tuber) |
| | etc. | | |

A final productive domain for semantic extension involves the bound form =*tég* 'stick', which (unlike any other bound form) can be used in the purely generic sense of 'thing'. While this fully abstract use of =*tég* occurs in relatively few names for native manufactured items (as opposed to new cultural items, see below), it is found in certain compounds referring to abstract concepts, always in conjunction with a verb stem (example 150).

- | | | | |
|-------|----------------------|---------------------------------|--------------------------|
| (150) | <i>nĩ=teg</i> | 'place to live, way of living' | (<i>ni-</i> 'be') |
| | <i>hup-hipãh=teg</i> | 'consciousness, self-awareness' | (<i>hup-</i> Reflexive; |
| | | (lit. 'self-knowing thing') | <i>hipãh-</i> 'know') |

5.6.2. Semantically extended bound constructions and names of newly introduced cultural items

In contrast to the quite limited use of semantically extended compounds for names of native items, their use with recently introduced cultural items is highly productive. The list of examples offered in this section is far from exhaustive, and new names are constantly being coined. Like the examples in §5.6.1 above, however, virtually all the semantically extended N2 forms in these constructions are terms for plant parts.

The bound plant part terms that occur as N2s in these compounds are only a subset of the bound plant-part terms listed in (101) above. They comprise a limited set of recurring elements, which contribute a more or less consistent semantics and organize their referents on a conventionalized basis, based primarily on shape. In this respect, these ‘bound nouns’ resemble noun classifiers.

A comprehensive list of the plant parts that undergo metaphorical extensions, together with their core semantic features, is given in (151).

- (151) =*tég* ‘tree, **long thin shaft; thing in general**’
 =*b’ǎh* ‘split wood; **flat thing**’
 =*tát* ‘fruit; **round thing**’
 =*b’ǎk* ‘bark, skin, eggshell; **cooking pot or dish**’
 =*wǐg* ‘seed, small individual-seed fruit; **any small roundish thing**’
 =*g’ǎt* ‘leaf; **paper, book**’
 =*hǎb* ‘concave hollow thing from certain trees; **any shallow receptacle** (with the exception of dishes)’
 =*tǎt* ‘vine; string, cord’

Example (152) lists some examples of such semantically extended compounds involving the bound plant part ‘leaf’. Where the more conventional plant part compounds classify various types of leaves, these compounds classify various types of

papers, books, or ‘leaflets’. Both verb stems and nouns are used as N1s. The high productivity of this construction is illustrated by the form *ǎrcu-g’æt* ‘bear book’, which was used in reference to my magazine of animals of Virginia; few if any of the Hupd’əh had ever heard of a bear before seeing this magazine.

(152) =*g’æt*: Kinds of leaves → kinds of books.

<i>cug’ǎ</i>	‘book, paper’	(also generic ‘leaf’; possibly from <i>j’ũg=g’æt</i> ‘forest leaf’)
<i>b’oy=g’æt</i>	‘study book’	(<i>b’oy-</i> ‘learn/ teach’)
<i>hĩʔ=g’æt</i>	‘writing/notebook’	(<i>hĩʔ-</i> ‘write’)
<i>cĩy’=g’æt</i>	‘vaccination leaflet’	(<i>cĩy’-</i> ‘poke in, vaccinate’)
<i>hup ʔĩd=g’æt</i>	‘Hup-language book’	(my notebook on Hup)
<i>pĩb=g’æt</i>	‘official documents’	(<i>pĩb</i> ‘strong; food supplies’)
<i>bĩʔ=g’æt</i>	‘rat book’	(for my booklet of animal pictures)
<i>ǎrcu=g’æt</i>	‘bear book’	(for my magazine with pictures of bears; from Portuguese <i>urso</i> ‘bear’)

(153) *cug’ǎ tĩh d’əh-ham-túk=b’ay-áh*
 paper 3sg send-go-want=AGAIN-DECL
 ‘She’s going to send the paper again.’ (B.Cv.87)

Examples (154-55) list semantically extended compounds formed with the bound plant terms ‘split wood’, generalized to flat things, and ‘fruit’, generalized to round things. As these examples show, a high proportion of the N1s in such compounds are borrowed Portuguese lexical items. Note that this system lends itself to even finer layers of classification, by which individual cassette tapes can be distinguished.

(154) =*b’ah*: Split wood → flat things

<i>píta=b’ah</i> ,	‘cassette tape’	(Port. <i>fita</i>)
<i>dabanáw=b’ah</i>	‘Lambadão tape’	(Brazilian singer)
<i>yúđ=b’ah</i>	‘neatly folded or flat square of cloth’	(<i>yúđ</i> ‘clothing’)
<i>wǎđ=b’ah</i>	‘spoon, plate’	(<i>wǎđ</i> ‘eat, food’)
<i>koyéra=b’ah</i>	‘spoon’	(Port. <i>colher</i>)

<i>méca=b'ah</i>	'table'	(Port. <i>mesa</i>)
<i>j'šč=b'ah</i>	'flat-bladed planting tool'	
<i>dóna=b'ah</i>	'tarpaulin'	(Port. <i>lona</i>)

(155) =*tat*: Fruits → roundish things

<i>bóda=tat</i>	'ball'	(Port. <i>bola</i>)
<i>táč=tat</i>	'soccer ball'	(<i>tac</i> - 'kick')
<i>badǎw=tat</i>	'balloon'	(Port. <i>balão</i>)
<i>duč=tat</i>	'lightbulb'	(Port. <i>luz</i> 'light')
<i>hš=tat</i>	'lightbulb'	(<i>hš</i> 'burn')
<i>motúdu=tat</i>	'outboard motor'	(Port. <i>motor</i>)

The plant part 'tree, stick' is generalized to long, thin, cylindrical things, as illustrated in (156a). From there, it has gone on to become the generic classifier form 'thing'. The set of entities in (156b) are still vaguely long and cylindrically shaped; but the use of =*teg* in (156c) is clearly not related to shape (also compare the use of =*teg* in words relating to abstract concepts in (150) above).

(156) =*teg*: Tree, stick → long thin thing → thing in general

a)	<i>hīʔ=teg</i>	'pencil'	(<i>hīʔ</i> - 'write')
	<i>véda=teg</i>	'candle'	(Port. <i>vela</i>)
	<i>cīy'=teg</i>	'syringe'	(<i>cīy'</i> - 'poke.in')
b)	<i>waydōʔ=teg</i>	'airplane'	(<i>wayd'oʔ</i> - 'fly')
	<i>pəpəd=teg</i>	'car, tractor'	(<i>pəpəd</i> - 'roll')
c)	<i>núy'=teg</i>	'eraser'	(<i>núy'</i> - 'rub')
	<i>wīʔ=teg</i>	'headphones'	(<i>wīʔ</i> - 'listen')

Examples of bound forms using =*hšb* 'hollow' (originally a stiff curled thing that grows behind the flower of certain trees), extended to shallow concave receptacles in general, are provided in (157-58).

(157) *kəwəg tuʔ=həb* ‘eyeglasses-case’ (eye immerse=HOLLOW)

(158) *taħ wəʔd=həb-ʃi=mah tħ hib’ah-ni-h*
 tapir/cow food=HOLLOW-OBL=REP 3sg be.created-INFR2-DECL
 ‘They say he was born in a cow-trough.’ (M.115)

These paradigms are all based on a variable N1. However—to a lesser degree—semantically extended compounds can also form paradigms that vary the N2 component, as in examples (159-60).

(159) Types of medicine:

<i>yəħ=g’æt</i>	‘medicine leaf’	(medicine=leaf) (native term)
<i>yəħ=wīg</i>	‘pill’	(medicine=SEED)
<i>yəħ=deh</i>	‘syrup’	(medicine=WATER)

(160) Flashlight and its parts:

<i>tuʔ=teg</i>	‘flashlight’	(light.fire=STICK)
<i>tuʔ=wīg</i>	‘flashlight batteries’	(light.fire=SEED)

The semantically extended bound N2 forms can pile up within a single compound word, as in (161-62) (the multiple bound N2s are all unstressed).

(161) *[[hi-m’æ=teg]=b’ah]=cuʔ*

FACT-cool=STICK=SPLIT.WOOD=grab
 ‘refrigerator door handle’ (lit: cooling-thing’s flat part’s grabber)

(162) *həʔ=tat=həb*

burn=FRUIT=HOLLOW
 ‘light bulb socket’

As noted above, this compounding strategy based on semantically extended bound plant part terms is an extremely productive source for new lexical items in Hup. While many of the examples listed here are conventionalized (to varying degrees), speakers often coin nonce terms creatively. In (163), for example, we see two different speakers’ attempts at ‘solar panel’ (an unfamiliar object until I arrived in the village).

- (163) *mɔyǎk=b'ah* 'mirror = SPLIT.WOOD' = 'solar panel'
pǎyǎy=b'ah 'thunder/electricity = SPLIT.WOOD' = 'solar panel'

Example (164) lists two different ways to say refrigerator (which only a few Hupd'əh have seen).

- (164) a) *teghǎ=d'əh nǎh hǎp=yi? m'ǎ ca?*
 Non-Indian=PL POSS fish=TEL cool box
 'Non-Indian people's fish-cooling box' = 'refrigerator'
- b) *hi-m'ǎ=teg* (FACT-cool=THING) 'thing for cooling' = 'refrigerator'

Most N1s in these newly coined compound forms are either verb stems or Portuguese borrowings. The N1 can also itself be a compound (verb or noun, as in 'eyeglasses case' in example 157 above), or even a phrase, as in (164a) and (165). These verbal or phrasal forms of N1 are essentially more tightly integrated, lexicalized versions of the highly productive strategy of combining a relative clause with an N2 (which may be a free or bound form) (see §18.2.3). Such relative clause + bound noun forms are also used productively to refer to new objects, such as 'ladder' in example (166).

- (165) *kǎy b'uy-d'ǎh=hǎb*
 trash throw-send=HOLLOW
 'wheelbarrow' (lit. 'trash-throwing-out-hollow')

- (166) *ʔin cák-ap=teg*
 1pl climb-DEP=THING
 'ladder' (lit. 'thing we climb up')

Over 90% of these newly coined words involve a plant part as N2, but other N2s (both bound and free nouns) can also be used productively in such compounds, as in the examples in (167). Verb stems (as deverbalized forms) can also occur as N2s, as in (168).

- (167) *pǣyǣy caʔ* ‘car battery’ (thunder box)
b’oħ=tod ‘glass cup or jar’ (salt=container)
puh mɔyɔ ‘glass window’ (water.foam house.opening)
 (used by old people; younger use Port. borrowing *janela*).
- (168) *tegd’uh hǣk* ‘chainsaw’ (tree saw)⁷⁶
kəwəg tuʔ ‘glasses’ (eye immerse)

Finally, while the majority of Portuguese borrowings are accompanied by a bound (plant-part) N2, some items are borrowed ‘as is’—as monomorphemic words—and do not occur in compounds (but these are relatively few):

- (169) *kópu* ‘cup’ (*copo*)
eskōwa ‘brush’ (*escova*)
bówsa ‘backpack’ (*bolsa*)
dápi ‘pen’ (*lapisera*)

5.6.3. Animate entities

Almost all semantically extended or classifier-like forms in Hup refer to inanimate objects, and for the most part organize these according to shape. However, one semantic extension of bound forms is used for animate entities. These are the bound terms for man/male (= *ʔħ*) and woman/female (= *ʔǣy*), which—though their prototypical use involves humans—can also be used in reference to animals, as in (170). However, the semantic extension of these bound nouns differs from those above in that it serves only an anaphoric function; with non-human entities, the bound masculine/feminine form

⁷⁶ ‘Chainsaw’ can optionally take an additional bound noun: *tegd’uh hǣk=teg* (tree saw=THING)

follows a numeral, demonstrative, or relative clause, rather than a full lexical noun as

N1:⁷⁷

- (170) *g'ōg, ʔāh kéy-ep= ʔh*
 titi.monkey 1sg see-DEP=MASC
 ‘The titi monkey, the one I saw.’ (EL)

5.6.4. A classifier system?

The bound constructions in §5.6 are clearly distinct from the plant whole-part compounds from which they derive. The bound plant part terms, semantically extended according to shape, now resemble noun classifiers.

Despite their differences, however, the two bound realizations of plant part terms (plant-part vs. noun-classifier) share a common functional and semantic basis. The classifying terms, like bound nouns generally, contribute to the individuation of a referent from the set of potential referents. In fact, this individuating function has been identified as a basic feature of noun classifiers generally: cross-linguistically, classifiers arguably serve to narrow down the semantic referent from an amorphous mass to a specified entity. In a classic paper on noun classification, Denny (1976: 130) observes that classifiers’ “semantic function is to place objects in classes having to do with human interaction with the environment”. Similarly, Broschart (2000: 264) notes that classifiers have a gestalt function: they give objects a kind of metaphorical “contour” (i.e. a capacity for manipulation, physical or otherwise) that is necessary for “the discrimination of units and for the possibility of recognizing units of a single kind”. A comparable phenomenon

⁷⁷ To express the sex of an animal, the free lexemes *tiyiʔ* ‘man’ and *tāʔāy* ‘woman’ (rather than the bound forms) occur together with the animal’s name in a compound, such that a male titi monkey would be *g'ōg tiyiʔ*, the semantic extension is thus essentially the same.

is the classifier-like function of ‘measure terms’, which individuate units of mass nouns in perhaps all languages; for example, ‘a cup of tea’, ‘a pinch of salt’ (see §4.4.3).

Given this function of classifiers, we might expect the N1 term in classifier constructions cross-linguistically to relate more specifically to a *property* than to an *entity*. There is evidence that this is indeed the case in Hup. For example, I once heard a Hup speaker refer to a cough drop as *kɔw* ‘hot pepper’; when I asked why, her response was “because it burns” (i.e. a property, whereas specific hot-pepper entities can be differentiated as *kɔw (tat)* ‘pepper fruit’; *kɔw b’ɔk* ‘pot of pepper broth’, etc.). Similarly, the Portuguese borrowing *véda* (‘candle’) was used to refer both to a puddle of wax on my desk and to the entire candle—i.e. a word referring to an entity (‘candle’) in the donor language has been interpreted as a property or undifferentiated material (‘wax’) in the borrowing language. If necessary, the wax puddle and the candle can be distinguished as *véda=cɔg* ‘wax piece’ vs. *véda=teg* ‘wax stick; candle’. The Hup case is strikingly similar to the corresponding example given by Lucy (1992) of noun classification in Yucatec Maya; in Yucatec, property or material concepts like ‘wax’ are differentiated into entities by numeral classifiers, whereby ‘one candle’ is designated by *un-tz’út kib* ‘one **long thin** wax’. In Yucatec, however, this strategy permeates the noun lexicon, whereas in Hup it is limited and is most common with neologisms.

5.6.4.1. From bound nouns to classifiers: a grammaticalization story

Clearly, a subset of bound nouns—mainly plant part terms—have ‘turned into’ noun classifiers. But how did the shift from plant parts to classifying terms come about? Where and how, exactly, have the two diverged?

Most importantly, while both non-semantically extended plant-part compounds and classifying compounds have to do with individuation, they may differ as to *what* is being individuated. In particular, the simple paradigms of noun-noun compounds (in which no semantic extension is involved) have a certain ambiguity regarding which component is being specified. This is especially the case with the plant-part compounds.

As we have seen, a plant-part compound can be interpreted either as encoding a whole-part relationship, or as encoding a property-entity relationship—which is inherently one of classification. A speaker may be dealing either with a banana tree and focusing on its leaf, or with a pile of leaves and picking out a particular banana leaf. Does the Hup speaker start with ‘banana’ and restrict it to ‘leaf-part-of’, or with ‘leaf’ and restrict it to ‘banana-type’? Is he or she foregrounding the property, as defined by the entity, or the entity, as defined by the property? The compound itself is neutral as to what counts as the ‘figure’ or new information, and what as the ‘ground’ or given information (cf. Talmy 1978).

In defining a given set of compounds, this question of figure and ground translates into the question of which slot in the compound—the slot expressing the different types of leaves, or the different parts of a tree—is likely to be more salient in speakers’ daily lives. For Hup speakers, as discussed in §5.4.3, the most prototypical paradigmatic oppositions in plant-part compounds involve a constant form as the second member of

the compound (N2) and a varied set of forms as the first member (N1); moreover, the stress pattern (where N1 receives primary stress) reflects the fact that the speaker's attention is more likely to correspond to the variable form than the constant one. This higher salience of one paradigm type over the other reflects the typical interaction of speakers with their environment: a Hup speaker is much more likely to be concerned about the identity of a leaf or stick, because that is crucial to what he or she can do or make with that object.

In the case of the classifier-type constructions, this tendency to foreground the (N1) property has become crystallized—it is now the only option. Just as 'banana-leaf' gives us information about the identity of the leaf, 'study-LEAF' gives us information about the type of book, but here no whole-part construal is possible. The first member of the compound (N1) has now become the focus of the construction; in some sense, it can now be considered the *semantic head*. The fact that *phonological* stress already falls on the N1 form in these constructions surely helps to reinforce the interpretation that it is also *semantically* stressed. At the same time, the bound N2 form in these classifying constructions is becoming a grammaticalized morpheme, and as such is becoming categorially distinct from 'regular' bound nouns. Its lack of stress and its compound-final position give it a resemblance to the unstressed enclitics that are extremely common elsewhere in Hup grammar. Finally, while metaphorical extension is a frequently encountered feature of compound constructions in Hup (especially metaphors involving N2), the existence of large plant-part paradigm sets of the variable N1 type (as in set 7 above) probably fostered the conventionalization of *particular* metaphorical extensions,

which in each case became codified along one specific semantic parameter, notably shape (cf. Lakoff's Idealized Cognitive Model, 1987).

There is also evidence that the reinterpretation of the semantic head in these classifying compounds is being played out in the syntax of these constructions as well. In some cases, the N1 of the construction is now arguably the *syntactic* head, as well as the semantic head. The most likely force behind this change is lexical borrowing from Portuguese and/or Tukano; this generated new terms, which Hup speakers would have organized according to the system already present in their language for dealing with manufactured or manipulated items. However, since the new terms first came into the language as independent monomorphemic nominals, they naturally assumed the function of nominal heads, to which the classifying form was subsequently added. Given the large (and growing) number of these borrowed nominals, the classifying forms are gradually coming to be perceived as something extra, tacked on to the main entity. In some cases, the presence of the classifier is in fact optional:

- | | | | |
|-------|-------------------------|-------------------------|---------------------------------|
| (171) | <i>píta</i> (=b'ah) | 'cassette tape' | (Port. <i>fita</i> =SPLIT.WOOD) |
| | <i>mandádiya</i> (=wíg) | 'medallion on necklace' | (Port. <i>medalhã</i> =SEED) |
| | <i>wéda</i> (=teg) | 'candle' | (Port. <i>vela</i> =STICK) |
| | <i>badǎw</i> (=tat) | 'balloon' | (Port. <i>balão</i> =FRUIT) |

This 'tacked-on' effect of classifying terms is even found with a few native words, such as those in (172), in which the classifier appears optionally:

- | | | | |
|-------|------------------------------|---------------------------------------|---------------------|
| (172) | <i>nɔg'ǎd</i> (=b'ah) | 'tongue' | (tongue=SPLIT.WOOD) |
| | <i>núh</i> (=tat) <i>pog</i> | 'a big head' | (head=FRUIT big) |
| | | (when emphasizing shape/size of head) | |

5.6.4.2. Functions of the Hup classifier system and the typology of noun classification

The transitional appearance of the Hup classifier-like system brings us to the next question: How do the Hup noun classifying terms fit into a general typology of classifiers? Below, I consider the various functions of the Hup classifier-like bound forms vis-à-vis the functions of noun classifiers cross-linguistically, and evaluate the arguments for characterizing the Hup case as an incipient noun classifier system.

A) Derivation

To the extent that the N1 members of compounds can be considered heads of the noun phrase, the classifying nouns—in cases where N1 is a verbal stem—can be understood to have the derivational function of creating an object or instrument nominalization from the verb stem, as in (173). Such derivational functions are common for noun classifiers in other languages (see Aikhenvald 2000: 220), especially those of Western Amazonia (Grinevald and Seifart, forthcoming).

- | | | | |
|-------|--------------------------|---------------------------|---|
| (173) | <i>wɪʔ=teg</i> | (listen=THING) | ‘thing for listening’ = ‘headphones’ |
| | <i>tác=tat</i> | (kick=FRUIT) | ‘round for kicking’ = ‘soccer ball’ |
| | <i>kæy b’uy-d’əh=həb</i> | (trash throw-send=HOLLOW) | |
| | | | ‘hollow for throwing out trash’ = ‘wheelbarrow’ |

B) Anaphoric reference

One of the most common functions of classifier terms in Hup is that of anaphoric reference, as in examples (174-76). Classifying nouns can refer anaphorically back to the full compound (or directly to a physically present object) in constructions where the N1 is the default/possessor form *tɪh=*, a demonstrative (174), a numeral (175), or a relative

clause (176). An anaphoric function is a common feature of noun classifiers

generally, especially in Amazonian languages (cf. Derbyshire and Payne 1990: 243).

- (174) *yí-n'íh hid bíʔ-íh, núp=tat*
 that.ITG-NMZ 3pl work-DECL this=FRUIT
 ‘Thus they made it (a clay musical instrument), this size (round).’ (showing with hands) (H.22)

- (175) *ka ʔap=těg!*
 two=STICK
 ‘(There are) two of them!’
 (watching flying airplanes: *wayd'óʔ=teg* [fly=STICK])

- (176) *nup bóda=tat-ʔěʔ, [núp d'əh-yǎt-æp]=tat*
 this ball=FRUIT-PERF this rot-lie.on.ground-DEP=FRUIT
 ‘This was a ball, this rotting round thing lying here.’ (EL)

This anaphoric function is *not* specific to classifying nouns, however. In their non-semantically extended use, the plant-part forms and various other bound nouns can be used for anaphoric reference in just the same way:

- (177) *dóğ=wíg b'ah-yóʔ... tǎh=wíg wǎ-d'əh-way-yóʔ*
 vapisuna=seed split-SEQ 3sg=seed pull.out-send-go.out-SEQ
 ‘Having split a vapisuna seed, having pulled the seed’s insides out...’ (H.15)

- (178) *deh=mí kéy=d'əh hám=b'ay-áh, cǎp=mí pǎ-ay-áh*
 water=river see=PL go=AGAIN-DECL another=river go.upstream-INCH-DECL
 ‘They went again to see the river, and went up another river.’ (LG.C.15)

With relative clauses, numerals, and demonstratives, the bound or classifier form may be interchangeable with a distinct monomorphemic head noun, depending on how specific the speaker chooses to be, as in (179). However, the slot *cannot* be filled by a full compound if a bound form is available. Thus either the lexeme *cug'ǎř* ‘leaf, paper,

book (generic)’ or the bound form =*g’æt* ‘leaf, paper, book’ can follow a relative clause, but not *pĩhĩ=g’æt* ‘banana leaf’ or *hĩĩ=g’æt* ‘notebook’.

- (179) a) [*ĩh káy-ep*] *g’og cak-yĩĩ-ĩy*
 1sg see-DEP titi.monkey climb-DYNM
 ‘The titi monkey I saw climbed up.’
- b) [*ĩh káy-ep*]=*ĩh cak-yĩĩ-ĩy*
 1sg see-DEP-MSD climb-DYNM
 ‘The one I saw climbed up.’

C) Agreement

Hup classifying terms can arguably serve a marginal agreement-marking function by virtue of appearing, optionally, on multiple constituents of the clause (as with noun class marking in Bantu, for example), as in (180). This concord has been identified by Grinevald (2002) as a hallmark of a true nominal classification system. However, this agreement-like phenomenon is extremely rare in natural discourse in Hup (being confined mostly to elicitation contexts), and may be better characterized as apposition of distinct noun phrases, rather than as marking concord within a single noun phrase.

- (180) *núp=(g’æt) pĩhĩ=g’æt tĩh=pōg=(g’æt)*
 this=FRUIT pineapple=FRUIT 3sg=big=FRUIT
 ‘this big pineapple’ (EL)

An incipient classifier system

Typologically, the Hup system is best characterized as an incipient classifier or ‘class term’ system (cf. DeLancey 1986, Grinevald 2000). It falls near the lexical end of the Grinevald’s proposed scale of classifier grammaticalization:

<Lexical-----Grammatical>
<i>measure terms</i> <i>noun classes—gender</i>
<i>class terms</i>

The arguments for considering the Hup system to be incipient are the following.

- a) Only a small subset of Hup bound nouns—and even of plant-part terms—are consistently used in metaphorically extended ways (see the list in 150 above).
- b) For the most part, the contexts of semantic extension have to do with newly introduced cultural items, and the influx of these items is a relatively recent phenomenon—the majority have become available within the lifetime of adult speakers. Some bound nouns appear to have been only recently extended in semantically specific ways, in order to classify a particular variety of new item; the best example of this is *leaf* → *book*.
- c) The bound classifier nouns have undergone little grammaticalization and essentially no phonological reduction; they are all recognizable nouns that can act as heads elsewhere (cf. the incipient classifier systems in some Australian languages (e.g. Reid 1997, Wilkins 2000, Grinevald 2000: 84).
- d) The classifying terms are used for derivation (see §5.7.4.2A), but are used only minimally for agreement-marking purposes (§5.7.4.2C).
- e) The presence of the classifying form is sometimes optional in the NP (see §5.6.4.1 above), and is absent altogether from most nouns in Hup.

In the future, we might expect the Hup classifiers to become more grammaticalized and more obligatory. In the process, we might also expect the Hup

system to gradually come to resemble closely the classifier system of the East Tukanoan languages, which have probably already played an important role in shaping the Hup system's development via areal diffusion (see the Historical Note below).

Historical Note

The grammaticalization story of the Hup classifying nouns, from nominal heads to something resembling encliticized modifiers, has been outlined above in §5.6.4.1. In this Historical Note, I consider the question of what may have served to trigger this process of metaphorical extension and reanalysis. Three main catalysts can be identified.

The first of these was a sudden influx of new cultural items requiring names. As noted above, this is a relatively recent phenomenon. The Hupd'əh have been in direct—though sporadic—contact with non-indigenous Brazilian culture for only about 35 years. Before this, they had access to some trade goods through their interaction with Tukanoan groups, but there undoubtedly was nowhere near the variety of items that they are exposed to now.

Hup already had the necessary linguistic raw materials for a classifier system at hand—a system of noun compounding and bound nouns, which could be understood as paradigmatic sets based on manipulation of the materials in one's environment. These essentially comprised a highly specialized classification system.⁷⁸ The seeds of the classifier-like metaphorical extensions have also probably been present for some time. Several classifier-like terms exist in Hup's sister language Dâw (including extended plant

terms in names for body parts; Martins 1994: 47-52, 181-82), but these are otherwise characterized by little or no semantic extension. Hup's most closely related sister Yuhup, like Hup, uses semantically extended plant-part terms for body parts and other objects, including some neologisms (Ospina 2002: 209-220).⁷⁹ Such semantically extended terms seem to be lacking from the more distantly related language Nadëb, but Nadëb does have a limited system of possessor classifiers (Weir 1984). When suddenly faced with a flood of new items, Hup simply expanded its existing system for cataloguing manipulable or manufactured objects, which thus blossomed into a full-blown system of nominal classification. The development of the Hup classifier system is therefore consistent with a 'punctuated equilibrium' model of language change (Dixon 1997), whereby language change is conceived as taking place in sporadic bursts of rapid activity, interspersed within longer periods of relative inactivity.

Cross-linguistically, similar semantic extensions of nominal forms—often of existing classifiers—from native to newly introduced cultural items are quite common. For example, the Australian language Ngan'gityemerri (Reid 1997) has a 'tree' class which includes all trees, tree products and wooden things, and hence manufactured objects of any substance; another Australian language, Gurr-Goni (Green 1995, cited in Aikhenvald 2000: 408), has generalized a classifier for traditional wood canoes to other boats, and thence to airplanes. Jakalte (Craig 1986, Grinevald 2000: 85) extended

⁷⁸ Moreover, there is considerable cross-linguistic precedent for nominal compound constructions to develop conventionalized classifier-like functions; e.g. in Australian and even Indo-European languages (Hackstein to appear).

⁷⁹ Ospina (2002: 219) identifies Yuhup classification as a class term system, i.e. a minimally grammaticalized nominal classification system. Classifier-like terms are not reported for the more distantly related language Nadëb (Weir 1984).

‘rock’ to metal and glass, and ‘corn’ to wheat and wheat products, and the Thai classifier *khan* ‘thing with handles’ went from bicycles to all vehicles (Aikhenvald 2000: 348).

In the Hup case, it is no great surprise that the shape-based semantic extensions of bound nouns all involve plant parts. Plant parts are a ubiquitous feature of the Amazonian rainforest environment, and provide the raw material for the great majority of native manufactured items—much more so than in many other parts of the world, where stone, leather, and other materials play a larger role.⁸⁰ In fact, noun classification is not the only manifestation of the importance of plant parts in Hup grammar; the bound noun =*teg* ‘stick’ did not stop when it became the generic classifier/nominalizer ‘thing’, but continued to grammaticalize into a marker of purpose, and thence to a verbal future-tense marker (see §13.1).

However, we may still ask why Hup would have recourse specifically to classifier forms in naming these new items, given that classifiers are not required on other nouns in the language generally. This question points to a second catalyst for the development of the system. This is linguistic conservatism—namely, the perceived need to *avoid* wholesale lexical borrowing in order to maintain linguistic identity. As discussed in (§1.5), it appears to be a feature of the Vaupés region as a whole (probably fostered by the linguistic exogamy system among River Indian groups) that speakers of various language groups consider their identity to be intrinsically connected to their primary (or

⁸⁰ The Hupd’əh do use animal bone, turtle shell, stone, and (untanned) animal hide for a few items (such as the deer-bone flute mentioned above), but these are minimal. Traditionally, plants have provided gourds and leaves for bowls and cups, bark (softened by pounding) for native ‘cloth’, the materials and venom for blowpipes and darts, bows and arrows, etc.

father's) language. This cultural focus on the emblematic function of language has led speakers of many Vaupés languages to consciously resist lexical borrowing, even while unconsciously allowing their languages to converge on a structural level (e.g. Sorensen 1967, Jackson 1983, Aikhenvald 2002). Probably for this reason, Hup speakers often create a word from all-Hup components (verb/noun stem + classifier) for a new item, even when they are aware of its name in Tukano or Portuguese. Likewise, when Hup speakers do use a borrowed word, they typically tack on an extra piece of Hup morphology, a classifying term, to give the new name a clear Hup stamp.

Finally, language contact with Tukano was surely an additional motivating force behind the development of the classifier system. While at first glance this would seem to be diametrically opposed to linguistic conservatism as a catalyst, the two factors manifest themselves in different ways, which are not at all incompatible. It is a general fact among Vaupés languages that intense language contact has led to considerable *structural* convergence, despite speakers' conscious efforts to keep their languages free from *lexical* mixing. In fact, classifier systems in other Vaupés languages have been shown to be sensitive to language contact (Gómez-Imbert 1996 for Cubeo-Baniwa, Aikhenvald 2002 for Tukano-Tariana).

Classifiers are an important feature of Tukanoan grammar, and in many ways the Hup system looks like an incipient version of the Tukanoan one: Tukanoan languages classify physical objects on the basis of shape, and animate entities on the basis of gender (see Gómez-Imbert 1996, Aikhenvald 2000, etc.), just as we have seen for Hup. Moreover, classifiers in Tukanoan languages appear in noun phrases with numerals,

adjectives, and demonstratives, with nouns as derivational markers, and with relativized verbal forms (Aikhenvald 2000), just as they do in Hup.

From a typological point of view, the Hup case is particularly intriguing because it represents a classifier system in its initial stages of development, with its nuts and bolts still visible. Moreover, this is one of the relatively rare cases in which the effect of an identifiable cultural change is clearly visible in the grammar of a language. Finally, despite the likelihood that culturally novel experiences have driven the development of the Hup noun classification system, its dependence on plant parts shows that the Hupd' «h have dealt with these new experiences in ways that make sense within their world view, in keeping with life in the rainforest.

Comparative Note

In general, noun classification systems are fairly common in Amazonia, but vary considerably in their complexity. On the one hand are highly developed systems like those in the Tukanoan languages (as mentioned above), in which classifiers are ubiquitous and can occur on multiple elements of the clause (e.g. Barnes 1990, Aikhenvald 2000); on the other, many systems appear to be in their incipient stages, like Hup. The link between possession and noun classification in Hup also has precedent in Bora (Witotoan), where classifier constructions may be derived historically from possessive constructions (see Grinevald and Seifart forthcoming: 39, Weber 2002: 7). Seifart (2003) also points out the importance of the individuating and derivational functions of classifiers in Witotoan languages, particularly in reference to plant parts (fruit, tree, leaf); this is plainly reminiscent of the Hup case.

A number of Amazonian systems rely heavily on terms related to plant parts for nominal classification, just as Hup does. For example, the Arawak language Apuriña (Facundes 2000) appears to have an incipient classifier system that bears remarkable similarity to the system in Hup: a subset of bound or inalienably possessed nouns, many relating to parts of plants, has taken on semantic extensions and classifier-like properties. Another example is Yanomam (a Yanomami language; Goodwin Gomez 2000), with a more fully developed classifier system in which phonologically reduced forms are required on most nouns; again, most of the classifiers terms are related to plant parts. This widespread reliance on plant parts in classification makes obvious sense vis-à-vis the Amazonian rainforest environment, which is characterized by an enormous variety of plants, but a relatively scarcity of stone and other raw materials. Thus most Amazonian peoples, like the Hupd'oh, rely heavily on plant parts as a source of raw materials for manufactured items. Their focus on this maximally salient part of their material world is borne out in the linguistic coding of their interaction with it.

6. The noun phrase: modification and definiteness

This chapter deals with issues relating to the noun phrase and its behavior within the clause, with a particular focus on modification and definiteness. While chapter 5 dealt with the compound noun, an NP composed of two (or more) associated members of the open class of nouns, this chapter examines the closed classes of nominal modifiers—demonstratives, quantifiers, and adjectives—and their roles within the NP. In addition, it addresses the ability of members of closed word classes to act as nominal heads in their own right, occurring in lieu of a noun or noun phrase as the argument of a verb. A few additional non-nominal functions (adverbial, determiner, etc.) of these closed word classes (specifically interrogative pronouns and demonstratives) are briefly considered here as well. In the final section of this chapter, I also briefly introduce NP coordination. Locative postpositions, which typically combine with a noun to form an adverbial phrase within the clause, are not discussed here but in §10.2.3.

A basic phrase structure template for the NP (in which the noun stem N may be either compound or simple) is provided here. The order of the constituents is fairly rigid within the NP itself; when numerals, demonstratives, or possessors follow the noun, they are probably best interpreted as appositional NPs in their own right, or even as predicate nominals.

NP → (Dem—POSS PN—Numeral) N (Adj)

6.1. Pronouns

While the form of the Hup personal pronouns and their inflected variants are covered in §4.1.2 (and §5.2), the present discussion deals briefly with their syntax—that is, their ability to represent NPs in the clause. A discussion of the differences in clausal constituent order between pronouns and full NPs relative to the verb is given in §17.3.1.

The subject pronouns are here re-summarized in Table 6.1. As can be seen in the more detailed paradigm given in Table 4.1, §4.1.2, Hup pronouns—like nouns in general—take basic inflectional and derivational forms relating to case, number, and possession, as well as various bound focus and discourse-marking forms (chapter 7). With the exception of suppletive forms (formed via phonological reduction) for the first person singular object (*ʔān*) and possessive (*nĩ*) pronouns, inflected pronouns are essentially regular.

Table 6.1. Hup subject pronouns

1sg	<i>ʔāh</i>
2sg	<i>ʔām</i>
3sg (M or F)	<i>tĩh</i>
1pl	<i>ʔĩn</i>
2pl	<i>nĩŋ</i>
3pl	<i>hĩd</i>

As can be seen in Table 6.1, a number distinction (singular/ plural) is lexically encoded in pronouns. Although gender is not encoded, it can be specified if necessary; in such cases the pronoun has a determiner-like function: *hĩd ʔāy=d'əh* (3pl FEM=PL) ‘those women’.

The singular and plural forms of the ‘Intangible’ demonstrative (see §6.2 below) are common variants of the basic third person pronouns (and can appear as such in any

grammatical role: subject, object, or oblique).⁸¹ They are particularly preferred in clause-final (post-verbal) position in subject function, where they require the Declarative marker (like all post-verbal subjects; see §17.3.1). Thus post-verbally one typically finds the Intangible forms *yúw-úh* and *yí-d'ǎh-ǎh*, rather than *tǎh-ǎh* and *hǎd-ǎh* (example 1).

- (1) *naw-nǎh mún ǎh-mǎh-ní-íy bíg yí-d'ǎh-ǎh!*
 good-NEG INTS2 RECP-beat-be-DYNM HAB that.ITG-PL-DECL
 ‘There are always loads of them fighting!’ (TD.Cv.28)

When they precede the verb in the clause, subject pronouns in Hup are typically immediately preposed to the verb. They appear to be developing a marginally procliticized status: in this position, they are unstressed, and in the Umari Norte dialect the third person singular pronoun (the most frequent in narrative) is phonologically dependent on its verbal host in some contexts (undergoing loss of final [h] and assimilating the vowel of the verb stem), as example (2) illustrates. This process may represent the incipient development of cross-referencing prefixes in the verb.

- (2) *yí-nǎh-ǎy tá-way-máh-ah, mǎh-ǎh, táh tǎ?ǎh-ǎh-ǎh*
 that.ITG-be.like-DYNM 3sg-go.out-REP-DECL turtle-DECL tapir 3sg-sleep-OBL-DECL
 ‘So he went out, they say, the turtle, into the place where the tapir was sleeping.’
 (RA.MJ.58)

As in most languages, Hup pronouns (including their possessive variants, as in example 3) are deictic forms that occur as arguments of predicates, in lieu of a noun phrase; they refer anaphorically to an entity that would otherwise be indicated by a full NP, or else refer deictically to the physical context.

- (3) *tǎh=póǎg tǎnǎh-ǎh*
 3sg=big 3sg.POSS-DECL
 ‘The big one is his.’ (EL)

⁸¹ Such double-duty of a demonstrative form is quite common cross-linguistically; Diessel (1999: 119) observes that third person pronouns often derive historically from pronominal demonstratives.

Hup discourse relies heavily on pronouns. Any constituent may be referred to anaphorically by a pronoun (or by a demonstrative, see below) if its referent can be recovered from the context. The principal protagonist in a narrative is often referred to exclusively by the third person singular pronoun *tɬh* for the entire story. Even within the same clause, it is common to refer to multiple participants with the same third person pronoun. In (4), one participant is a subject and one an object; here case marking and context are enough to differentiate the referents. In (5), the first instance of *tɬh*= refers anaphorically to ‘her husband’—introduced as such immediately afterwards—and the second *tɬh*= refers back to the spirit woman who was the subject of the previous clause.

- (4) *tɬh=tɬ* *pöğ-ót* *tɬh-añ* *tɬh* *yók-ay-áh*
 3sg=vine big-OBL 3sg-OBJ 3sg poke-INCH-DECL
 ‘With a big thorn he poked him.’ (P.BY.91)
- (5) *yup* *huýʔah-ay=mah* *tɬh* *wid-yé-éh,* *tɬh=tæh* *ʔip-ih*
 that after-INCH=REP 3sg arrive-enter-DECL 3sg=child.father-DECL
 ‘After that he entered, her husband.’ (P.BY.89)

The third person pronoun in Hup is also used generically in reference to an idea, proposition, or some other relatively abstract referent which is not specified precisely. For example, together with the contrastive focus (Telic) marker =*yɪʔ* (§7.1.2), it can mean ‘exactly that’ (as in (6), where the speaker is seconding another’s joking statement that a boy had left the village, after first crying over a girl), or ‘relating specifically to X’, as in (7).⁸²

⁸² Here *tɬh*=*yɪʔ* appears to be used as an adnominal modifier.

- (6) *tʰh=yĩʔ cáp, tʰh=yĩʔ cáp!*
 3sg=TEL INTS1 3sg=TEL INTS1
 ‘Exactly that, exactly!’ (B.Cv.136)
- (7) *n’i-cóʔ-óy=d’əh tʰh=yĩʔ ʔĩd, ʔʰn=hin=b’ay tʰh=yĩʔ ʔĩd*
 that-LOC-DYNM=PL 3sg=TEL speech 1pl=also=AGAIN 3sg=TEL speech
 ‘The ones from over there have their own language, and we have our own language.’ (H.int.130)

The third singular pronoun *tʰh* has additional uses which have relatively little to do with its pronominal function: it occurs as the default N1 in most bound noun constructions, where it acts as a general specifier (see §5.4), and it similarly occurs with adjectives as a nominalizer (see §6.6). The second person plural form *nĩy* also occurs elsewhere as a ‘Cooperative’ verbal suffix and (in limited contexts) as a verbal stem (§14.5).

6.2. Interrogative pronouns and question words

While they can functionally be considered as a single set, Hup question words formally fall into two distinct sets. They are built on only two basic forms, *ʔũy* ‘who’, used exclusively for animate (almost always human) referents, and the interrogative particle *hĩ*. In form, morphological patterning, and semantics, *ʔũy* is essentially a personal pronoun with properties closely resembling those of the other pronouns given in §6.1 above (i.e. primarily human reference, inflecting for case, possession, etc.).⁸³ The interrogative particle *hĩ*, on the other hand, patterns formally with the demonstratives (§6.3 below), as is evident from Table 4.2 in §4.1.2, and from the tables in §6.3 below.

⁸³ The distinctive patterning of Hup interrogative pronouns (human referents vs. all other entities) conforms to the special treatment of humans in Hup grammar; see §4.3.1.2, §4.4.1, and §5.4-5.

Depending on its inflection, it can act as an interrogative pronoun, determiner, and/or adverbial. A relationship between demonstratives and interrogatives like that found in Hup is not uncommon cross-linguistically, according to Diessel (2003: 636), who notes that demonstratives and interrogative pronouns “tend to encode the same semantic features and have a number of morphosyntactic properties in common”.

Table 6.2. Hup question words

Basic interrogative particle	Pronoun, determiner, adverbial?	‘Who’ (human referent)	Inflection
<i>hĩ</i>		<i>ĩĩ</i>	Uninflected form
<i>hĩp</i> ‘which?’	PN, DET		- <i>p</i> (From Dependent marker?)
<i>hĩ</i> ‘where? in what way?’	ADV		- <i>t</i> (From oblique?)
<i>hĩw-ǎn</i> ‘which one (obj)?’	PN	<i>ĩĩ-ǎn</i> ‘whom’	- <i>ǎn</i> Object
<i>hĩw-ĩ</i> ‘with which one?’	PN	<i>ĩĩ-út</i> ‘with whom’	- <i>ĩ</i> Oblique
		<i>ĩĩ-úh</i> ‘who-DECL’	- <i>Vh</i> Declarative
<i>hĩcóp?</i> ‘at/to what location?’	ADV	<i>ĩĩ cóp?</i> ‘who LOC’ (focus)	<i>cóp?</i> Locative
<i>hĩkán</i> ⁸⁴ ‘in/from what direction?’	ADV		- <i>kán</i> Directional (Unproductive elsewhere)
<i>hĩ-n’ĩh</i> ‘what, what kind?’	PN, DET		- <i>n’ĩh</i> Nominalizer
<i>hĩ-ĩap</i> ‘how many?’	DET		- <i>ĩap</i> Quantity, number
<i>hĩ-m’ǎ</i> ‘when, how much?’	PN		- <i>m’ǎ</i> Amount, measurement
		<i>ĩĩ nĩh</i> ‘whose’	<i>nĩh</i> Possessive
<i>hĩ nĩh-</i> ‘in what way?’ ⁸⁵	ADV		<i>nĩh-</i> ‘be.like’
<i>hĩ nɔ</i> ‘saying what?’ (<i>hĩnĩy?</i> ‘what did you say?’ ⁸⁶)	ADV		<i>nɔ</i> ‘say’
<i>hĩnĩykeyó?</i> ‘why’ [<i>hĩnĩh-ĩy key-yó?</i> Q-be.like-DYNM see-SEQ]	ADV		- <i>nĩh-ĩy</i> ‘be.like-DYNM’ - <i>key-yó?</i> ‘see-SEQ’ (‘cause’)

⁸⁴ Corresponding to a general morphophonological process in Hup, an epenthetic glottal stop or homorganic consonant marks the morpheme/ syllable boundary, here and in all other cases (including the demonstratives in the tables below) where a bound form precedes an obstruent-initial inflectional morpheme (see §2.6). The glottal stop is not written in the transcription.

⁸⁵ This use of *hĩ* with the verb ‘be like’ occurs in the Tat Deh dialect area, but not in that of Barreira Alta, where speakers use *hĩp=yi?* *nĩh-* instead.

⁸⁶ This expression may be a reduced form of *hĩ nɔ-ĩy-ĩm* ‘what are/did you say(ing)?’ or of *hĩ nĩh-ĩy?* ‘in what way, how’s that?’; compare *yĩnĩy* ‘thus, in this way’ from demonstrative *yu-/yĩ-*.

Question words are always clause-initial, and their use generally requires a clause-final verb taking the interrogative marker *-V?* (see §17.4 for a full discussion of interrogative clauses and their syntax). These forms also occur in non-interrogative clauses as indefinite pronouns (§6.4 below).

Examples (8-10) illustrate the use of interrogative *ňŷ* ‘who’. In (8-9), it stands in for a noun phrase, as subject and inflected object; in (10), it occurs in combination with a bound human noun in a compound construction, as a type of modifier or determiner. Note that—like the lexically singular personal pronouns—*ňŷ* cannot inflect for number, but does take the Associative plural form *-and’əh* (see §4.4.6). The form *ňŷ* has one additional use, beyond its function as an interrogative pronoun; it occurs as an enclitic in constructions meaning ‘one from/associated with’ (see §7.5 below).

- (8) *ňŷ yĭ nŋɔɔ?*
 who that.ITG say-INT
 ‘Who said that?’ (B.Cv.86)

- (9) *ňŷ-ǎn=yĭ? tih nŋɔɔ? ňŷ-ǎn?*
 who-OBJ=TEL 3sg say-INT who-OBJ
 ‘To whom did she say that? To whom?’ (TD.Cv.105)

- (10) *ňŷ=ňh tih?*
 who=MSC 3sg
 ‘Who’s that?’ (EL)

As a nominal, the interrogative particle *hĭ* usually appears in its derived form *hĭn’ňh* ‘what’ (interrogative + nominalizer suffix), which can occur as a full NP and take oblique case marking (though not object marking; example 11), and can modify another

noun within an NP (example 12). Other forms of *hĩ* commonly occurring in NPs include *hĩp* ‘which’ and *hĩ ɭap* ‘how many’, which modify nouns as interrogative determiners.

- (11) *hĩn'ĩh-ĩ tĩh yɔhɔy-ɔʔ?*
 Q-NMZ-OBL 3sg search-INT
 ‘With what is he searching?’ (FS.6)

- (12) *hĩn'ĩh hĩp yúp=b'ay?*
 Q-NMZ fish that.ITG=AGAIN
 ‘What kind of fish is that?’ (OS)

Interrogative *hĩ* also has adverbial functions relating to direction, location, and time, as in examples (13-14).

- (13) *hĩkán ɭam hám-aʔʔ*
 to.where 2sg go-INT
 ‘Where are you going?’ (OS)

- (14) *hĩm'æ (tĩh y'æt-cɔp-ɔʔ)?*
 Q-MEAS 3sg lay-go.from.river-INT
 ‘When (did he leave it by the river)?’ (B.Cv.93)

Like demonstratives (see below), interrogative *hĩ* is in general unable to stand alone as an uninflected form. The only exception is its occurrence with two verbal forms, *nɔ* ‘say’ and *nĩh* ‘be like’ (examples 15-16), where it occurs (unmarked) in object function; here it can be separated from the verb by a subject pronoun (16), an additional verb root in a compound, or other morphology.

- (15) *hĩ⇒ nɔɔy tĩh ?*
 Q say-DYNM he
 ‘What did he say?’ (OS)

- (16) *hĩ híd nĩh-ĩ? tĩh nĩh=cud ãĩhnĩy*
 Q 3pl be.like-INT 3sg be.like=INFR EPIST.be
 ‘What are they doing? He’s doing something, apparently.’ (FS.11)

6.3. Demonstratives

The Hup demonstrative system involves five basic terms, which combine with various bound inflectional suffixes and enclitics to create a large set of derived forms (summarized in Table 4.2, §4.1.2). In addition to the interrogative particle *hĩ*, the system encodes four other distinctions: proximal, distal, ‘intangible’ (where physical accessibility is lacking or irrelevant), and alterative (i.e. ‘other’).⁸⁷ These basic semantic distinctions are contrasted in example (17). Example (18) illustrates the same contrast, but with temporal rather than spatial reference.

- (17) Prox: *núp=g’æt* ‘this leaf’ (relatively close by)
 Dist: *n’íp=g’æt* ‘that leaf’ (relatively further away)
 Intg: *yúp=g’æt* ‘that leaf’ (esp. if out of sight or not physically present)
 Alter: *cãp’=g’æt* ‘another, a different leaf’
- (18) Prox: *núp g’i* ‘this year’
 Dist: *n’íp g’i* ‘last year’
 Intg: *yúp g’i* ‘that (some other) year’
 Alter: *cãp’ g’i* ‘next year’

Syntactically, the various derived forms fulfill all of the major functions of demonstratives, as identified by Diessel (1999: 57-58). They occur as independent pronouns in argument positions of verbs and adpositions (where they are used in lieu of nouns or noun phrases and inflect for case, number, and so on just as nouns do), and they

occur together with nouns in noun phrases as determiners (Hup has no definite/indefinite articles *per se*). Demonstrative forms can also occur as adverbs modifying a verb, and as demonstrative ‘identifiers’ in copular and nonverbal clauses.

This discussion focuses on the semantics, morphology, and syntax of the Hup demonstratives (with the exception of the interrogative particle, which is discussed in §6.2 above). The Proximal, Distal, Intangible, and Alterative terms are discussed in turn.

A. Proximal demonstrative

The basic form of the Proximal demonstrative is *nu-*, with variant *ní-*. Its proximal value is of course relative, pertaining to any referent that is within the immediate range of the speaker, according to a given frame of spatial reference. In conversation, its use is frequently accompanied by a deictic pointing gesture. Temporally, it is used for time periods which are simultaneous with or include the speech moment. The most common derived forms are summarized in Table 6.3.

⁸⁷ Determining the parameters of use for these demonstratives was aided by Wilkins 1999.

Table 6.3. Hup Proximal demonstrative forms

Form	Meaning	Inflection
<i>nu-</i> (<i>ní</i>)	Proximal	Uninflected form
<i>núp</i>	‘this’	<i>-p</i> (From Dependent marker?)
<i>nút</i>	‘here’	<i>-t</i> (From Oblique?)
<i>núw-ǎñ</i> (<i>nú-uw-ǎñ</i>)	‘this-(FLR)-OBJ’	<i>-an</i> Object
<i>núw-út</i> (<i>nú-uw-út</i>)	‘this-(FLR)-OBL’	<i>-Vt</i> Oblique
<i>núw-up</i> (<i>nú-uw-up</i>)	‘this-(FLR)-DEP’	<i>-Vp</i> Dependent marker
<i>núw-úh</i> (<i>nú-uw-úh</i>)	‘this-(FLR)-DECL’	<i>-Vh</i> Declarative
<i>núw-u?</i>	‘this-INT’	<i>-V?</i> Interrogative
<i>nu-có?</i>	‘in this place here’	<i>-có?</i> Locative
<i>nu-kán</i> ⁸⁸	‘to here’	<i>-kán</i> Directional (Occurs only in DEMs)
<i>ní-d’ǎh</i>	‘these’	<i>-d’ǎh</i> Plural/ collective
<i>ní-n’ǎh</i>	‘all these, about here’ (pl. inanimate, approximate)	<i>-n’ǎh</i> Nominalizer
<i>na ǎǎp, núp-ǎǎp</i>	‘this many’	<i>-ǎǎp</i> Quantity, number
<i>nu-m’ǎ</i>	‘this much, (at) this time’	<i>-m’ǎ</i> Amount, measurement
<i>nú-wag</i>	‘these days’	<i>wág</i> ‘day’
<i>nú-wəd</i>	‘this old/respected one’	<i>-wəd</i> ‘old/respected’
<i>nú-wa</i>		<i>-wa</i> ‘old/respected woman’
<i>ní níh-</i>	‘in this way, like this’	<i>níh-</i> (Verb) ‘be like’
<i>ní nɔ-</i>	‘saying this’	<i>nɔ-</i> (Verb) ‘say’

With all four demonstratives, the most common nominal form is the *-p* form, which is very frequent as a demonstrative determiner (example 19). As is the case with the Distal, Intangible, and Alterative forms as well, the Proximate demonstrative determiner usually gets the primary stress of the noun phrase.

- (19) *núp tǎg ǎǎn pé?-éy=hɔ̃*
 this tooth 1sg.OBJ hurt-DYNM=NONVIS
 ‘This tooth hurts.’ (lit. ‘hurts me’) (EL)

⁸⁸ See footnote 84 above regarding the phonetic realization of this and similar forms.

The demonstratives derived with *-p* are also common as pronominals, standing in for an entire NP, as in (20). Many of the other inflectional forms are used exclusively as pronominals, including all those inflected directly for case, and those taking the Declarative, Dependent, and Interrogative markers.

- (20) *núp ʔǎn péʔ-éy=hɔ̃*
 this 1sg.OBJ hurt-DYNM=NONVIS
 ‘This (one) hurts.’ (EL)

Example (21) illustrates the derived ‘quantity’ form, which also occurs as a modifier in the noun phrase, and in (22) the ‘measure’ form occurs with a bound nominal.

- (21) *na ʔǎp hupáʔ=mah híd pɔʔ-ɔh, dapuñ=d’ɔh píd=mah híd pɔʔ-píd-ñh*
 this.QTY flat.basket=REP 3pl present-DECL hand=PL DIST=REP 3pl present-DIST-DECL
 ‘They ritually presented this many baskets, they presented both hands-worth (i.e. 10).’ (txt)

- (22) *wǎn=mah tñh tɔñ-ɔh, nu-m’æ=b’ah*
 knife=REP 3sg hold-DECL this-MEAS=SPLIT
 ‘She held a knife, a blade this size.’ (H.TY.79)

Example (23) illustrates the plural-marked demonstrative acting as a pronominal. As discussed in (§4.4.1), this Plural form (*=d’ɔh*) is usually found with animates, whereas the *n’ñh* derivation is preferred for plural inanimates and mass nouns. Diessel (1999: 48) notes that an animacy distinction in demonstratives appears to be a relatively common feature of American Indian languages.

- (23) *ʔǎg=wag nɪ-d’ɔh nñh-nñh-ay=póʔ, páy-ay*
 drink=day this-PL be.like-NEG-INCH=EMPH1 bad-INCH
 ‘On drinking days, those (people) don’t do like this, (it’s) no good.’ (T.int.147)

Adverbial uses of the proximal demonstrative include temporal expressions, such as *núp=mæh=yíʔ* [this=DIM=TEL] ‘right this minute’, and (probably) the lexicalized form *nutǎñ* ‘today, currently’. The derived form *nu-m’æ* can serve both temporal and locational adverbial functions, as illustrated in examples (24-26), as well as a nominal modifier function (example 22 above). Example (26) illustrates the co-occurrence of both a locational adverbial and a determiner demonstrative in the same clause.

- (24) *tán nu-m’æ ʔāh næn-té-h*
 later this-MEAS 1sg come-FUT-DECL
 ‘I’ll be right back.’ (H.txt.43)

- (25) *hídnǎh húptok yǎ=yíʔ píð b’əh-ham-pæm-yíʔ-ay,*
 3pl.POSS person.belly thus=TEL DIST pour-go-sit-TEL-INCH
 ‘I kept pouring out their caxiri as I sat there,

ʔāh-āw-āh, nu-m’æ ay-áh
 1sg-FLR-DECL this-MEAS-INCH-DECL
 ‘(I poured it out) right here.’ (points to ground next to her) (TD.Cv.98)

- (26) *nukán núp j’ah-át nǎ ʔín ʔǎn g’et-næn-g’ét-ét=b’ay...*
 over.here this land-OBL 1sg.POSS mother 1sg.OBJ stand-come-stand-OBL=AGAIN
 ‘When my mother brought me over here to live in this land...’ (A.int.117)

In (27), the form *núp* is used adverbially, in anaphoric reference to an idea just presented in the discourse:

- (27) *g’æḡ=tæh ʔǎn-ǎn y’æt-yíʔ-ay-áh, j’uḡ cóʔ*
 bone=son 1pl-OBJ leave-TEL-INCH-DECL forest LOC
 ‘Bone-Son left us in the forest (area);

núp ʔín ni-nǎh-tég-éh
 this 1pl be-be.like-FUT/PURP-DECL
 ‘this is the way we are supposed to live.’ (H.34)

The uninflected variant *nĩ* appears in adverbial constructions with—exclusively—the verbs *nɔ* ‘say’ and *nĩh* ‘be like’ (examples 28-29). As noted above, the combination of the uninflected demonstrative forms with *nĩh* ‘be like’ is limited to certain dialect areas; in *Barriera Alta*, in particular, speakers use *núp=yiʔnĩh* rather than *nĩ nĩh*.

- (28) *nĩ ʔãh nɔ-yɔhɔy-pæm-hʃ-ʔp tíh*
 this 2sg say-search-sit-NONVIS-DEP EMPH2
 ‘Like this I am sitting looking for something to say.’ (txt)
- (29) *nĩ nĩh-ʔy bĩg j’ãh b’oỹ ʔãh cúh-tæh-æh*
 this be.like-DYNM HAB DST.PST traira 1sg string-COND-DECL
 ‘I always do like this when I string traira fish.’ (I-M.24)

Finally, example (30) illustrates the demonstrative identifier use of *nu*-. This occurs in copular and nonverbal (predicate nominal and adjective) clauses, and serves to “focus the hearer’s attention on entities in the surrounding situation or in the universe of discourse” (Diessel 1999: 79).

- (30) *nĩ dápi núw-úh*
 1sg.POSS pencil this-DECL
 ‘This is my pencil’ (EL)

It should also be noted that while Table 6.3 above (like the tables below) includes all the most common derived demonstrative forms, it is not exhaustive; other derivations are also occasionally encountered. For example, (31) illustrates the adverbial demonstrative form ‘this side/area’.

- (31) *nu-cá ʔáh-áy=n’ãh ʔãh hup-ʔid-mũhúʔ-útiʔ*
 this-side-DYNM=PL.OBJ 1sg RFLX-speak-play-EMPH.TAG
 ‘By the people around here I am scolded.’ (T.PN.21)

B. Distal demonstrative

The basic form of the Distal demonstrative is *n'i-*. It is used for referents that are relatively far from the speaker, but still within the immediate frame of reference.

Spatially, this is often limited to the visible area, although it can also include the area just outside the immediately accessible perimeter; temporally, it refers to a specific time period which is separated from the present, and is in general specifically past, rather than future. Like the Proximal form, its use is frequently accompanied by pointing.

Table 6.4. Hup Distal demonstrative forms

Form	Meaning	Inflection
<i>n'i-</i>	Distal	Uninflected form
<i>n'íp</i>	'that'	- <i>p</i> (From Dependent marker?)
<i>n'ít</i>	'there'	- <i>t</i> (From oblique?)
<i>n'íw-ǎñ</i> (<i>n'í-iw-ǎñ</i>)	'that-(FLR)-OBJ'	- <i>an</i> Object
<i>n'íw-ít</i> (<i>n'í-iw-ít</i>)	'that-(FLR)-OBL'	- <i>Vt</i> Oblique
<i>n'íw-ip</i> (<i>n'í-iw-ip</i>)	'that-(FLR)-DEP'	- <i>Vp</i> Dependent marker
<i>n'íw-íh</i> (<i>n'í-iw-íh</i>)	'that-(FLR)-DECL'	- <i>Vh</i> Declarative
<i>níw-i?</i>	'that-INT'	- <i>V?</i> Interrogative
<i>n'i-có?</i>	'in that place there'	- <i>có?</i> Locative
<i>n'i-kán</i>	'over there, that way'	- <i>kán</i> Directional (Occurs only in DEMs)
<i>n'i-d'əh</i>	'those'	- <i>d'əh</i> Plural/ collective
<i>n'i-n'íh</i>	'those, about there' (pl. inanimate/mass, approximate)	- <i>n'íh</i> Nominalizer
<i>n'íp-?ǎp</i>	'that many'	- <i>?ap</i> Quantity, number
<i>n'í-m'æ</i>	'that much, (at) that time'	- <i>m'æ</i> Amount, measurement
<i>n'í-wag</i>	'those days; earlier days'	<i>wag</i> 'day'
<i>n'í-wəd</i>	'that old/respected one'	- <i>wəd</i> 'old/respected'
<i>n'í-wa</i>		- <i>wa</i> 'old/respected woman'

Morphologically and syntactically, the Distal demonstrative is almost the same as the Proximal form; there is, however, no association of the bare uninflected form *n'i* with

the verbs ‘say’ and ‘be like’. Examples (32-33) contrast the use of both Proximal and Distal demonstratives in one sentence. In (33), the alternation reflects the fact that the relevant parameter is the relative frame of reference, which may vary even within the context of a single speech event and with a single unchanging referent—here the immediate location of the speaker *within* the village (‘there’) is contrasted with the location of the village (‘here’) vis-à-vis the rest of the surrounding forest. Finally, example (34) illustrates the temporal adverbial use of the distal demonstrative, in reference to a past event.

- (32) *nu-cóʔ pǎ, n’ikán híd ní-íy*
 this-LOC NEG:EX over.there 3pl be-DYNM
 ‘Here there are none (of my siblings), they live over there.’ (A.int.114)
- (33) *n’ít tǎh g’əç-ní-h, n’ít! nút tǎh-ǎn tǎh mæh-ní-h, n’ít*
 there 3sg bite-INFR2-DECL there here 3sg-OBJ 3sg kill-INFR2-DECL there
 ‘Over there it (snake) bit him, over there! (just across village central area; points); here (i.e. within village) it killed him, there (points across).’ (H.txt.52)
- (34) *maca-ní-h... n’í-wag-an*
 be.born-INFR2-DECL that-day-DIR
 ‘(I) was born...in earlier days.’ (doesn’t know year) (A.int.123)

C. Intangible demonstrative

The ‘Intangible’ demonstrative form is *yu-*, with variants *yí-* and *yǎ-* (via nasal spreading from the bound inflectional endings). Semantically, this form is the most flexible of all the demonstratives; in general, it points to a referent that is physically absent, out of sight, or in some other way outside the immediate frame of reference (hence my choice of the

label ‘Intangible’).⁸⁹ For example, *yu-* is the usual choice for indicating a place that is far away (especially if the location is approximate or not really known), a thing or person that is not present, or an abstract entity. However, it can also be used somewhat generically for something that is physically present but is being less actively pointed out by the speaker; in other words, an entity whose physical accessibility is somehow irrelevant. In comparison to the other demonstratives, *yu-* is less often accompanied by a deictic gesture of pointing.

The Intangible demonstrative is somewhat distinct from the other demonstratives in Hup. In keeping with its more tenuous connection to the physical world, one of the deictic functions of *yu-* is predominantly discourse-related: it is extremely common as a reference-tracking device, and has developed a somewhat specific use as a demonstrative identifier, as discussed below (this section). Another development is its common extension as a third person plural pronoun (see §6.1 above). Intangible *yu-* has also changed formally: when it occurs as a clause-final subject in interrogative clauses (e.g. ‘what’s that?’ ‘is that an X?’), it appears as the phonologically reduced *yu* in the Tat Deh dialect area, whereas it remains *yup* in the more conservative Barreira dialect area.

⁸⁹ According to Diessel (1999: 41), visibility is relatively common as a deictic category in Native American languages.

Table 6.5. Hup ‘Intangible’ demonstrative forms

Form	Meaning	Inflection
<i>yu-</i> (<i>yí</i> , <i>yí</i>)	Intangible distal	Uninflected form
<i>yúp</i>	‘that’ (inaccessible)	- <i>p</i> (From Dependent marker?)
<i>yí</i>	‘thus, then, there’	- <i>t</i> (From oblique?)
<i>yúw-ǎn</i>	‘that-FLR-OBJ’	- <i>an</i> Object
<i>yúw-út</i> (<i>yú-uw-út</i>)	‘that-(FLR)-OBL’	- <i>Vt</i> Oblique
<i>yúw-up</i> (<i>yú-uw-up</i>)	‘that-(FLR)-DEP’	- <i>Vp</i> Dependent marker
<i>yúw-úh</i> (<i>yú-uw-úh</i>)	‘that-(FLR)-DECL’	- <i>Vh</i> Declarative
<i>yúw-u?</i>	‘that-INT’	- <i>V?</i> Interrogative
<i>yí-có?</i>	‘in that place’	- <i>có?</i> Locative
<i>yí-kán</i>	‘over/out there, that way’	- <i>kán</i> Directional (Occurs only in DEMs)
<i>yí-d’ǎh</i>	‘those’	- <i>d’ǎh</i> Plural/ collective
<i>yí-n’íh</i>	‘all those’ (inanimate)	- <i>n’íh</i> Nominalizer
<i>yí-ǎp</i> (<i>ya ǎp</i>)	‘this many, all that’	- <i>ǎp</i> Quantity, number
<i>yú-wag</i>	‘those days’	<i>wag</i> ‘day’
<i>yú-wǎd</i>	‘that old/respected one’	- <i>wǎd</i> ‘old/respected man’
<i>yú-wa</i>		- <i>wa</i> ‘old/respected woman’
<i>yí nǎh-</i>	‘in that way, thus’ ‘saying thus’	<i>nǎh-</i> (Verb) ‘be like’
<i>yí nǎ-</i>		<i>nǎ-</i> (Verb) ‘say’

The following examples (35-37) illustrate the ‘intangible’ deictic function of *yu-*, in reference to some real, physical entity that is currently not present. In (35-36), the pronominal use of the demonstrative refers to a boat captain who has come and gone. In (37), the demonstrative determiner refers to the fish that sometimes appear in the speaker’s net.

- (35) *j’ám=mah yú-wǎd d’o ǎ-wíd-nǎn-ǎh*
 yesterday=REP that.ITG-RESP take-arrive-come-DECL
 ‘Yesterday that (respected) one brought it’ (B.Cv.87)
- (36) *ǎn-ǎn=yí ǎ=nih yúp nǎ ǎ-nǎh mún tǎh ní-bǎh, cǎc!*
 1pl-OBJ=TEL=EMPH.CO that.ITG give-NEG INTS2 3sg be-HAB-DECL INTERJ
 ‘That one never gives us any (sugar) at all!’ (B.Cv.92)

- (37) *cǎ-wag pǎd g'ǎʔ-ǎy j'ám yǎn'ǎh hǎp hǎʔ*
 other-day DIST suspend-DYNM DST.CNTR that.ITG-NMZ fish TAG2
 'Every now and then there are some fish in my net.' (B.Cv.81)

Examples (38-39) illustrate the discourse deictic use of *yu-*, which refers to “the propositional content of the preceding utterance... [or] focuses the hearer’s attention on its illocutionary force” (Diessel 1999: 91). In (38), the demonstrative refers to the entire story the speaker has just finished telling; in (39), it refers to the spirit’s techniques, in general, for fishing, stringing, and cleaning the ‘fish’ that appeared to the human speaker as jaguars.

- (38) *ya ǎp j'ǎh yúp hám-áh, yú-uw-úh, ya ǎp*
 that.ITG.QTY DST.PST that.ITG go-DECL that.ITG-FLR-DECL that.ITG.QTY
 ‘That’s how it happened, that, that’s it.’ (H.txt.20)

- (39) *ǎh-íp yǎn'ǎh=n'ǎn hipǎh-nǎh yǎh tí*
 1pl-DEP that.ITG-NMZ=PL.OBJ know-NEG FRUST EMPH.DEP
 ‘We don’t know about these things.’ (I-M.24)

Example (40) shows the co-referential use of ‘intangible’ demonstrative and pronoun for reference-tracking purposes, a common device in Hup discourse.

- (40) *ǎh wǎy-muhún-tǎh, yúp tǎh wid-nǎh-ǎh*
 1sg be.weak-INTS2-COND that.ITG 3sg arrive-come-DECL
 ‘When I was really small, that one, he arrived.’ (H.txt.62)

Adverbial uses of the ‘intangible’ demonstrative include the occurrence of the uninflected form (*yǎ*) with the verbs ‘be like’ (Tat Deh dialect only) and ‘say’, as in examples (41-42), where it refers back to the content of the entire story that has just been told. Interestingly, nasal spreading may occur on *yǎ* even when other morphological material comes between the demonstrative and the verb, which suggests that this is a

basically fused form that can come apart in certain circumstances. Note that were the demonstrative a direct object of the verbs ‘say’ and ‘be like’ (rather than an adverbial), we would expect the object form *yúw-ǎñ*.

- (41) *yí* ⇒ *nɔ-ɔy* *wíɽ=d’əh* *n’úñ-uñ*
 that.ITG say-DYNM hear=PL CNTR-DECL
 ‘Thus speak the ones who have heard (Curupira).’ (T-C.1)

- (42) *yí* *ham-nñ-ɣ=cud* *yúw-úh*
 that.ITG go-be.like-DYNM=INFR that.ITG-DECL
 ‘It happened like that.’ (H-CO.5)

Various *yu-* forms are extremely common as discourse devices, especially when introducing a new topic in a narrative. One example is the form *yí nñ-* ‘thus’, which appears (with the Dynamic) as the reduced form *yñɣ* (< *yí nñ-ɣ*) ‘thus, and so’, and with the Sequential to form *yññ-yóɽ* ‘having done that, after that’. Another frequent example is *yñ* ‘thus, with that’; this form also occurs with the Telic (contrastive focus) marker =*yíɽ* in the expression *yñ=yíɽ* ‘like that, exactly’. The form *yúp* is also especially frequent in these topic-introducing phrases; it can even occur multiple times within a single phrase, as in (43), often separated from the rest of the clause by a brief pause. As a semi-formulaic device, its reference is not always entirely clear, but in cases like (44) its first instance seems to be adverbial (‘thus, with that’), while its second instance is a proleptic pronoun referring to the subject of the clause (which is often not otherwise stated).

- (43) *yúp=mah* *yúp* *tíh=yɔh=d’əh* *máh-an* *tíh=tæh ɽp* *wíd-b’áy-áh*
 that.ITG=REP that.ITG 3sg=affine=PL near-DIR 3sg=child.father arrive-return-DECL
 ‘Then, it’s said, that one, her husband, returned from (visiting) his affines.’
 (P.BWB)

Adverbial uses of *yu-* are given in (44-45); example (44) refers to a roça in a myth (not anchored in the physical world), while (45) refers to a past and indefinite point in time.

- (44) *yíkán* *kayak=tĩg=g'æt híd nɔʔ-ʒh*
 out.there manioc=stem=leaf 3pl give-DECL
 'Out there they gave (him) manioc leaves (to eat).' (M.I.58)
- (45) *cug'æt d'əh-hám-áy=nih j'ám yúw-úh, yítæñ-æw-æh*
 leaf/paper send-go-DYNM=EMPH.CO DST.PST that.ITG-DECL that.ITG-COND-FLR-DECL
 'She sent a letter, that other time.' (B.Cv.87)

One of the most common functions of *yu-* is as a demonstrative identifier in nonverbal clauses—a role that is far more frequently filled by this demonstrative form than by the Proximal, Distal, or Alterative demonstratives. In this usage, it almost invariably appears clause-finally, and accordingly takes the Declarative marker *-Vh* that is required for any subject that follows the verb in Hup (see §17.3.2). Examples include (46) and (47), involving the 'old/respected man' inflected form of *yu-*. The demonstrative identifier *yu-* also occurs in phonologically reduced form in the semi-formulaic expression *náw yúh* 'thank you', which derives from *náw yuw-uh* 'that is good'.

- (46) *madio=ĩh yúw-úh!*
 Mario=MSC that.ITG-DECL
 'That's Mario!' (B.Cv.)

- (47) *páy=pog páh yú-wəd-əh, húptok 'estragá'-áy*
 bad-EMPH1 PRX.CNTR that.ITG-RESP-DECL person.belly go.bad(Pt)-DYNM
 'That old guy is a jerk, "sugar makes caxiri go bad,"

yúw-úh, ʔacúka, nɔ̃ɔ̃ páh yú-wəd-əh
 that.ITG-DECL sugar(Pt) say-DYNM PRX.CNTR that.ITG-RESP-DECL
 he just said, that one.' (i.e. the merchant refused to trade sugar) (B-Conv.2.7)

This demonstrative identifier function of clause-final *yu-* (or rather *yúw-úh*) appears to be almost automatic in many predicate nominal and adjective clauses. In fact, in keeping with Diessel's (1999: 79) observation that "a demonstrative identifier is easily confused with a copula that appears in a sentence with no overt subject," Franklin and Moore (1979) label the clause-final form *yúw-úh* (or its phonologically reduced variant *yúh*) as the copula verb 'be'.

While this form is clearly a demonstrative, and not a true copula, the demonstrative identifier realization of *yu-* does appear to be taking on an identity that is distinct from that of its other functions. In particular, it often appears on clauses that already have a verbal predicate and that may even have an explicit subject (to which *yu-* then refers back). In these cases, it almost always occurs following a verb-final enclitic (usually an evidential or contrast particle), which it usually latches directly onto as if it were a clitic itself. Examples of this copula-like demonstrative identifier function include (48-50) (following evidential and diminutive particles) and (51) (following a temporal contrast particle):

- (48) *g'í-nɪh=hɔ̃ yúw-úh!*
 hot-NEG=NONVIS that.ITG-DECL
 'It's not hot!' (B-Cv.5)
 (A joking contradiction of another's statement, *g'í=hɔ̃* [hot=NONVIS] 'it's hot')

- (49) *núh múj=yĩʔ-ay=mah yúw-úh, nʒh!*
 head stink=TEL-INCH=REP that.ITG-DECL say
 ‘(She says) her head smells!’ (B.Cv.1.6)
- (50) *tú=mæh=yĩʔ ʔám=ʔp mʒy-yok ní-ip=mæh yúw-úh,*
 low=DIM=TEL 2sg=father house-poke be-DEP=DIM that.ITG-DECL
 ‘They are so low, the rafters of your father’s house,
- tĩh-ǎn nʒ-ʒy=mah yúw-úh*
 3sg-OBJ say-DYNM=REP that.ITG-DECL
 she said to him (her child).’ (E-SB.2)
- (51) *nɔg’ǒd pǎ=pog páh yúw-úh!*
 mouth NEG:EX=EMPH1 PRX.CNTR that.ITG-DECL
 ‘It has no mouth at all!’ (B.Cv.)

Further evidence that the demonstrative identifier *yu-* has taken on a copula-like function that is somewhat distinct from its deictic one is its ability to co-occur with a *different* demonstrative in some predicate nominal or adjective clauses:

- (52) *n’íp teg póg yúw-úh*
 that tree big that.ITG-DECL
 ‘That tree is big.’ (EL)

D. Alternative

The demonstrative form *cǎ-* ‘other’ indicates alterity. It inflects much like the other demonstrative forms, although (like the Distal form) it lacks combinations with the verbal forms ‘say’ and ‘be like’, as well as several of the directional and quantity-related terms.

Table 6.6. Hup Alternative demonstrative forms

Form	Meaning	Inflection
<i>cā-</i>	‘Other’	Uninflected form
<i>cāp</i>	‘another’	- <i>p</i> (From Dependent marker?)
<i>cāw-ān</i> (<i>cā-āw-ān</i>)	‘another-(FLR)-OBJ’	- <i>an</i> Object
<i>cāw-āt</i> (<i>cā-āw-āt</i>)	‘another-(FLR)-OBL’	- <i>Vt</i> Oblique
<i>cāw-āp</i> (<i>cā-āw-āp</i>)	‘another-(FLR)-DEP’	- <i>Vp</i> Dependent marker
<i>cāw-āh</i> (<i>cā-āw-āh</i>)	‘another-(FLR)-DECL’	- <i>Vh</i> Declarative
<i>cāw-ā?</i>	‘another-INT’	- <i>V?</i> Interrogative
<i>cā-?ah-có?</i>	‘in another place’	- <i>?ah</i> (= <i>có?</i>) Locative
<i>cā-d’āh</i>	‘others’	- <i>d’āh</i> Plural/ collective
<i>cā-n’āh</i>	‘whatever’	- <i>n’āh</i> Comparative, nominalizer
<i>cā-wag</i>	‘some days’	<i>wag</i> ‘day’
<i>cā-wəd</i>	‘other old/respected one’	- <i>wəd</i> ‘old/respected man’
<i>cā-wa</i>		- <i>wa</i> ‘old/respected woman’

Like the other demonstratives, the syntactic functions of the Alternative form include pronominal, determiner, and adverbial functions, as illustrated in (53-57).

- (53) *n’íp pót?ah=có?óy nāh ?id cāp=yf?b’ay-áh, cāp ?id=yf?*
 that upriver=LOC-DYNM POSS speech other=TEL=AGAIN-DECL other speech=TEL
 ‘Those upriver people’s language is different, it’s a different language.’
 (A.int.119)
- (54) *cā-d’āh ?id-hipāh-nāh=d’āh ni-bf’h*
 other=PL speak-know-NEG=PL be-HAB-DECL
 ‘There are a few/ others who don’t know how to speak.’ (A.int.115)
- (55) *cā-wag ?in hām-áh, páti!*
 other-day 1pl go-DECL Pattie
 ‘Someday we’ll go, Pattie!’ (B.Cv)
- (56) *cā-wəd, tāh=wəhəd=wəd*
 other-RESP 3sg=old.man=RESP
 ‘Another respected one, an old respected man.’ (H.YP.71)
- (57) *cā?ah có? cā-d’āh b’f’i?, hipāh-nāh ?āh-āh, cā?d’āh-āh*
 other.side LOC other-PL only know-NEG 1sg-DECL other-PL-OBJ
 ‘In other places there is only a different kind of people, I don’t know about those other people.’ A.int.115)

E. Other demonstrative forms

In addition to the five-way demonstrative paradigm discussed above, Hup has two other demonstrative forms. These incorporate the two temporal Contrast particles *páh* ‘proximate, recent past’ and *j’am* ‘distant past’ (see §13.4). They have only been encountered in a single inflectional form, involving the Dependent marker -*Vp*.⁹⁰

In keeping with the temporal values of the bound particles, the demonstrative *pah-áp* ‘that (recent)’ is used in reference to entities that were recently mentioned or encountered (example 58), while *j’am-áp* ‘that (past)’ is used for entities that were mentioned or encountered some time ago (typically the day before or earlier; example 59).

- (58) *núp, pah-áp wæɔɔm’æh=tod=tæh=n’ǎn, híd hɔh-ʔé-p wab*
 this PRX.CNTR-DEP star=hollow=offspring=PL.OBJ 3pl smoke-PERF-DEP jirau
 ‘Here is the smoking-platform where those recently mentioned Star-Hollow children were smoked (as meat).’ (constellations) (H.txt.50)

- (59) *j’am-áp ʔin ham-ʔáy-ap n’uǎ, húptok húp mǝʔ j’ǎh ʔin*
 PST.CNTR-DEP 1pl go-VENT-DEP CNTR person.belly good UNDER PST.CNTR 1pl
 ‘That other time we went, we got drunk on very good caxiri,

ʔəg-na ʔ-póʔ tí, j’am-áp páti
 drink-lose.consciousness-EMPH1 EMPH.DEP DST.CNTR-DEP Pattie
 that other time when Pattie

ʔin-ǎ ham-ʔáy-ap tí!
 1pl-OBL go-VENT-DEP EMPH.DEP
 went with us (the previous year)’ (TD.Cv.100)

6.4. Indefinite reference

While demonstratives are the primary resource in Hup for expressing definite reference, Hup has several means for conveying indefinite reference.

New participants and entities are frequently introduced into discourse with the numeral *ʔayũp* ‘one’,⁹¹ followed by the noun (which is bound, if a bound form is available), as illustrated in examples (60-62). In (60), for example, the narrator is beginning a story and introducing the protagonist; in (61), he switches the topic of conversation from poisonous snakes to a man who had been a victim of such a snake. The use of *ʔayũp=ʔh* in (62) can likewise be translated as ‘someone’, ‘indefinite person’.

- (60) *ba'tʔb' - ʔǎy=n'ǎn=mah ʔayũp=ʔh yɔh-ní-íy*
 spirit-FEM-PL.OBJ=REP one=MSC affine-be-DYNM
 ‘(There was) a man (who) had spirits for in-laws.’ (I-M.21)

- (61) *nút ʔayũp=ʔh tɔhɔɔh; yúp tʔhɔ́ mæh-æw-æh*
 here one=MSC finish-DECL that.ITG snake kill-FLR-DECL
 ‘Right here a man died; one of those snakes killed him!’ (H.txt.52)

- (62) *papudí cóʔ=mah wɔh=d'ɔh híd næn-æh, nút=mah, ʔayũp=ʔh ʔíd-ih*
 Papuri LOC=REP river.indian=PL 3pl come-DECL here=REP one=MSC speak-DECL
 ‘(Someone) says River Indians came from the Papuri (River region)... she says someone from over here said so.’ (H.txt.35)

After first mention with *ʔayũp*, the participant is subsequently referred to by a demonstrative, as examples (63-64) illustrate, or (especially for humans) a pronoun.

⁹⁰ But note the idiosyncratic stress pattern; normally the Dependent marker is unstressed and the stem is stressed, while here the reverse is true.

⁹¹ Probably related to demonstrative *yúp*; see §6.6.1.

- (63) *nút j'áh yúp, yř híd nřh-ře ř-ní-iw-řh,*
 here land that.ITG that.ITG 3pl be.like-PERF-be-FLR-DECL
 'It was around here that they did thus,

cřř deh=mah řayup=má, yúp=ma g'ætyřh
 slug water=REP one=river that.ITG=river headwaters
 at a creek called Slug Creek, at the headwaters of that creek.' (H.YP.78)

- (64) *nút hayám-át řayup mřř pōğ g'et-ní-h...*
 here town-OBL one house big stand-INFR2-DECL
 'In this town stood a big house...

mřř pōğ j'ám yúp mřř ni-ní-h
 house big DST.CNRT that.ITG house be-INFR2-DECL
 that house was a big house.' (P.B.10)

Another strategy for conveying indefinite reference makes use of the Alterative demonstrative *cā-* 'other' in combination with a noun (often bound) or the plural marker, especially in the nominalized form *cā-n'řh*:

- (65) *cā-n'řh=řh=yřř yúp řám-ăň bahád-áy=nih*
 other-NMZ=MSC=TEL that.ITG 2sg-OBJ appear-DYNN=EMPH.CO
 'It was someone else who appeared to you.' (T-C7)

- (66) *cā-n'řh wăđ, třh wăđ-tăň, třh pe ř-ní-ty*
 other-NMZ food 3sg eat-COND 3sg sick-be-DYNN
 'Whatever food (it is), when he eats (it) he is sick.'
 (i.e. 'Anything makes him sick.') (EL)

- (67) *yúp cā-d'řh wíd-năň-ăp=b'ay*
 that.ITG other-PL arrive-come-DEP=AGAIN
 'Then others arrived.' (H.txt.66)

The form *húp* can also refer to an indefinite human participant (see discussion in §11.1.1), as in examples (68-69).

- (68) *nutăň húp-ăň řăh key-tuk-nřh-řh, páy řăh-ăň*
 today person-OBJ 1sg see-want-NEG-DECL bad 1sg-DECL
 'These days I don't want to see anyone, I am bad.' (T.PN.27)

- (69) *yĩ=mah yúp húp=wəd wĩʔ-g'ét-éy, mǎh g'íg-ip=ĩh*
 thus=REP that.ITG person=RESP hear-stand-DYNM inambu arrow.shoot-DEP=MSC
 'There, they say, an old man was standing listening, one who was shooting
 inambu.' (E.SB.4)

Yet another strategy for indefinite and non-specific reference makes use of interrogative pronominal forms. Examples (70-71) illustrate this use of the form *ĩũ* 'who', which tends to occur with a restrictive relative clause and the masculine/animate bound noun = *ĩh*. (72-74) are examples of indefinite reference using the interrogative particle *hĩ*. Note that the interrogative pronouns occur clause-initially, just as they do in interrogative clauses, although most of these examples are clearly in imperative or declarative modes.

- (70) *ĩũ yam-muhũʔ-túk-up=ĩh, nĩŋ yam-muhũʔ nĩŋ=hin*
 who dance-play-want-DEP=MSC 2pl dance-play.IMP 2pl=also
 'Whoever wants to dance, you all go ahead and dance.' (P.Sp.)
- (71) *ĩũ ʔayũp=ĩh ʔid-túk-up=ĩh, nĩŋ ʔid-ʔáy*
 who one=MSC speak-want-DEP=MSC 2pl speak-VENT.IMP
 'Whoever wants to speak, you all come and speak.' (P.Sp.)
- (72) *hĩ ʔāh hám-át, ʔāh ham-bĩh*
 where 1sg go-OBL 1sg go-HAB-DECL
 'Wherever I (want to) go, I always go (there).' (Alb.Int.)
- (73) *hĩn'ĩh pǎ-ǎp, tǎhĩp pǎ-ǎp, tĩh hám-ap*
 Q-NMZ NEG:EX-DEP child.father NEG:EX-DEP 3sg go-DEP
 'Without anything, without a husband, she went.' (M.I.1)
- (74) *hĩ ʔǎp páy nihũʔ*
 Q-QTY baggage all
 'All kinds of merchandise' (H.txt)

Finally, indefinite reference can also be expressed via a complement clause (see §18.2.3 and §18.2.5), as in the two synonymous versions in example (75).⁹² A related form is the expression *hĩ-nĩ-n'ñ* ‘whatever it is’, a semi-lexicalized complement construction (example 76).

- (75) a) *ɔam túk-n'ñ, d'óʔ!*
 2sg want-NMZ take.IMP
 ‘Take whichever you want.’
- b) *ɔam túk-uw-ǎñ, d'óʔ!*
 2sg want-FLR-OBJ take.IMP
 ‘Take whichever you want’ (EL)
- (76) *hĩ-nĩ-n'ñ ʔĩd=yĩʔ tñ təw-wáy-áh*
 only-be-NMZ speech=TEL 3sg scold-go.out-DECL
 ‘Anything one says makes him angry.’ (EL)

6.5. Quantification

In this section, I discuss the range of quantifiers available in Hup. These include numerals and a number of other forms.

6.5.1. Numerals

An interesting feature of Hup numerals is their relative etymological transparency. This applies even to the lowest numerical values (numerals 1-3), for which such transparency is extremely rare cross-linguistically. The cardinal numerals 1-5 and their etymological sources (whose meaning in most cases is simply the literal translation of the least grammaticalized dialectal variant) are summarized in Table 6.7.

Table 6.7. Cardinal numerals 1-5 in Hup

	Numeral	Etymology?
1	<i>ʔayup</i> (TD, B) <i>ʔæp</i> (UN)	compare demonstrative <i>yúp</i> ‘that (intangible)’ ⁹³
2	<i>ko ʔap</i> (B) <i>ka ʔap</i> (TD, UN) <i>kəw ɛg- ʔap</i> (NF?)	‘eye-quantity’ (body part)
3	<i>mɔ́wa ʔap</i> (B) <i>mɔ́ra ʔap</i> (TD) <i>mɔ́-w ɛg- ʔap</i> (NF?) <i>bab’ pã@</i> (UN)	‘rubber.tree-seed-quantity’ ⁹⁴ ‘sibling NEG:EX’ (‘without sibling’)
4	<i>hi-bab’-nĩ</i> (TD, B) <i>bab’-nĩ</i> (TD, UN)	‘(FACT)-have.sibling/accompany.NMZ’ (deverbal) OR ‘sibling exists’
5	<i>ʔayup dapúh</i> (TD, B) <i>ʔædapúh</i> (TD) <i>nap’úh</i> (variant B) <i>ʔæp d’apúh</i> (UN)	‘one hand’

In the case of ‘two’ and ‘three’, the ‘quantity’ marker (-*ʔap*) is built into the numeral, whereas for ‘four’ and above this marker is optional.

One striking aspect of the Hup numeral system is the high degree of variation for a given term. The different variants correspond to different dialectal regions, but some variants currently coexist within the same community, and most speakers seem to be aware of the range of forms in use. Thus while the etymologies of ‘two’ and ‘three’ would not be obvious just from the more phonologically reduced forms, these coexist with the non-reduced variants, and speakers who regularly use even the most reduced forms seem to be familiar with the fuller forms.

⁹² (75b) is a headless relative clause, nominalized by the Object case marker (see §18.2.4).

⁹³ The plausibility of this etymology for ‘one’ was also observed by Pozzobon (1997: 167).

⁹⁴ The rubber tree (*hevea* sp.), known in Hup as *mɔ́*, has a large, distinctive, three-lobed seed or nut (*mɔ́ wɛg*). This seed is culturally highly salient: it is used to make a popular children’s toy, and is associated with an edible fruit; the name *mɔ́* is also a common personal name among Hup women (see Table 1.2).

The etymology of ‘four’ has already been the topic of some discussion in the limited literature on Hup. Pozzobon (1997: 167) suggests that the lexeme ‘four’ is composed of the morphemes *hi-* ‘lie down’, *bab*’ ‘family’, and *ni* ‘have’, with the combined meaning ‘lie down (with a woman) in order to have a family’. Particularly in light of the form for ‘three’ (‘without a sibling’) in the Upriver Hup dialect, Pozzobon goes on to argue that this etymology for ‘four’ is motivated by the cultural salience of sister exchange as a marriage strategy among the Hupd’əh and in the Vaupés region generally. While Pozzobon’s suggestion regarding the cultural motivation behind these forms for ‘three’ and ‘four’ is insightful (see discussion below), the actual internal composition of ‘four’ is best analyzed otherwise.⁹⁵

The morpheme *hi-* is undoubtedly the Factitive prefix (see §11.4), rather than the homonymous verb root ‘descend’. The remaining construction *bab*’-*ni*—which consists of the noun *bab*’ (‘real/classificatory brother’ or the gender-neutral ‘sibling’) and the verb root *ni-* ‘exist, be’—can be analyzed in two ways. As two words, *báb*’ *ni-*, it forms an intransitive clause ‘sibling exists’ (compare the structurally non-ambiguous form *báb*’ *pǎ* ‘three’, or ‘sibling does not exist’). The same construction also occurs as a noun-incorporating verbal stem *bab*’-*ni-* (see §9.5), which is used both in a literal sense ‘have siblings’ or ‘be among one’s clan members’ (see example 77) and in a more figurative sense ‘accompany/be together’ (regardless of type of relationship; see example 78). Accordingly, acceptable literal translations of *hibab*’*ní* ‘four’ include both ‘be caused to have a sibling’ and ‘be caused to be accompanied’. I will return to this etymology below.

⁹⁵ Cf. Ospina 2002: 462 on Yuhup.

- (77) *nu-cáʔ-áy=n'ǎn ʔǎh hup-ʔid-muhúʔ-útiʔ... bab'-ní-ip,*
 this-side-DYNM=PL.OBJ 1sg RFLX-speak-play-EMPH.TAG sibling-be-DEP
 'I am made fun of by the people here... (who) have siblings;

bab'-ni-nǎh j'ám ʔǎh-tiʔ
 sibling-be-NEG DST.PST 1sg-EMPH.TAG
 I have no siblings!' (T-PN.21)

- (78) *ʔin ʔǎh-bab'-ni-d'oʔ-pǎd-ǎh, ʔǎh=yǎh=d'ǎh-ǎ ʔin bab'-ni-yóʔ*
 1pl RECP-sibling-be-take-DIST-DECL 1sg=affine=PL-OBL 1pl sibling-be-SEQ
 'We all accompanied each other; we were accompanied by our affinal relations.'
 (A-Int.47)

While the forms for 1-5 are variable, even more variation is apparent in the numerals for 6-20, which are based on the hands and feet, and involve adding fingers and toes (summarized in Table 6.8). These forms are only marginally lexicalized; several options are available, and there is considerable variation within a given community and even among utterances by a single speaker. This system is probably more accurately characterized as a tally system, rather than a numeral system per se; note that there is ambiguity between the series 11-14 and that of 16-19, and speakers probably rely on gesture to differentiate between them. Unfortunately, we may never know to what extent these numerals were actually used beyond simple tallying, since today virtually all speakers prefer Portuguese numerals⁹⁶ for 6+ (except occasionally for 'ten'). For 20+, consultants can only give Portuguese forms.

⁹⁶ This is general among Hup speakers, despite the fact that very few speak more than a few words of Portuguese.

Table 6.8. Numerals 6-20 in Hup

	Numeral (and variants)	Gloss
6	<i>cǎp cob cakg'ět ʔayũp</i> <i>ʔayũp cob cakg'ět</i> <i>cǎp cob popōg</i>	'other finger stands up one' 'one finger stands up' 'other finger RED.big (=thumb)'
7-9	<i>cǎp cob cakg'ět (2,3,4)</i> <i>(2,3,4) cob cakg'ět</i>	'other finger stands up (2,3,4)' '(2,3,4) fingers stand up'
10	<i>cǎp cob cakg'ět ʔædapũh</i> <i>ʔædapũh cob cakg'ět</i> <i>cōb niħũʔ</i> <i>d'apũh niħũʔ</i> <i>d'apũh=d'əh pǎd</i>	'other finger stands up five' 'five fingers stand up' 'finger be.finish' 'hand be.finish' 'hand-PL both'
11-14	(another, 2, 3, 4) <i>j'ib (popōg) cakg'ět</i>	'... toes/foot stand up' (Note same forms as 16-19)
15	<i>ʔayũp j'ib ħũʔ</i>	'one foot finish'
16-19	(another, 2, 3, 4) <i>j'ib (popōg) cakg'ět</i>	'...toes/foot stand up' (Note same as 11-14)
20	<i>j'ib niħũʔ</i> <i>j'ib=d'əh pǎd</i>	'feet be.finish' 'feet-PL both'

The forms given above are used strictly for cardinal numerals. There is no precise way in Hup to express precise ordinal values such as 'fourth' or 'seventh'; ordinality can only be indicated via non-numerical constructions ('the beginning', 'the following', etc.), as illustrated in (79). Note that any countable noun can be substituted for the animate (masculine) singular = *ʔh* given in the example; e.g. *mǎy* 'house', etc.

- (79) *kəcǎ-əp=ʔh* (ahead-DEP=MSC) 'the first man'
tǎ=cum-ní-ip=ʔh (3sg=beginning-be-DEP=MSC) 'the first man'
- yúp ħũy-yǎ-áy=ʔh* (that follow-TEL-INCH=MSC) 'the next man'
yúp ħǎ ʔah-áy=ʔh (that beyond-INCH=MSC) 'the next man'

‘Half’ is typically expressed with the lexical *hæyɔ* ‘middle, midway’ (*hæyhɔ* in the Barreira dialect), used as an adjectival modifier. Other fractional values are conveyed by first indicating the number of pieces something is divided into (usually via a classifying noun such as *=b’ah* ‘split/flat thing’), then the number of these that are subsequently taken.

In the noun phrase, numerals can occur both as nominal modifiers and as nominal heads. As modifiers, they typically precede the noun, as do demonstratives (while adjective modifiers follow the noun); in this case, the numeral is usually unstressed, while the noun gets the primary stress of the NP, usually recognized as rising tone (whatever the underlying tone of the noun)⁹⁷. The alternative order (N-Numeral) is also possible, but is much less common. The occurrence of numerals in the noun phrase is illustrated in examples (80-83).

- (80) *d’apuñ niñu? wædhɔ=cud ðuñ hid b’ɔ-tubúd-úh*
 hand all moon=INFR2.EPIST 3pl chop.down-INTS3-DECL
 ‘For 10 months, apparently, they were chopping down (the tree).’ (MD.DT.11)
- (81) *ðayup wǎg=yi? hid ham-g’o?bɔh*
 one day=TEL 3pl go-go.about-HAB-DECL
 ‘They always take just one day in getting there.’ (B.Cv.129)
- (82) *ðin wid-ham-bɔay-áh... j’ák b’ɔk kɔd-əh, ko ðap b’ɔk*
 1pl arrive-go-HAB-INCH-DECL buriti swamp pass-DECL two swamp
 ‘We arrived as we always do... we passed the buriti-swamp, two swamps.’
 (S.PN.15)
- (83) *ko ðap=d’əh tɔh=tæh=d’əh ná?-áh*
 two=PL 3sg=offspring=PL die-DECL
 ‘Two of his children died.’ (B.Cv.134)

⁹⁷ Note that the opposite stress pattern applies to demonstrative NPs (‘DEM N).

Note that in (83) the numeral itself takes the Plural marker =*d'əh*, as does the noun (although this may result in two appositional NPs). When a numeral other than ‘one’ occurs on its own as a nominal head, it requires the Plural/collective suffix =*d'əh* as a nominalizer (example 84), whereas within the NP this is optional (see §4.4.4).

- (84) *ka ʔaɸ=d'əh ʔm-ih, tã ʔãý=d'əh*
 two=PL 1pl-DECL woman=PL
 ‘There are two of us, women.’ (D.int.121)

Further discussion of the interaction of numerals and number marking is provided in §4.4.2, and of the use of bound nouns and measure terms with numerals in §4.4.3.

Comparative and Historical Note

In this note, I address some interesting parallels that exist between the numeral system of Hup and those of its sister languages, which may give us some insight into how these systems developed historically.

The Nadahup languages display a diverse range of numeral strategies. Nadëb’s system is the simplest, with lexical terms for 1-3 only; ‘two’ tends to be used only approximately (i.e. ‘a couple’), and larger quantities are expressed via quantifying terms (‘several’, ‘all’, ‘many’; Weir 1984: 103-4). Weir notes that the lexeme ‘one’ also means ‘together, unity’, but offers no insights into the etymologies of the other forms, which do not appear to have cognates within the family.

Dâw displays a slightly more complex system (S. Martins 1994: 93-5). It has lexical terms for (1-3), of which *mæʔ* ‘one’ is etymologically opaque, but (although Martins 1994 offers no insights into their etymologies) *tɬib* ‘two’ bears a striking

similarity to Dâw *tʰb* ‘eye’, and *mutuwap* ‘three’ appears to be cognate with the Hup form *mɔʔɔʔ* or *mɔʔ-wig-ɔʔ*, ‘rubber.tree-seed-quantity’.⁹⁸ For values over three (which speakers today usually express via Portuguese borrowings), the native Dâw system relies on gesture-bound tallying, supplemented by a ‘fraternal’ lexical strategy: fingers are added one by one to form pairs (such that ‘ten’ is indicated by five pairs of digits, with the thumbs placed side by side), while the even numerals (4, 6, 8, 10) are referred to as *mæʔmab* ‘one (has) brother’, and odd numerals (5, 7, 9) as *mæʔmab mæh* ‘one brother NEG’ (i.e. ‘one has no brother’). This strategy is identical to the one we find lexicalized in the Hup word ‘four’ (*hibab’ni* ‘having a sibling/companion’), and in the Umari Norte term for ‘three’ (*bab’pã* ‘without a sibling’).

Yuhup (Ospina 2002: 455-59), like Hup, has a relatively complex numeral system, with basic lexical terms for 1-3, a ‘fraternal’ term (‘has a brother/sibling’ or ‘is accompanied’) for ‘four’, and a base-five system relying on the hands and feet for 5-20. The forms of the terms themselves are slightly different from those in Hup. The form for ‘one’ (*cāh* or *cāhyāpā*) appears—like ‘one’ in Hup—to be derived from a demonstrative, in this case ‘other’. ‘Two’ (*b’ɔʔ*) is etymologically obscure, but ‘three’ (*mɔʔig-w’ap*) is clearly cognate with the ‘rubber-tree-seed-quantity’ form in Hup and in Dâw. Finally, Yuhup expresses ‘four’ as *bab-ni-w’ap* (‘accompany-quantity’ or ‘has sibling-quantity’; cf. Ospina 2002: 462), and ‘five’ as *cāh-pɔh-w’ap* ‘one-hand-quantity’—semantically identical to their Hup parallels.

⁹⁸ Note that Dâw *-wap* is a quantifier morpheme, undoubtedly cognate with the Hup quantifier form *ɔʔ*.

Given their common resemblance, the forms for ‘two’ and ‘three’ seem to be reconstructable across the Nadahup family, although they have retained semantic transparency. The ‘fraternal’ form for ‘four’ is perhaps even more intriguing, since it is common not only to three of the Nadahup languages, but also to the Vaupés region and beyond: calqued equivalents of ‘has a brother/companion’ for ‘four’ are found in the Tukanoan languages generally, in Tariana (probably due to diffusion from Tukanoan, since it is *not* found in the related language Baniwa; cf. Aikhenvald 2002: 107-8). The ‘fraternal’ term for ‘four’ also occurs in several Witotoan/ Bora languages (Colombia), including Miraña (Frank Seifart, p.c.), Murui and Minica (Huber and Reed 1992: 183); some also use ‘without a brother’ for ‘three’ (Huber and Reed 1992: 183). Finally, in Kakua/Nukak ‘two’ is literally ‘brother’, and the same word is contained in the other even numerals (Huber and Reed 1992: 180-84).

The ‘has a sibling’ strategy is clearly a widespread areal phenomenon, although it does not appear to be a more generally cross-linguistically common strategy for representing ‘four’ (cf. studies of numeral etymologies, e.g. Blažek 1999). It is possible that the ‘fraternal’ tally system present in Dâw might once have been a more widespread strategy, later superseded (in some cases) by a base-five system (also probably a tally system). There may also be a cultural explanation for the equation of ‘four’ with two pairs of siblings: in the Vaupés region (and beyond it), having and living among one’s actual and classificatory siblings is culturally extremely important; these are one’s fellow clan members (and in the case of the Vaupés River Indians, the fellow speakers of one’s language). Moreover, as Pozzobon (1997: 167) points out, sister-exchange is the ideal

marriage pattern in the region, in part because this allows spouses to return to the community of one of their parents; thus if a person has an opposite-sex sibling, he/she is more likely to find a partner. This involves two sets of two; two married pairs of siblings—four individuals. Thus there is a culturally highly salient reason to associate the quantity 3 with a ‘failed’ set (‘without a sibling’) and 4 with a full set (‘has a sibling’).⁹⁹

Hup and Yuhup closely fit the Vaupés areal profile in having language-specific lexical forms for 1-3, a calqued form of ‘has a sibling/ is accompanied’ for ‘four’, and terms based on hands and feet for five and up. Interestingly, the range of numeral strategies across the family corresponds to their geographical proximity to the Vaupés region: Nadëb (the most distant) has lexical forms for 1-3; Dâw (peripheral) adds a minimally lexical ‘fraternal’ system for 4-10; and Hup and Yuhup have these strategies plus a base-five system for 5-10. The current systems in Hup and Yuhup may represent historical layers of developing complexity, which are currently reflected in geographical distribution (across the Nadahup languages) as well as diachronically. I therefore suggest the following stages of development for the Hup and Yuhup numeral systems:

- 1) A basic 1-3 system (like that found in Nadëb);
- 2) Adoption of a minimally productive ‘fraternal’ system (like the one in Dâw);
- 3) Adoption of a base-five system (probably borrowed from the Tukanoan languages); this would have stranded ‘four’, giving it a specific quantitative value to replace the general meaning ‘even number’;
- 4) Currently: adoption of Portuguese numerals for 6+, resulting in the stranding of ‘five’ as a distinct lexical item, rather than part of a more general system.

⁹⁹ It is possible that the culturally salient practice of sister exchange has influenced Hup grammar in other ways as well, in particular the development of the Reciprocal/pluractional marker from the noun ‘opposite-sex sibling’ (see §11.2).

Such a progression of steps is consistent with historical reconstructions of numeral systems in many of the world's languages. As Hurford (1987: 83) puts it, “one can ‘read’ the history of a [numeral] system, just like the history of an old building, from the contrasting style of its pieces, from the foundations up.” The Nadahup languages offer a particularly fascinating glimpse into this history, since we can read it geographically as well as temporally.

6.5.2. Distributive *pɨl* as a quantifier

Like many morphological forms in Hup, the particle *pɨl* is multifunctional and extremely promiscuous in its combinations with various parts of speech. In general, it can be understood to have the basic function of signaling multiple realizations of some focused entity or attribute. Following a nominal argument, *pɨl* indicates multiple instances of the argument vis-à-vis the predicate; i.e. it acts as a quantifier, as in examples (85-86).

- (85) *bodáca ʔóytu=b'ah, yɨ̃ pɨl j'áɦ ʔm-ǎn tih nɔʔ-ɔy*
 cookie eight=SPLIT thus again PST.CONTR 1pl-OBJ 3sg give-DYNM
 ‘Eight cookies, that’s what she gave to each of us.’ (P.txt.3)
- (86) *tínɦ tǎɦ=mǎɦ=d'əh=mah ní-ih, nút=mǎɦ=d'əh pɨl*
 3sg.POSS offspring=DIM=PL=REP be-DECL here=DIM=PL DIST
 ‘Her children were there, both small ones like this’ (gestures to show height).
 (P.BT.93)

In example (87)—from a popular story in which a turtle follows a tapir and asks the leaves and other entities he encounters as to the tapir’s whereabouts—the quantifier modifies a locative clause:

- (87) *tĩh ʔɔh-ʔé-t pĩd, tĩh wæd-ʔé-t pĩd=ma-ám*
 3sg sleep-PERF-OBL DIST 3sg eat-PERF-OBL DIST=REP-PST.CNTR
 ‘At each place he (tapir) had slept, at each place he’d eaten,

tĩh ʔih-key-hám-mah
 3sg ask-see-go-REP
 he (turtle) went asking.’ (J-AJ.3)¹⁰⁰

The quantifier occurs in the common expression *ʔayup pĩd* ‘several, some, sometimes’,

as in example (88).

- (88) *wɔh cáp ʔid-nĩh, ʔayup pĩd yúp ʔāh ʔid-ĩy*
 River.Indian INTS1 speak-NEG one DIST that.ITG 1sg speak-DYNM
 ‘(I) don’t speak a lot of Tukano; I speak a little of it.’ (P.int.133)

Similarly, *pĩd* occurs with the demonstrative *cā-* ‘other’ in expressions relating to ‘a few’,

‘occasionally, rarely’, as in (89-90);¹⁰¹ this expression signals that the entities or instances are fewer or less frequent than that indicated by *ʔayup pĩd*, as example (89) illustrates.

- (89) a) *cā-wag pĩd j’əb-tæ-yi? ʔāh j’əm-ʔh*
 other-day DIST night-still-TEL 1sg bathe-DECL
 ‘I **occasionally/rarely** take a bath in the morning.’
 b) *ʔayup wăg pĩd j’əb-tæ-yi? ʔāh j’əm-ʔh*
 one day DIST night-still-TEL 1sg bathe-DECL
 ‘I **sometimes** take a bath in the morning.’ (EL)
- (90) *cā-d’ɔh pĩd ʔid-kɔd ʔũhníy*
 other-PL DIST speak-pass EPIST.be
 ‘Just a few speak better, maybe.’ (A.int.115)

¹⁰⁰ Umari Norte dialect.

¹⁰¹ A similar meaning can be conveyed by the demonstrative ‘other’ in combination with the Habitual marker:

cā-wag g’et-g’oʔ-hám-áy bĩg
 other-day stand-go.about-go-DYNM HAB
 ‘I sometimes go.’ (P.int.141)

With human referents, an alternative quantifier to *pǎl* is the form *hupnɔ* ‘each person’; this idiomatic form appears to be composed of *hup* Reflexive or ‘human’ and *nɔ* ‘say’ (or ‘mouth’). The two forms may be used interchangeably, as in (91), or may co-occur, as in (92). Note the use of a classifying noun with *pǎl* in (91b) (i.e. ‘bananas, one fruit apiece’), as in (85) above; this is not generally the case with *hupnɔ*.

- (91) a) *pǎhǎ hupnɔ tǎh nɔʔ-ɬ, tǎ ʔǎy=n’ǎn*
 banana RFLX.say 3sg give-DECL woman=PL.OBJ
 ‘He gave a banana to each of the women.’
- b) *pǎhǎ ʔayup=tǎǎ pǎl tǎh nɔʔ-ɬ, tǎ ʔǎy=n’ǎn*
 banana one=fruit DIST 3sg give-DECL woman=PL.OBJ
 ‘He gave a banana to each of the women.’ (EL)
- (92) *núp ʔayup hupnɔ pǎl ʔín bahad-té-ay-áh*
 this one RFLX.say DIST 1pl appear-FUT-INCH-DECL
 ‘Thus we (humans) would appear (to form) each (of the different ethnic groups).’
 (LG.O.31)

The quantifier function of *pǎl* is only one manifestation of its basic identity as a marker of multiplicity. Its various other uses are discussed at length in §12.9.1; for example, when it follows a predicate (whether verbal or nominal), *pǎl* indicates a repeated instance of the event or of the entity (i.e. ‘also’, ‘respectively’, ‘some/many’), as in examples (93-95). The overlap between this use and the quantifier function of *pǎl* is illustrated by (95). Also, when brought into the verb word as an Inner Suffix, *-pǎl-* typically signals that the event is characterized by iterative or durative aspect. (See §12.9.1 for a comparative paradigm of *pǎl* in different combinations with various

constituents of the clause—as quantifier, marker of repeated instance, and marker of iterative or durative aspect.)

- (93) *ʔāh hipāh-nh p̥ɬ*
 1sg know-NEG DIST
 ‘I don’t know either.’ (OS)
- (94) *ʔp, pā-ay, pāç=yi? p̥ɬ, pāç=yi? p̥ɬ, pāç=yi? p̥ɬ*
 father NEG:EX-INCH father’s.brother=TEL DIST father’s.bro=TEL DIST father’s.bro=TEL DIST
 ‘Father’s gone, and Uncle too, and (other) Uncle too, and (other) Uncle too.’
 (counting on fingers) (T.int.144)
- (95) *dəb-nh=yi? ní-ty, na ʔ-huʔ-yi?-ty p̥ɬ*
 many-NEG=TEL be-DYNM die-finish-TEL-DYNM DIST
 ‘There are only a few of them, many of them died.’ (A.int.114)

The frozen lexical form *ʔop̥ɬ-yi?* (and variants *ʔap̥ɬ-yi?*, *ʔuhp̥ɬ-yi?*, and *ʔop̥ɬ-yi?*) ‘right away, immediately’ (example 96) also appears to contain the morpheme *p̥ɬ*.

- (96) *ʔap̥ɬ=yi? tih d’o ʔ-cɔp=yi? nɔ-cud-yæh-æh*
 immediate=TEL 3sg take-go.up.from.river=TEL say-INFR-FRUST-DECL
 ‘(I) would have advised him to bring (it) up from the river immediately.’
 (B.Conv.2.8)

6.5.3. Other quantifiers

The ‘quantity’ marker *ʔāp*¹⁰² usually appears as a bound form, which—as discussed above—appears with the bound demonstrative and interrogative particles to form other quantity-related expressions, such as *hɛ ʔāp* ‘how many?’, *ya ʔāp* [*yɛ ʔāp*] ‘several, that

¹⁰² This form is homonymous with the ‘negative identity’ particle *ʔāp*.

many’ (and *ya ʔǎp-ay* [INCH] ‘all gone’), etc. It also occurs in the cardinal numerals

ko ʔǎp ‘two’ and *mǎa ʔǎp* ‘three’ (literally ‘eye-quantity’ and ‘rubber-tree-seed-

quantity’), and can optionally occur with other cardinal numerals as well, as in example

(97).

- (97) *ʔin hibab’ní-ʔap wág ni-yóʔ ʔin b’ay-yíʔ-ay-áh*
 1pl four-QTY day be-SEQ 1pl return-TEL-INCH-DECL
 ‘Having stayed there for four days, we returned (home).’ (S-PN.2)

The form *ʔap* is most commonly encountered in the quantifier *ʔǎp-yíʔ* ‘every, all’, which involves the Telic (contrastive focus) marker *=yíʔ* (see §7.1.2). This quantifier acts like an adjective in that it can follow the noun or pronoun that it modifies (as in examples 98-100), but it can also occur by itself as a nominal head (example 100). Objects modified by *ʔǎpyíʔ* do not take case marking.

- (98) *yuyú deh nǎ-ǎ-ʔúy=d’ǎh, híd ʔǎp-yíʔ nǎ-ǎy*
yuyu water mouth-OBL-who=PL 3pl QTY-TEL say-DYNM
 ‘The people of Barreira, they all say (that).’ (E.int.136)

- (99) *wág ʔǎp-yíʔ tih j’ǎm-ǎh*
 day QTY-TEL 3sg bathe-DECL
 ‘She takes a bath every day.’ (EL)

- (100) *híd nǎʔ-ʔé-h, ʔǎp-yíʔ=mah nutǎn=hin tih wǎd-ǎh, mǎhǎy-ǎh*
 3pl say-PERF-DECL QTY-TEL=REP today=also 3sg eat-DECL deer-DECL
 ‘They gave him everything (on that day) that deer also eat today.’ (I-M.16)

A semantically similar (and usually interchangeable) quantifier is the form *nihuʔ*

‘all, all kinds’, a deverbal form of the compounded roots *ni-huʔ* ‘be-finish’. Like

ʔǎpyíʔ, it can modify a preceding noun or stand alone as a nominal head, as illustrated in

examples (101-103). Objects modified by *nihúʔ* (such as the plural ‘animals’ in example 101) typically do not take the object marker, and consultants differ as to whether this is grammatically possible. The quantifiers *nihúʔ* and *ʔǎpyíʔ* can co-occur to produce an emphatic statement, as in (103).

- (101) *hú=d'əh nihúʔ=mah tɬh hitæʔ-æh*
 animal=PL all=REP 3sg imitate-DECL
 ‘He imitates all kinds of animals.’ (T.C)

- (102) *yág, b'oh-oh, wǎn-áh, mǎm-əh, nihúʔ!*
 hammock salt-DECL knife-DECL axe-DECL all
 ‘There were hammocks, salt, machetes, axes, all (kinds of merchandise)!’ (H.txt)

- (103) *tegcáʔ ʔǎh d'óʔ-óy, ʔadócu ʔǎh d'óʔ-óy, hɬ ʔǎp wæd nihúʔ ʔǎp-yíʔ*
 wood.box 1sg take-DYNM rice(Pt) 1sg take-DECL Q-QTY food all QTY-TEL
 ‘I took matches, I took rice, all of every kind of food...’ (LG.)

Another commonly used quantifier is *b'ɬyíʔ* ‘all, only’. This form probably includes the Telic (contrastive focus) form *=yíʔ* (like *ʔǎpyíʔ* ‘all’), but in this case the first syllable *b'yí* cannot be identified as a morpheme by speakers. The quantifier *b'ɬyíʔ* has two subtly different usage patterns: following the focused constituent of the clause (this constituent may itself be a complement clause, as in (110) below), it indicates ‘only’ (i.e. an exclusive group involving that entity), whereas when postposed to the predicate of a main clause it produces an ‘all’ interpretation (i.e. an inclusive group relating to the predication). The following elicited paradigm illustrates this formal and functional distinction:

- (104) a) *[ʔín] b'ɬyíʔ teghɬ-nɔg'od ʔíd-ɬy*
 1pl only fire.people-mouth speak-DYNM
 ‘Only we speak Portuguese.’

- b) *ʔín [teghʃ-nɔg'ɔd] b'ʃíʔ ʔíd-ʃy*
 1pl fire.people-mouth only speak-DYNM
 'We speak only Portuguese.'
- c) *[ʔín teghʃ-nɔg'ɔd ʔíd-ʃy] b'ʃíʔ*
 1pl fire.people-mouth speak-DYNM only
 'We all speak Portuguese.' (EL)

Further examples of the 'only' function of *b'ʃíʔ* are given in (105-9). Note that the quantifier itself can take the Inchoative suffix *-ay* to form a predication 'be only, be alone' (examples 105-6), and that objects modified by *b'ʃíʔ* do take the object marker (unlike most other quantifiers; example 109). This quantifier is also commonly encountered in the expression *ʔayup b'ʃíʔ* 'only one' (essentially the same meaning as *ʔayup=yíʔ*).

- (105) *ʔāh b'ʃíʔ-ay ʔāh-āh, ʔayup=yíʔ-ay*
 1sg only-INCH 1sg-DECL one=TEL-INCH
 'I am all alone, all by myself.' (H.int.129)
- (106) *núh b'ʃíʔ-ay mǐʔ=mah, tǐh ʔíd-ǐh*
 head only-INCH UNDER=REP 3sg speak-DECL
 'Although now only a head, he spoke.' (H.R.108)
- (107) *n'i-cóʔ b'ʃíʔ ʔāh hipāh-āh, tǎh cóʔ b'ʃíʔ*
 that-LOC only 1sg know-DECL pig LOC only
 'I only know that region over there, around Serra dos Porcos.' (D.int.122)
- (108) *ʔáy=d'əh b'ʃíʔ ham-té-h*
 FEM=PL only go-FUT-DECL
 'Only women will go.' (OS) (not 'all the women' [*ʔapyíʔ*])
- (109) *tiyǐʔ=n'ān b'ʃíʔ tǐh hi-kéy-éy*
 man=PL.OBJ only 3sg FACT-see-DYNM
 'He takes care of only the men' (EL)

In example (110), *b'ǵiʔ* (in its 'only' function as nominal modifier) has scope over an entire complement clause.

- (110) *tɪnʔh húptok, [húptok tɪh ʔəg-tég] b'ǵiʔ yúp tɪh hipǎh-ǎh*
 3sg.POSS caxiri caxiri 3sg drink-FUT only that.ITG 3sg know-DECL
 'His caxiri, he thinks only about drinking caxiri.' (P-Sp.3)

The 'all, completely' function of *b'ǵiʔ* when postposed to the predicate is illustrated in examples (111-13). Note that the same predicate nominal use of *hǵm b'ǵiʔ* 'all sores' refers in (111) to all the people involved in the fight, whereas in (112) it refers to the completely affected state of a single person.

- (111) *híd hǵm b'ǵiʔ*
 3pl sore only
 'They *all* have injuries!' (goes on to list names of men involved in the fight) (OS)
- (112) *páy, hǵm b'ǵiʔ=mah*
 bad sore only=REP
 'Ugly, all (covered with) sores.' (describing a single person) (M-KTW.104)
- (113) *ʔíd-ǵ b'ǵiʔ ʔm-ǵw-ǵp*
 speak-DYNM only 1pl-FLR-DEP
 'We all speak (Hup).' (Ronaldo P.-Int.)

The quantifier *dǵb* 'many, much' likewise occurs as both a nominal modifier (where it inflects much like an adjective) and a nominal head. It is usually used to describe a large quantity of discrete objects (multiplicity), rather than a mass amount (example 114), and occurs in at least one lexicalized construction (*mumuǵ dǵb* [lit. 'arm many'] 'lower part of hand including fingers').

- (114) *yíkán dǵb=yíʔ-ay=cud, tǎh dǵb=yíʔ-ay=cud*
 over.there many=TEL-INCH offspring many=TEL-INCH=INFR
 'Over there a lot (have appeared), apparently, (he's had) a lot of children.'
 (H.txt.12)

Unlike the other quantifiers, *dəb* shares several properties with the adjective class (although not all; for example, it does not require modification by *tih*= when standing alone as a nominal head; see §6.6 below). It can occur as a predicate (whether nominal or adjective; examples 115-18), and can take verbal negation, as in example (117) and the quantifying expression *dəb-nih=mæh* (many-NEG=DIM) ‘a few’. Also, like the quantifier *pɨd* and many other modifiers in Hup, *dəb* can be incorporated into the verb core as a compounded root (118), although this is not particularly common.

- (115) *dəb* *yɨd'əh-əh!*
 many that.ITG-PL-DECL
 ‘There were a lot of them!’ (OS)
- (116) *dəb* *yúp* *ʔɨd-ih!*
 many that.ITG speech-DECL
 ‘This story is a long one’ (H.txt.68)
- (117) *dəb-nih=yiʔ* *ní-íy*
 many-NEG=TEL be-DYNM
 ‘There are only a few of them.’ (A.int.114)
- (118) *yɨ-nih-mɨʔ=mah* *j'áɬ* *tih* *ʔid-dəb-əh*
 that-be.like-UNDER=REP DST.CNTR 3sg speak-many-DECL
 ‘In spite of this he spoke a lot.’ (he had been reduced to just a head by a jaguar)
 (H.txt.107)

6.6. Adjectival modifiers

As discussed in §3.1.3 and §10.1, adjectives in Hup can be defined as a distinct word class on the basis of their formal properties. Nevertheless, as predicates they share many properties with verbs—in particular, the ability to take aspectual inflection and verbal

negation—while as modifiers of nominal arguments, they share a number of properties with the sub-class of bound nouns in Hup. This section is devoted to a discussion of adjectives in the noun phrase, where they appear both as nominal modifiers and as nominalized heads.

As noted in the noun phrase template in the introduction to this chapter, adjectives follow the nouns they modify. This is in contrast to other types of NPs containing a modifier: numerals, demonstratives, and compounded nouns precede the noun (but note that locative adpositions, like adjectives, follow nouns; §10.2.3 below). Examples of adjectival NPs are given in (119-121).

- (119) *tih wən-hám-ay-áh, té tod pōg g'et-pó-ow-ñ=mah*
 3sg follow-go-INCH-DECL until hollow.tree big stand-EMPH1-FLR-OBL=REP
 'She went after (the spirit), to where a big hollow tree stood, they say.' (P.TB.2)

- (120) *híd nǝg'od j'á pǝm-hi-ham-tég*
 3pl mouth black sit-descend-go-FUT
 'They'll all be sitting around with black mouths (from eating coca).' (B.Cv.85)

- (121) *hñ pñ yúp n'uñ-úh*
 sound strong that CNTR-DECL
 'That one has a strong (loud) sound.' (B.Cv.92)

Adjectives can take the verbal Negative suffix *-ñh* not only when they are used as predicates (see §10.1), but also when the adjective occurs within a noun phrase as a modifier, as in example (122) (a predicate nominal). Adjectival NPs can also be negated by nominal negators that have scope over the whole NP (see chapter 16).

- (122) *hōp tāh yó pay-nñh mún yǎh yúw-úh*
 [fish small dangle] bad-NEG INTS2 FRUST that.ITG-DECL
 'It would make a not-bad minnow-fishing line.' (B.Cv.79)

Adjectives can also modify subordinate clauses (which are nominalizations; see §18.2), as in (123).

- (123) [*ʔāh nɔɔp*] *póg ʔāh tɔh-ɔh, nutæñ-æh*
 1sg say-DEP big 1sg hold-DECL today-DECL
 ‘I have a lot to say today.’ (T.PN.23)

Non-predicate adjectives are *obligatorily* preceded by some nominal form. When not a full noun (as in the examples above), this may be a demonstrative (example 124) or similar form (such as the interrogative quantifier acting as indefinite pronoun; example 125).

- (124) *hup-hipāh-nih núp=pay, cɔc!*
 REFL-know-NEG that=bad INTERJ
 ‘That bad one has no sense, darn it!’ (B.Cv2.91)

- (125) *hɛ ʔāp páy=d'ɔh, ba ʔtɪb'=d'ɔh, bicíw=d'ɔh...*
 Q-QTY bad=PL spirit=PL bisiw.spirit=PL
 ‘So many bad things, evil spirits, *biciw* spirits...’ (H.33)

When an adjective occurs on its own as a nominal head, it is obligatorily preceded by the default preform *tɪh=*, elsewhere the 3sg pronoun, as in (126) (note that adjectives do not modify pronouns in NPs). The only exception to this rule appears to be the form *cípmæh* ‘small’ (cf. Diminutive =*mæh*, §7.2), which does not occur as a nominal head at all and cannot take *tɪh=* (and may be better considered a kind of quantifier; compare the alternative form *tɪh=tæh(=mæh)* ‘small’, which patterns like a normal adjective).

- (126) *páh=yí?* *y'æt-pog-ʔé-y* *páh* *yúw-úh*,
 PRX.CNTR=TEL leave-EMPH1-PERF-DYMN REC.CNTR that-DECL
 'Just recently (he) left it,
- cǎc,* *tǎh=j'á-aw-áh !*
 INTERJ 3sg=black-FLR-DECL
 darn it; (it was) a black one!' (B.Cv.93)

In (127), the interrogative form *hǎn'ǎh* 'what' (a derived nominal) occurs in place of an adjective (some unspecified color value), preserving the bound nominal construction.

- (127) *tǎh=hǎn'ǎh* *ʔam* *túk-u?* ?
 3sg=Q-NMZ 2sg want-INT
 'What (i.e. which color beads) do you want?' (OS)

Stress and tone (word-accent) patterns for adjectival NPs are not fully consistent across speakers and speech events. The underlying lexical tone value for adjectives is almost always high tone, with the primary exception of *bǎg* 'old' (it is possible that this may be at least partially motivated by the contrast with *bǎg* 'tapir'). In general, a noun phrase composed of [N Adj] is treated phonologically as a single lexical unit, with primary stress on the second constituent. In the case of *tǎh*=Adj constructions, this stress pattern is quite consistent: tone always falls on the adjective and is realized as rising (except in the case of CV roots, which always have high tone). In NPs involving full lexical nouns, on the other hand, tone on the adjective may vary. The pattern in less careful speech tends to favor a pattern like that of the *tǎh*= form (including rising tone on the adjective), but in more careful speech (especially in cases of potential ambiguity, such as when the speaker is confronted with a minimal pair set contrasting by tone), the noun may receive equal stress and take tone. In these cases, the following adjective assumes

its underlying tonal value (and so is usually high). In at least one case, this general pattern gives rise to a minimal pair contrast:

- (128) *tɪh=pɔ̌g* (3sg=big) ‘big one’
 tɪh póg (lie big) ‘liar’ (literally ‘big liar’, although *tɪh* by itself is not generally used in this sense)

Note that this pattern for *tɪh*= adjectival NPs is consistent with the most frequent word-accent (stress/tone) pattern for bisyllabic (monomorphemic) lexical items in general (see §2.3.2), and bound nouns with *tɪh*= are also always stressed on the N2.

The fact that adjective modifiers must take an explicit preceding nominal, for which the default is the *tɪh*= preform, gives them a formal resemblance to bound (and inalienably possessed) nouns in Hup (see §5.4). Compare, for example, the human noun ‘child’ and the adjective ‘big’ in the nominal constructions in (129):

- (129) a) *tiyĩʔ=dóʔ* ‘male child’
 tɪh=dóʔ ‘child’
 b) *tiyiʔpɔ̌g* ‘big man’
 tɪh=pɔ̌g ‘big one’

Functionally, too, there are parallels between the two constructions. The prototypical bound noun construction signals an inherent relationship between two entities, where the first possesses and/or defines the second (e.g. in a whole-part relationship; see §5.5); likewise the adjective denotes a property that is inseparable from the entity that ‘possesses’ it, and may be difficult or impossible to even conceptualize without some kind of physical embodiment. Similarly, the association indicated by the bound noun construction also helps to individuate the entity in question from other

entities like it (i.e. by restricting a set), just as the denotation of a property may have a restrictive function, helping to pick out an individual referent from the set of possible referents—although adjectives do not just restrict reference, but also enrich the semantics of a known entity.

Given the formal and functional parallels between the adjectival NP and the bound noun NP, could these actually be one and the same construction? If so, then the relative order of modifier and head in the adjectival NP must be the opposite of what it seems, as defined earlier in this section: [(Nom) Head + (Adj.) Modifier], where the adjective is the modifier and the noun the head. As example (129a) above illustrates, the bound noun construction involves the order [Modifier + Head]; is this actually the structure of the adjectival NP as well? This does indeed seem to be the case for adjectival NPs taking the dummy nominal *tʰh*—which is both semantically contentless and phonetically unstressed, as in (129b) above (*tʰh=põg* ‘the big one’); here the adjective (and final element of the NP) is a plausible head, at least semantically. This type of adjectival NP really does appear to mirror the bound noun construction.

On the other hand, it seems much less plausible to assume that a noun-adjective NP containing a full noun—such as *tiyi? põg* (man big) in 129b—should have the order of [(Nom) Modifier + (Adj) Head]; that is, that the adjective should be the head of the construction. Yet could the adjectival NP in Hup be internally inconsistent, in that one type has one order, and the other the opposite order?

It is difficult to resolve these questions definitively, since there are few syntactic clues to headedness in Hup. However, to the extent that heads can be determined at all,

there is actually no reason to think that head-modifier order cannot vary within the Hup NP; in fact, such syntactic inconsistency already exists among different subtypes of the bound noun constructions. In §5.6, I argue that the *semantic* head of the bound-noun NP may be ambiguous, and that for many NPs involving *classifying* bound nouns, this ambiguity has fostered a switch of the *syntactic* head of the construction from N2 to N1. Thus interpreting one type of adjectival NP as having head-modifier order while the other has modifier-head order is not inconsistent with the facts of Hup more generally.

Given that significant differences between *subtypes* of bound-noun NPs and adjectival NPs are possible in Hup, the question of whether the two constructions should themselves be considered one and the same becomes less meaningful. Instead, it makes more sense to consider them as distinct types of NP that simply share a number of features. In fact, upon closer inspection, quite a few differences between them can be identified.

First, were the parallel with the bound noun construction complete, we would have to assume that the ‘adjective’ head of the adjectival NP is itself no more than a bound noun; however, the set of bound nouns and the set of adjectives in Hup do not actually pattern in the same way at all. Adjectives *must* be preceded by a nominal when acting as the argument of a predicate, but appear alone (i.e. bare) as predicates themselves; most bound nouns, on the other hand, can appear outside the bound construction in contexts where semantic individuation is irrelevant, but otherwise can only function as predicate (nominals) while bound. As the discussion in §3.1.3 illustrates, the identity of adjectives as a formal class of their own hinges on their possession of *both* nominal and verbal qualities, and their ability to move freely between

argument and predicate constructions—usually retaining attributes of the one while functioning as the other, and vice versa.

Other features of adjectival NPs that differentiate them from purely nominal NPs include their stress pattern: while bound noun constructions with a full noun as N1 typically have primary stress either on the N1 only, or on both members of the compound construction (e.g. *tiyĩʔ=dóʔ* (man=child) ‘male child’), stress in noun + adjective NPs usually falls on the adjective (this difference can be seen in example 129 above). Yet another difference involves the verbal negation strategy, which can be applied to adjective modifiers within NPs (see 119 above); in the case of bound nouns, on the other hand, the entire NP (and not simply the bound noun within it) must be negated by a nominal negation strategy. Finally, another difference is the fact that unmodified adjectives—unlike bound nouns—do not directly follow a numeral acting as N1 (although they can follow a demonstrative, see above). Instead, the adjective appears in nominalized form with *tĩh=*, as in (130).

- (130) *ko ʔaʔ tĩh=põğ tĩh tɕn-ɕh*
 two 3sg=big 3sg hold-DECL
 ‘She has two big ones.’ (EL)

The differences between the adnominal adjectives and the bound nouns are summarized in Table 6.9.

Table 6.9. Adjective vs. bound noun in Hup

	Adjective	Bound noun
Appears as 2 nd element in NP	yes	yes
Can appear alone (bare) as NP	no	yes (some)
Can appear alone (bare) as predicate	yes	no
Negator	verbal or nominal	nominal only
Can take numeral as N1	no	yes
Preferred stress pattern when N1 is a full noun	Adjective only (some variation)	Both N1 and N2, or N1 only

Another noteworthy feature of adjectives in NPs (which also helps to differentiate them from most bound nouns) is their ability to occur in an explicitly *nominalized* form in association with other nouns. This results in a noun phrase composed of [N *tɪh*=Adj]. Grammatically, this can be considered as two appositional NPs, since both elements can take case and number marking separately; by contrast, in an NP formed from [N Adj] without intervening *tɪh*=, inflection can only attach to the end of the NP. Examples of appositional NPs involving nominalized adjectives are given in (131-32).

- (131) *ʔin tɪh=pɪb=d'əh hup-hipāh=d'əh b'ɪyɪʔ-ay*
 1pl 3sg=strong=PL RFLX-know=PL only-INCH
 'We adults all know better.' (B.Cv.94)

- (132) *yúp japudutút... pɪh, tɪh=w'ə tih !*
 that.ITG japurutut flute 3sg=long EMPH4
 'That japurutut... (it's a) flute, the long (kind)!' (H.txt.23)

Where *multiple* adjectival modifiers occur in reference to a given entity, consultants judge *tɪh*= to be obligatory on all of them:

- (133) *núp=tat tɪh=pəğ tɪh=pəy nəh-yɪʔ-ɪy*
 this=fruit 3sg=big 3sg=bad fall-TEL-DYNM
 'This big ugly fruit fell.' (EL)

Adjectives taking *tʃh=* are clearly nominalizations. For example, a nominal negator is required when *tʃh=* is present (example 134a-b), whereas a predicate adjective (or a ‘bare’ adjective modifier within an NP, see above) takes a verbal negator (135).

- (134) a) *cadakǎʔ tʃh=pōǵ ʔǎp*
 chicken 3sg=big NEG:ID
 ‘(That’s) not a big chicken’ (EL)
- b) **ʔamʃh pǎt tʃh=w’ǎ-nʃh*
 2sg.POSS hair 3sg=long-NEG
 (Intended meaning: ‘Your hair is not long’)
- (135) *ʔamʃh pǎt w’ǎ-nʃh*
 2sg.POSS hair long-NEG
 ‘Your hair is not long’ (EL)

The [N *tʃh=*Adj] type of NP may optionally also pattern like a single NP constituent, with inflectional marking occurring only once, at the end the unit, regardless of the presence of *tʃh=*. Moreover, in many cases neither pause phenomena nor consultants’ Portuguese translations of [N *tʃh=*Adj] constructions provide support for two distinct NPs, and consultants often judge the variants ([N Adj] and [N *tʃh=*Adj]) to be interchangeable.

Within NPs of the form [N *tʃh=*Adj], the main function of *tʃh=* appears to be one of placing additional focus on the quality conveyed by the adjective. In particular, the [N *tʃh=*Adj] construction always indicates a quality that is inherent or permanent, while an adjective modifier without *tʃh=* may be either permanent or temporary. (Note that this association of the more nominal form with a more time-stable attribute, and the more verbal form with a more fleeting attribute, parallels the prototypical semantic distinction

between verbs and nouns across languages; it is also a characteristic of the bound nominal construction, which typically signals a whole-part or inalienably possessed relationship.) For example, a naturally dark-skinned hand is described as *dapúh̃ (t̃h=)j'á* (hand [3sg=]black); but *t̃h=* is ungrammatical when referring to a soot-blackened hand, which would be *dapúh̃ j'á(-áy)* (hand black[-DYNM]). Some adjectives, such as color terms, almost always appear with *t̃h=*, and a few have even undergone phonological reduction (consonant cluster simplification and vowel harmony), e.g. *tuhúp* ‘beautiful, new’ and *tídó* [tíró] ‘red’ (Umari Norte dialect only). Examples of this type of adjectival NP are given in (136-37).

- (136) *j'ám nĩ [b'ěj t̃h=põğ] hid d'oʔ-way-yíʔ-ní-h!*
 yesterday 1sg.POSS jandia 3sg=big 3pl take-go.out-TEL-INFR2-DECL
 ‘Yesterday they took out my [big jandia fish]!’ (B.Cv.94)
- (137) *nĩ-d'ǎh nǎh-tuʔ-key-yóʔ [t̃h=cáp t̃h=tohó] ní-ih*
 this-PL fall-immersed-see-SEQ 3sg=body 3sg=white be-DECL
 ‘Because those (people) jumped in, their body was white (lit. their [white body] existed).’ (LG.O.33)

Where it occurs between noun and adjective in what appears to be a single NP constituent, the marker *t̃h=* may be developing an identity as an attributive marker, functioning to signal the connection between the nominal and the modifier in the NP. While the above discussion has argued that the bound noun and the adjectival NP cannot be considered the same construction synchronically, it is very likely that they are historically and/or functionally related. Typological work has shown that there is cross-linguistic precedent for the grammaticalization of a possessive marker to an attributive marker (e.g. in Oceanic languages, Ross 1998; Rießler 2004); in a number of cases, such

as in Ural-Altaic languages (cf. Rießler 2004), intermediate stages apparently include a nominalizer, marker of definiteness, and marker of anaphoric-demonstrative focus. In Hup, as this discussion has shown, one and the same marker *tʰh=* has the role of a marker of inalienable possession (and individuation, related to definiteness) with nouns, and of nominalization and—to some degree—focus and attribution with adjectives.

6.7. NP coordination

Hup has a number of strategies for indicating coordination of multiple NPs within the clause. The simplest of these is a juxtaposition strategy, which requires no morphological indicator of the coordination (examples 138-39). This strategy is also used to express clausal coordination (see §18.1.1).

- (138) *nihuʔ, bʰʔʔ=tat, naháw=tat, núp gʰob=tat, híd dʰoʔ-pǎd-ʰh*
 all gourd=fruit macucu=fruit this tucuma=fruit 3pl take-DIST-DECL
 ‘They took all kinds: gourds, macucú fruits, (and) these tucumá fruits.’ (H.txt.18)

- (139) *hǎp, cǎ, wǎn, mǎm jʰám pǎ-ǎhʔʰ*
 grater hoe knife axe DST.CNTR NEG:EX-TAG2
 ‘There used to be no graters, hoes, knives, (or) axes.’ (P.Sp.105)

A second mechanism that is used to link both NPs within the clause and with entire clauses is the Emphatic Coordinator *=nih*. It can appear on associated nominal constituents in a list, as in (140), but when *=nih* is used these linked NPs are more commonly expressed as entire linked predicates (see §18.1.3).

- (140) *ya ʔám huh-út- ʔǎy=d' əh hipǎh-ǎy b' ʔyǐʔ! mináʔ=d' əh hipǎh-ǎy,*
 jaguar rapids-OBL-who=PL know-DYNM only Desano=PL know-DYNM
 'The people from Iawareté (Jaguar Rapids) all know (the kapiwaya)! The Desanos know,

mináʔ=d' əh... m'ǎc=d' əh hǐd-áy=nih yúw-up-úh!
 Desano=PL Tuyuca=PL 3pl-INCH=EMPH.CO that.ITG-FLR-DECL
 the Desanos... the Tuyucas, it's so for them too!' (M-Kap.121)

The Declarative suffix *-Vh* can also signal coordinated nominal entities (example 141), and is likewise sometimes used to indicate clause coordination (cf. §17.3.2 and §18.1.2)

- (141) *yág, b'əh-óh, wǎh-áh, mǎm-ǎh, nuhúʔ d' əh-d' əh-wáy-áh*
 hammock salt-DECL machete-DECL axe-DECL all send-send-go.out-DECL
 '(He) brought out hammocks, (there was) salt, (there were) machetes, (there were) axes, everything.' (H.txt.64)

Other strategies for coordinating multiple nominal arguments include use of the 'Parallel' marker *=hin* 'also' (§7.7), which—among other related functions—is used as an optional emphatic coordinator (example 142), and the 'Associative plural' marker *-and' əh*, which links associated participants who are acting together (see §4.4.6). Note that these two markers cannot serve a clause-linking function, unlike the strategies above, but are limited to use with nominal arguments within the clause.

- (142) *yúp=mah hǐd yəhəy-pǐd-ǎh, ya ʔambəʔʔ=hin yəhəy,*
 that.ITG=REP 3pl search-DIST-DECL dog=also search
 'So they were searching, the dog also searching,
- tǎh=hup=hín yəhəy, ní-íy=mah*
 3sg=RFLX.INTS=also search be-DYNM=REP
 and he himself (boy) also searching.' (FS.2)

7. Nominal discourse-marking morphology

This chapter presents the wide range of bound morphology associated with the noun phrase and having functions relating generally to discourse marking. The forms discussed here all associate primarily with nominal arguments, or else have specific functions in combination with nominals that differ from their functions with predicates.

In general, these forms have functions relating to focus, emphasis, topicality, etc.

Nominal morphology relating more narrowly to the semantic or syntactic status of the referent (primarily case and number marking) is covered in Chapter 4. Other forms in Hup that combine relatively freely with various parts of speech (including nominals) and undergo little or no change in function from one host to another are discussed in Chapter 15.

The forms, slot classes, and functions of the formatives discussed in this chapter are summarized in Table 7.1:

Table 7.1. Nominal discourse-marking formatives in Hup

Form	Slot class (formative type)	Identity/ word-class of host	Function	Other relevant functions of same form
-ay	Suffix	Nouns, various hosts	Inchoative focus	Inchoative aspect (Inner/Boundary suffix w/ verbs)
=yíʔ	Enclitic	Nouns	Contrastive emphasis	Telic aspect (Inner Suffix w/ verbs) Adverbializer (enclitic w/ adverbs, clauses)
=b'ay	Enclitic	Nouns	Topic-switch marker	Repetition or return to a state; (Enclitic/Inner Suffix with verbs) Verb root 'return'
=hup	Enclitic	Nouns	Reflexive intensifier	Reflexive marker (prefix w/ verbs) Noun 'person'; Adj. 'new, good'
-Vp	Suffix	Nouns, various hosts	Topic marker	Dependent marker (Boundary Suffix w/ verbs and clauses)
=sud	Enclitic	Nouns	Deceased referent marker	Inferred evidential (enclitic w/ predicates) Verb root 'be inside'
=wəd =wa	Enclitic	Nouns	Respect markers (male/gender-neutral and female)	Bound nouns wəhəd 'old man'; wá 'old woman'
-ʔiŋ	Nominal suffix	Noun + Oblique or Object case	Indefinite associative 'one from X place; associated with X'	Interrogative pronoun ʔiŋ 'who'
táʔ	Particle	Nouns	Related instance marker	
=hin	Enclitic	Nouns, adverbials	Parallel comparison	
n'uŋ	Particle	Nouns	Contrast between entities	
cóʔ	Particle	Various hosts	Locative; shift of attention among entities	
hũy	Particle	Nouns (animate)	'Following' marker	Locative postpositions: hũy ʔah 'after, behind'; hũyan 'in water'

7.1. 'Promiscuous' verbal morphology and the noun class¹⁰³

In general, Hup bound morphology tends to be highly promiscuous, as discussed in §3.3 (see also Appendix I). Even the forms that are most closely integrated phonologically with their hosts (i.e. the vowel-copying formatives defined as Boundary Suffixes in relation to verbs) are usually able to attach to various parts of speech, often occurring in a

range of distinct constructions, and serving a variety of functions. Accordingly, very little nominal morphology in Hup is *strictly* nominal. As discussed in Chapter 4, even the markers of case and number—the main inflectional forms that can be considered *primarily* nominal—are not strictly limited to nominal hosts; the case suffixes are capable of combining with verb stems to form adverbial clauses, and the case and number markers attach to verb stems in relative clause contexts (producing nominalizations).

Bound formatives in Hup sometimes perform much the same function regardless of the word class of their host, but in other cases their function may be quite distinct depending on whether the host is a predicate, a nominal argument, or even a main or a subordinate clause. One of the most striking cases of this involves the set of markers that indicate aspect when occurring on verbs (and typically on predicate nominals and adjectives as well), but which on nominal arguments tend to serve discourse-related functions of marking focus, topic, or emphasis. Nevertheless, the distinction between these forms' functions with predicates (verbal, nominal, or adjectival) versus non-predicate constituents of the clause is often blurred. A single form is often able to convey a range of meanings, depending not only on its host and on the construction in which it occurs, but also on the pragmatic context. The many possible variations are not all fully clear in this work, and will have to await future clarification.

Among verbal morphological forms, some can also combine directly with a non-verbal predicate (adjective or nominal) with no change in either function or form, while others require a copula host. To the extent that these forms are predicative, they are treated together with verbal morphology (primarily in Chapter 12; also see 13 and 14).

¹⁰³ Extra thanks to Orin Gensler for his especially helpful comments on this section.

In addition to the ‘promiscuous’ forms discussed in this section, there is one aspect-related verbal Boundary Suffix that also occurs with nominal forms, but does not serve a focus function. This is Dynamic *-Vý*, which in a limited number of cases can attach as an attributive marker to the first element (which is usually an adjective) of certain nominal compounds, as discussed in detail in §5.1.4 (see also §12.2); examples include *j’əb-əy wædhɔ* (night-DYNM luminary) ‘night luminary (=moon)’, *wág-áy wædhɔ* (day-DYNM luminary) ‘day luminary (=sun)’, and *póh-óy deħ* (high-DYNM water) ‘water from the roof’. The use of the Dynamic suffix as an attributive appears to mark a dynamic but intrinsic association between the two entities in the compound.

7.1.1. Inchoative focus *-ay*

The form *-ay*, which acts as a marker of inchoative aspect on predicates (see §12.3), serves a focus function with nominal arguments. It can occur on either subject or object nominals, and typically highlights information as new, in keeping with its inchoative identity. In general, this highlighting of newness is a discourse phenomenon that relates to the entire clause; when the Inchoative marker occurs on a nominal argument, it usually *also* occurs on the predicate (i.e. twice in one clause), although not invariably.

The use of *-ay* with predicate nominals provides important context for understanding its use with arguments. Example (1) illustrates its relatively clear-cut inchoative function, relating to an initiated or imminent event:

- (1) *dəh-ay* *ʔín-ih*
 water-INCH 1pl-DECL
 ‘We’re about to get rained on.’ (OS)

In other cases, the Inchoative marker also occurs with a nominal predicate, but here the ‘inchoative’ sense relates primarily to the beginning-point of the speaker’s (and hearer’s) engagement with a time-stable entity, rather than to the initiation of an event. This is illustrated in examples (2a) and (3a), and contrasted with the more aspect-neutral declarative inflection in (2-3b).

- (2) a) *núp pĩhĩ=teg-ay-áh*
 this banana=tree-INCH-DECL
 ‘This is a banana tree.’ (we are walking by and commenting)
- b) *núp pĩhĩ=teg-éh*
 this banana=tree-DECL
 ‘This is a banana tree.’ (EL)
- (3) a) *núw-ay nĩ mǎy-ay-áh*
 this-INCH 1sg.POSS house-INCH-DECL
 ‘This is my house (we’re arriving in).’
- b) *núp nĩ mǎy-ǎh*
 this 1sg.POSS house-DECL
 ‘This is my house.’ (EL)

Similarly, in the string of predicate nominals in (4) (which one might say when showing someone a photograph of one’s family) the Inchoative marks each person as he/she is pointed out.

- (4) *ǎǎh=ǎn-ay, ǎǎh=ǎp-ay, ǎǎh=cǎt-ay yúw-úh*
 1sg=mother-INCH 1sg=father-INCH 1sg=older.brother-INCH that.ITG-DECL
 ‘That’s my mother, my father, my older brother.’ (RU)

The function of Inchoative *-ay* with nominal arguments is similar to its function with predicates: it serves to highlight new information vis-à-vis the speaker’s (and hearer’s) immediate experience. As noted above, where it occurs on an argument, it is

frequently *also* present on the predicate, as in (3a) (but not invariably). Examples of the Inchoative marker's occurrence on the subject NP (and in some cases on the predicate) are given in (5-7).

- (5) *mǎť ciwĩb=wĩg-ay=mah, tĩh-ǎñ wĩd-hám-ay-áh...*
 cutia bacaba=seed-INCH=REP 3sg-OBJ arrive-go-INCH-DECL
 '(Then he tried) cutia-bacaba seeds, and they fit him.'
 (after trying a number of other seed types to replace his missing eyes) (H-CO.4)
- (6) *bahad-nĩh tĩh ní-ay-áh, yúp hĩd=ĩn-tǎh-ay-áh*
 appear-NEG 3sg be-INCH-DECL that.ITG 3pl=mother-offspring-INCH-DECL
 'He did not appear, their mother's son.' (I-M.17) (i.e. he had disappeared)
- (7) *dɔwɔh dó hǎp-ay=mah yúp d'ol-mɔy-d'ɔh-ɔh*
 cheek red fish-INCH=REP that.ITG take-hole-rot-DECL
 'It was that red-cheeked fish that made the hole in her.' (LG-C.18)

Inchoative *-ay* can only occur once within the NP. Where a demonstrative is present in the NP, it is usually the host for the Inchoative marker, while the noun it modifies is not. In example (8)—as in (3a) above—the Inchoative marks the clause-initial demonstrative, as well as the predicate.

- (8) *yúw-ay ɛdí g'ɔp-ay-áh*
 that.ITG-INCH Edi scoop-INCH-DECL
 'There's Edi getting water now' (RU)

The Inchoative focus marker also appears on object NPs, where it follows any case marker, as in (9-10). However, *-ay* cannot occur on *both* A and O in a single clause, probably because only one tends to be the focus of new information at a time.

- (9) *hǎp-ay tĩh wǎd-ay-áh*
 fish-INCH 3sg eat-INCH-DECL
 'Now he's eating fish (after eating something else first).' (EL)

- (10) *wãʔ(*-ay) ʔám-ǎn-ay mæh-tég-ay-áh*
 buzzard 2sg-OBJ-INCH beat-FUT-INCH-DECL
 ‘Buzzard will beat you.’ (EL)

The focus function of Inchoative *-ay* is especially clear in those contexts where some focus marker is constructionally obligatory in the clause. This is the case, for example, with the ‘Exclusive’ *-Vyɬk* construction, which has a corresponding nominal focus slot; while this is usually filled by the generic Focus suffix *-ah*, *-ay* may take its place:

- (11) *yũ-ay tɬh-an cug’æt be-eyɬk*
 John-INCH.FOC 3sg-OBJ leaf/paper show-EXCL
 ‘**Only John** showed him the paper.’ (EL)

7.1.2. Contrastive emphasis (Telic) =*yɬʔ*

The form =*yɬʔ* is one of the most ubiquitous morphemes in Hup; it is extremely frequent, and attaches to a variety of different parts of speech. In all of its realizations, it appears to have something to do with signaling focus, but its more specific function depends on the particular part of speech and type of construction with which it occurs. As an Inner Suffix with verbs, *-yɬʔ* indicates telic aspect (§12.6); encliticized to adverbial clauses, it appears to have both the function of focus and that of marking the construction as an adverbial (§10.2); and encliticized to nominals it indicates contrastive emphasis. As such, its main function is to emphasize the nominal referent’s uniqueness vis-à-vis other entities.

While this discussion concentrates on the ‘contrastive emphasis’ use of =yɨʔ, the various functions of this form are in many cases not clearly distinct, and blend into one another. For this reason, I have glossed all instances of yɨʔ as ‘Telic’, although its uses with nominal arguments and adverbial clauses are certainly related more to emphasis than to aspect. Another somewhat mysterious fact about constructions involving encliticized =yɨʔ is their varying stress patterns, where in some cases =yɨʔ is unstressed, while in others it receives equivalent or even primary stress in relation to its host. Because stress plays such an important role in determining construction types elsewhere in Hup, these differences may correspond to a meaningful pattern, but this is as yet unclear. It is hoped that the nuances of this bound form’s polyfunctionality will become more clear with future research.

Examples (12-14) illustrate the contrastive emphasis function of =yɨʔ in connection with predicate nominals. The first two are common responses to teasing; for example, a joking allegation is often answered with (12), “It’s *you* (and not me!)”, and I was instructed to answer with (13) when teased that so-and-so was my husband. Example (14) comes from a story in which the participants in a ceremony had a large number of dance staffs, but had stacked them all one inside the other so that they appeared as a single staff.

- (12) ɬám=yɨʔ yúw-úh !
 2sg=TEL that-DECL
 ‘It’s *you*!’ (OS)
- (13) cǎp=yɨʔ!
 other=TEL
 ‘(He’s) a *different* one!’ (OS)

- (14) *ʔayup=təg=yiʔ=mah hidnɪh kotoʔw=teg-eh*
 one=stick=TEL=REP 3pl.POSS dance.staff-stick-DECL
 ‘Their dance staff was *just one* staff.’ (H.72)

The elicited pair of examples in (15) likewise illustrates the contrastive emphasis function of =*yiʔ*, which can occur on either the subject or the object argument of a clause.

- (15) a) *ʔɪn=yiʔ teghʃ-nɔg'od ʔɪd-ɬy*
 1pl=TEL fire.people-mouth speak-DYNM
 ‘It is *we* that speak Portuguese (in contrast to other people).’
 b) *ʔɪn teghʃ-nɔg'od=yiʔ ʔɪd-ɬy*
 1pl fire.people-mouth=TEL speak-DYNM
 ‘It’s *Portuguese* that we speak (in contrast to other languages).’ (EL)

Further examples are given in (16-18). In example (18), =*yiʔ* occurs with an oblique argument.

- (16) *ʔuɣ-ǎn=yiʔ tɪh nɔɔʔʔ ʔuɣ-ǎnʔ*
 who-OBJ=TEL 3sg say-INT who-OBJ
 ‘To *whom* did she say that? To whom?’ (TD.Cv.105)
- (17) *nɪŋ cóʔ=yiʔ bɪʔ=teg ham-ní-p=b'ay, tɪh=cúm-úh*
 2pl LOC=TEL work=THING go-INFR2-DEP=AGAIN 3sg=beginning-DECL
 ‘As for *you* all (but not us), you all were making things in the beginning.’
 (i.e. Non-Indians have been the ones with merchandise since the Creation)
 (H.txt.32)
- (18) *wɔh-d'ɔh-ɛ=yiʔ yúp ʔɪn bab'-ni-ní-h*
 River.Indian-OBL=TEL that.ITG 1pl sibling-be-INFR2-DECL
 ‘We were together *with the River Indians!*’ (H.txt.28)

In keeping with its contrastive emphasis function, the form =*yiʔ* can occur on each element in a list to mark expression of explicit contrastive difference between two or

more entities, including the semi-idiomatic construction *tɬh=yiʔ* ‘one’s own’, as in examples (19-20).

- (19) *nɪŋɬh hɔhtɛg tɬh=yiʔ, ʔɪnɬh hɔhtɛg tɬh=yiʔ*
 2pl.POSS canoe 3sg=TEL 1pl.POSS canoe 3sg=TEL
 ‘Your (Non-Indian peoples’) canoe was one, our canoe was another,

cɔkw’ɔt=ʔɬh nɬh hɔhtɛg tɬh=yiʔ
 tukano=MSC POSS canoe 3sg=TEL
 the Tukanos’ canoe was another (in the Creation)’ (H.txt.29)
 (i.e. you all had your own canoe, we had our own...)

- (20) *húp=d’əh kedó=yiʔ nɔɔy,*
 person=PL firefly=TEL say-DYNM
 ‘There are those Hup people that say “kedo”,

huhúy=yiʔ nɔɔy, ní-íy yɪ-d’əh-əh
 firefly=TEL say-DYNM be-DYNM that.ITG-PL-DECL
 and those (others) that say “huhuy” (to mean “firefly”).’ (E.int.136)

The form *=yiʔ* also marks adverbial expressions and clauses (mostly relating to time and location), as discussed in §10.2 and §18.2.6.1. In examples (21-24), *=yiʔ* (here optional) appears to serve a similar emphasis-related function with the adverbials as it does with nominals. However, as the discussion in §10.2 (see also §18.2.6.1) clarifies, *=yiʔ* appears in other cases to have the more general role of simply marking a construction as adverbial.

- (21) *yíkán=yiʔ pɬd wíd-b’ăy, yíkán=yiʔ pɬd wíd-b’ăy, ní-íy=mah*
 there=TEL DIST arrive-return over.there=TEL DIST arrive-return be-DYNM=REP
 ‘Each time he arrived, he arrived right back there again!’ (man trying to leave spirits’ house; keeps finding himself returning to it as he wanders lost) (P.BY.92)

- (22) *[ʔamɬh yág g’ăʔ-ăʔ]=yiʔ tɬh g’ăʔ-ăʔ*
 2sg.POSS hammock suspend-OBL=TEL 3sg suspend-DECL
 ‘He kept his hammock right where your hammock hangs.’ (OS)

- (23) *híd bĩ?ni-ní-h, hib'ah=tǎh=d'əh-əh...*
 3pl work-be-INFR2-DECL be.created=offspring=PL-DECL
 'They did (thus), the Ancestors...

cǎp=ma yĩ-yĩ?, cǎp=ma yĩ-yĩ?
 other=river thus-TEL other=river thus-TEL
 the next creek (was named) thus, (and) the next creek (was named) thus.'
 (H.txt.24)

- (24) *nutǎn=mǎh=yĩ? lǎh wĩ?-tuk-həh-yǎh-ǎh!*
 today=DIM=TEL 1sg hear-want-NONVIS-FRUST-DECL
 'Right this minute I'd like to listen to it!' (B.Cv.83)

The marker =*yĩ?* also appears in expressions of comparison, probably through a reflex of its adverbial function (see §10.2.2). It typically combines with the nominal standard of comparison to indicate 'just like X':

- (25) *b'öy=yĩ? təg nĩh-ĩy yúw-úh*
 traíra=TEL tooth be.like-DYNM that.ITG-DECL
 'Its teeth are just like the traíra's.' (P-F.126)

7.1.3. Topic-switch marker =*b'ay* ('again')

The enclitic =*b'ay*, which has the aspectual meaning of 'repeated instance' in verbal constructions (see §12.9.2), also occurs on nominal arguments and relates to a switch of topic in the discourse. Like most of the other bound forms discussed in this section, there is functional and conceptual overlap between its aspectual use with verbs and its use as a discourse marker with nominals (hence the gloss 'again' in both instances): just as the predicative use of =*b'ay* signals the repetition of an event or of its resulting state, its nominal use picks out one referent from a series of multiple entities (actual or

hypothetical) that figure in repetitions of the same event or situation, or in different events that are rhetorically parallel. If an event is repeated with a different entity, that entity is often new information; thus by marking a switch of topic in the discourse, *=b'ay* can also act as a kind of focusing device within the clause itself (cf. Lambrecht 1994: 129).

The link between the verbal aspectual and the nominal topic-switch functions of *=b'ay* can be seen in examples (26-28), in which both treat a ‘repeated instance’ of a related event, but where different entities are involved. Examples (26-27) come from a story in which a person guts one game animal after another to feed a hungry spirit (26), then passes the knife out of his hiding place so that the spirit, in his turn, can feed the person (27). Example (28) is a follow-up request in a conversational exchange: the initial request—which a child made to me while I was playing the fiddle—was *cadakaʔ yám!* ‘(Play the) Chicken Song!’; I responded saying ‘I’ve just played it’, so he countered with the second suggestion.

- (26) *yúp cǎw-ǎn=b'ay, tǎh kiwíʔ-b'ay-áh*
 that.ITG other-OBJ=AGAIN 3sg split.open-AGAIN-DECL
 ‘Then he split open another one.’ (M.NS.67)

- (27) *yúp=b'ay, húp=b'ay wan tǎh d'ǎh-wáy-áh*
 that.ITG=AGAIN person=AGAIN knife small send-go.out-DECL
 ‘Then the person sent out the knife (so that the spirit could use it in his turn).’
 (M.NS.67)

- (28) *mǎhǎy yám=b'ay*
 deer song=AGAIN
 ‘Deer Song then.’ (OS)

Examples (29-30) illustrate the use of *=b'ay* to draw attention to a contrast between entities—i.e. a switch of topic—in the context of a rhetorically parallel event.

- (29) *tĩh=b'ay, cɔhɔ=b'ay, d'uç tĩh tɔd-g'ét-mĩʔ=yiʔ,*
 3sg=AGAIN crab=AGAIN timbó 3sg beat.timbó-stand-UNDER=TEL
 'As for him, the crab, while he (the jaguar) was beating timbó,

hup-hi-cu ʔ-ham-tú ʔ-ay-áh

RFLX-FACT-cover-immersed-INCH-DECL

(the crab) went and covered himself up in the water (to hide).' (H-CO.3)

- (30) *tĩh b'ɔ̃-an hám-áh, tĩh b'ĩyĩʔ, yĩ-nĩh-mĩʔ=mah*
 3sg roça-DIR go-DECL 3sg only that.ITG-be.like-UNDER=REP
 'She went to the roça by herself; at the same time

tĩh=tæh ʔp=b'ay hɔ̃p kək-əp hám-áh

3sg=child.father=AGAIN fish pull-DEP go-DECL

her husband went fishing.' (T-C.2)

The elicited example (31) contrasts the appearance of *=b'ay* as a topic-switch marker on both subject and object arguments of the clause (31a-b) with its typical verbal aspectual function in (31c).

- (31) a) *hĩd=b'ay hɔ̃p wæd-æh*
 3pl=AGAIN fish eat-DECL
 'As for *them*, they are eating fish.' (i.e. in contrast/comparison with us)
- b) *hĩd hɔ̃p=b'ay wæd-æh*
 3pl fish=AGAIN eat-DECL
 'They are eating *fish*.' (i.e. relative to some other food)
- c) *hĩd hɔ̃p wæd-æy=b'ay (wæd-b'ay-áh)*
 3pl fish eat-DYNM=AGAIN (eat-AGAIN-DECL)
 'They are eating fish again.'

However, this division of labor is not clear-cut, as already suggested by example (26) above. In fact, *=b'ay* can realize its comparative/contrastive function even when occurring on a verb, as in (32-33). Note, however, that *=b'ay* can combine with a verb in

two different ways; as an enclitic following the Boundary Suffix (e.g. *ʔəg-əy=b'ay*

‘drink-DYNM=AGAIN’), or as an Inner Suffix preceding the Boundary Suffix (e.g. *ʔəg-*

b'ay-áh). The more tightly integrated form involving *b'ay* as an Inner Suffix can *only*

have the aspectual reading relating to a repeated event (see §12.9.2), so it is unacceptable

in these examples.

- (32) *núp ʔāh=cəʔ=b'ay wəʔn' ʔəg-nʔh,*
 this 1sg=older.brother=AGAIN mingau drink-NEG
 ‘My older brother drinks mingau,

núp ʔāh=təʔh ʔip=b'ay wəʔn' ʔəg-əy=b'ay
 this 1sg=child.father=AGAIN mingau drink-DYNM=AGAIN
 my husband does not.’ (EL)

- (33) *yʔ=yiʔ g'et-pæm-yiʔ-ʔy, cāp=ʔh yé-miʔ=b'ay*
 thus=TEL stand-sit-TEL-DYNM other=MSC enter-UNDER=AGAIN
 ‘While they stay thus sitting around, another one goes (to school).’ (P-Sp.1.2)

In conversation, *=b'ay* is in extremely frequent use with interrogative clauses (both information (WH) and polar (yes-no) types), as illustrated in examples (34-38). As such, its use is probably motivated by the awareness of multiple possible but contrasting options vis-à-vis one referent or situation, or (conversely) of multiple possible referents vis-à-vis one event. It tends to occur clause-finally, in conjunction with clause-final subjects; by contrast, the verb-final interrogative strategy (see §17.4) rarely involves marking with *=b'ay* (although this can occur, as in example 38) below).

- (34) *ʔy yúp=b'ay?*
 who that.ITG=AGAIN
 ‘Who’s that?’ (B.Cv.90)

- (35) *hʔn' ʔh yúp=b'ay?*
 what that.ITG=AGAIN
 ‘What’s that (for)?’ (OS)

- (36) *hĩp=b'ay, hĩ key-nĩh-ĩy tĩh-áh?!*
 what=AGAIN how see-be.like-DYNM 3sg-FOC
 'What? How can it be (that you didn't leave any for me)?!' (H-CO.2)
- (37) *cúg kæt-tég ľám=b'ay?*
 stringed.instrument play-FUT 2sg=AGAIN
 'Are you going to play fiddle?' (OS)
- (38) *ľy d'o ľ-yi?-pó ľ=b'ay ?*
 who take-TEL-EMPH1=AGAIN
 'Who the heck took it?' (B.Cv.93)

It is possible for =*b'ay* in an interrogative to occur both on a demonstrative question word and clause-finally, as in (39).

- (39) *hĩp=b'ay canǎ=b'ay, hĩp=b'ay pĩhĩ=b'ay?*
 what=AGAIN pineapple=AGAIN what=AGAIN banana=AGAIN
 'Which is the pineapple, which the banana?' (EL)

The enclitic =*b'ay* also occurs frequently on demonstratives, marking a constituent that is a new (or reactivated) topic (examples 40-41). This use probably has a similar motivation to that in interrogatives, that is, signaling a mild contrast or comparison among possible referents or options.

- (40) *núp=b'ay!*
 this=AGAIN
 'This one!' (OS: child showing me a bug)
- (41) *yúp ľĩn=b'ay... núp j'áh có? ľĩn ni-tég*
 that.ITG 1pl=AGAIN this land LOC 1pl be-FUT
 'So as for us... this is the land we are to live in.' (H.txt.33)

7.1.4. Reflexive intensifier =*hup*

The form *hup* is extremely multifunctional; among other uses, it can be a marker of valency (as a reflexive) and of indefinite reference, as discussed in detail in §11.1. As an enclitic on nominal arguments, however, it functions as an intensifier (i.e. an ‘emphatic reflexive’), focusing attention on the referent. Whereas Reflexive *hup*- always occurs with an animate subject, the intensifier =*hup* is acceptable on both animate referents (example 42) and on inanimate referents (examples 43-44).

- (42) *huñ-way-nñ=yi? nñh, tñh=hup tñh way-ññh*
 carry-go.out-NEG=TEL be.IMP 3sg=RFLX.INTS 3sg go.out-OPT
 ‘Don’t carry him out, he can go out by himself.’ (OS)
- (43) *nup-m’æ=po? híd we?d’ó?óh ... tñh=hup-ay hɔp-hí-ay-áh*
 this-MEAS=EMPH1 3pl transfer-take-DECL 3sg=RFLX.INTS-INCH dry.up-descend-INCH-DECL
 ‘Just this little bit they pour out... it dries/settles out by itself (in the bottom of the pot).’ (MD-C.74)
- (44) *nñ húpnúh, tñh=hup tñh pay-yí?-ñy*
 1sg.POSS person.head 3sg=RFLX.INTS 3sg bad-TEL-INCH
 ‘My radio, it went bad by itself.’ (EL)

The Reflexive intensifier =*hup* can also encliticize to nominals marked as objects or possessors, but it must follow these inflectional formatives, as in examples (45-47). It may itself be followed by additional focus markers, in particular the Telic/contrastive emphasis form =*yí?* (47).

- (45) *ñám-ăn=hup ññh mæy-té-h*
 2sg-OBJ=RFLX.INTS 1sg pay-FUT-DECL
 ‘I’ll pay you yourself.’ (EL)
- (46) *ñámñ=hup núp=b’ay*
 2sg.POSS=RFLX.INTS this=AGAIN
 ‘This one is your own.’ (EL)

- (47) *nutæñ ʔñ=hup=yíʔ-ay-áh ʔñ=hin-íh, híð-n'áñ híkəd-ní=d'əh-ay*
 today 1pl=RFLX.INTS=TEL-INCH-DECL 1pl=also-DECL 3pl=PL.OBJ FACT.pass-be=PL-INCH
 'Today it is just us; we have changed places with them (the Tukanos).' (P-B.6)

7.1.5. Dependent suffix -*Vp* as topic marker

The form -*Vp*, which attaches to verb stems as a clause-level Dependent marker, can also occur with a variety of clausal constituents (§18.2.4). With these non-predicative elements, -*Vp* appears to function as a topic- or antitopic-marker: it sets the nominal apart from the rest of the clause, reactivating it for the benefit of the hearer (example 48). The use of -*Vp* as a clausal subordinator and as a topic marker has a common denominator in that both have to do with the theme of the sentence, rather than the focus or rheme, and both are scene-setting, rather than dealing with asserted new information.

- (48) *ʔáñ-āp híð-āñ=yíʔ nɔɔ j'am=tiʔ*
 1sg-DEP 3pl-OBJ=TEL say-DYNM PST.CNTR=EMPH.TAG
 'As for me, I said (so) to them.' (TD.Cv.102)

Nominals marked by -*Vp* often occur clause-finally, following the verb, as antitopics (i.e. a right-detached topic, cf. Lambrecht 1994: 203). When they occur in this position, the preceding constituent is obligatorily marked with the Focus form -*áh* (see §15.2.3), and the Dependent marker is often preceded by the 'Filler' form -*Vw*- (see §15.2.4). The obligatory use of -*áh* in this context helps to create an explicitly stated, polarized opposition between the topic and focus (i.e. theme and rheme). This combination of strategies usually lends an emphatic tone to the entire utterance, and is illustrated in examples (49-51).

- (49) *páti-ǎn húp-út ʔǎh ʔǎd-ihɔʔ, ʔǎd-ty-áh ʔǎh-ǎw-ǎp*
 Pattie-OBJ Hup-OBL 1sg speak-TAG2 speak-DYNM-FOC 1sg-FLR-DEP
 ‘I speak Hup to Pattie, you know, I really speak (it)!’ (P.Sp.)
- (50) *hɪʔh'ih nɔ-tég-n'ih pǎ-áh yú-uw-úp, mandukori-ǎn-aw-ǎp!*
 what say-FUT/PURP-COMP NEG:EX-FOC that.ITG-FLR-DEP Mandukori-OBJ-FLR-DEP
 ‘...Nothing like that (is said) to that one, to Mandukori!’ (P-Sp.3)
 (Father, I want to eat bananas)
- (51) *tih=hup hup-hipǎh-yóʔ ní-ty tih nǎn-æp=cud-áh núw-úp*
 3sg=RFLX RFLX-know-SEQ be-DYNM 3sg come-DEP=INFR-FOC this-DEP
 ‘She came of her own accord, this one!’ (P-Sp.7)

7.1.6. Comparison of ‘promiscuous’ nominal discourse markers

The bound forms discussed above are considered as a set, given that they all occur as aspectual markers with verbs and have a discourse-marking function with nominal constituents. The following elicited paradigm illustrates the differences in their patterns of nominal use and their semantic contributions.

Inchoative focus: The following sentence might be spoken by children who speak Hup, but whose father does not; the choice of the inchoative focus form stresses the chronological comparison between the children and their father.

- (52) *ʔh-ay húp ʔǎd-ih* (OR: *ʔǎd-ay-áh*)
 1pl-INCH Hup speak-DECL (speak-INCH-DECL)
 ‘**But we** speak Hup.’

Contrastive emphasis: This sentence contrasts the speaker’s group, who speak Hup, with the majority of people in São Gabriel, who do not.

- (53) *ʔh=yiʔ húp ʔǎd-ih, huñ-an*
 1pl=TEL Hup speak-DECL São.Gabriel
 ‘**Only we** speak Hup in São Gabriel.’

Switch of topic: This sentence picks out the speaker’s group as a new topic, in implicit or explicit comparison with other groups that speak other (sometimes multiple) languages.

- (54) *ʔɨn=b'ay húp ʔíd b'ɨyíʔ ʔɨn ʔíd-ɨh, ʔɨnɨh hayám-át*
 1pl=AGAIN Hup language only 1pl speak-DECL 1pl.POSS town-OBL
 'As for us (people of the forest), we speak only Hup in our village.'

Reflexive intensifier: This sentence emphasizes that the members of the speaker's group speak Hup among themselves, whereas they speak Tukano to River Indians, and Portuguese to Non-Indians.

- (55) *ʔɨn=hup húp ʔíd ʔíd-ɨh*
 1pl=RFLX.INTS Hup language speak-DECL
 'Amongst ourselves, we speak Hup.'

Dependent suffix as topic-marker: This sentence might be said to a person who does not speak Hup, on his/her arrival to the village (such as to one of the Hup people who understand Hup fully but insist on speaking Tukano); choice of *-Vp* marks the speaker's group as a reactivated or emphasized topic.

- (56) *ʔɨn-ɨp húp ʔíd-ɨy*
 1pl-DEP Hup speak-DYNM
 'As for us, we speak Hup!'

7.2. Augmentatives and diminutives

Hup's augmentative and diminutive forms are best described as general markers of emphasis or affect. They are not limited to appearing on nouns as indicators of unusual size, but can attach to various parts of speech and carry information relating primarily to the speaker's attitude toward the referent. For this reason, the Augmentative emphasis form *=pog* and the Diminutive emphasis form *=mæh* are addressed in detail in Chapter 15, and only briefly discussed here.

The form *pog*—whose function as an emphatic enclitic is discussed in §15.2.1—also acts as the adjective lexeme 'big'; as such, it naturally has an augmentative function with nouns. However, as a grammaticalized morpheme, its function is not largeness, but emphasis. The Diminutive form *=mæh* (see §15.1.4), on the other hand, does occur as a

bound morpheme with certain expressions of small size, closeness, or unimportance, and is semi-lexicalized in a few forms, particularly the adjective *cípmæh* ‘small’.

Other than these forms, the form *tæh* has a limited function as a diminutive-like marker with nouns. It is essentially an adjective modifier, but—unlike other members of the adjective class in Hup—it cannot appear as a predicate (except in the semantically distinct form *tæh-* ‘be pregnant (animal)’¹⁰⁴), and it is restricted to noun phrases. It occurs in nominalized form (*tih=tæh=mæh* ‘little one’, *nɪ-n’ih (tih=tæh=d’əh* ‘these little ones’), and in a few semi-lexicalized nouns (*tegd’uh-tæh* [tree=small] ‘stick’, *widm’æh-tæh* [star=small] ‘star’, Umari Norte dialect only)¹⁰⁵. It is also a bound noun meaning ‘offspring, son’, and as such appears in compounds like *ya ʔamboʔ=tæh* ‘puppy’.

7.3. ‘Deceased’ marker =*cud*

Hup uses the enclitic =*cud* with nouns to mark a referent as dead (i.e. ‘late’). This ‘deceased marker’ usually occurs with kin terms (examples 57-58), but can mark human referents in general (59-60), and is acceptable even with domestic animals (61). It is not required; dead people may be referred to (by name, kin term, etc.) without it.

- (57) *ʔin=pā́ç=wəd=cud* *pe ʔ-ní-h*
 1pl=father’s.brother=RESP=DCSD sick-INFR2-DECL
 ‘Our late uncle was sick.’ (P.B)

¹⁰⁴ There is almost certainly a historical link between these forms; see §3.1.3.

¹⁰⁵ The final stress and the semantics of these forms indicate that *tæh* has adjectival rather than bound-noun status.

- (58) *ʔǎy=cud* *cəh-ʔé-h*
 older.sister=DCSD səh-PERF-DECL
 ‘Late older sister used to *səh*.’¹⁰⁶ (T.int.147)
- (59) *tiyĩʔ=cud-ǎñ* *n’uñ* *b’uy-d’əh-əy* *bĩg* *j’ám* *ʔǎh-tiʔ*
 male=DCSD-OBJ CNTR throw-send-DYNM HAB DST.CNTR 1sg-EMPH.TAG
 ‘I was always losing track of my late son (at a drinking party).’ (TD.Cv.100)
- (60) *natá,* *na ʔ-yĩʔ-íp=ʔǎy=cud*
 Natasia, die-TEL-DEP=FEM=DCSD
 ‘Natasia, the one who died’ (EL)
- (61) *nĩ* *ya ʔambó ʔ=cud* *naw-ʔéʔ*
 1sg.POSS dog=DCSD good-PRF
 ‘My (dead) dog was a good one.’ (EL)

The same form *cud* also occurs as an inferential evidential, and again as the verb root ‘be inside’. These constructions differ formally as well as functionally from each other: the deceased marker encliticizes directly to a nominal constituent, whereas the evidential encliticizes to (and has scope over) predicates, and the verb root is of course internal to the verb core. Nevertheless—as argued in detail in §14.9.3 (Historical Note)—it is likely that all three of the different manifestations of *cud* are polysemous, despite their strikingly different functions.

While a historical link between a ‘deceased’ morpheme and an evidential appears to be typologically rare, it is not completely without precedent in South America. In the unclassified Colombian language Andoke, the reported evidential marker *-há* (on predicates) also attaches to personal names to mark a deceased referent (Jon Landaburu,

¹⁰⁶ *səh-* (v.): the high-pitched singing delivered by a woman during the otherwise exclusively male performance of the kapiwaya ritual song cycle.

personal communication).¹⁰⁷ ‘Reported’ and ‘inferred’ evidential specifications have in common their reference to events or situations that are outside the direct (physical) experience of the speaker. It is presumably this function of signaling a lack of access to personal experience of something that has motivated both of these forms to extend their evidential function to one of marking deceased referents. (Extension in the opposite direction – from deceased referent to evidential – is also possible, but is less likely because the ‘deceased’ function is less easily semantically motivated.)

A historical link between the Inferred evidential and the Deceased marking forms in Hup is also supported by the somewhat ambiguous use of *=cud* in example (62). Here the form attaches to a predicate adjective like an inferential evidential, but refers specifically to the dead father, uncles, and other relatives of the speaker (an old woman):

- (62) *dəb ʔn-ŋ, dəb-ʔeʔ=cud, dəb=cud ʔn-ŋ... ʔp, pǎ-ay,*
 many 1pl-DECL many-PERF=INFR many=INFR 1pl-DECL father NEG:EX-INCH
 ‘There were many of us, there used to be many (apparently), we were many (apparently)... (but) Father is gone,

pǎç=yiʔ pǎd, pǎç=yiʔ pǎd, pǎç=yiʔ pǎd, ʔǎy’...
 father’s.brother=TEL also fa.bro=TEL also fa.bro=TEL also fa.sister
 and Uncle too, and (another) Uncle too, and Uncle too, and Aunt...’
 (T.int.143)

An alternative, though rarely used, deceased-marking construction is given in example (63); here the verb root *naʔ* ‘die’ follows the nominal referent as a peripheral formative, just as *=cud* does in the examples above.

¹⁰⁷ Also compare the Bolivian isolate Mosetén, in which the morpheme *-win* has a completive meaning with verbs and some particles, and marks nominal referents as deceased or no longer existing (Sakel 2002: 60).

- (63) *ʔobídiu=wəd náʔ ʔñ-ǎñ d'əh-nǎñ-b'ay-áh*
 name=RESP die 1pl-OBJ send-come-AGAIN-DECL
 'The late old/respected Ovidio brought us (here).' (P.B.11)

7.4. Respect markers

The enclitic =*wəd* can follow nouns referring to humans or spiritual beings as an optional marker of respect, especially for an older person or someone of higher social status. It is clearly historically derived from the bound human noun =*wəhəd* 'old man'. The feminine counterpart of this form (=wa 'old woman') is used in a similar way to indicate respect, but is less grammaticalized (see §5.4.2.1). These respect forms usually follow kin terms and personal names, both in direct address (including vocative kin terms) and in third-person reference. They also combine directly with demonstrative stems to produce derived demonstrative forms such as *yú-wəd* 'that old/respected man', *nú-wa* 'this old/respected woman', etc. (see §6.3).

Examples of the 'respect' forms include referential uses such as *tíh=cəw=wəd* (3sg=shaman=RESP) 'the respected shaman' and *ʔāh=ʔəh=wa* (1sg=grandmother=old.woman) 'my old/respected grandmother'. Vocative uses include, for example, the Hup children's respectful form of address for their Tukano teacher, *moycé=wəd* 'Moisés (respectful)', and occasionally for me *páti=wa* 'Pattie (respectful)'. Similarly, my Hup classificatory 'mother' refers to me as *tóg=wa* 'respected daughter'. Further examples are (64) and (57, 63) above.

- (64) *yunícu=wəd-ǎñ ʔāh ʔíd-ñ*
 Junilson=RESP-OBJ 1sg speak-DECL
 'I spoke to respected Junilson.' (LG.O.41)

While they typically indicate that the referent is of greater age or higher social status than the speaker, these forms do not entail a positive perception. For example, *=wəd* is often used in reference to malignant or dangerous spiritual entities (such as the Rainbow Spirit and the Snake of the Star-Hollow story), as in example (65).

- (65) *yúp tɪh̥ɸy=wəd nɪh tóg-óh!*
 that.ITG snake=RESP POSS daughter-DECL
 ‘It was the old/respected Snake’s daughter!’ (H.txt.45)

A related use of the ‘Respect’ terms is to signal endearment or familiarity, and they are sometimes applied as such to children or friends, as in example (66). While this use seems at first glance to be contrary to the ‘respect’ function, a similar phenomenon is actually quite common in English, where the respectful forms ‘Mister’ and ‘Miss’ can be used endearingly with children.

- (66) *kayak deh ʔəg-yæh yú-wəd-ǎn*
 manioc water drink-request.IMP that-old-OBJ
 ‘Tell that old fellow to drink some maniocera’ (B.Cv.85)

As noted above, the form *=wəd* is more grammaticalized than the corresponding feminine form *=wa*. Phonologically, the form has lost the internal [h] seen in the bound noun *=wəhəd* ‘old man’; semantically, while *=wa* is limited to female referents, *=wəd* can be used for both males and females (with females, primarily with kin terms) as in example (67). Still further evidence for grammaticalization is that *=wəd* can in fact co-occur with the nominal form *=wəhəd* ‘old man’, as in *tɪh=wəhəd=wəd* (3sg=old.man =RESP) ‘the respected old man’.

- (67) *yǎʔ=wǎd!*
 mother(Voc)=RESP
 ‘Mom!’ (OS)

The ‘old person’ nouns and their ‘respect’ derivations have an additional use: they can indicate that a person is characterized by (interaction with or ownership of) a high quantity of something, represented by the noun preceding the bound form. This function is usually reserved for *=wəhǎd* and *=wǎd* (regardless of the sex of the referent), as in examples (68-9).

- (68) *ʔam yénu=wəhǎd!*
 2sg money=full.of
 ‘You’re loaded with money!’ (OS)

- (69) *pán=wǎd*
 sloth=full.of
 ‘Many Sloths’ (i.e. one who encounters many sloths); ‘Lord of Sloths’
 (personal name)

The various uses of *=wǎd* can probably be explained via the semantic and pragmatic links between old age, the social status accompanying it, and the large quantity of years, children, hunting-and-gathering experience, and the like that also are associated with it. While grammaticalized markers of respect, or honorifics, are not uncommon in the languages of the world, they are considerably less common in highly egalitarian, non-stratified societies like that of the Hupd’əh. Nevertheless, age is clearly a meaningful measure of social status in such societies. This is reflected linguistically not only in Hup, but also in languages such as Tunebo (Colombia) and Guugu-Yimidhirr (Australia; cf. Foley 1997: 326-28). Example (70) illustrates the co-occurrence and marginal ambiguity of the ‘respected’ and ‘full of’ manifestations of *=wǎd*:

- (70) *hǝp=wǝd=mah yúw-úh, cǝ=wǝd!*
 fish=full.of/lord=REP that=DECL rainbow=old/respected
 ‘He’s lord of/ has lots of fish, Old Rainbow Man’ (H.40)

7.5. Indefinite Associative *ǝy* (‘who’)

The ‘Indefinite Associative’ construction involves the attachment of the interrogative pronoun *ǝy* ‘who’ to a noun N, usually following an intervening Directional/Object case marker (-*ǝt* or -*ǝn*), to indicate ‘a person from N, associated with N’. This use of ‘who’ is probably linked to the more general function of interrogative pronouns to mark indefinite reference (see §6.4); however, it is more grammaticalized. In the Indefinite Associative construction, *ǝy* is typically pronounced [dǝy] due to assimilation with the preceding dental stop [t] or [n] of the case marker. Some speakers maintain this assimilation even in slow speech, and do not even recognize a connection between this form of *ǝy* and the interrogative pronoun.¹⁰⁸

The Indefinite Associative construction almost always contains a case marker; this is usually the Object (or possibly the Directional oblique) form -*an* (71), but in many cases the Oblique -*ǝt* is also acceptable (examples 72-73). There are also a very few examples of this construction where no case marker is present, as in (74) below (note that in this environment *ǝy* is *not* pronounced [dǝy]). Finally, the construction is almost always followed by a bound nominal form; this is usually the masculine, feminine, or

¹⁰⁸ According to the morphophonological parameters defined for Hup formatives in §3.4, the peripheral formative *ǝy* should be labeled a postpositional ‘particle’, rather than an ‘enclitic’, because it receives

plural enclitic, but may be another bound noun when the referent is inanimate, as in

example (73), which refers to a piece of plastic pipe.

- (71) *n'i=cóʔ ni-yóʔ, núp ma-an-ǂũy=ǂǎy=n'ǎn tɕn-yóʔ...*
 that=LOC be-SEQ this river-OBJ-who=FEM=PL.OBJ hold-SEQ
 'Having lived there, having taken (in marriage) the women of this river...' (H.38)

- (72) *núp=b'ay katánya-át-ǂũy=ǂh ǂh-ǎn huǎ w'ob-nh yǎh=nih tí*
 this=AGAIN Castanha(Pt)-OBL-who=MSC 1pl-OBJ tobacco place-NEG FRUST=EMPH.CO EMPH.DEP
 'That guy from the Rio Castanha hasn't put any tobacco out for us.' (P.Sp.102)

- (73) *hǂp mǂh-ǂ-ǂũy=teg*
 fish lake-OBL-who=THING
 '(It's a) thing from the fish-pond.' (OS)

- (74) *máh=yiʔ-ǂũy=d'ǂh, w'éh-éy=d'ǂh*
 near=TEL-who=PL far-DYNM=PL
 'People from nearby, from far away' (T-Song.2)

The Indefinite associative construction can also follow a personal pronoun, as in the expression *ǂǎh-an-ǂũy=d'ǂh* (also *ǂǎh-ǎt-ǂũy=d'ǂh*) [1sg-OBJ/OBL-who=PL] 'my friends/those who are with me'. It is found with demonstratives (example 75) and with interrogative pronouns (example 76) as well.

- (75) *nút-ǂũy=ǂǎy ǂǎp-áh yúw-up, mǎǎ ǂah-an-ǂũy=ǂǎy!*
 here-who=FEM NEG-FOC that.ITG-DEP downriver-OBJ-who=FEM
 'She's not from here, she's from downriver!' (B.Cv.81)

- (76) *hǂ-ǂũy=d'ǂh yú?*
 where-who=PL that.ITG
 'Where are those people from?' (OS)

While the indefinite associative construction is found primarily with nouns, there are a few examples of its occurrence with adjectives, where it similarly indicates 'one associated with (Adjective)':

independent stress. However, I will consider it an enclitic because of its phonological dependence on its

- (77) *dəb húp-ǎn ʔāh kéy-éh, ʔāh náw-an-ǎy, hicocó-an-ǎy,*
 many person-OBJ 1sg see-DECL 1sg good-OBJ-who happy-OBJ-who
 ‘I spent time with many Hup people, I had love (‘goodness’) (from this),

ʔāh kéy-éh, yǎñ híd=n’ǎn náw ʔāh bǐʔ-ǎh
 1sg see-DECL thus 3pl=PL.OBJ good 1sg work-DECL
 I was happy (by this); thus I did well for them.’ (LG-O.8)

In comparison with its strictly locational sense in the examples above, the Indefinite Associative construction is also occasionally used to indicate a more general association with N (but one that is crucial for the referent’s identity). In (78), for example, it combines with the noun ‘clothes’ to mean ‘a person characterized by having lots of clothes’. The Indefinite Associative can also occur with a numeral to produce a meaning similar to that of the Associative plural construction (see §4.4.6), as in (79).

- (78) *tih=báb’ yǔd-an-ǎy=ʔh tih ní-mǐʔ*
 3sg=sibling clothes-OBJ-who=MSC 3sg be-UNDER
 ‘While his brother is one with clothes, he lives (without).’ (RU)

- (79) *ʔayǔp-an-ǎy=d’əh ni-ʔé=d’əh=mǐʔ... ʔin ʔūh-d’oʔ-kawa-ní-h*
 one-OBJ-who=PL be-PERF=PL=UNDER 1pl RECP-take-divide-INFR2-DECL
 ‘Being (originally) all one people, we separated.’ (H.txt.35)

Finally, it is not always necessary that a bound noun follow =*ǎy* in this construction. This is illustrated in the following examples, which also display some of the semantic variations of the Indefinite Associative. In (82), the construction occurs in connection with a time period, apparently to convey a sense of approximation; consultants say that *-an-ǎy* would be inappropriate for a more exact expression of the time period.

- (80) *cuh-hí-ty... nu-cãʔah-ay, nút, cãp tít-an-ũy*
 string-descend-DYNM this-side-INCH here other string-OBJ-who
 ‘String (bones) in a descending line, this side, this (other) side, (those that go on)
 the other string.’ (H.20)
- (81) *hí-n’ít-an-ũy?*
 Q-NMZ-OBJ-who
 ‘Which (story); (a story) about what?’ (i.e. what do you want to hear?)
 (H.txt on tape 2003:1)
- (82) *ʔayup g’ít-an-ũy=mah tít g’ãʔ-ãh, tít hɔp-nít-nít*
 one year-OBJ-who=REP 3sg suspend-DECL 3sg dry-NEG-DECL
 ‘For about one year he floated in his canoe, it did not dry up.’ (M-DT.78).

7.6. ‘Related instance’ particle *táʔ*

This particle is commonly used in imperatives and interrogatives relating to another instance of an entity.¹⁰⁹ For example, people would say (83) to me when asking to hear another fiddle tune, and (84) was uttered when soliciting translations of Hup words into English, after one or more preceding words had already been translated. Further examples are given in (85-86).

- (83) *cãp táʔ*
 other REL.INST
 ‘Once again, another one!’ (OS)
- (84) *yág táʔ*
 hammock REL.INST
 ‘What about ‘hammock’?’ (OS)
- (85) *dudu nít táʔ?*
 Pedro POSS REL.INST
 ‘What about Pedro’s?’ (B.Cv.80)

¹⁰⁹ This form is apparently homonymous with the verb stem *taʔ* ‘block’ (e.g. tree across a path); also compare the Factive form *hitaʔ* ‘meet up with’.

- (86) “*nř* *řǣg* *tář*, *cǣw*,” *třh* *nř-řřřh*
 1sg.POSS drink REL.INST Səw 3sg say-MS
 “‘What about *my* drink, Səw?’ was what he said.’ (Səw has just had a drink himself) (LG-O.15)

The Inchoative focus marker often follows *tář*, as in (87-88).

- (87) *řam* *tář-ay*, *j’ǣm-nřh-ay* *řám?*
 2sg REL.INST-INCH bathe-NEG-INCH 2sg
 ‘Aren’t *you* going to bathe?’ (speaker’s or others’ bathing is presupposed) (RU)
- (88) *mangǻ* *tář-ay*, *hřđ-ǻñ* *yamhidǻř-nřh* *třh?*
 Margarita as.for-INCH 3pl-OBJ sing-NEG 3sg
 ‘What about Margarita, didn’t she sing to them?’ (TD.Cv.103)

7.7. Parallel marker =*hin*

The enclitic =*hin*¹¹⁰ attaches to non-verbal constituents. It signals a parallel between like entities—usually an additional or related instance of a participant role vis-à-vis the event—and in many cases has the meaning of ‘also’ in English. It occurs with nominal subjects and objects—following any plural and inflectional marking—as well as with adverbial expressions like ‘today’ (examples 89-91).

- (89) *tǻřh=mǻřh=n’ǻñ* *tiřcřk=d’ǻh* *j’ǻřh* *nřř=d’ǻh=hín-řh!*
 offspring=DIM=PL.OBJ dislike=PL DST.CNTR 2pl=PL=also-DECL
 ‘You all didn’t like my children either!’ (TD.Cv.103)
- (90) *řám=yřř* *nřh-řp* *břg* *j’ǻřh* *řǻřh=hín-řh*
 2sg=TEL be.like-DEP HAB DST.CNTR 1sg=also-DECL
 ‘I too always do just as you are doing.’ (TD.Cv.101)
- (91) *hřđ* *nǻř-řé-h*, *řǻř-yřř=mah* *nutǻřn=hín* *třh* *wǻřđ-ǻřh*, *mǻřřy-řh*
 3pl give-PERF-DECL QTY-TEL=REP today=also 3sg eat-DECL deer-DECL
 ‘They gave him (on that day) everything that deer also eat today.’ (I-M.16)

¹¹⁰ Speakers in the Tat Deh dialect area tend to pronounce this form as [*in*], unless the host morpheme is a CV stem; this is consistent with the general morphophonemic pattern of dropping post-consonantal [h] in this dialect (see §2.4).

Coordination of nominal arguments in a clause can also be signaled by *=hin*, which acts as an optional, emphatic coordinator (examples 92-94). Note that *=hin* does not entail ‘separate’; in a statement such as ‘X, Y conversed’, coordination of the subjects with *=hin* (and likewise without) can imply either that they converse with each other, or with different people (example 94).

- (92) *yúp=mah híd yɔhɔy-pĩd-ĩh, ya ʔambɔʔ=hin yɔhɔy,*
 that.ITG=REP 3pl search-DIST-DECL dog=also search
 ‘So they were searching, the dog also searching,

tĩh=hup=hín yɔhɔy, ní-íy=mah
 3sg=RFLX.INTS=also search be-DYNM=REP
 and he himself (boy) also searching.’ (FS.2)

- (93) *ʔayup pĩhĩ=mæh=hín, ʔayup puđ=mæh yo-pæm-yóʔ ní-íy,*
 one banana=DIM=also one breast=DIM dangle-sit-SEQ be-DYNM
 ‘A few bananas, having carried dangling and placed (in the ground) a few banana-tree sprouts,

caná=mæh=hín, ya ʔăp=yiʔ ʔĩn-ĩh
 pineapple=DIM=also all.that=TEL 1pl-DECL
 a few pineapples, that’s it for us.’ (P.Sp.100)

- (94) *puh, mɔt=hin bab’-ʔĩd-ĩy*
 Puh Mɔt=also sibling-speak-DYNM
 ‘Puh and Mɔt conversed.’ (EL)

In the following example, the use of *=hin* is compared to that of the Distributive form *pĩd*, which can likewise be translated as ‘also’ in some environments. Semantically, the two may be essentially synonymous, as in (95a-b); note also that they can co-occur (95c). However, they are *syntactically* distinct (as reflected in the English translations of 95a-b). While *=hin* has scope over a non-predicative constituent, the ‘also’ function of

pĩd is restricted to predicates (thus the ungrammaticality of 95d); compare its quantifier use with nominals, §6.5.2).

- (95) a) *ham-tég ɔ̃h=hin-ih*
 go-FUT 1sg=also-DECL
 'I too will go.' (OS)
- b) *ɔ̃h ham-tég pĩd*
 1sg go-FUT DIST
 'I will go also.' (EL)
- c) *ɔ̃h=hin ham-tég pĩd*
 1sg=also go-FUT DIST
 'I too will go also.' (EL)
- d) **ɔ̃h pĩd ham-tég*
 1sg DIST go-FUT
 (Intended meaning: 'I too will go')

A related function of the Parallel form =*hin* is primarily a discourse one: it draws a parallel between a newly introduced or activated, but topical, referent and a previously mentioned one. In (96), for example, the Hup speaker has just stated that there are no more Tukano children left in the formerly mixed Tukano-Hup village school, and that only Hup children are left. He now switches to the issue of Hup children: even though the school is now theirs alone, they play hookey under the eyes of their parents. Similarly, in (97) the speaker is drawing a parallel between the position of the Hupd'əh of Barrera, who now live in what used to be a Tukano village, and that of the former Tukano inhabitants. Finally, the speaker in (98) has just been talking about how she is bereft of relatives, alone, old, and feeble. She then switches to a new topic, but uses =*hin* to keep it integrated with her previous one; she presents her inability to communicate with occasional non-Indian visitors as contributing to her state of aloneness.

- (96) *yǝ-nǝh-mǝʔ* *j'ám* *ʔǝ=b'ay*, *ʔǝ=tǝǝh=n'ǎn=hin=b'ay*,
 that.ITG-be.like-UNDER DST.CNTR 1pl=AGAIN 1pl=offspring=PL.OBJ=also=AGAIN
 'Even so, we don't tell **our kids**
- “nǝʔ b'oy-ʔáy hám!” nɔ-nǝh ʔǝ ni-bǝhɔʔ*
 2pl study-VENT go.IMP say-NEG 1pl be-HAB-TAG2
 “go to school!” (P-Sp.1.1)
- (97) *nutǝh ʔǝ=hup=yǝʔ-ay-áh* *ʔǝ=hin*, *hǝd=n'ǎn* *hi-kǝd-ní=d'ǝh-ay*
 today 1pl=RFLX.INTS=TEL-INCH-DECL 1pl=also 3pl=PL.OBJ FACT-pass-be=PL-INCH
 'Today, **as for us**, it is just us (in relation to Tukanos); (we) have changed places
 with them.' (P-B.6)
- (98) *nǝʔ=d'ǝh wǝd-nǝh-tǝh=hin*, *ʔǝh ʔǝd-tuk-yǝǝh-ǝp*, *yǝ ham-nǝh*,
 2pl=PL arrive-come-COND=also 1sg speak-want-FRUST-DEP thus go-NEG
 'And when you all (Non-Indian people) **come here**, I'd like (in vain) to talk (with
 you), but it doesn't go well;
- teghǝ-nɔg'oǝd=hin wǝʔ-nǝh, potugéc=hin wǝʔ-nǝh ʔǝh-ǝh*
 fire.people-mouth=also hear-NEG Portuguese=also hear-NEG 1sg-DECL
 I don't understand **Non-Indian language**, I don't understand
Portuguese. (T-PN.5)

7.8. Contrastive *n'uh*

The particle *n'uh* follows nominal arguments that are primary participants in the clause, and signals a contrast between the referent and other entities (compare =*hin* above, which patterns in similar ways but involves a parallel). Like peripheral formatives generally in Hup (cf. §3.4), *n'uh* always directly follows the noun it modifies, without intervening pause phenomena or other morphology, but its independent stress gives it 'particle' rather than 'enclitic' status.

Use of *n'uñ* always implies a contrast between two or more entities, whether or not these are explicitly stated. In (99), the speaker is describing a girl from another village who has gotten married too young and seems to be doing poorly; she points out that the girl is the same age as a girl from her own village—who, in contrast, remains unmarried. In (100), the speaker and her reported interlocutor were both drinking, but with quite different results.

- (99) *n'íp=b'ay hǎy=mæh, hocádia n'uñ*
 that=AGAIN REGC=DIM Rosaria CNTR
 '(She's) like that little what's-her-name, Rosaria.' (TD.Cv.105)

- (100) *hɔ́n-ɔ́ yǎh ɔ́ám n'uñ-úh, nɔ́-ɔ́, hɔ́n-nɔ́ ɔ́áh n'uñ=ti?, nɔ́-ɔ́*
 vomit-DYNM FRUST 2sg CNTR-DECL say-DYNM vomit-NEG 1sg CNTR=EMPH.TAG say-DYNM
 'You threw up, (I) said, I didn't throw up, (I) said.' (TD.Cv.102)

In (101), *n'uñ* occurs with a subordinate clause. The speaker is contrasting two trips made to the same village; the visitors were received with good beer on the first occasion, while on the second the beer was not very good. Further examples are given in (102-104).

- (101) *j'am-áp ɔ́m ham-ɔ́áy-ap n'uñ,*
 past.time-DEP 1pl go-VENT-DEP CNTR
 'That other time we went (as opposed to this time),

húptok húp mɔ́? j'áh ɔ́m ɔ́ag-na?-pó?-tí
 caxiri good UNDER PST.CNTR 1pl drink-lose.consciousness-EMPH1-DEP.EMPH
 we got drunk on very good caxiri.' (TD.Cv. 100)

- (102) *yɔ́ nɔ́-yó? j'áh wəhɔ́d=d'əh n'uñ ɔ́d-ɔ́h*
 that.ITG say-SEQ DST.CNR old.man=PL CNTR speak-DECL
 'Thus the old ones told it (in contrast to people today).' (H.34)

- (103) *ɔ́m key-hipāh-nɔ́h-n'ɔ́h tɔ́h-ɔ́h nɔ́?nɔ́h bɔ́g ɔ́m n'uñ-úh, ɔ́m=yi? nɔ́-ɔ́h*
 1pl see-know-NEG-NMZ 3sg-OBL say-NEG HAB 1pl CNTR-DECL 1pl=TEL say-DECL
 'We can't read, so it doesn't go right (lit. 'give') for us (in contrast to those who can read), we say.' (P-Sp.13)

- (104) *hɔ̃h pɪb yúp n'uɰh-úh*
 sound strong that CNTR-DECL
 'That one (someone else's radio) gives a really loud sound.' (i.e. in contrast to ours) (B.Cv.2.6)

With human participants, the contrastive function of *n'uɰh* lends itself easily to reproach or encouragement, in that it indicates the speaker's expectation, desire, or worry that the hearer—who is not currently performing the activity in question—will follow the example of the referent and engage in the activity. It is therefore frequently used for implicit urging or admonition (see discussion of 'social connectedness', §15.4). For example, my consultant said that he might say (105) when waking someone who had overslept, the implication being that the birds are awake, but the addressee is not. Similarly, one could say (106) to encourage others to speak out at a village gathering. Finally, (107) was uttered by my Hup classificatory 'mother' in response to her daughters' saying they would like to go with me to visit the United States; she was reminded of another woman (J'ub) whose daughters went away from the village and never returned.

- (105) *huɰtɔ̃h n'uɰh ?ɔ̃h-cəwɔ̃ʔ-ay=hɔ̃*
 bird CNTR sleep-awake-INCH=NON.VIS
 'The birds are already awake.'
 (i.e. 'and you're not, but you should be') (RU)
- (106) *?ɔ̃h n'uɰh ?ɰd-ɰy*
 1sg CNTR speak-DYNM
 'I'm speaking (i.e. publicly).'
 (i.e. 'and you have not yet done so, but perhaps should') (EL)
- (107) *j'ub tóg=d'əh n'uɰh wɪd-b'áy-áy=hɔ̃ hɰd=b'áy*
 J'ub daughter=PL CNTR arrive-return-DYNM=NON.VIS 3pl=AGAIN
 'I wonder if J'ub's daughters will ever come back?'
 (i.e. 'and maybe it would be the same with you') (B-Cv.1.4).

7.9. Locative *cóʔ*

The most prototypical function of the particle *cóʔ* is the marking of physical location. As examples (108-9) illustrate, *cóʔ* follows a noun N—or combines directly with a demonstrative stem (see Tables 6.2-6.6, §6.3)—to yield the meaning ‘in the location of N’; it also frequently follows locative postpositions and locative adverbs (example 109; see §10.2.3). It is important to note that Hup does have other means of marking location besides *cóʔ*, via the oblique case markers (*-V́t* and *-an*); *cóʔ* appears to function as a relatively emphatic locational marker, which is especially useful when contrasting different locations (as in 109 and 110).

- (108) *cǎw-ǎñ yǎwǎc-yǎʔ, n’í-cóʔ=b’ay, tǒk cóʔ*
 other-OBJ meet-TEL that-LOC=AGAIN belly LOC
 ‘(She) had already gotten another (child), there, in the belly.’ (H.txt.17)

- (109) *nút ʔǎhníy cǎ deh hayám ní-mǎʔ*
 here maybe slug water town be-UNDER
 ‘While Slug Creek Village is about here,

nu-cóʔ ʔǎhníy-ay yúw-úh, wáʔah cóʔ
 here-LOC maybe-INCH that.ITG-DECL other.side.of.water LOC
 it (another village) is located maybe on this side, on the other side of the creek.’ (B.Cv.132)

As examples (110-11) illustrate, nominals marked with Locative *cóʔ* can themselves act as modifiers of other nouns, including bound nouns. In such cases, *cóʔ* is obligatorily followed by the Dynamic suffix *-V́y*, here acting as an attributive marker (see §5.1.4 and §12.2).

- (110) *tɪh=g'æt d'óh cóʔ-oy ʔǎy', huýtú cóʔ-óy ʔǎy', haktǎn-ǎy=d'əh ʔǎy'*
 3sg=end LOC-DYNM brace back LOC-DYNM brace middle.MEAS2-DYNM=PL brace
 'A brace (of inambu) in front, a brace behind, and a brace on either side.' (I.M.45)
- (111) *n'i-cóʔ-óy=ʔɪh nɪh*
 that-LOC-DYNM=MSC POSS
 'The guy from over there's (thing).' (B.Cv.91)

In addition to marking physical location, *cóʔ* has less prototypical—but quite frequent—uses relating to temporality and emphasis. Examples (112-13) illustrate its use in adverbial constructions relating to time, where it is completely optional and functions to emphasize a particular time period (i.e. in contrast to some other time). Note that in (113) *cóʔ* appears to be incorporated into a verbal expression; this ability for peripheral formatives associating primarily with nominals to be drawn into a verb is attested widely in Hup (compare the same phenomenon for the 'Following marker' *húy* in (122) below).

- (112) *yúp=mah tɪh-ǎn ʔecáp cóʔ wag hí-íy tɪh ham-y'æt-kǎdham-yɪʔ-ay-áh*
 that.ITG=REP 3sg-OBJ tomorrow LOC day descend-DYNM 3sg go-lay-pass.go-TEL-INCH-DECL
 'So, they say, early the next morning he left her and went quickly away.'
 (D.BWB)
- (113) *póh níŋ d'əh-cak-w'ob-yɪʔ, ʔin pəʔ-cóʔ-ay=nih, níŋ wǎd!*
 high 2pl send-climb-set-TEL 1pl hold.dabacuri-LOC-INCH=EMPH.CO 2pl eat.IMP
 'You all put it up high; when the time comes for our dabacuri, you all eat (it)!'
 (H.YP.70)

The particle *cóʔ* has an additional function that is relatively distinct from its use to mark a location: it can act to emphasize a particular *participant* in an event, as examples (114-19) illustrate. This use has probably arisen through a semantic shift, through which physical location came over time to be associated with a participant. Such a shift is arguably functionally motivated: as noted above, the locative use of *cóʔ* is primarily one

of emphasis of or contrast between locations (e.g. 109-10 above; also compare the temporal use in 112-13); this has the conceptual effect of shifting attention from one physical location to another. Accordingly, the effect of directing attention from one *participant* to another is motivated by the shift of attention from one participant's *physical space* to that of the other. Especially in light of the facts of Hup more generally (in which many morphemes can be shown to have undergone changes in function over time), such a shift seems plausible. Note that the Dynamic marker -Vý often follows this realization of *cóʔ* (examples 116-19), and seems to single out the participant from the rest of the clause, as if forming a mini-predicate of its own.

- (114) *ʔám cóʔ ʔəg-key-kǎm!*
 2sg LOC drink-see-IMP
 'You try some yourself!' (TD.Cv.101)
- (115) *tǎh d'óʔ-óy yǎh̃=mah yúw-úh, tǎ ʔǎy-ǎw-ǎp, tiyĩʔ-ǎn cóʔ key-pe ʔ-yóʔ*
 3sg take-DYNM FRUST=REP that.ITG-DECL woman-FILR-DEP man-OBJ LOC see-sick-SEQ
 'She would have taken him, that girl, having fallen in love with that man.'
 (TY.84)
- (116) *ʔǎh cóʔ-óy kúpa ni-té-h*
 1sg LOC-DYNM blame(Pt) be-FUT-DECL
 'I'll be the one to get the blame (*culpa*).' (P.Sp.14)
- (117) *ʔúy cóʔ-óy, ʔánaʔ*
 who LOC-DYNM Ana
 'Who said that, Ana?' (someone asking who had said what she reported)
 (TD.Cv.105)
- (118) *“ʔǎn=yiʔ nɔ-ɔy=nih núp=tiʔʔ?” nɔ-yóʔ=cud ʔúh, tǎ ʔǎy cóʔ-óy...*
 1sg.OBJ=TEL say-DYNM=EMPH.CO this=EMPH.TAG say-SEQ=INFR.EPIST woman LOC-DYNM
 “‘Is this one really saying this to me?’” (she) apparently said, this woman...'
 (D.BWB)
- (119) *tǎh cóʔ-óy ʔh̃n-ǎn d'o ʔ-kawa-ní-h*
 3sg LOC-DYNM 1pl-OBJ take-divide-INFR2-DECL
 'It was he himself who separated us (into different ethnic groups).' (H.txt)

7.10. ‘Following marker’ *huỹ*

The particle *huỹ* associates with nominals having animate referents. The resulting adverbial construction indicates that the actor (the subject of the clause) is physically following behind another participant (the noun modified by *huỹ*); accordingly, *huỹ* cannot associate with the subject of the clause. The ‘Following marker’ crucially involves directional movement, whereas close proximity in static location is indicated via distinct postpositions. However, the same morpheme *huỹ* does apparently form the basis for two locative postpositions: *huỹan* ‘in water’ and *huỹlah* ‘behind’ (spatial) and ‘after’ (temporal; see §10.2.3). The use of ‘Following marker’ *huỹ* is illustrated in examples (120-21).

- (120) *l̥h̥ huỹ hám!*
 1pl FLW go.IMP
 ‘Follow us!’ (H.83)

- (121) *t̥h huỹ=yi?mah t̥h j’əkwən-kəd-hám-áh*
 3sg(Səw) FLW=TEL=REP 3sg(J’ew’ew’) jump-follow-pass-go-DECL
 ‘He (J’ew’ew’) jumped after him (Səw).’ (M-DT.78)

The ‘Following marker’ *huỹ* has one additional function: it occurs in verbal compounds following the verb ‘go’, where it conveys the figurative sense of ‘going well’ or ‘working out’ as planned, as illustrated in example (122).

- (122) “*h̥f=yi? nən̥h-ĩ ɔ́ám ?*” *t̥h n̥ɔ́ɔ́, ɔ́id-d’əh-ham-huỹ-n̥h*
 INT=TEL say-be.like-DYNM 2sg 3sg say-OBL speak-send-go-FLW-NEG
 ‘When she says, “what does this word mean?”, it is hard to explain.’
 (i.e. ‘talking about it doesn’t go well’) (P-sp.14)

A cognate form *-huỹ* can be identified in Dâw; this is reported to involve a comitative relationship between the actor and some other participant who is the leader of the activity (S. Martins 1994: 143). In Hup, however, the function of *huỹ* involves only an indirect link to the status of the participant leading the activity, since a leader is typically the one who physically heads the expedition and whom others follow. That Hup has a distinct grammatical form relating to one participant's following after another probably has to do with the fact that their rainforest environment encourages people to walk in single file along paths—a habit which holds even in the open village spaces.

8. The verb word

In contrast to the Hup noun, which is morphologically relatively isolating, the verb is morphologically complex. The verb word is typically made up of layered agglutinated forms, including roots (of which several may be joined together to form a compound; see chapter 9) and bound formatives (affixes, clitics, and particles; see §3.4). While almost all of these verbal formatives follow the stem—as is the general rule in Hup morphology—there is a small set of verbal formatives which precede it; all of these relate to valence-adjusting. Hup verbs do not inflect for number or gender (although these may be marked in nominalized verbal constructions). There is also generally no marking of person on the Hup verb, but the third person pronoun *tʰi* may in some contexts be marginally procliticized to the verb stem, especially in the Umari Norte dialect (see §6.1). Verb stems in Hup are regular, with no suppletive forms or other irregularities.

In this chapter, §8.1 deals with some of the defining features of the Hup verb class, while §8.2 treats the verb stem and its valency. The verbal template is discussed in §8.3, and the uniquely multifunctional verb *ni-* (the closest thing in Hup to an irregular verb) is addressed in §8.4. Other aspects of the verbal construction and of predicates more generally (compounding, adjusting valency, tense and aspect morphology, modality, evidentiality, and affect marking) are covered in the following chapters.

8.1. Defining the Hup verb

As mentioned in §3.1, the morphological complexity of the Hup verb is the main feature that defines it vis-à-vis the noun and adjective classes. With only a few specific

exceptions (imperative and apprehensive moods and a few subordinate clause types), the verb root can never appear ‘bare’—i.e. in uninflected form—while heading a predicate. Minimally, it must be followed by a Boundary Suffix, which contributes information regarding the type of clause headed by the verb (see §3.4.1.2).

The other primary feature that distinguishes the verb class from other parts of speech is the relative unimportance of tonal contrast on verb roots. However, as discussed in §2.3.2.2, there are in fact a few minimal pairs of verb roots that are distinguished by tone, as in example (1):

- (1) *túk-* ‘want’
 túk̃- ‘sting (insect)’

Furthermore, tone values are clearly distinguished on verb stems in Apprehensive mode (see §14.6). As discussed in §2.3.2.2, it is likely that underlying tone values are in fact present for most verb roots in Hup (at least those that can act as the unique stem in a verb word, rather than being obligatorily part of a compound), but are simply much less salient than they are for other parts of speech. A probable reason for this low salience is the fact that verb stems are almost never word-final (because they usually require a following Boundary Suffix), whereas word-final position is the primary environment for distinguishing tonal contrasts generally in Hup. These questions of verbal tone in Hup will have to await future research.

8.2. Verb root classes and transitivity

This section addresses the various types of verb roots, or simple stems, particularly with regard to transitivity. Many verb roots in Hup can be identified as lexically transitive,

intransitive, or ditransitive on the basis of the maximum number of arguments they may take, as well as certain other syntactic indicators. However, this distinction is frequently not clear-cut on formal grounds, for two main reasons. First, arguments—especially objects—need not be explicitly stated when they are already established in the discourse, as we see in example (2). This can obscure the distinction between an ambitransitive and a transitive verb.

- (2) *ba ʔɪb' = d' əh = hín cét-éy = nih = mah*
 evil.spirit=PL=also carry-DYNM=EMPH.CO=REP
 'Evil spirits also used to carry off (children).' (P-BY.84)

Second, an affected, non-agentive participant may be morphologically marked as an object (see §4.3.1) regardless of whether it is semantically and syntactically 'core' (i.e. a direct object) or more peripheral (i.e. a recipient, beneficiary, or maleficiary). In (3), for example, the verb *na ʔ* 'die', which normally takes only one argument, can also take a second, object-marked participant—such as 1st singular 'me'—as a kind of maleficiary. In addition to this, direct objects themselves receive the Object marker *-aň* only when they are animate, marked as plural, or are accompanied by a demonstrative, and never when they are singular, inanimate, and non-demonstrative (§4.3.1). The presence or absence of object marking on participants is therefore not necessarily a reliable indicator of the transitivity of the root. These characteristics can blur the distinction between a transitive and an intransitive verb in Hup.

- (3) *ʔaň = ʔn ʔaň ná ʔ-yíʔ-ní-h*
 1sg=mother 1sg.OBJ die-TEL-INFR2-DECL
 'My mother died (which affected me adversely).' (T-PC.1)

The following discussion considers the arguments for classifying Hup verb roots according to their lexical valency, based on a number of formal cues.

Some Hup verbs are clearly able to take two core arguments, and no more than two (without the addition of valence-increasing morphology such as the Applicative marker)—although neither argument need be explicitly stated in the clause (this is particularly true for objects). Such verbs are considered to be transitive, and include roots such as *j'ɔŋ*- ‘punch’, *nɔm*- ‘poke’, *j'ɛp*- ‘tie’, and the examples in (4-6).

- (4) *tɪh kɔw b'ɔk y'æ-æh*
 3sg(A) hot.pepper pot(O) lay-DECL
 ‘He set down the pepper-broth pot.’ (txt)
- (5) *ɔ́ám-ǎ́n cé mæh !*
 2sg-OBJ Moisés(A) hit.APPR
 ‘Moisés will hit you!’ (B.Cv)
- (6) *hídñĩh hɔhɔh, híd key-ɔ́é-w-ǎ́n, híd yɔhɔy-ɔp*
 3pl.POSS toad(O) 3pl see-PERF-FLR-OBJ 3pl(A) search-DEP
 ‘They were searching for their toad, the one they had been looking at.’ (A-FS.3)

A third, peripheral argument appears in extended transitive constructions, and is usually marked with the Oblique marker, as in (7-8). Clauses with as many as three explicitly stated arguments are relatively rare in Hup discourse, since once participants are established by the context they are not required for the grammaticality of the clause.

- (7) *yúw-út, tɪh=túm we ɔ́-hũɔ́-yó ɔ́-ay*
 that-OBL 3sg=settled.out.solid(O) transfer-finish-SEQ-INCH
 ‘(Using) that (leaf-cone), (they) have transferred all the settled-out solid part to another container.’ (MD-C.74)
- (8) *mɔhɔy hup mæh-ǎy muh-út*
 deer(O) person(A) kill-DYNM arrow-OBL
 ‘The person killed the deer with the arrow.’ (EL)

Other verbs in Hup can take as many as three core arguments without the addition of valence-adjusting morphology, and are therefore considered ditransitive. These include such roots as *be-* ‘show’, *noʔ-* ‘give’, *j’ek-* ‘steal’, and *g’ɔp-* ‘serve’, as in examples (9-11).

- (9) *nɪŋʰ deʰ b’oʔ ʔaŋ nɪŋ be-kæm báʔ!*
 2pl.poss water gourd(O) 1sg.OBJ 2pl(A) show-IMP PROTST
 ‘You all show me your gourd dipper (of beer)!’ (G-Sng.21)
- (10) *ʔæyhiyóʔ=mah hɪd-aŋ ʔəg hɪd g’ɔp-ɬ*
 together=REP 3pl-OBJ drink(O) 3pl(A) serve-DECL
 ‘They served the drink to all them.’ (H-Y.74)
- (11) *ʔaŋ hɪd j’ek-yɪʔ kədd’ob-ní-h, yǔp nɪ g’aç-áh*
 1sg.OBJ 3pl(A) steal-TEL pass.descend-INFR2-DECL that 1sg.POSS beads-DECL(O)
 ‘Having stolen (them) from me they descended quickly to the river—those beads of mine.’ (I-Mon.4)

In such ditransitive constructions, both objects may receive identical morphological marking. The direct object takes the case-marker *-aŋ* when its type permits (i.e. it is human, plural, or the NP includes a demonstrative), and recipients are normally always object-marked (see §4.3.1), as in (12-13). However, since most such constructions involve human recipients of non-human objects, recipients are more commonly the only marked arguments.

- (12) *yúp=mah yawáč kág’=mah ba ʔtɬ’-aŋ tɬh bé-éh*
 that.ITG=REP capuchin.monkey forehead=REP(O) spirit-OBJ 3sg(A) show-DECL
 ‘So, it’s said, he showed the top of the capuchin monkey’s head to the spirit.’
 (M.NB.04)
- (13) *ʔaŋ tɬh=dóʔ-aŋ mɪh-aŋ bé-éy*
 1sg(A) 3sg=child-OBJ Mih-OBJ show-DYNM
 ‘I’m showing the child to Mih.’ (EL)

As in the case of verbs that can take up to two core arguments, those that can take up to three also frequently appear with fewer, and it is often unclear whether this involves lability of the verb itself (between transitive and ditransitive), or simply a dropped argument. For example, the verb *j'ek-* ‘steal’ can alternatively take two arguments ‘someone stole something’ and three ‘someone stole something from someone’.

Those verbs that normally can take only one core argument (i.e. a subject) are here considered intransitive. These include roots that are semantically active, stative, or involve a change of state, but since there appear to be no formal reflections of these semantic categories in the grammar, these are not treated as reified classes (the Factitive prefix *hi-* is most commonly found with stative roots, but not exclusively). Hup intransitive roots include activity verbs such as *j'am-* ‘bathe’, *tɔʔɔh-* ‘run’, *j'ək-* ‘jump’; verbs of motion/path and manner such as *næn-* ‘come’, *ham-* ‘go’ (example 14), *hi-* ‘go downstream’; verb relating to states or transitions like *d'ɔh-* ‘rot’, *hitab-* ‘full’, *puhu-* ‘swell’, *peʔ-* ‘be sick’; verbs of position such as *mam-* ‘be in sideways-leaning position’, *píŋ-* ‘be stretched tight (string)’, *g'et-* ‘stand’, *d'ak-* ‘be supported by vertical surface’, *g'ãʔ-* ‘be suspended’, etc. Semantically stative verb roots in Hup are easily distinguished from members of the adjective class in that the stative verbs—like other verbs—generally require a Boundary Suffix when predicative, whereas predicate adjectives can occur with or without inflection (see §10.1).

- (14) *yĩ-nĩh-yóʔ=mah* *tĩh* ***ham-yĩʔ-ay-áh***
 that.ITG-be.like-SEQ=REP 3sg(S) go-TEL-INCH-DECL
 ‘With this, he went away.’ (txt)

One of the main problems in making a distinction between transitive and intransitive verbs in Hup is the fact that some verbs that are usually used intransitively occasionally occur with a second argument, which (if animate) is Object-marked. As illustrated by example (15) and (3) above, this formally resembles a transitive construction, in which the object-marked argument is in some way affected by the action (and is therefore conceived as a semantic undergoer).

- (15) *dóʔ=d'əhǎn=mah j'ǎp tɪh wɪd-yé-éh*
 child=PL.ACC=REP other 3sg arrive-enter-DECL
 'Some other one, he arrived to the children.' (txt)

Other verbs—primarily those involving changes of state—can take either one or two core arguments freely, and thus could be considered ambitransitive or labile verbs. Most of the verbs that are best characterized as having labile properties follow the pattern Subject=Patient (when converting from a one-argument construction to a two-argument construction), and include *pu-* 'wet, be wet', *poʔ-* 'open', *həb-* 'dry', *təh-* 'break', *cəỹ-* 'tear', *yəʔ-* 'sing, roast', as in examples (16-17).

- (16) a) Two arguments:
b'úʔ tɪh yəʔ-əh
 anteater(O) 3sg(A) singe-DECL
 'She singed the anteater' (to remove the fur). (P-BWB.3)

- b) One argument:
teghɔ̃ tɪh yəʔ-yiʔ-ɪh
 fire-OBL 3sg(S) singe-TEL-DECL
 'He burned himself in the fire.' (EL)

- (17) a) Two arguments:
nɪ yuɔ̃ ʔǎh cəw'-yiʔ-ɪy
 1sg.POSS clothes(O) 1sg(A) tear-TEL-DYNM
 'I tore my clothes.' (EL)

b) One argument:

nĩ yũd tuhúp=yi? cǎw'-yĩ?-ĩy
 1sg.POSS clothes(S) 3sg.RFLX=TEL tear-TEL-DYNM
 'My clothes tore by themselves.' (EL)

However, it is difficult to distinguish a formal class of ambitransitive verbs in Hup (at least as distinct from the semantic class of state-change verbs), just as it is often difficult to distinguish a transitive from an intransitive verb. This is particularly the case for active verbs, where there is generally no formal indication as to whether the object argument is implicit and dropped (i.e. the verb is essentially transitive), or is really absent altogether (i.e. the verb is labile and used intransitively). Examples include *ʔid-* 'speak; speak a language, speak to someone' (example 18), *b'oy-* 'study; teach', and *tǎm̃hɔ* 'laugh, smile (at)'.

(18) a) Two arguments (dropped subject):

yĩkán nǎ cɔkw'ǎ ʔid-nĩh-íp nǎ potugés wiʔ-nĩh-íp...
 there NEG:R Tukano speak-NEG-DEP NEG:R Portuguese understand-NEG-DEP
 'There, speaking neither Tukano nor understanding Portuguese, (I)...'
 (T-PC.1)

b) One argument:

ʔũy ʔayũp=ʔh ʔid-túk-up=ʔh, nĩŋ ʔid-ʔáy
 who one=MSC speak-want-DEP=MSC 2pl speak-VENT.IMP
 'Whoever wants to speak (publicly), come and speak.' (P-Sp.8)

Despite these ambiguities, there are several syntactic tests in Hup to indicate whether a verb is being understood as transitive or intransitive. First, single-argument (i.e. intransitive) verbs cannot occur in any type of reflexive construction (see §11.1). Also, as noted above, some verbs require valence-adjusting morphology if they categorize for more than one, two, or three arguments. Mechanisms for changing valency include the Applicative suffix (§11.3), the Factitive prefix *hi-* (§11.4), and causative verb

compounding (e.g. involving the causative initial stem *d'oʔ* 'take'; see §9.4.1.2).

Verbs classified as intransitive, for example, *require* one of these strategies if they are to appear with two arguments, as (19-20) illustrate:

- (19) a) *kamíca ʔǎñ hi-póg-óy*
 shirt 1sg.OBJ FACT-big-DYNM
 'The shirt makes me (look) big/fat.' (EL)
- b) **kamíca ʔǎñ póg-óy*
 shirt 1sg.OBJ big-DYNM
 (Intended meaning: 'The shirt makes me (look) big/fat.')
- (20) a) *tǎ-ǎ toáya g'ǎʔ-ǎy*
 string-OBL towel hang-DYNM
 'The towel hangs from the string.'
- b) *pěd toáya d'oʔ-g'ǎʔ-ǎy, tǎ-ǎ*
 (name) towel take-hang-DYNM string-OBL
 'Ped hangs the towel from the string.'
- c) **pěd toáya g'ǎʔ-ǎy, tǎ-ǎ*
 (name) towel hang-DYNM string-OBL
 (Intended meaning: 'Ped hangs the towel from the string.') (EL)

Furthermore, the *d'oʔ* causative construction itself requires a stem that categorizes for only one argument to complete the compound, and is ungrammatical or has a non-causative meaning when combined with transitive stems. Examples of the construction include *d'oʔ-ʔɹ* 'cause to cry', *d'oʔ-kiʔ* 'make sticky', *d'oʔ-ʔǎh* 'cause/put to sleep'.

In contrast, the following forms involving transitive stems are ungrammatical: **d'oʔ-mæh*- (take-hit/kill), **d'oʔ-j'ɔŋ*- (take-punch), **d'oʔ-cuh*- (take-thread.onto.

string). (Where transitive stems do occur in causative constructions, the causative meaning is conveyed via verb roots other than *d'oʔ* 'take', e.g. *g'et-wæd*- [lit. 'stand-

eat'] 'feed', and *wæd-yǎh-* [lit. 'eat-order/ request'] 'request/ compel to eat'; see §9.4.1.2.)

Some of these syntactic tests indicate that verbs like *naʔ* 'die', which appear to be semantically intransitive but can appear with a second, Object-marker argument, actually do pattern like intransitive roots rather than transitive ones. For example, *naʔ* can occur in the *d'oʔ* causative construction, resulting in *d'oʔ-naʔ* 'cause to die'. It is also ungrammatical with the Reflexive prefix *hup-*, which would otherwise produce a passive reading (example 21; compare 22). This suggests that verbs like *naʔ*, despite their ability to take an object-marked participant, can be classified as intransitive on formal grounds. In other words, their second argument may not be considered semantically 'core', even though it is identical to a core argument in its morphological marking.

- (21) **ʔǎh ʔǎh=ʔn-ǎn hup-naʔ-yǎʔ-ǎ*
 1sg 1sg=mother-OBJ RFLX-die-TEL-DYNM
 (Intended meaning) 'I was died on by my mother.'

Compare:

- (22) *ʔám ya ʔám-ǎn (ʔám) hup-wæd-té-p!*
 2sg jaguar-OBJ (2sg) RFLX-eat-FUT-DEP
 'You'll get eaten by a jaguar!' (EL/OS)

8.2.1. Transitive and intransitive variants distinguished by glottalization

For at least two verbs in Hup, there is an additional indicator of transitivity. These verbs formally distinguish transitive and intransitive counterparts by the presence of

glottalization on the initial consonant in the transitive form, and its absence in the intransitive form:

- yæt-* (intransitive) ‘be in lying position on ground’ (for any entity capable of an upright position; i.e. having legs or a long shape, like a pole); ‘be in direct contact with ground’ (for any other entity)
y’æt- (transitive) ‘lay (something) on ground; leave (something) behind’

- (23) *méca mĩʔ b’ǝʔ yæt-æy*
 table under cuia lie-DYNM
 ‘The cuia is lying under the table.’ (EL)

- (24) *těg pob-y’æt-yóʔ=mah, tĩh ye-yĩʔ-ay-áh*
 wood split.up-lay-SEQ=REP 3sg enter-TEL-INCH-DECL
 ‘Having split up the wood and placed it (in a pile) on the ground, he entered (the house)’ (KT.107)

- wob-* (intransitive) ‘be resting on another object or surface (not ground)’
w’ob- (transitive) ‘place (something) on top of another object or surface’

- (25) *tĩw wĩd-ye-d’óʔ-ót=mah yúp, kukuỹ wob-ni-h*
 path arrive-enter-take-OBL=REP that.ITG night.monkey rest-INFR2-DECL
 ‘At the entrance to the path, a night monkey was sitting (in a tree).’ (P.CC.82)

- (26) *d’ób-n’ǎn tĩh kək-w’ob-pæ-ní-h*
 acara.fish-PL.OBJ he pull-set.on-go.upstream-INFR-DECL
 ‘He went along fishing for acará fish and setting them out (for someone else to find) as he went upstream.’ (I.M.1)

Consonant glottalization is used elsewhere in Hup to distinguish phonologically and semantically similar forms (see §2.1.2.6), but these two verb pairs are the only known cases in which the semantic difference is one of transitivity. It is noteworthy that phonologically similar forms are found in many languages for bodily position verbs and their causative variants, such as English *lie* and *lay*, *sit* and *set*; Portuguese *deitar* ‘lie’ and *deixar* ‘leave’; and German *liegen* ‘lie’ and *legen* ‘lay’. Kemmer (1993: 58-9) notes

that the causative forms of these pairs are frequently historically derived from the verbs referring to the bodily actions, as in the case of the Germanic languages, but that in other cases the derivation can take the opposite direction. In the Hup case, the semantics of other similar pairs distinguished by glottalization provides reason to suppose that the glottalized variant is the historically derived form (e.g. *tóg* ‘daughter’, *hutóg* ‘niece’, in which the final consonant in the first case is released/post-nasalized /g/ [g^h] and in the second is glottalized /g’/ [g^ʔ]; cf. §2.1.2.6). It is likely that this was also the direction of derivation for these transitive/intransitive pairs, but the question remains open.

8.3. The verbal template

As noted in §8.1, the defining characteristic of verb stems in Hup is their inability to appear ‘bare’—without affixes—as predicates of a clause. The only exceptions to this rule occur in apprehensive mood (§14.6), imperative mode (§17.5; but note that the stem receives high tone), and in certain (co-)subordinated clauses (§18.2.2). Otherwise, the verb word is multimorphemic: minimally, it involves a root and a Boundary Suffix; maximally, it may include a procliticized subject nominal, up to two prefixes, multiple component stems, multiple Inner Suffixes, a Boundary Suffix, and a string of enclitics and particles. These different types of formatives all are considered to be morphosyntactically part of the verb word, although the particles are relatively phonologically free (see the discussion in §3.4).

This section deals with the verbal template as a combination of stem + formatives.

Note, however, that the ‘stem’ may itself be made up of a string of stems forming a

compound, as discussed in detail in chapter 9. A basic template for the verb word is the following (note that generally obligatory elements appear in boldface):

(Proclitic) = Prefix(es) - **Stem** - Inner Suffix(es) - **Boundary Suffix** = Enclitic(s) Particle(s)

In reality, this template is not quite as neat as it appears. First, the distinction between component verb stems (in compounds) and Inner Suffixes is somewhat blurry in Hup. This synchronic fuzziness has a diachronic explanation: Inner Suffixes typically grammaticalize from verbs within compounds, and some forms are currently in a transitional phase (see §9.4.3). Second, most enclitics and particles can appear in the Inner Suffix slot when followed by clause-final Boundary Suffixes (most commonly the Declarative marker *-Vh*) as discussed in §3.5. A few suffixes (Inchoative *-ay*, Negative *-nʔh*, and Future *-téɡ*) can optionally appear as either Boundary Suffixes or Inner Suffixes. Finally, two of Hup's three prefixes—Reflexive *hup-* and Reciprocal *ʔũh*—can optionally disassociate from the verb when occurring in a ditransitive construction with an explicit object; in this context, these precede the object nominal and are best considered particles (see §11.1 and §11.2).

Each of the formative classes in the template above is itself divided into a series of slots, corresponding to the relative order of individual formatives that co-occur. Depending on the formative, there is some flexibility in this order. A general schema of the slot series that makes up the verbal template is given below, in which the numbers correspond to the order of formatives when moving from left to right in the verb word.

Forms appearing under the same numbered slot are usually mutually exclusive (with certain exceptions), but many forms that fall in different slots also do not co-occur (often for reasons that are probably semantic, rather than morphosyntactic). For this reason the number of slots in the template is much higher than the number of morphemes present in a given word.

The sets of formatives that fill the various slots in the verbal template do not break down neatly by semantics or function, but tend to be a heterogeneous lot. However, it is possible to make some broad generalizations relating to form-function patterning (see §3.4). The small set of prefixes is functionally quite consistent in that its members all relate to adjusting the valency of the verb (although not all valency-adjusting forms are prefixes). Of the Inner Suffixes, many (though still not a majority) relate to aspect, and in general the aspectual markers tend to come earliest in the verb (i.e. closest to the stem), while Hup's tense suffix (the future marker) comes later. Markers of modality and discourse tend to appear later still in the verb, appearing as enclitics, particles, and in some cases Boundary Suffixes (while those that can optionally occur in Inner Suffix position typically fall into one of the final Inner Suffix slots when they do so). This relative order of aspect-tense-mood is consistent with the typical ordering of these morphemes relative to the verb stem cross-linguistically, according to the survey by Bybee (1985: 35).

As discussed in §3.4, the Boundary Suffixes are semantically heterogeneous. However, they too have a near-common denominator, in that they are typically the primary indicator of the type of clause in which they appear. This is especially clear with those suffixes having the vowel-copying form -VC, which are by far the most frequent of

the Boundary Suffixes and in some cases are obligatorily clause-final (-*V́y* ‘Dynamic’ and -*Vh* ‘Declarative’ in declarative clauses; -*V?* in interrogative clauses; and -*Vp* in subordinate clauses, while imperative/apprehensive are marked by -*Ø*; see §3.4.1.2 and §17.1). However, the other Boundary Suffixes also indicate kinds of clauses as well, such as the various subordinate types (e.g. complement, adverbial, relative, etc.), as well as finer distinctions of main clauses, such as the optative, the hortative-like ‘cooperative’, and the ‘strong’ imperative (all of which can be considered subtypes of imperative clauses), and the ‘announcing’ function of the ‘acting alone’ markers.

1. *Proclitic* (marginal procliticization of subject pronouns in some contexts, esp. 3sg)

Prefixes:

2. Reciprocal *ñh-*
3. Reflexive *hup-*
4. Factitive *hi-*

5. *STEM* (may include multiple compound-internal stems, some of which can act as auxiliaries)

Inner Suffixes:

6. Telic -*yí?*
7. Ventive -*ay-*
8. Applicative -*ñh-*
9. Completive -*cñp-* / -*cñw-*
10. Counterfactual -*tæ?*
11. Perfective -*pe?* (variant -*pe-* must directly precede Boundary Suffix)
12. Clausal negative -*nñh-* (also as Boundary Suffix)
13. Emphasis -*pog-* (variant -*po-* must directly precede Boundary Suffix)
14. Habitual -*bíg-* (variant -*bí-* must directly precede Boundary Suffix)
- Distributive -*píd-*
- Future -*teg-* (also as Boundary Suffix; variant -*te-* directly precedes Boundary Suffix)
15. Inchoative -*ay* (also as Boundary Suffix)
16. Inferred evidential 2 -*ni-*
17. Filler -*Vw-*

18. Boundary Suffix:

Main clauses:

Declarative (aspect-neutral) -*Vh*

Dynamic -*Vy*

Interrogative -*V?*

Clausal negative -*nʔh* (also as Inner Suffix)

Imperative (strong) -*kæm*

Cooperative -*nʔh*

Future -*tég* (also as Inner Suffix)

Inchoative -*ay* (also as Inner Suffix)

Focus -*áh*

‘Acting alone’ markers -*ké?*, -*d’ah*

Optative mood -*ʔh*

Verbal diminutive -*kodé*

Intensifiers and tags -*Vcáp*, -*Vti?*, -*Vyá*, -*Vhə?*, -*Vʔh*, -*Vyʔk*

Subordinate clauses:

Dependent marker -*Vp*, -*d’əh* (plural)

Conditional -*tæh*

Purpose -*tég*

Case-markers (relative clauses, temporal and locational adverbials) -*ah*, -*Vt*, -*an*

Nominalizer -*n’ʔh*

Sequential -*yó?*

Simultaneous -*mʔ?*

Temporal adverbial -*kamí*

Enclitics (NB: many can also appear in Inner Suffix position; see §3.5):

19. Counterfactual 2 =*tih*

Interrogative alternative =*ha?*

20. Emphatic Coordinator =*nih*

21. Inferred evidential =*cud*

22. Non-visual evidential =*hə*

23. Repetition =*b’ay*

24. Reported evidential =*mah*

Particles (NB: some can also appear in Inner Suffix position; see §3.5):

25. Habitual *bʔg*

Distributive *pʔd*

26. Frustrative *yæh*

27. Contrast: Distant past *j’ám*, *j’ah*; Temporally proximate *páh*; Future *tán*

28. Intensifier *mún*

Adversative conjunction *kaʰ*

Ongoing event *tæʻ*

Epistemic modality *ʔáʰ*

For the most part, the Boundary Suffixes cannot co-occur, but one is required on every verb stem (except in the contexts listed above). Unlike the Boundary Suffixes, Inner Suffixes, enclitics, and particles often pile up. The following examples illustrate some of the combinations. Note that the actual number of formatives present on a verb is always much lower than the number of slots in the verbal template above; nevertheless, it is not uncommon to have as many as six bound forms attached to a stem (which may be no more than a single verb root), as in example (30).

- (27) *ʔāh wiʔ-tuk-h ʃh-y ǎh-ǎh!*

1sg hear-want-NONVIS-FRUST-DECL
‘I’d like to listen to it!’ (B.Cv.83)

- (28) *ʔāh hipāh-y ʔʔ-ay b ǧ ʔāh-ǎh,*

1sg know-TEL-INCH HAB 1sg-DECL
‘I always start thinking (of another story);

n ʃ ʃy b ǧ =nih ʔāh-ǎp h ʃʔ ʔāh ʔid-ɪw-ay
say-DYNM HAB=EMPH.CO 1sg-DEP TAG2 1sg speak-FLR-INCH
‘I always keep talking once I get started.’ (I-M.21)

- (29) *“h ɪ-n ʃh-ɪy t ʃh?” n ʃ-yó ʔ=mah j’ǎh, t ʃh ʔɔt-kædc ʔp-y ʔʔ-ay-ǎh*

Q-be.like-DYNM 3sg say-SEQ=REP DST.CNTR 3sg cry-pass.go.from.river-TEL-INCH-DECL
‘Having said “what happened?” she came up from the river crying.’ (H.txt.46)

- (30) *y ɪ-d’ ʃh-ǎn pe ʔ-n ʃh=pog b ǧ =nih j’ám h ʃʔ*

DEM-PL-OBJ hurt-NEG=EMPH1 HAB=EMPH.CO DST.CNTR TAG
‘And (the insects) have never bothered those guys at all, huh?!’ (B.Cv.10)

These ‘verbal’ formatives are a heterogeneous lot. Some are strictly verbal, but many are not restricted to verbs at all, and also associate with nouns, adjectives, and other

parts of speech. Some can take scope over entire clauses (see §3.4, §7.1 and elsewhere). Also, while bound formatives do not in general come between verb roots within compounds, the valency-adjusting prefixes *hi-* (Factitive) and *hup-* (Reflexive) do so regularly, and as such take scope over the individual root they precede. They can also occur compound-initially, where they take scope over the entire string of compounded roots.

Productive derivational processes involving verbs are mostly limited to nominalizations of verb stems (see §3.1.2 and §4.6), rather than the creation of verb roots from other parts of speech. However, the addition of verbal TAM morphology to adjectives effectively creates a verbal predicate (see §10.1 and elsewhere), and there are some cases of noun > verb derivation via noun incorporation with the verb *ni-* (see §9.6).

8.4. The verb *ni-*

Almost without exception, Hup verbs are strikingly regular. However, there is one root that patterns very differently from the rest, although morphologically it too is fully regular. This is the verb *ni-*, which when used by itself as a predicate means ‘be, exist’ (example 31), and is quite ubiquitous.

- (31) *ʔám=ʔp ní-íy tĩh ?*
 2sg=father be-DYNM 3sg
 ‘Is your father here?’ (OS)

In addition to this simple predicative function, the verb *ni-* appears in a wide variety of constructions in Hup, and is almost undoubtedly the most multifunctional verb root in the language. First, it commonly functions as a copula, and as such is required in

some predicate nominal and adjective clauses as the host for verbal TAM markers (see §17.3.4). It also acts as an aspectual auxiliary when it occurs as the final stem in verb compounds (see §9.4.2.4b). The verb *ni-* is the only verb root in the language that licenses noun incorporation with any productivity (see §9.6). In addition, it is required in certain cosubordinative constructions, where it occurs as a ‘light’ or ‘dummy’ verb following (non-compound) verbal predicates which lack the otherwise obligatory Boundary Suffix; this suffix appears instead on clause-final *ni-* (see §9.3). This special form of cosubordination with *ni-* is realized most often as the ‘reduplicative predicate’ construction (where an entire predicate is repeated several times in a serial-like format for iterative effect; see §18.2.2). Finally, the verb *ni-* is probably the source—via processes of grammaticalization—for an additional inferred evidential suffix (see §14.9.6). This multiplicity of uses is perhaps even more remarkable when the probable borrowed origin of *ni-* is considered, as discussed in the Comparative Note below.

The verb *g’əh-* is used as the functional equivalent of *ni-* ‘be, exist’ (see example 32) in Tat Deh and elsewhere in the Eastern dialect region, as well as in Umari Norte (Western region), but is not in general used at all in the Central dialect. It is likely that *g’əh-* is an older, native form of the verb ‘be, exist’, but this question remains open.

Currently, many speakers in Tat Deh use both *g’əh-* and *ni-* in predicate position, and it is not clear whether they consider the two semantically distinct in some way. At least some speakers who use *g’əh-* favor *ni-* as a copula, and use *ni-* in noun-incorporating and inferred evidential constructions. Unfortunately, my information on *g’əh-* is incomplete

because my primary consultants—who do not use it themselves—had limited insight into its use.

- (32) *hɔ̃p wæd-tú-up g'ɔ̃h-ɔ̃y=nih, tæh ʔp pǎ-ãp g'ɔ̃h-ɔ̃y=nih,*
 fish eat-want-DEP be-DYNM=EMPH.CO child.father NEG:EX-DEP be2-DYNM=EMPH.CO
 ‘Wanting to eat fish, and being without a husband...’ (I.M.43)

Comparative Note

The verb *ni-* is an areal feature. It exists in Tukano with essentially the same form, meaning, and many of the same functions as it has in Hup (particularly as a copula and in existence clauses; cf. Ramirez 1997: 140), as well as in the East Tukanoan languages Wanano (Stenzel 2004: 327) and Desano (Miller 1999: 67) (although with somewhat varying functions and forms). It also occurs—again with virtually the same form and meaning—in several other Nadahup languages, including Yuhup (Ospina 2002: 138, etc.) and Dâw (V. Martins 1994: 154). A similar form *ni-* ‘do’ in Tariana (Aikhenvald 2003: 606-8) may also be related.

The verb *ni-* thus appears to be a case in which an actual form – rather than a grammatical category – has diffused, probably moving from Tukanoan (although this is at present unclear) into the Nadahup languages and possibly into Tariana. For a form, as well as a grammatical function, to spread by contact is relatively rare in the Vaupés region, where borrowing of forms tends to be actively resisted (cf. §1.5). That a variety of languages have apparently adopted this form may be due to its extremely common occurrence in discourse (e.g. in Tukano; cf. Ramirez 1997a: 116).

9. The compound verb

Verb compounding is an extremely productive process in Hup. Out of a cross-section of narrative and conversational texts, over 50% of verbs in the sample contained more than one stem. This chapter defines the Hup compound and the principles by which the order of stems are determined.

9.1. The verb compound and its component stems

Several different classes of compound verbs can be distinguished by the degree to which the events or states encoded in stems are integrated with each other. These form a continuum that ranges from the least integrated, where the order of stems reflects a temporal sequence of conceptually linked events, to the most integrated, where some stems serve only to modify other stems by supplying aspectual or modal information. In addition, some compounds are highly lexicalized forms—presumably learned as units by speakers—whereas others represent fully productive combinations of stems. Because of these differences from one compound verb to another, compounds in general are not easily classified as either essentially lexical or essentially phrasal items. In other words, some compounds are essentially lexical items (to be learned as units), while others are freely coined word-level ‘phrases’. A similar situation is reported for Yuhup (see Ospina 2002: 334).

Individual compound words have been found to include as many as five verb stems, which I refer to as the ‘component’ stems. These may themselves correspond to different conceptual levels of event integration, thus giving rise to compounds within

compounds. This ‘nesting’ effect is increased by the ability of verb roots within compounds to take valency-adjusting prefixes. The individual verb stems themselves separately encode various ‘semantic entities’ (“elements, relations, and structures”; cf. Talmy 1985: 57). The surface expression of Hup verbs reflects many of the distinct elements of meaning that Talmy (1985) identifies, such as motion and path, manner, cause, and position.

An example of an internally complex compound verb is given in (1), which comes from a story in which a malignant spirit forces his way into a house in search of a woman and her children.

- (1) *yɿ̃ tɿ̃ hi-j'ɿ̃ ɿ̃-w-ǎ̃,*
 then 3sg FACT-tie-PERF-FLR-OBJ
 ‘Then, to that which she had caused to be tied up (i.e. the door),
- tɿ̃-[hi-j'ap]-[b'uy-d'əh]-ye-yɿ̃ʔ-ay=mah, ba ɿ̃ɿ̃'-ɿ̃!*
 push-[FACT-snap]-[throw-send]-enter-TEL-INCH=REP evil.spirit-DECL
 (he) pushed it until it snapped, threw it out of the way, and entered, they
 say, (did) the evil spirit!’ (P-BT.95)

An interesting feature of Hup compound verbs is that they often combine both transitive and intransitive stems, producing a construction with complex valency. With causative compounds (see §9.4.1.2 below), in particular, the subject of the intransitive verb may double as the object of the transitive verb. Cross-linguistically, such transitive-intransitive combinations in verb compounds may be more typical of VO languages, such as Chinese and some languages of West Africa, rather than of verb-final languages like Hindi-Urdu and Quichua, which require component stems to have the same valency (Liang and Hook, to appear). Hup, which is OV, appears to differ from the typological

norm, although more cross-linguistic studies may be necessary to ascertain this definitively.

Hup verb compounds are subject to two diachronic processes, which are responsible for the generation of many new forms in the Hup grammar and lexicon. These are relexicalization, whereby two verb roots become relexicalized into one stem, and grammaticalization, whereby component stems take on a more and more grammatical function and become aspectual or modal auxiliaries. Some grammaticalized stems eventually become Inner Suffixes, and may later move out to the verbal periphery to be enclitics or particles (see §3.4 and §9.4.3). These new formatives are formally and semantically distinct from the corresponding (and usually segmentally identical) verb stems, and the multiple forms often continue to co-exist alongside each other in the grammar. The fact that many compounds and the stems that comprise them appear to be straddling two categories (lexeme and phrase, verb and auxiliary, root and formative) can be better understood in the context of these diachronic processes and their transitional phases.

Comparative Note

Verb compounding is an areal feature in the Vaupés region. It is a very productive process in East Tukanoan languages, in which—as in Hup—verb compounds make up a single phonological word, and roots tend to follow a fixed order, inseparable by other morphemes (cf. Miller 1999: 88, Aikhenvald 2002b: 137). Tukanoan verb compounds likewise often involve the combination of both a transitive and an intransitive stem, resulting in a construction with complex valency—and like Hup, the Tukanoan

languages are verb-final. Verb compounding in East Tukanoan languages also diachronically yields markers of aspect, valency-changing, and Aktionsart. Unlike Hup compounds, on the other hand, compounds in Tukano normally have no more than two co-occurring verbs (Ramirez 1997: 375, Aikhenvald 2000: 9). Both productive verb serialization and limited verb compounding exist in Tariana (Aikhenvald 2002b: 136-7). Some of the parallels between Hup verbal constructions and the compound verbs in the Tukanoan languages, as described by Ramirez (1997: 375), Miller (1999) and Gómez-Imbert (1988), as well as the serial and compound verbs in Tariana (Aikhenvald 2003), will be mentioned in the course of this discussion.

9.2. Defining the verb compound as ‘word’

The main criterion for defining a verb compound in Hup is the fact that it forms one phonological word, determined by stress patterns and pause phenomena. Primary stress occurs only on the last verb stem and/or the following suffix material (depending on the type of Boundary Suffix; see §3.4), whereas non-final stems do not receive word-level stress, and component stems are also not separated by pauses. Phonological word-hood is frequently cited as a defining feature of a compound, and has been used to distinguish compounding from serialization within a single language, such as Paamese (see Durie 1997: 304, with reference to Crowley 1982), and Tariana (Aikhenvald 2003). The other crucial defining feature of Hup compounds is that no other morphological material can come between the component stems, with the exception of the valency-changing pre-forms *hi-* (Factitive) and *hup-* (Reflexive).

Negation phenomena provide an illustration of this ungrammaticality of non-stem-related morphological material between component stems of a compound. Clausal negation can take scope over the entire compound; as such, the negative suffix *-nɪh* is compound-final, as in *ʔəg-pæm-nɪh* (drink-sit-NEG) ‘not sitting drinking’, the negative form of the compound *ʔəg-pæm-æy* (drink-sit-DYNM) ‘sitting and drinking’. When only one verbal constituent of a compound is negated, however, this typically produces two separate predicates. Thus ‘sitting and not drinking’ must be expressed via two coordinated predicates: *ʔəg-nɪh pæm-æy* (drink-NEG sit-DYNM). Each of these forms a distinct phonological and grammatical word: they receive independent stress, and while the subject (e.g. 3pl *hɪd*) cannot be inserted between elements of the compound (**ʔəg hɪd pæm-æy*), it can come between the coordinated predicates in the negative construction (*ʔəg-nɪh hɪd pæm-æy*). Further examples are provided in (2-3).

- (2) *tɪnɪh ʔɪd [wɪʔ-nɪh] [g'et-g'o ʔtú-ay] yɪ-d' əh=nɪh*
 3sg.POSS language understand-NEG stand-go.about-(want)-INCH that.ITG-PL-EMPH.CO
 ‘(We) would go about not understanding anything of her language.’ (B-Cv.1.4).

- (3) *[ʔok-nɪh] [key-ham-g'et-yɪʔ-ay], tɪh=ʔǎy-ǎh*
 move-NEG see-go-stand-TEL-INCH 3sg=FEM-DECL
 ‘She stood there looking, without moving, that girl.’ (TD.Cv.104)

Other defining criteria for the Hup verb compound include the fact that it takes a single grammatical subject, and its stems share a single compound-final Boundary Suffix, as well as other formatives. Semantically, the verb compound refers to an event that has conceptual unity (although the degree of this ‘unity’ is relative to the degree of stem

integration). Like compounds cross-linguistically, Hup verbal constructions may become lexicalized and undergo corresponding phonological and semantic changes (see Payne 1997: 233). For example, the compound *b'uy-d'eh-* (throw-send) 'throw out' (itself nested within the larger compound in example (1) above) is frequently pronounced [ᵐb'uyč'əh], in which the palatalization from the /y/ is carried over to change the /d'/ to a palatal stop (realized phonetically as a fricative).

While compounds form phonological words, they are not necessarily unitary lexical items. Compounding is a highly productive process in Hup, and compounds are made up of multiple roots whose combination need have no conventionalized coherence or meaning. Speakers can creatively generate novel strings of stems, according to specific rules and conventions (a grammatical process), just as they also rely on many conventionalized multi-stem forms (lexical items). Unlike speakers of Mohawk (Marianne Mithun, ALT 2003 course), who have a sense of each compound form as a distinct lexical entry, Hup speakers accept novel combinations, provided they are semantically appropriate and correspond to the production conventions.

Accordingly, individual stems vary with regard to their degree of autonomy, i.e. whether they can appear without other stems to form predicates in their own right. In relatively loosely integrated compounds, stems encode distinct events or components of an event, and can be considered maximally autonomous. For example, one member of a compound can be replaced by the 'whatchamacallit' form *hãy* (this member is always an autonomous stem; *hãy* can only replace other stems (i.e. not grammatical formatives), and has not been found to replace stems that are acting as auxiliary-type modifiers to

other stems in compounds). Example (4) illustrates the replacement of one stem of a compound with *hāy*—whereupon the utterance is corrected by repeating the entire compound, demonstrating the integrity of the entire combination.

- (4) *núp híd hāy-ní-b'ay-áh, híd yǎwǎc-ní-b'ay-áh*
 here 3pl um-be-AGAIN-DECL 3pl meet-be-AGAIN-DECL
 'At this point they watchamacallit-ed again, they met up again.' (txt)

Similarly, individual verb stems may be singled out of a longer compound for special narrative emphasis, involving raised intensity and pitch, followed by a pause before the rest of the verb compound is uttered. Example (5) comes from a climactic moment in a tale by a master storyteller, in which, just as the young girl vengefully struck the tapir in his anus with her knife, he sucked her entire arm up into his rectum and ran off with her, his prisoner, bumping along behind him. Both compound verbs have one emphasized stem ('poke' and 'suck in'); then the second part of the compound—'take quickly off'—is repeated to emphasize the distance and speed of their journey.

- (5) *tih yók! d'əh-hám-yǎh-kamí=mah tin̩h yɔ̌mɔ̌,*
 3sg **poke!** send-go-FRST-at.time.of=REP 3sg.POSS anus
 'Just as she POKED (the knife) in vain into his anus, they say,
- tih hi-?ón'! d'oʔ-kədham- d'oʔ-kədham-yɪʔ-ay-áh!*
 3sg FACT-**suck.in**-take-pass.go take-quick.go-TEL-INCH-DECL
 he SUCKED (her arm) inside and took her quickly, took her quickly off!'

In contrast, other stems can occur only within compounds, and are judged ungrammatical as predicates by themselves. An example of such a stem is *g'oʔ* 'move in no specific direction', which occurs in such compounds as *g'et-g'oʔ* (stand-go.about)

‘wander about on foot’, *g’ãʔ-g’oʔ* (hang.suspended-go.about) ‘go about in canoe’ or ‘hang around in a hammock’.

In still other cases, stems may appear as predicates in their own right, but have very different semantics depending on whether they are alone or in a compound—especially where they are becoming lexicalized to the extent that they are undergoing phonological reduction. An example of this is the stem *wid-*, which by itself is translated as ‘fish-spawn’ (i.e. arriving of spawning fish), but functions in compounds such as [*wiram-*] (*wid-ham-* ‘arrive-go’) ‘arrive at a place (from point of view of traveler)’, [*wiræn*] (*wid-næn-* ‘arrive-come’) ‘arrive at a place (from point of view of residents)’, etc. (see §9.4.2.4c below).

9.3. Compounding compared to serialization

Cross-linguistically, verb compounding and serialization have been identified as sharing many common features, which suggest that they are closely related phenomena (Claire Lefebvre, p.c.; Nishiyama 1998). Both represent forms of cosubordination, as defined by Foley and Van Valin (1985), in which non-embedded verbal constituents join together in a dependence relationship. They differ in that compounding is generally understood to form a single phonological word, within which the component verb roots cannot be broken apart by intervening morphology, whereas the components of serial verb constructions are normally independent phonological words and can in most cases take intervening morphology such as a direct object.

Hup has only one marginal process that could perhaps be considered a form of verb serialization. In this construction, the verb *ni-* (see §8.4) is required as the final verb in the series, and takes the Boundary Suffix and any other inflectional marking. The preceding verbs are bare, lacking a Boundary Suffix or peripheral formatives (although they may take certain Inner Suffixes). They are clearly distinct words; they take independent stress, and are often preceded by nominal subject or object arguments. This most common realization of this phenomenon involves the repetition of the *same* bare verb to form a ‘reduplicative predicate’ (example 6); this phenomenon is discussed in more detail in §18.2.2. However, the phenomenon can also involve different verbs, as in example (7). This is rare, but it seems to be the preferred choice when expressing an event that is perceived as relatively conceptually unitary, and using transitive verbs having different objects to do so (these verbs are not usually expressed as a compound; see §9.4.1.1, example (16) below).

- (6) *hĩd-añ wæd-n ʔ, hĩd-añ wæd-n ʔ,*
 3pl-OBJ eat-give 3pl-OBJ eat-give
 ‘(He) would give them food, (always) give them food,
- ni-yóʔ pĩd=mah tĩh way-yiʔ-pĩd-tĩh*
 be-SEQ DIST=REP 3sg go.out-TEL-DIST-DECL
 having done thus he would go out again, it’s said.’ (P.BY.85)
- (7) *yub d’uʔ, kayak=tĩg čĩy’ ʔin ni-té-h*
 cipó pull.down manioc=stem poke.in 1pl be-FUT-DECL
 ‘We’ll both pull cipó and plant manioc.’ (EL)

Other than this phenomenon—which may be better described as cosubordination or chaining on the predicative level, rather than on the nuclear level (cf. §18.2.2)—Hup has no distinct process of verb serialization. However, because Hup compound verbs are

neither fully lexical, nor fully phrasal entities, they themselves have much in common with other cross-linguistically defined processes of verb serialization.

The range of more or less conceptually unified events reflected in Hup compound verbs resembles the ‘iconic’ and ‘non-iconic’ types of serial verbs defined by Durie (1997: 330-1), and the ‘symmetric’ and ‘asymmetric’ classes of serial verbs that Aikhenvald describes for Tariana (1999, 2000: 4-5). Like serial verbs, Hup compounds often follow iconic principles, where verb order corresponds to temporal succession of actions, including sub-events in a cause-effect relationship. Also like serial verbs, other compounds in Hup do not follow temporal iconicity, but represent coincident motion, posture, and manner (cf. Durie 1997: 336). Verb serialization, according to Durie (1997: 322), is “universally characterized by heavy lexicalization”, but this exists alongside productivity of serialization “because many events can be typed in terms of certain predictable internal structures and structural components”. Moreover, serial verb constructions are subject to cross-linguistic constraints against duplicate participant roles, such as two agents (Durie 1997: 343). These are all properties of Hup compound verbs.

Other features of Hup compound verbs are perhaps even more typical of cosubordination processes such as serialization than they are of compounding generally. These include the high productivity of Hup compounds and their tendency to encode multiple events—even relatively distinct events—in temporal succession. They also include compounds’ internal bracketing—i.e. the ‘nesting’ of compounds that are themselves components of larger compounds, and the ability of certain prefixes to occur together with the particular stems over which they have scope. Finally, the productive verbal constructions on the ‘less-integrated’ side of the spectrum in Hup do not conform

to Payne's (1997: 233) description of a compound as having 'bleached' semantics, i.e. a distinct lexical meaning beyond that encoded in its parts.

It is worth noting that the serial verbs in neighboring Tariana resemble Hup compounds closely in that they do not allow nominal constituents to come between stems (Aikhenvald 2003: 424-25), unlike many serial constructions in African languages (cf. Lefebvre 1991). Tariana does permit affixal material encoding person, number, tense, and other information to occur between stems, but Hup has less material that *could* come between its verb stems, since it does not mark person or number on verbs to begin with, and marks tense more rarely than does Tariana.

Despite these similarities between the Hup verbal construction and the serial verbs found in other languages, it is clear that the Hup verb is consistently a single word both phonologically (as determined primarily by stress) and morphosyntactically (as determined by the inability for other morphological material to break up component stems, and by the assignment of a single Boundary Suffix to the end of the compound), and is therefore best considered a compound. Nevertheless, as a class, the Hup verb compounds do not fit neatly into either the lexicon or the grammar, and show other characteristics that are more reminiscent of serial verb constructions. It is possible that Hup has developed verb compounding from earlier processes of serialization, but this question must be left for future research.¹¹¹

9.4. The Hup compound and levels of sub-event integration

As a single-predicate, cosubordinate construction, a compound verb in Hup must encode an event that has a degree of conceptual unity. When this unity is not judged to be present, the events are necessarily represented by two predicates, linked by subordination or coordination strategies. However, among compound verbs, the linked stems can encode a variety of more or less conceptually integrated sub-events. These range from the least integrated, in which the component stems of the compound represent a series of distinct sub-events in temporal succession, to the most integrated, where some stems act as auxiliaries to modify others.

9.4.1. Low integration

These Hup compounds are much like the “iconic” serial verbs described by Durie (1997: 330), and the “symmetrical” serial verbs (where stems all come from a large open class) that Aikhenvald (2003: 424) identifies for Tariana. They also resemble the class of Barasana and Tatuyo (Eastern Tukanoan) compound verbs that encode a “direct relationship” between stems (Gómez-Imbert 1988).

Compounds of this type represent a set of distinct sub-events (each indicated by a component stem) that are conceptualized (often loosely) as a single, unified event. By definition (and in contrast with the relatively more integrated compounds discussed in §9.4.2 below), the events encoded by the stems are temporally distinct; that is, they are not simultaneous. The order of verb stems reflects the chronological order of sub-events,

¹¹¹ Ospina (2002: 381) reports that in Yuhup, old peoples’ speech occasionally suggests traces of the basic TAM suffix *-i* occurring between verb stems within compounds. She observes that this may reflect a prior

or a cause-effect relationship between them, and in many cases the compound can be broken up into a series of multiple, coordinated predicates without changing the general meaning of the utterance. The type of event that may be conceptualized as unitary varies from language to language (Durie 1997: 326-9); for example, the chain of events represented in the compound in (8) below could not be represented in a single serial verb construction in some African languages, such as Fongbe (Claire Lefebvre, p.c.).

9.4.1.1. Temporal sequence

These compounds are the lowest on the scale of conceptual integration of events. The order of stems reflects the temporal succession of events, and may incorporate ‘nested’ compounds. In (8), for example, the mythical figure’s penis was rubbed, broke off, fell into the water, and was sent away by the current. Other examples are given in (9-12).

- (8) *tính tɪb, tɪh yɔɔp-j’ap-tu ʔ[d’əh-hám]=b’ay-áh*
 3sg.POSS penis 3sg rub-snap-go.into.water-send-go=AGAIN-DECL
 ‘His penis rubbed until it broke off, fell into the water, and was swept away.’
 (LG-C.17)
- (9) *ʔəytæn=yɪʔ hɪd mæh-[b’uy-d’əh-ham]-yɪʔ-ay-áh!*
 together=TEL 3pl kill-throw-send-go-TEL-INCH-DECL
 ‘Together they killed them and threw them out.’ (H.76)
- (10) *yú-uw-ʔ=yɪʔ=mah tɪh coh-tud-[kədɕak]-yɪʔ-ay-áh*
 that-FLR-OBL=TEL=REP 3sg pole-push-pass.climb-TEL-INCH-DECL
 ‘With this (stick) he poled, pushed, and sent himself flying up into the air.’ (H.76)
- (11) *n’ikán ʔühníy næn-g’et-yóʔ=mah...*
 there maybe come-stand-SEQ=REP
 ‘Having come and stood about there, maybe...’ (P.BT.93)

- (12) *ʔm-ǎñ ci ʔ-mǎh-yíʔ-ǵy=mah!*
 1pl-OBJ urinate-kill-TEL-DYNM=REP
 ‘He (Curupira) urinates on us to kill us, they say!’ (TD.Cv.04)

According to the temporal-sequence compounding strategy, the order of the verb stems must iconically reflect the order of events:

- (13) a) *kayak=tǵ tǎh-cĩy’-yíʔ-ǵy*
 manioc=stem break-poke.in-TEL-DYNM
 ‘(Someone) planted the manioc.’ (EL)
 (NB: manioc is planted by breaking the woody stems of adult plants into sections, which are then thrust into the ground to root)
- b) **kayak=tǵ cĩy’-tǎh-yíʔ-ǵy*
 manioc=stem poke-break-TEL-DYNM
- (14) a) *huǎd núh j’ap-wǎd-ǵy*
 sauva.ant head divide-eat-DYNM
 ‘Breaking the heads off sauva ants and eating (the ants’ bodies).’ (EL)
- b) **huǎd núh wǎd-j’ap-ǵy*
 sauva.ant head eat-break-DYNM

It is common for transitive, ditransitive, and intransitive stems to occur together within a single compound, and for the different stems to take different objects. In example (14), the verbs ‘break’ and ‘eat’ cannot be understood as taking the same object, since the activity involves breaking the heads off sauva ants in order to eat the rest of the ant (while the head is not eaten). In (15), the stem ‘pull up’ has the object ‘manioc’, while the ditransitive stem ‘give’, within the same compound, has the object ‘her’ (3sg):

- (15) *tǎh-ǎñ kayak tǵʔ híd kǵʔ-nǵʔ-ǵy*
 3sg-OBJ manioc tuber 2pl pull.up-give-DYNM
 ‘They’ve pulled up manioc and given it to her.’ (EL)

In many cases, however, it is ungrammatical for multiple transitive component stems to take different objects (although this is common in certain causative compounds; see §9.4.1.2 below). As noted in §9.3 above, an alternative is a serial-like construction with the verb *ni-* ‘be’. The ungrammatical form in (16a) is contrasted with the grammatical, non-compound construction in (16b) (repeated from (7) above):

- (16) a) **kayak=tǐg, yuǔb híd cǐy’-d’úp-úh*
 manioc=stem cipó 3pl poke.in-pull.down-DECL
 (Intended meaning: ‘We’ll both plant manioc and pull cipó.’)
- b) *yuǔb d’uǔp, kayak=tǐg cǐy’ ?ín ni-té-h*
 cipó pull.down manioc=stem poke.in 1pl be-FUT-DECL
 ‘We’ll both pull cipó and plant manioc.’ (EL)

9.4.1.2. Compounds encoding a cause-effect relationship

Causative compounds are relatively low on the scale of conceptual integration of events, although considerably less so than are those compounds that encode temporal succession. In causative compounds, stems encode multiple events, and although the construction has only one grammatical subject, the actions themselves necessarily have different underlying actors. Thus while they are constructed like many compound verbs, involving a transitive stem plus an intransitive stem, these stems have a particular valency relationship whereby the object of one is the subject of the other. The constructions usually involve a relationship between two verb stems (although more are possible), in which one component encodes a causative action (often involving manner), and the other encodes the resulting event—both units of verbal meaning as described by Talmy (1985: 62-64).

a. Compound-initial causative stems

Hup has a small class of conventional causative stems, each with its own semantic content and restricted patterns of use. These involve the combination of a transitive causative stem with an intransitive stem, and the result is a transitive construction involving two (or more) participants.

The most productive causative stem is the verb *d'oʔ*, which by itself means 'take'. This is a cross-linguistically common lexical source for a causative marker; for example, Lefebvre (1991) notes that in Fon the semantic contribution of *take* in many serial constructions is 'cause'. In Hup causative constructions with 'take', the causer is directly involved in bringing about the causee's performance of the activity; accordingly, 'take' appears to be contributing its active semantics to the compound. In many cases, this implies direct physical involvement between the participants throughout the duration of the event. Examples of such causative forms include *d'oʔ-naʔ* (take-die) 'cause to die' (used in situations where killing is not direct; e.g. abortion or infanticide by abandoning a newborn, as in example (17) below; compare lexical causative *mæh-* 'kill, hit'); *d'oʔ-cak-g'et-* (take-go.up-stand) 'stand something/someone up' (compare *cak-g'et-* 'stand up of one's own accord', and *g'et-* 'be in standing position'); *d'oʔ-cud-* (take-be.inside) 'put (something) inside (something else)'; *d'oʔ-ʔʂh-* (take-sleep) 'put [child] to sleep'; *d'oʔ-yʔʂʂm-* (take-be.frightening) 'frighten'. In examples (18-20), the causative stem takes scope over multiple stems within a compound.

- (17) *tʰh hæ̃k-ʔé-p tæ̃h-ǎñ d'oʔ-naʔ-yʔ-ʔy*
 3sg sleep.around-PERF-DEP child-OBJ take-die-TEL-DYNM
 '(She) brought about the death of the child she got by sleeping around.' (RU)
- (18) *denícon tʰh-ǎñ d'oʔ-ʔʰ-ʰh*
 Denilson 3sg-OBJ take-cry-DECL
 'Denilson made him cry!' (OS)
- (19) *nút tʰhǎñ d'oʔ-[cæ̃pə-g'et]-yʔ-ʔy=mah... d'oʔ-[hɔ̃y-g'et]-yʔ-ʔy*
 here 3sg-OBJ take-straddle-stand-TEL-DYNM=REP take-bum.stuck.out-stand-TEL-DYNM
 'He made him stand with his legs spread apart... made him stand with his bum stuck out' (in order to poke an anus in the spirit, who lacked one). (P91)
- (20) *cǎw-ǎñ d'oʔ-[cək-wob]-yʔ, ní-íy=mah*
 other-OBJ take-go.up-rest.on-TEL be-DYNM=REP
 '(He) set another one up high.' (H.WT.43)

In other causative-like constructions, the verb *d'oʔ* has not lost its 'take'

semantics:

- (21) *yuyú híd d'oʔ-hi-g'ǎʔ-yam-ʔé-p=mah*
 ritual.object 3pl take-FACT-hang-dance/sing-PERF-DEP=REP
 'They would hold the *yuyu* (ritual object) hanging down while they sang/danced, they say.' (H.25)
- (22) *těghod-ót híd d'oʔ-yæʔ-yʔ-ay-áh*
 wood.hearth-OBL 3pl take-roast-TEL-INCH-DECL
 'They put it (clay) into the fire to bake.' (H.22)

Similarly, distinct causative and non-causative interpretations of 'take' can both co-exist for a given compound. In other words, the underlying actor can be the same ('Y take X and do V (with it)') or different ('Y make X do V') for the two stems without changing the overall meaning. For example, *d'oʔ-næn-* 'bring (toward deictic center)' is most likely to be interpreted as 'Y take X and Y come', although it necessarily also has the causative meaning 'Y make X come'. The same applies to *d'oʔ-ham-* 'bring (away from

deictic center)’. (Note that making X come or go without full physical control—e.g. by throwing it—requires a different causative marker, as described below).

Causative verb stems can take scope over multiple stems plus valency-changing markers, producing a ‘nested’ compound, as in (21) above, and example (23):

- (23) *wǎh=n’ǎn (...)* *d’o ʔ[hup-hipǎh-nǎn]-ní-h*
 River.Indian=PL.OBJ take-RFLX-know-come-INFR2-DECL
 ‘He brought the River Indians to be educated.’ (H)
 (i.e. he caused them to come and have knowledge)

Another causative stem is *d’ǎh-*, which on its own means ‘send, (cause to) move’, and combines productively with direction and movement verbs. Its use in causative compounds involves a situation where the object of the causative action has a degree of control or autonomy in carrying out the activity. Usually, it implies the absence of physical involvement between causer and causee beyond the initial impetus for the event, as illustrated by examples (24-26). In these examples, the manner or action by which the causative event was carried out is encoded in the first element in the compound.

- (24) *ʔǎh bóda=tat tac-d’ǎh-yé-éy,* *mǎy g’od-an*
 1sg ball=FRUIT kick-send-enter-DYNM house inside-OBJ
 ‘I kicked the ball into the house.’ (EL)
- (25) *tǐh yok-d’ǎh-ham-yǎh-kamí=mah*
 3s poke-send-go-FRST-time.of=REP
 ‘At the moment when she poked (the knife) in...’ (txt)
- (26) *ʔǎh tegd’úh hǎk-d’ǎh-hi-yǐʔ-ǎy*
 1sg tree sawing.motion-send-descend-TEL-DYNM
 ‘I felled the tree by sawing it.’ (EL)

An idiosyncratic feature of this particular causative stem is its tendency to be repeated; this occurs when *d'əh-* is the first stem in the compound, and is not preceded by a stem encoding manner, as in examples (27-29). Consultants say that the unrepeated variant is also acceptable, although textual uses consistently involve the doubled form. This may be a case of reinforcement (Hopper and Traugott 1993: 58), in which the semi-lexicalization of the initial causative construction has motivated the restatement of the causative element. Another possible explanation is that, in these cases, only the second *d'əh* expresses causation, while the first *d'əh* is a sort of ‘dummy’ manner specification, on the model of examples (24-26) above.

- (27) *ʔāh pāt j'ǰp d'əh-d'əh-yé-éy*
 1sg hair tie send-send-enter-DYNM
 ‘I’m putting in the hairclip.’ (OS)

- (28) *tǎh d'əh-d'əh-d'ob-pǎd-ay-áh*
 3sg send-send-descend.to.river-DIST-INCH-DECL
 ‘He sent them all down to the river.’ (H.47)

- (29) *yúp wáb-át w'ob-ʔéʔ=n'ǎn d'əh-d'əh-hí-ih*
 that smoking-grid set.on-PERF=PL.OBJ send-send-descend-DECL
 ‘(He) caused those who had been placed on the smoking-grid to descend.’ (H.47)

Still another causative stem is *g'et-* ‘stand’. This stem has more limited use than ‘take’ or ‘send’, but it is also fairly productive. Its use indicates that the causative agent is instrumental in bringing about an animate participant’s carrying out of the event, often conceived to be for his/her own good; however, its semantics are much less active than those of *d'oʔ-* ‘take’. The ‘causer’ is in the position of caring for, chaperoning, or helping the ‘causee’, and the ‘causer’ is usually understood to participate to some degree

in the joint activity. This type of construction is most commonly used in reference to children, as in examples (30-33).

- (30) *nĩ=nih ʔāh g'et-wæd-maca-cák-áh, núp nĩ dóʔ=n'ǎn-áh*
 1sg.POSS=EMPH.CO 1sg stand-eat-raise-grow-DECL this 1sg.POSS child=PL.OBJ-DECL
 'With my own (produce) I fed and raised my children.' (JM.PN)
- (31) *kedō kedō! nɔ-ɔy nĩ tǎh=d'əh-əh, ʔāh g'et-ham-g'óʔ-ót-óh, j'ũg-an*
 firefly firefly say-DYNM 1sg.POSS child=PL-DECL 1sg stand-go-go.about-OBL-DECL forest-DIR
 '“Firefly, firefly!” my children would say, when I took them to the forest.'
 (Int.txt)
- (32) *tát deh-an ʔǎh=ʔp ʔǎn g'et-næn-ní-h*
 taracua (ant) water-DIR 1sg=father 1sg.OBJ stand-come-INFR2-DECL
 'My father brought me to Taracúa Igarapé (as a young child).' (int.txt)
- (33) *yúb ʔǎn-ǎn hid g'et-bĩʔ-ĩy*
 cipó 1pl-OBJ 3pl stand-work-DYNM
 'They (Tukanos) made us work cipó (i.e. gather vines in forest for sale).' (P.BH)

Note that the different causative constructions are not usually interchangeable, but differ in important ways, particularly according to the degree of control. For example, only *g'et-* 'stand' is grammatical in an expression such as 'feed a child' (example 34a), whereas *d'óʔ-* 'take' can only be interpreted literally in this context (34b):

- (34) a) *ʔǎh tǎh=dóʔ-ǎn g'et-wǎd-æh*
 1sg 3sg=child-OBJ stand-eat-DECL
 'I fed the child.' (EL)
- b) *ʔǎh tǎh=dóʔ-ǎn d'óʔ-wǎd-æy*
 1sg 3sg=child-OBJ take-eat-DYNM
 'I took and ate the child.' (EL)

While the stems described above (*d'óʔ-* 'take', *d'əh-* 'send', and *g'et-* 'stand') are by far the most productive in forming causative compounds, the class of causative stems

that can function in these constructions is essentially open. For example, the stem *huĩh-* ‘hold’ is often used in causative constructions involving babies, such as *huĩh-j’əm-* ‘bathe an infant’ (i.e. holding the child in the water of the stream or river; does not entail that the caregiver also bathes), and *huĩh-ʔəh-* ‘put child to sleep by holding it’ (i.e. by lying with child in hammock).

Other causative combinations involve initial verbs that do not occur regularly in causative constructions at all, but form causatives by virtue of their position in the verb compound and the pragmatic interpretation. Such causative combinations include *ʔey-way-* (call-go.out) ‘cause to go out by calling’ (example 35), and *b’əh-ham-* (pour-go) ‘cause to go away by pouring out’ example (36). Various transitive stems can combine with the intransitive verb *naʔ-* ‘die’ to yield a causative reading (‘cause to die’), such as *g’əç-naʔ-* ‘cause to die by biting’, *hi-g’et-naʔ-* ‘cause to die by stepping on’, as in example (37), or even the hypothetical *key-naʔ-* ‘cause to die by looking at’.

- (35) *ya ʔamboʔ-ǎn yú ʔey-way-yĩʔ-ǎy*
 dog-OBJ João call-go.out-TEL-DYNM
 ‘João calls the dog out (of the house).’ (EL)

- (36) *hĩdnĩh húptok yĩt=yĩʔ b’əh-ham-pəmə-yĩʔ-ay, ʔǎh-ǎw-ǎh!*
 3pl.POSS caxiri thus=TEL pour-go-sit-TEL-INCH 1sg-FLR-DECL
 ‘I had begun pouring out their caxiri like this, as I was sitting there!’ (TD.Cv.98)

- (37) *cadakaʔ tǎh-ǎn ʔǎh hi-g’et-naʔ-yĩʔ-ǎy!*
 chicken child-OBJ 1sg FACT-stand-die-TEL-DYNM
 ‘I stepped on the chick and killed it!’ (by accident) (OS)

b. Compound-final causative stems

Hup has an additional compounding strategy for forming causative constructions, in which the intransitive stem describing the resulting event is the first element in the compound, and is *followed* by the transitive causative stem. Note, in addition, that in these compounds it is possible for *both* stems to be transitive—with two different objects—as in (40).

Only two causative stems are used productively and regularly in these constructions: *-biʔ-* ‘make, work’ (example 38), and *-yæh-* ‘order, request, compel’ (examples 39-40). These compounds resemble the relatively less ‘iconic’ constructions described below in §9.4.2, in that the order of stems does not reflect the order of events. Even though the causative force is usually initiated before the resulting state is attained, the stems occur in the opposite order.

- (38) *tih=dóʔ-ǎñ* *peʔ-biʔ-ǎy*
 3sg=child-OBJ sick-make-DYNM
 ‘(Someone) makes the child sick.’ (EL)
- (39) *tegd’úh ʔág* *tih* *hop-key-yæh-ǎp*
 tree fruit 3sg immerse-see-request-DEP
 ‘He sent (the water-roach) into the water to see the fruits on the trees.’ (DT.78)
- (40) *tih=dóʔ* *tih=báb’-ǎñ* *wæğ* *wæd-yæh-ǎy*
 3sg=child 3sg=sibling-OBJ sand eat-request-DYNM
 ‘The child made his sibling eat sand.’ (also: ‘told his sibling to eat sand’) (EL)

9.4.2. High integration

Hup compounds of this type have much in common with the ‘non-iconic’ serial verb constructions described by Durie (1997: 336). In contrast to the relatively less-integrated compounds described above, the multiple stems in these constructions encode various pieces of information about a conceptually and temporally more unitary event. The order of stems reflects conventions in information packaging, but they are not organized in terms of any temporal sequence of sub-events. Many of the compounds in this class resemble the ‘asymmetrical’ serial verbs described by Aikhenvald for Tariana (2003: 424), in that at least one stem in the set may come from a closed class (encoding motion, posture, etc.). The temporal concurrence of the stems in these compounds has also been described for the Tukanoan languages Barasana and Tatuyo by Gómez-Imbert (1988), who refers to the relationship of the stems within the compound as ‘simultaneous’.

These compounds do not form a unified class of their own, but themselves manifest different degrees of conceptual integration. At one end of the scale we find semi-autonomous sub-events that are happening at the same time; at the other end, component stems modify other stems, usually contributing aspectual or Aktionsart information.

In some cases, integrated compounds have developed idiomatic meanings that are distinct from the sum of their stems, and are partially lexicalized. Some display phonological reduction that goes along with their reanalysis as one lexeme. As discussed above (§9.2), certain stems may be obligatorily bound forms, or may develop very different meanings depending on whether they occur as independent predicates, in compounds, or even in initial vs. final position within a compound. Other stems have

become grammaticalized until they have become auxiliaries or even formatives.

Examples of forms that have undergone these processes will be encountered below.

9.4.2.1. Multiple sub-events: semantic classes of verb stems

On the lower end of the scale of event integration, some compounds encode multiple components of an event. These range from distinct but concurrent activities to more conceptually indivisible parts of an activity. In (41-42), the activities encoded in the compounds could be expressed as separate predicates without significantly changing the overall meaning of the utterance.

- (41) *tĩw-ít hám-ap=ĩĩh ?id-?æk ɔh-w æd-hám-áy*
 path-OBL go-DEP=MSC speak-make.commotion-eat-go-DYNM
 ‘The man who is going along the path is eating and gossiping while walking.’
 (EL)

- (42) *yúp=yi? nĩh-ĩw-ĩ tĩh ?ey-y ɔh ɔy-ní-h*
 thus=TEL manner-EMPH-OBL 3sg call-search-INFR2-DECL
 ‘Thus in this way he went calling and searching.’ (FS.4)

This type of compound blurs into a slightly more integrated type, in which the different stems encode semantic components of a conceptually more unitary event. Here, the stems cannot easily be separated into separate predicates without changing the overall meaning of the clause. The semantic components they encode include distinct elements of motion, path, manner, and position (reminiscent of the “coincident motion or posture” verb serialization described by Durie 1997: 336). The surface structure of the Hup verb closely reflects many of the units of meaning identified by Talmy (e.g. 1985), in a much more one-to-one correspondence than we find in languages such as English.

The event components encoded in Hup verb stems can be separated into several groups. These include the small, closed classes of (1) motion/path and (2) position, and the open classes of (3) posture, (4) manner/ activity, and (5) states and transitions. Compound verbs can be made up of all closed-class or all open-class stems, but they usually involve at least one stem from an open class and one from a closed class. In this latter case, they resemble the “asymmetric” serial verbs described by Aikhenvald (2003: 424) for Tariana.

Below, I introduce the different semantic classes of stems. While there is no formal indication in the stem itself regarding its semantic class, the class membership does play an important role in determining the order of stems in a compound (when temporal sequence is not a factor). There is thus a language-internal formal reality behind the semantic class assignments listed here. These ordering principles are discussed in the following section (§9.4.2.2).

a) Motion/path. Closed class.

The verbs in this class are all intransitive, and encode both motion and path relative to a reference point (which in many cases involves water—an interesting semantic feature which seems quite natural given the ecology of the Hup environment). They include the following:

- næn-* ‘go towards reference point (speaker); come’
- ham-* ‘go away from reference point (speaker)’
- hi-* ‘descend’ (from height or downstream)
- pæ-* ‘go upstream’
- d’ob-* ‘go toward river/downhill’
- cɔp-* ‘go away from river/uphill’

<i>tuʔ-</i>	‘go into liquid’
<i>cak-</i>	‘go in upward direction’ (climb, grow, raise)
<i>bʼay-</i>	‘return’
<i>ye-</i>	‘enter bounded space’
<i>way-</i>	‘leave bounded space’
<i>tu-</i>	‘go down (toward ground/water)’
<i>kəd-</i>	‘pass’
<i>bʼeh-</i>	‘cross a waterway’
<i>kot-</i>	‘go in circles’
<i>gʼoʔ-</i>	‘wander about’; i.e. motion with no defined path (this is an obligatorily bound stem that can only occur in a compound).

Path, vis-à-vis a reference point, is a more central feature than actual motion in these verbs; for example, *hi-* ‘descend’ is used to describe the static position of a dangling string, as is *ham-* ‘go’ for strung wire, etc.

b) Position. Closed class.

These intransitive stems include the following:

<i>wob-</i>	‘rest on another object’
<i>pæm-</i>	‘sit’ (animate entities only)
<i>dʼak-</i>	‘be attached to/in contact with a surface without the help of gravity’ (esp. to a vertical surface or stuck to the underside of a horizontal surface)
<i>gʼet-</i>	‘stand; be in upright position (for long thin object); stay’
<i>gʼãʔ-</i>	‘hang, be suspended with free movement’ (used for hammocks and floating canoes)
<i>yæt-</i>	‘lie on ground; be in contact with ground’ (for any object that does not have a specific upright standing position)
<i>cud-</i>	‘be inside something else’.

c) Posture (includes some manner semantics). Probably an open class; if closed is large.

These stems are also uniformly intransitive. They include:

<i>minuk-</i>	‘be doubled over’
<i>tuk-</i>	‘be face down’, ¹¹²

¹¹² Transitive forms resembling this stem are *túk-* ‘want’ and *tũk-* ‘sting (insect)’.

<i>caj-</i>	‘be right side up’
<i>mam-</i>	‘leaning sideways’
<i>kĩmĩn-</i>	‘arms wrapped around (something)’
<i>yoyo-</i>	‘suspended from above’ (by hands, a rope, etc.; entails one fixed end only)
<i>yɔw-</i>	‘straight, in alignment’ (especially for the human body)
<i>nuc-</i>	‘bent’ (body).

d) Manner/ activities. Large open class.

This is something of a ‘catch-all’ class, which contains most ‘activity’ verbs. All transitive stems are in this class, but it also includes what are considered intransitive and ditransitive stems. Manner (according to Talmy’s (1985) characterization of semantic entities) is the main parameter for distinguishing these verbs from each other and from the other verb classes. For example, there are a number of semantic sub-classes of Hup verbs that encode types of actions, and manner is an important part of their internal differentiation. One such group includes verbs for different types of carrying or supporting:

<i>hũh-</i>	‘carry in arms or on shoulder’
<i>tɔn-</i>	‘carry in hand’
<i>hitoy’-</i>	‘carry on head’
<i>cet-</i>	‘carry on back’
<i>kæmæm-</i>	‘carry against body or under one arm’
<i>tɔw-</i>	‘carry between two or more people’ (e.g. a bench)
<i>yo-</i>	‘carry dangling from hand’ (e.g. a pot)

Verbs for types of hitting form another semantic sub-class, and include:

<i>mæh-</i>	‘beat, hit, kill’
<i>tab’ah-</i>	‘slap with flat of hand; hit head against something’
<i>tɔn’-</i>	‘pound against something’ (e.g. hammer, hard fruit to break it)
<i>kotow-</i>	‘hit with end of stick, held vertically’
<i>tāw-</i>	‘beat with length of stick’
<i>pæç-</i>	‘hit with flat, flexible thing’ (e.g. bark, hand, notebook)

<i>cɪʔwɪp-</i>	‘beat with thin flexible thing’ (rope, string, or vine)
<i>tok-</i>	‘pound with mortar and pestle’

Verbs relating to bodily functions, sensations, and emotions are in this general manner/activity class as well, and include:

<i>ʔəg-</i>	‘drink’
<i>wæd-</i>	‘eat’
<i>ʔʰ-</i>	‘sleep’
<i>hɔn-</i>	‘vomit’
<i>ʔɔt-</i>	‘weep’
<i>hohot-</i>	‘cough’
<i>key-</i>	‘see’
<i>wɪʔ-</i>	‘hear; understand’
<i>ʔɔm-</i>	‘fear’
<i>wɔy-</i>	‘love; be stingy with’

Other manner/activity verbs include:

<i>doy-</i>	‘bend down, duck’
<i>cɔ̃y-</i>	‘slither’
<i>yoy’</i>	‘swing back and forth’
<i>hɔ̃k-</i>	‘saw back and forth’ (especially when cutting)
<i>tɔ’ ɔh-</i>	‘run’
<i>yam-</i>	‘dance/sing’
<i>dɔʔ-</i>	‘count’
<i>j’ ək-</i>	‘jump’
<i>nɔh-</i>	‘fall; hit against (no downward motion entailed)’
<i>tac-</i>	‘kick, hit against with feet’
<i>d’oʔ-</i>	‘take’
<i>ʔh-</i>	‘ask’
<i>tɪh-</i>	‘tell lie’
<i>nɔ-</i>	‘say’

Weather verbs such as *d’oj-* ‘rain’ and *bohoh-* ‘be windy’ are also included in this class.

e) States and transitions. Open class.

These stems are all typically used intransitively, and in some cases include members of the adjective class (which can form independent predicates without the Boundary Suffix required for true verbs). The stems in this class combine relatively infrequently in highly integrated compounds with the other verbs described in this section, but occur more often with auxiliary-type forms or causative stems (see §9.4.1.2a above and §9.4.2.4 below).

Verbs in this class include:

- təm-* 'having close-together vertical components' (e.g. a wall made of poles)
- tɔɔd'* 'spotted with small sores'
- cɪʔ-* 'be sticky/stuck together'
- g'ɪ-* 'be hot'
- m'æ-* 'be cool (liquid)'
- həb-* 'dry, be dry'
- d'ɔh-* 'be rotten'
- naʔ-* 'lose consciousness/die', etc.

9.4.2.2. Order of stems in compounds

Integrated compounds formed from the stems in the classes above are very common in Hup. The order of combination of stems follows specific conventions based on their class membership. Since these are semantically defined classes, it is possible to make a semantic generalization about the stem-ordering conventions: the most time-stable concept is the last in the string of stems. The members of the two closed classes, motion/path and position, are relatively time-stable and tend to be last when they occur.

When members of closed or open classes co-occur, their order likewise depends on which element is the more permanent or resultative. This stem-ordering principle for integrated

compounds is thus closely related to the principle of temporal succession that dictates the formation of less integrated compounds.

That the final element in a compound is in some sense the ‘main’ verb is supported semantically, since it provides a kind of matrix or context for the other events. It is also supported formally, since Hup is a verb-final language; that is, being head-final at clause level seems to be mirrored by being head-final at word level. Finally, as in the case of causative compounds, a combination of a transitive and an intransitive stem results in a transitive construction.

Below, I offer examples of the various possible combinations of these stem classes. Note that the reverse order of stems is ungrammatical for virtually all; in the very few cases (noted in the text) where it is grammatical, it usually results in a different meaning.

a. Manner/activity + Motion/path (open + closed class).

Examples of this type of compounding include *nɔ̌-ham-* (say-go) ‘go along saying’, *tac-[kəd-hi-]* (kick-pass-descend) ‘go downstream fast, hitting against things’, *j’ɔ̌m-ham-* (bathe-go) ‘swim’, *j’ɔ̌y-næn-* ‘slither along ground toward deictic center’ (i.e. a snake), and *kək-w’ob-ham-* (pull-set-go) ‘catch and set out (fish) while going along’. (43-46) are further examples.

- (43) *ʔāh ʔəg-g’ó ʔ-óy*
 1sg drink-go.about-DYNM
 ‘I would go around drinking.’ (MM.1)
 (as a young woman, the narrator often traveled from place to place to attend drinking parties)

- (44) *tĩh j'ək-kədhám-áh*
 3sg jump-pass.go-DYNM
 'He jumped quickly forward.' (LG.12)
- (45) *tĩh waŋ-yé-ay-áh*
 3sg spy-enter-INCH-DECL
 'He entered, spying around.' (txt)
- (46) *tĩw pat-hám-áy, nuh=kəbək=d'əh*
 path clear.path-go-DYNM head=break=PL
 'The sauva (lit. 'head-breaker') ants cleared the path as they went.' (P87)

Example (47) is from a story about a man who takes revenge on a spirit who has cooked his children; the man tricks the spirit into letting him puncture him with a thorn, upon which the man pulls out the spirit's insides and kills him.

- (47) *ʔmĩh hǎwíg=tæn tĩh [kək-[d'əh-way]]-hũʔ-yfʔ-ay-áh*
 1pl.POSS heart=MEAS2 3sg pull-send-go.out-complete-TEL-INCH-DECL
 'Right up to where our heart is, he pulled everything out.' (P.91)

b. Manner/activity + (resulting) Position (open + closed class).

Examples of these compounds include *nəh-d'ək-* (stick.against) 'fall/hit against a vertical surface', *hũh-g'ǎʔ-* (hold.against.body-be.suspended) 'hold against body while suspended (in hammock)', *ʔəg-pæm-* (drink-be.seated) 'drinking while seated', *key-g'et-* 'stand watching', *bug'-g'et-* 'pile into a stack', and those given in (48-50).

- (48) *ʔǎh ʔám-ǎn key-g'ǎʔ-ǎy*
 1sg 2sg-OBJ see-hang.suspended-DYNM
 'I'm lying in a hammock and watching you.' (EL)

(Note that *g'aʔ-key-* is grammatical, but means 'trying out a new hammock'.)

- (49) *g'ɔp-yóʔ, ʔāh nɔʔ-d'ák-áh*
 dip.out-SEQ 1sg give-stick.against-DECL
 'Having dipped (out the beer), I gave it to her.' (TD.101)

- (50) *hūt=teg ʔam tɔn-pæm-æh*
 tobacco=stick 2sg hold-sit-DECL
 'You're sitting there with a cigar.' (TD.102)

Finally, the stems within the compound in example (51) illustrate the compatibility of the stem-ordering conventions of semantic elements with the logical temporal succession of events, as mentioned above. Here, the components of the woman's action (manner, motion, and locational goal) parallel the successive positions of the frog:

- (51) *woʔ-hi-wób-an=mah tih yo-b'uy-wób-óh*
 remove.groundcover-FACT-be.set.on-DIR=REP 3sg dangle-throw-set.on-DECL
 'She swung (the frog) onto the rubbish pile, it's said.' (P.BT)

c. Posture + Position (open? + closed class).

These compounds include *tuk-wob-* (face.down-rest.on) 'lie face down on something', *tuk-yæt-* (face.down-lie) 'lie face down', *yɔw-g'et-* (straight-stand) 'stand straight (arms and legs in alignment)', *caj-wob-* (right.side.up-rest.on) 'lie face up on something', *caj-d'ak-* (right.side.up-stick.against) 'be leaning against something, face up', *minuk-pæm-* (head.bowed-sit) 'crouch in huddled position', *yoyo-g'āʔ* (hang.from.above-dangle) 'hang by hands or a rope', *mam-d'ak-* (lean.to.side-stick.against) 'stand leaning to one side with shoulder against something', and example (52).

- (52) *nút tǎhǎn... d'o ʔ-hɔy-g'et-yǎʔ-ǎ*
 here 3sg-OBJ take-bum.stuck.out-stand-TEL-DYNM
 'He made him stand with his bum stuck out.' (P.91)

d. Position + Motion/path (closed + closed class)

Compounds made up of members of both closed classes occur, although they are not particularly common. The order of elements corresponds to the time-stability of the events; in (53), for example, the position—being in contact with the wall—is intermittent, while the motion/path—wandering about (the bound stem *g'o ʔ*)—is constant.

- (53) *tǎh pe ʔpe ʔ-d'ak-g'ó ʔ-óh*
 3sg grope-stick.against-go.about-DECL
 'He was groping around along the wall.' (TD.103)

In example (54), the motivation for the stem order is less clear, since the wire's vertically supported position has no more time-stability than its path from one point to the other. The speaker presumably felt the path information (the scope of the area enclosed by the wire) to be more conceptually relevant than its supported position. (Note that this is another case of a motion/path verb encoding only path; see section (a) above.)

- (54) *ʔarámi tǎh núp=yǎʔ d'ak-ham-nǎh-ǎ*
 barbed.wire cord this=TEL stick.against-go-CMPR-DYNM
 'Barbed wire was strung across like this.' (H.56)

e. Motion/path + Position (closed + closed class).

An alternative order for the compounded members of these two closed classes, in contrast to (d) above, is illustrated in examples (55-56). Both of these examples come

from the Hup Origin Story, which describes the long voyage in a mythical canoe taken by the forebears of the region's peoples, after their creation. The travelers remained seated in the canoe throughout the journey, as the canoe traveled up and down river after river. The relative time-stability of their sitting, as opposed to the more short-term event of exiting a location, probably explains the order of the stems.

- (55) *yawadaté-ét=mah hid way-pæm-pĩd-ĩh*
 Yawaraté-OBL=REP 3pl go.out-seated-DIST-DECL
 'From Yawaraté also, they say, they went out sitting.' (A-O.7)

- (56) *yĩ hid way-g'ã ʔ-ní-h*
 thus 3pl go.out-suspended-INFR2-DECL
 'Thus they went out suspended.' (in the canoe)

The order of the stems in compounds like example (57) is also temporally motivated, since the second stem represents the stable position that resulted from the motion/path event (and the final verb *g'et-* functions as an auxiliary; see §9.4.2.4b below). This is comparable to the role of temporal sequence in motivating the combination of two motion/path stems in a compound (e.g. example (8) above, *yɔyɔp-j'ap-tu ʔ-[d'əh-ham]=b'ay-ah* '(his penis) rubbed, broke off, fell into the water, and was swept away').

- (57) *tĩh cak-wob-g'ét-éh*
 3sg ascend-rest.on-stand(=stay)-DECL
 'He climbed back in to stay (in the canoe).' (LG.13)

f. Motion/path + Motion/path.

This combination is rare but occasionally occurs, as in example (58). Here, the speaker is emphasizing the fact that the person in question has gone away from the village, in the direction away from the river. The final stem ‘go’ is presumably more resultative (i.e. he’s gone away), while the person’s direction is less time-stable or important in the long run.

- (58) *kaninĩ* *cɔp-ham-pó-h!*
 ‘sleepy’ (Tukano) go.away.from.river-go-EMPH1-DECL
 ‘“Sleepyhead” has gone away (into the forest)!’ (cv.txt.135)

g. Activity/manner + Transition/resulting state (open + open class).

Examples of compounds formed from stems of these two classes involve situations where an activity/manner verb brings about a resulting state (although both the activity and the transition may be occurring simultaneously). Such compounds (which are not very frequent) include *ʔɔc-həb-* (squeeze.in.tipiti-dry) ‘make manioc mash dry by squeezing in tipiti’ and example (59).

- (59) *ʔāh* *ʔəg-ná ʔ-áy*
 1sg drink-lose.consciousness-DYNM
 ‘I’m drunk.’ (i.e. ‘I’ve reached a state of semi-consciousness through drinking’)
 (OS)

h. Manner/activity + Manner/activity (open + open class).

As with most of the other types of compounds described here, the final stem in a compound formed from two manner/activity verbs also tends to be the most time-stable

component. Thus the last stem in example (60) refers to the on-going activity (serving) that provides the context for the more sporadic activity (singing),¹¹³ while the final component in examples (61-62) is the one that best characterizes the resulting state.

- (60) *ʔāh yamhidʔʔ-g'ʔp-ʔh*
 1sg sing-serve-DECL
 'I was singing while serving beer.' (TD.Cv)
- (61) *tīh kʔ-cicīh-yīʔ-īh*
 3sg chop-divide.into.bits-TEL-DECL
 'He chopped (the spirits) into many pieces.' (i.e. 'divided them into bits by chopping') (P.92)
- (62) *mʔ nɔmīh=d'əh ʔān mʔh-təh-yīʔ-īy*
 house house.dweller=PL 1sg.OBJ hit-break-TEL-DYNM
 'The people who live here have hit and broken me (my bones).' (P.94)

In summary, the compounds in my corpus tend to correspond to the following ordering conventions, based on the semantic categories of the component stems:

Manner/activity + Motion/path
 Manner/activity + (resulting) Position
 Posture + Position
 Position + Motion/path
 Motion/path + Position
 Motion/path + Motion/path
 Manner/activity + Transition/resulting state
 Manner/activity + Manner/activity

In addition (or perhaps as a result) of these general semantic ordering principles, a combination of a transitive and an intransitive stem always requires the transitive stem to precede the intransitive.

9.4.2.3. Complex compounds: ordering of multiple stems

These ordering principles interact with the temporal succession principle discussed above to organize compounds that are made up of multiple stems. In (63), for example, the manner/activity stem *j'ip-* ‘lash (tie) to’ precedes the posture stem *m'æc-* ‘squeeze tight’, which in turn precedes the position stem *d'ak-* ‘stick against, be against a vertical surface’—an ordering that iconically mirrors the ordering of events:

- (63) *túʔ-út* *hid* *j'ip-m'æc-d'ak-yiʔ-ay-áh*
 house.pole-OBL 3pl lash-squeeze.tight-stick.against-TEL-INCH-DECL
 ‘They tied (his basket) tightly against the house-pole.’ (P85)

More integrated compounds are often ‘nested’ inside larger, less-integrated compounds. Thus the organizing principles discussed above can apply on several levels within the same verb word, as the following examples illustrate.

[Manner-Position]-Motion/path:

- (64) *tih* *[nɬ-d'ak]-kót-op*
 3sg [fall-stick.against]-travel.in.circles-DEP
 ‘It went knocking around (inside the box)’. (H.R.108)

Manner/activity-[Manner-Motion/path] (the nested manner-path form is semi-lexicalized; see discussion in §9.4.2.4c below):

- (65) *dóʔ-n'ǎn* *tih* *cet-[wid-ye]-pid-ih*
 child-PL.OBJ 3sg carry.on.back-[arrive-enter]-DIST-DECL
 ‘He always entered carrying (food) for the children.’ (P85)

¹¹³ But note that in this example the opposite order *g'ɔp-yamhidɔʔ* is also acceptable. The verb ‘sing’ is a lexicalized form containing the root *yam-* ‘dance, sing kapiwaya’; the rest of the compound may be *hi-dɔʔ* ‘FACT-count, keep track of’.

[Manner-Position]-Activity/manner linked in temporal sequence:

- (66) *híd [nɔh-d'ak]-g'ɛ-ay-áh*
 3pl [fall-stick.against]-bite-INCH-DECL
 'They (jaguars) would fall on (the people) and bite them.' (H.75)

[Activity/manner-Activity/manner]-AUX (see below for discussion of auxiliary stems)

- (67) *tínħ mumų táħ yɔʔmɔy-an [yaŋ-m'æc]-d'oʔ-yĩʔ-ħ*
 3sg.POSS arm tapir anus-DIR [suck.in-squeeze.tight]-take-TEL-DECL
 'Her arm had been swallowed up and stuck in the tapir's anus.' (H.80)

In example (68), two nested compounds are linked together in temporal sequence:

- (68) *[way-d'oʔ]-[nɔh-d'ak]=d'ɔh, dɛħ dadáp=d'ɔh*
 [go.out-take]-[fall-stick.against]=PL water roach=PL
 'The ones who had taken flight and hit against (the sky), the water-roaches...' (LG.13)

In a few cases, however, stems appear to follow the *opposite* order from that of the temporal sequence of the events. This resembles the “inverse relationship” of stems in Barasana and Tatuyo compounds, as described by Gómez-Imbert (1988: 103). In Hup, these are all compounds whose stems have a relationship based on purpose, as we see in (69-71). All the examples of this ‘inverse’ ordering type encountered have a motion/path verb as the second stem.

- (69) *híd [yam]-[cak-g'et]-ʔé-h*
 3pl dance/sing-[raise.up-stand]-PERF-DECL
 'They used to stand up in order to sing/dance.' (T.int.5)
- (70) *ʔayųp=ħħ [key]-[wɔn-hám]-ay-áh*
 one=MSC see-[follow-go]-INCH-DECL
 'A man followed after in order to see (where the spirit went).' (P87)
- (71) *wɔħ=n'ăn (...)* *d'oʔ-[hup-hipāh]-[næn]-ní-h*
 River.Indian=PL.OBJ take-[RFLX-know]-[come]-INFR2-DECL
 'He made the River Indians come in order to be educated.' (H)
 (repeated from (95) above)

These examples are probably not as exceptional as they might appear at first glance. First, since the compounded meaning is one of purpose, and the compound itself is neutral as to whether or not the intended activity was actually carried out, the final verb is actually more grounded in real time and real events, hence in a sense more ‘stable’. Moreover, these compounds correspond to the formal ordering conventions based on the semantic classes above, in which position and motion/path information tends to occur last.

The causative compounds in §9.4.1.2b, in which the causative stem *follows* the stem representing the caused event (*V-biʔ-* [V-make] ‘make sick’ and *V-yæh-* [V-compel] ‘compel, order to V’), represent a similar ‘inversion’ of the temporal order of events. In these compounds, the causative component is final, even though (at least as a distinct event) it is temporally prior and less resultative than the effect. However, the case of *yæh-* ‘compel, order, request’ is like the ‘purpose’ forms above in that it does not entail that the activity be actually carried out (its uses range from straightforward requests to actual causatives). A similar situation may be behind the causative *biʔ-*, which presumably entails only the act of the causer, and not necessarily the resulting effect.

A few other exceptional cases of stem ordering exist in my corpus, although these are not common. They illustrate that—for certain compounds—the order of stems may be relatively flexible, and probably depends largely on the speaker’s construal of the event, particularly which aspect he/she considers more salient or more continuous. In (72) (from the Origin Story), for example, the simultaneous events of exiting-while-

seated and crying are presented in an order opposite to that which their semantic classes would predict—the activity/manner verb ‘cry’ would be expected to come first, but is compound-final. Consultants judge the more expected variants *?ɔt-way-pæm-* (cry-go.out-sit) and *?ɔt-pæm-way-* (cry-sit-go.out) to be grammatically and semantically comparable; other combinations are considered to be more questionable.

- (72) *híd way-pæm-ʔɔt-ɔp=mah j'ǎh yúw-úh*
 3pl go.out-seated-cry-DEP=REP DST.CNTR that-DECL
 ‘They went out seated, crying.’ (H.26)

9.4.2.4. Auxiliary and ‘vector’ stems: aspect, mode, and Aktionsart in compounds

The most highly integrated type of verbal compound involves a stem whose main function is to modify another stem (or multiple stems within a compound), thereby usually providing aspect, Aktionsart, or modal information. The prototypical position of these modifying stems is compound-final (although the resulting compound may itself be nested inside a larger, less-integrated compound). These compounds have much in common with the ‘ambient’ serial constructions that Aikhenvald (2003: 424) describes for Tariana, in which one verb serves as a modifier to the other.

The verb stems in this class range from those that are much like normal verbs in compounds to those that resemble real auxiliaries. This corresponds to a cline of grammaticalization (viewed from a synchronic perspective), ranging from stems that are ordinary main verbs, to those that have an auxiliary-like function when they appear in compound-final position but retain their original semantics, to those stems that are semantically quite clearly only auxiliaries—that is, their function in compound-final

position is semantically distinct from their function as main verbs, and in a few cases they cannot act as a main verb at all. While the most grammaticalized examples represent a fairly small class, these auxiliary-like verbs cannot be said to form a closed group; especially since the compound-final position itself may signal an auxiliary interpretation, there is no strict division between those compound-final forms that are no more than normal verb stems, and those that perform some modifying function. For example, a compound such as *ʔid-muhũʔ* (speak-play; see example 77 below) has the semi-idiomatic meaning ‘joke’, but there may be little difference pragmatically between interpreting this as ‘a unitary event of speaking and playing’, or as ‘playing through speaking’.

Because these compound-internal verb stems can be understood to correspond to a continuum or cline of grammaticalization between verb and auxiliary, many can be best characterized as ‘vector verbs’ (Hook 1991, cf. Hopper and Traugott 1993: 112-14)—i.e. verbs that are at an intermediate point of grammaticalization between main verb and auxiliary (itself part of a larger cline between main verb and affix). Like the Hindi compounds described by Hook (1991), Hup compounds of this type contain a verbal complex of a ‘main verb’ followed by a ‘vector’. These vector verbs impart aspectual, modal, or other information to the clause, and belong to a large, diverse class, with a low degree of specialization. In Hup, vector verbs appear to represent one stage in the grammaticalization process from verb stem to true auxiliary to Inner Suffix or other formative.

The following subsections provide an illustration of verb stems in compounds that act as modifiers, and their variation as more and less similar to their function as independent main verbs.

a. Stems within compounds that are more like independent main verbs

Stems which perform an auxiliary-like function when compound-final but retain their original verbal semantic identity include *-tuk-* ‘want to do V’, *-hipāh-* ‘know how to V’, *hūʔ-* ‘finish, use up (something) through doing V’, *hūʔũy-* ‘do V industriously’, and *muhūʔ-* ‘play at/through V’:

- (73) *wæd-hūʔ-yíʔ-ŷ*
eat-finish-TEL-DYNM
‘Eat (it) all up’ (OS)
- (74) *yíʔ=mah tih [yo-d’oʔ]-hipāh-nih g’ŷh-g’et-g’óʔ-op=b’ay*
thus=REP 3sg [hang.from.above-take]-know-NEG be-stand-go.about-DEP=AGAIN
‘So he was standing around, not knowing how to carry (the fish).’ (I.24)
- (75) *ŷh-añ [bíʔ-hitam]-tuk-yóʔ...*
1pl-OBJ work-cooperate-want-SEQ
‘Having wanted to help us...’ (I.1)
- (76) *ŷāh ʔəg-hūʔũy-nih káh, ŷnāç!*
1sg drink-be.industrious.NEG DISJ aunt (MZ)
‘But I don’t have any stomach for drinking, Aunt!’ (TD.Cv.99)
- (77) *ŷid-muhūʔ-úy yúw-úh !*
speak-play-DYNM that.ITG-DECL
‘He’s joking!’ (OS)

b. Stems within compounds that are less like independent verbs

Some of the most common of the more grammaticalized auxiliary or vector verbs are presented here. These forms tend to be semantically distinct from their variants as independent verbs.

-d'oʔ Auxiliary meaning: 'do V in an abrupt or goal-oriented way'. Free verb stem: 'take' (compare the non-literal use of 'take' in many of the English translations of these compounds). Note that this verb also functions as a causative element (as the first element in the compound; see §9.4.1.2 above).

- (78) *g'et-d'oʔ-nĩh=hɔ̃ ʔāh-āh*
 stand-take-NEG=NONVIS 1sg-DECL
 'I can't stand up.' (D.BWB)
- (79) *doy-d'oʔ!*
 bend.down-take-IMP
 'Duck!'; 'Take a duck!' (OS)
- (80) *way-d'oʔ-óy* 'fly'
 go.out-take-DYNM
 'Fly'; 'Take flight' (OS)
- (81) *ʔān híd g'et-hipāh-d'oʔ-ay-áh*
 1sg.OBJ 3pl stand(CAUS)-know-take-INCH-DECL
 'They reminded me.' (P.txt)
- (82) *hǎy-ǎn key-d'oʔ-ów-ay ʔāh-āw-āh*
 um-OBJ see-take-FLR-INCH 1sg-FLR-DECL
 'I've seen what-his-name.' (caught a glimpse of illicit behavior). (B-Cv.)
- (83) *yúp g'əç-j'ap-d'oʔ-yóʔ, tĩnĩh yɔʔmɔ̃ máh tĩh wók-ay-áh*
 that bite-snap-take-SEQ 3sg.POSS anus near 3sg rub-INCH-DECL
 'Having bitten off a piece of it (hot pepper) she rubbed it around (the tapir's) anus.' (H.TY.80).

-key- Auxiliary: ‘experience/try to do V’. Free verb stem: ‘see’ (cf. English ‘see if you can V’ = ‘try to V’).

- (84) *biʔ-key-kǎm!*
work-see-IMP2
‘Try to do it!’ (OS)
- (85) *g’ǎʔ-kéy-éy*
hang.suspended-see-DYNM
‘Trying out a new hammock’ (EL)
- (86) *d’oʔ-hǎh-key-kǎm=b’ay!*
take-make.sound-see-IMP2=AGAIN
‘Play it back so I can “see” how it sounds.’ (MM.8)
- (87) *lám cóʔ-óy ʔəg-key-kǎm!*
2sg LOC-DYNM drink-see-IMP2
‘You try some (drink)!’ (TD.Cv)

-tu- Auxiliary: ‘want; proximative (imminent future)’. This is a bound, phonologically reduced variant of *tuk-* ‘want’, which itself can also act as a auxiliary-type stem (see example 75 above). In compounds, *-tuk-* is a more emphatic and insistent expression of desire (as in example 88), whereas *-tu-* expresses more neutral desire (examples 89-90). Both *-tuk-* and *-tu-* are also used to express imminent future regardless of volition (example 91; see also §13.2). Note that the grammaticalization of volition to future is cross-linguistically common (as in English ‘will’).

- (88) *yí-nǎh-yóʔ=mah hǎp wæd-tú-up g’ǎh-ǎy=nih*
that-be.like-SEQ=REP fish eat-want-DEP be-DYNM=EMPH.CO
‘So, being in a situation of wanting to eat fish...’ (M)
- (89) *hǎ ʔǎh [ham-g’oʔ]-tú-t... ham-g’óʔ-op*
where 1sg go-go.about-want-OBL go-go.about-DEP
‘Wherever I wanted to go... I’d go there.’ (MG-PN.3)

- (90) a) *cúg ʔāh wiʔ-túk-úy=hɔ̃*
 fiddle 1sg hear-want-DYNM=NONVIS
 ‘I want to hear the fiddle!’ (emphatic) (OS)
- b) *cúg ʔāh wiʔ-tú-y=hɔ̃*
 fiddle 1sg hear-want-DYNM=NONVIS
 ‘I’d like to hear the fiddle.’ (non-emphatic) (OS)
- (91) *tīh g’et-g’oʔ-tú-ay*
 she stand-go.about-want-INCH
 ‘She’s almost walking.’ (a toddler) (EL)

-tubud- Auxiliary: ‘completely; intensification’ (see also §15.1.3.1). In independent form, this stem can be used to mean ‘die, lose consciousness’, but this use is rare and is not attested in my text corpus.

- (92) *cet-ham-tubud-yʔʔ-ʔy, hup=ʔāy-āñ*
 carry.on.back-go-INTS3-TEL-DYNM person=FEM-OBJ
 ‘(He) carried the girl a LONG way off!’ (AJ)
- (93) *ʔāñ mæy-tubud-pó-y páh yú-wa, cəc!*
 1sg.OBJ owe-INTS3-EMPH1-DYNM PRX.CNTR that.ITG-old.woman INTJ
 ‘That old girl really owes me, dang it!’ (B.Cv.4)

-ni- Auxiliary: indicates that the subject has entered a state in which the event is occurring or has relevance; often serves to set the stage for a description of other concurrent events. Free verb stem: ‘be’. The verb *ni-* is used in a number of non-canonical ways in Hup (see §8.4).

- (94) *tīh-āñ yɔʔ=d’əh tuk-ní-ay-áh ...núp tīh tɔʔɔh-ham-ní-ay-áh*
 3sg-OBJ wasp=PL sting-be-INCH-DECL ... here 3sg run-go-be-INCH-DECL
 ‘The wasps are stinging him... here he’s running away.’ (looking at a picture) (FS.7)
- (95) *tiyʔ=b’ay key-d’ob-g’et-ní-ay-áh*
 man=AGAIN see-descend.to.river-stand-be-INCH-DECL
 ‘There was a man standing on the bank looking down at her.’ (I-M.1)

- (96) *tĩh=tæh ĩn nĩh hupáh=mah tĩh tawak-g'ā ĩ-pog-nĩ-ay-áh*
 3sg=child.mother POSS back=REP 3sg be.stiff-hang.suspended-EMPH1-be-INCH-DECL
 'He was stuck stiffly against his wife's back.' (I-M.12)
- (97) *tedé=d' əh-əĩ tĩh bi ĩ-nĩ-cĩp-ĩh*
 three=PL-OBL 3sg work-be-COMPL-DECL
 'He's worked with three of them.' (P.Sp.110)

-g'et- Auxiliary: 'stay'. Free verb stem: 'stand'.

- (98) *j'āp mi-ít pæ-g'ét-ep=b'ay*
 other river-OBL go.upstream-stand-DEP=AGAIN
 'They went and stayed up another river.' (LG-C.28)
- (99) *həh mĩ ĩ=yĩ? d'ak-g'o ĩ-key-yó ĩ=mah tĩh cak-wob-g'ét-éh*
 canoe UNDER=TEL stick.against-go.about-see-SEQ=REP 3sg climb-rest.on-stand-DECL
 'After being under the canoe for a while, he climbed in again (to stay)' (LG-C.13)
- (100) *nænɔ tæh=d' əh n'ikán d'ob-g'et-nĩ-ay-áh*
 Miriti.Tapuyo offspring=PL over.there go.to.river-stand-be-INCH-DECL
 'The Miriti-Tapuyo went down (to river) and stayed' (H.36)

-j'ap- Auxiliary: 'stop doing V'. Free verb stem: 'break/divide in two' (cf. English

'break off doing V'). Use of this verb as an auxiliary is relatively infrequent; it is much more common as a free verb stem.

- (101) *nupm'æ ĩh ĩ-ag-j'ap-yĩ ĩ-ĩ*
 at.this.time 1sg drink-break-TEL-DYNM
 'I quit drinking at about this time (of day).' (TD-Cv.99)
- (102) *hi-mĩ ĩ-g'ě ĩn bi ĩ-j'ap-yĩ ĩ-ĩ*
 FACT-UNDER-stand 1pl work-break-TEL-DECL
 'We'll stop working at noon.' (RU)

c. Compound-initial auxiliary-type forms

There are at least two cases of auxiliary-like forms that occur compound-initially, rather than compound-finally. Unlike the compound-final forms like those above, which tend to develop into Inner Suffixes or clitics with grammatical functions, these pre-forms are becoming lexicalized together with the verbs with which they regularly occur to form a new set of fused lexical items.

The verb *kəd-* can be used as an independent verb stem meaning ‘pass (by)’, as well as a compound-final auxiliary-type form acting as an Elative marker (see §15.1.3.3), but when it precedes motion/path verbs in compounds it indicates speed. Verb compounds with *kəd-* tend to be phonologically reduced, but most speakers are able to separate them in slow speech. Phonological processes involve the reduction of the consonant cluster and the harmonization of the initial vowel with the following vowel. Such forms include: *kəd-ham-* [karam] ‘go quickly’; *kəd-d’ob-* [kod’ob] ‘go down to water quickly’; (*d’oʔ-*)*kəd-næn-* [kænæn] ‘(bring) come quickly’; *kəd-way-* [karay] ‘go out quickly’; *kəd-hi-* [kiri] ‘descend quickly’; *kəd-cak-* [kasak] ‘ascend quickly’; and *kəd-wag* [kawag] ‘dawn’ from the ‘verby’ noun ‘day’ (cf. §4.1.3).

The verb *wɪd-* likewise precedes motion/path verbs in compounds, and contributes the meaning ‘arrive’. As an independent verb, its semantics are quite distinct: ‘fish-spawn’, i.e. the arrival and passing of large numbers of fish during their upriver journey. Addition of the Factitive prefix *hi-* gives rise to a distinct main verb, the form *hi-wɪd-* ‘arrive (to where someone is), meet (someone)’. Despite their more opaque

semantics, these forms are less phonologically reduced than the compounds with *kəd*-; consonant clusters are simplified, but vowel quality varies between V and *i*. These compounds include: *wid-ham*- [wɪrɑm] ‘arrive (going)’ (from travelers’ point of view); *wid-næn*- [wɪræn] ‘arrive (coming)’ (from residents’ point of view); *wid-ye*- [widye] ‘arrive inside’ (also: arrive in village from a short foray); *wid-d’ob*- [wid’ob] ‘arrive down at river’; *wid-cɔp*- [wisɔp] ‘arrive up from river’; *wid-hi*- [wiri] ‘arrive downstream’, *wid-pæ*- [widpæ] ‘arrive upstream’.

In the context of ‘nested’ compounds, the ability of the component stem to be repeated illustrates the distinct identity of the relexicalized, compound-internal form from its function as a main verb, as in example (103).

- (103) *tɪh hup-kəd-[kədhi]-yɪʔ-ní-p=b’ay*
 3sg RFLX-pass-pass.descend-TEL-INFR2-DEP=AGAIN
 ‘She turned around (lit. REFLEXIVE-pass) and went back down quickly.’ (I-M.20)

9.4.3. Maximal integration: stems and formatives

As discussed in §3.4.1.3, Hup has a class of formatives, the Inner Suffixes, which occur in exactly the same position in the verb word as do compound-final verb stems (whether main verbs or auxiliary/vector stems)—that is, following the other verb stems in the word, but preceding the Boundary Suffix and peripheral formatives. An example of an Inner Suffix is the Ventive marker *-ʔay-* (cf. §12.7):

- (104) *b’ɔ̃-an ham-ʔáy-áy ʔám ?*
 roça-DIR go-VENT-DYNM 2sg
 ‘Have you just returned from the roça?’ (OS)

In addition, many of Hup's peripheral formatives (enclitics and particles) are able to occur in Inner Suffix position, and do so when followed by certain vowel-initial Boundary Suffixes (particularly the Declarative marker *-Vh*), as discussed in §3.5. Many of these forms are formally identical to—although semantically distinct from—verb stems. This flexibility between peripheral and Inner Suffix position is illustrated by the Frustrative marker *yæh* (cf. §14.4) in examples (105a-b); the same form also occurs as the verb stem 'request, order, compel' in (105c):

- (105) a) *núw-ǎñ ɭǎh túk-úy yæh*
 this-OBJ 1sg want-DYNM FRST
 'I'd like this one (but I don't expect to get it).' (EL)
- b) *núw-ǎñ ɭǎh tuk-yæh-æh*
 this-OBJ 1sg want-FRST-DECL
 'I'd like this one (but I don't expect to get it).' (OS)
- c) *deh cǎy-ǎñ tɨh hop-yæh-æh*
 water beetle-OBJ 3sg immerse-command-DECL
 'He sent the water-beetle down into the water.' (M.DT)

Clearly, these Inner Suffix forms resemble verb stems within compounds—both by virtue of their place within the verb word, and of the fact that a number of formatives are formally identical, or near-identical, to verb stems. As discussed in detail in §3.7, these formal overlaps between stems and formatives are indicative of a grammaticalization cline in Hup: verb stem > vector/auxiliary stem > Inner Suffix > (peripheral formative). Aikhenvald (2002: 127) observes that the grammaticalization of a compounded verb is a typical process among Eastern Tukanoan languages as well, so its presence in Hup may be part of a larger areal phenomenon.

Like the distinction between verb stem and auxiliary, that between auxiliary and Inner Suffix is not black and white. Essentially, most Inner Suffixes can be understood as highly grammaticalized auxiliaries, which in many cases have no counterparts that can act as main or independent verbs—or if they do, the two are fully distinct semantically. Many of these forms have undergone phonological reduction of their final consonant, although this is limited to the context of vowel-initial Boundary Suffixes. Many morphemes in Hup appear to be in a transitional stage between verb stem and formative. The variants *tuk-* / *-tu-* ‘want, imminent future (proximative)’, listed with the auxiliaries in §9.4.2.4b above, are an example of such a borderline case. Another example is the Completive aspect marker *-cɿp-* / *-cɿw-* (cf. §12.5), as in examples (106-7). The form *cɿp-* also occurs as a verb stem, but in an extremely limited context (which also has to do with completing), referring to the final stage of making a basket. Despite their distinct semantics, both forms probably derive from a common verb stem. The grammaticalization process may have involved both semantic generalization in the case of the inflectional affix and specification in the case of the independent stem.

- (106) “*b’oŷ=d’əh tɿh=pŏg=d’əh wæd-d’oʔ-næn-cɿw-ɿy*” *nɿɿ-ɿy=mah*
 traira=PL 3sg=big=PL eat-take-come-COMPL-INPF say-DYNM=REP
 ‘The big traira have already come to eat (take the bait), he said.’ (I-M.23)
- (107) *yɿ-nɿh-yóʔ, ʔəg-hi-cɿp-yóʔ ní-íy, pəʔ-hi-cɿp-yóʔ ní-íy...*
 thus.SEQ drink-FACT-COMPL-SEQ be-DYNM present-FACT-COMPL-SEQ be-DYNM
 ‘So, having finished drinking, having finished presenting the ritual gift...’
 (M-KTW.106)

Just as the distinction between auxiliary and Inner Suffix is blurry, so is that between Inner Suffix and peripheral formative, due to the ability of peripheral formatives

to occur in Inner Suffix position when some vowel-initial Boundary Suffixes (with the crucial exception of the Dynamic marker) are present in the verb word. Those forms that are formally identical to a main verb stem blur the distinction even further, as illustrated by example (105) above. In addition to Frustrative *yǎh*, other peripheral formatives that resemble existing verb stems and can occur in Inner Suffix position are the Repetitive marker *=b'ay* 'again' (verb stem 'return'), the Elative marker *=kǎd* (verb stem 'pass'), the Nonvisual evidential *=hǎ* (verb stem 'make noise'), and the Inferred evidential *=cud* (verb stem 'be inside'; see discussion in §3.5-7 and the sections devoted to these morphemes). While usually quite distinct semantically, some of these forms can occasionally be semantically ambiguous when they appear in Inner Suffix position. For example, the Nonvisual evidential *=hǎ* in example (108) lacks the final *h* of the verb stem *hǎh*- 'make noise', but both an evidential and a verbal interpretation are semantically/pragmatically appropriate:

- (108) *himuñ=hǎb* *d'oʔ-d'ǎh-ǎy* *hám,* *yúp* *nǎh-kǎd-hi-hǎǎ*
 paxiuba.tree=hollow take-send-VENT go.IMP that.ITG fall-pass-descend-Noise-OBJ
 'Go fetch a paxiuba-tree-hollow, that one that I just heard fall (OR: that just fell, making noise).' (M.KTW)

Despite such fuzzy boundaries, those morphemes that act as peripheral formatives are clearly far diverged from verbhood. Many, such as the Nonvisual and Inferred evidentials, can occur with non-verbal hosts, and most of these formatives can co-occur with their verbal look-alikes within the same verbal construction:

- (109) *híd* *key-b'áy=b'ay-áh*
 3pl see-return=AGAIN-DECL
 'They go back again to see.' (P.F.125)

- (110) *ʔñ-añ b'ɣiʔ tih d'ob-yǎñ-cud-yǎñ-ǎñ*
 1pl-OBJ only 3sg descend.to.river-order-INFR-FRST-DECL
 'He told only us to come down to the river (in vain).' (B.H)

9.5. Restrictions on compounding

Durie (1997: 326-9) observes that in serializing languages, it is not always obvious (to the non-native speaker) when and why an event must be coded as two distinct predicates; one commonly encounters “examples of ungrammatical sentences where the writer is at a loss for explanation” (Durie 1997: 326). However, he notes, the explanation is usually simple: ungrammatical sentences are “less plausible event-types” than the grammatical cases. Moreover, what is considered a plausible event-type may vary with the language and the culture of its speakers.

Ungrammatical verb compounds in Hup can usually, like the serial verbs discussed by Durie, be explained as less plausible event types. However, the exact type of event encoded (thus their grammaticality) has much to do with the semantic category of the stems (especially the final stem), as discussed in §9.4.2.1 above. In compounds where the first stem is a manner/activity verb, the compound is much more likely to be grammatical if the second stem is of the closed motion/path or position class, and ungrammatical if the second stem is another manner/activity verb, even if the difference in meaning between the stems appears to be negligible. Thus to describe children shrieking while bathing, one can form a compound with *pĩk-* ‘shriek’ and the motion/path verb *tuʔ-* ‘go into water’, but one cannot combine these with the manner/activity verb *j'əm-* ‘bathe’, as we see in examples (111-12).

- (111) *dóʔ=d'əh pĩk-túʔ-úy, j'əm=d'əh*
 child=PL shriek-go.into.water-DYNM bathe=PL
 'The children are shrieking in the water while bathing.' (EL)

- (112) **pĩk-j'əm-əy*
 shriek-bathe-DYNM

Similarly, both *j'əm-* 'bathe' and *pĩk-* 'shriek' can combine with the motion/path verb *ham-* 'go', but the three cannot co-occur to form a compound meaning 'shriek while swimming'. Such information must be conveyed via an adverbial construction. The possibilities are illustrated in example (113).

- (113) a) *j'əm-hám-áy*
 bathe-go-DYNM
 'swimming'
- b) *pĩk-hám-áy*
 shriek-go-DYNM
 'going along shrieking'
- c) **pĩk-j'əm-hám-áy*
 shriek-bathe-go-DYNM
- d) *pĩk-ĩp=yíʔ j'əm-hám-áy*
 shriek-DEP=TEL bathe-go-DYNM
 'Shrieking while swimming' (EL)

Likewise, *ʔey-yəhəy-* (call-look.for) is grammatical (see example 42 above), since calling and looking for someone/something is easily conceived as a unitary event, but 'call' and 'run' can only combine in an adverbial clause, as in example (114).

- (114) a) *tĩh-ǎñ ʔey-ep=yíʔ ʔǎh tɔʔəh-əy*
 3sg-OBJ call-DEP=TEL 1sg run-DYNM
 'I'm calling him while running.' (EL)
- b) **ʔǎh tĩh-ǎñ ʔey-tɔʔəh-əy*
 1sg 3sg-OBJ call-run-DYNM

Compounded forms are likewise ungrammatical when stems have different subjects and there is no causation involved, as in example (115).

- (115) a) *tĩh way-yĩʔ-mĩʔ, ʔãh yú-úh*
 3sg go.out-TEL-TEMP.CL 1sg wait-DECL
 ‘I’ll wait for him to go out.’ (EL)
- b) *ʔãh tĩh-ãñ way-yu-té-h*
 1sg 3sg-OBJ go.out-wait-FUT-DECL
 ‘I’ll go out to wait for him.’ (EL)
- c) **ʔãh tĩh-ãñ yu-way-té-h*
 1sg 3sg-OBJ wait-go.out-FUT-DECL
 [Intended meaning: ‘I’ll wait for him to go out.’]

9.6. Noun incorporation

Noun incorporation is not, in general, a productive process in Hup. However, it does appear to exist in limited form.

First, there are a few frozen expressions that combine both noun and verb roots and are on their way to becoming lexicalized as single words. These include *hũ-mæh-* (game.animal-kill) ‘hunt’, and *cĩh-wĩʔ-* (scent-hear-) ‘smell’. In the latter example, the lexicalization of the noun-verb compound into a monomorphemic verb is illustrated by phonological reduction: it is usually pronounced *cãwĩʔ-* (with vowel harmony and nasal spreading), especially in the Tat Deh/ Eastern dialect region. Others are idiomatic and more fully lexicalized, such as *hɔ-wæd-* (apparently ‘liver-eat-’) ‘be thirsty’. There are also a few forms built on the kin term *báb* ‘sibling’, of which the most common is *bab’-ʔid-* (sibling-speak) ‘chat together’ (cf. §11.2 Historical Note).

Since objects usually precede verbs in Hup clauses, these incorporated forms may represent lexicalization of frequently co-occurring forms, rather than an actual morphosyntactic *process* of noun incorporation. However, they may also be a fossilized remnant of a strategy that was more productive in the past. Noun incorporation is very productive in Hup's sister language Nadëb (Weir 1990) and is also productive in Dâw (Martins 2004), which suggests that it may be an old strategy which perhaps was present in the proto-language.

Another phenomenon in Hup that resembles noun incorporation is limited to the context of reciprocal/pluractional or reflexive expressions that involve a ditransitive verb with an explicitly stated nominal object. In this environment, the Reciprocal marker *ʔiħ* and the Reflexive *hup-*, normally verbal prefixes, optionally detach from the verb and precede the object, while taking on the phonologically independent status of prepositional particles (example 116). That the object in this construction cannot inflect or be modified in any way, and that it lacks independent stress, suggest that it forms a grammatical unit with the verb (see §11.1 and §11.2).

- (116) *híd ʔiħ nam nɔʔ-ɔy*
 3sg RECP poison give-DYNM
 'They give poison to each other.' (LG.txt)

Other constructions in Hup may resemble incorporation at first glance, but are better characterized as verb root compounding. These cases involve those roots that can occur as independent nouns (with the contrastive tone characteristic of Hup nouns), but can also receive inflection and act as verbs (which do not have contrastive tone); an example is *wæd* 'food' and *wæd-* 'eat' (see §3.1). These flexible roots are distinct from

the nominal components of the forms in the examples above, which cannot inflect as verbs. An example of a flexible root's use in a compound is given in example (117). Here the root *wãʔ*—also a noun meaning ‘vulture’—is used as a verb meaning ‘make an infant sick (with diarrhea and vomiting) by engaging in sexual relations too soon after its birth’. That this should be considered root compounding and not incorporation is supported by the ability of the root *wãʔ* to inflect and act as a predicate (*wãʔ-ã́y*) in its own right.

- (117) *tʃh-dóʔ-ãñ wãʔ-pay-yæt-yfʔ-ťy...*
 3sg-child-OBJ make.‘buzzard-sick’-bad-lie-TEL-DYNM
 ‘(She) made the child ‘buzzard-sick’... (H.T)

While none of these are clear cases of noun incorporation, Hup does have one process that appears to be a bona fide example of the phenomenon. This is strictly limited to verbal constructions involving the stem *ni-* ‘be’—a non-canonical verb in a number of ways, as discussed in §8.4. In general, these constructions involve a nominal root which—unlike *wãʔ* and other flexible noun-verb roots—cannot receive inflection and act as a verbal predicate by itself; however, when followed by *ni-*, the combination produces a true verbal form.

These incorporating constructions are not fully productive, and in many cases have conventionalized, idiomatic meanings. In others, the verbal incorporating form has the meaning ‘have N’. Examples from my corpus are *yʃh-ni-* (medicine-be) ‘give

medicine'; *cəh-ni-* (?-be)¹¹⁴ 'dream'; *doʔ-ni-* (child-be) 'be a child', *tok-ni-* (belly-be)

'be pregnant' (person only), and the following:

təh-ni- (offspring/son-be) 'give birth; have a child'

- (118) *ʔám-ǎn ʔǎh təh-ní-íy, tǎh*
 2sg-OBJ 1sg offspring-be-DYNM son
 'You are my son, Son.' (lit. 'I son-have you') (H.71)

həm-ni- 'have sores'

- (119) *ʔǎh həm-ni-pó-y=nih páh-áh, cǎc!*
 1sg sore-be-EMPH1-DYNM=EMPH.CO PRX.CNTR-DECL INTJ
 'I really have some sores, dang it!' (B.Cv.88)

cum-ni- 'begin' (compare *tǎh=cúm* 'the beginning, first part')

- (120) *ʔín b'oy-cum-ni-yǎh-ǎh*
 1pl study-beginning-be-FRST-DECL
 'We began studying (in vain).' (P-B.1)

hɔ-ni- 'to think about something' (*hɔ* 'liver')

- (121) *cǎ-wag ʔǎh hɔ-ní-íy, w'éh-éy=ʔǎy=mǎʔ j'ám*
 other-day 1sg liver-be-DYNM far-DYNM=FEM=UNDER DST.CNTR
 'Sometimes I think, "I'm a woman from far away"...' (T.PN.3)

doʔ-d'əh-ni- 'have children, be a parent' (uses a plural incorporated noun regardless of number of referent)

- (122) *ʔp ʔǎn doʔ-d'əh-ni-yóʔ*
 father 1sg.OBJ child-PL-be-SEQ
 'After father had me...' (txt)

yəh-ni- 'have as in-laws'

- (123) *ba ʔǎb'=n'ǎn ʔayǔp=ʔǎh yəh-ní-íh*
 spirit=PL.OBJ one=MSC in.law-be-DYNM
 'A man had spirits for in-laws.' (i.e. he had married a spirit woman).

bab'-ni- 'accompany, be accompanied by; be consanguinally related to'

- (124) *ʔapóncu-ǎn ʔǎh bab'-ni-té-h*
 Alfonso-OBJ 1sg sibling-be-FUT-DECL
 'I'll be accompanied by Alfonso.' (OS)

¹¹⁴ There is no verb *cəh-* in Hup. There is also no noun meaning 'a dream'. The form *cəh* also appears in *cəh-cóʔ* (-LOC) 'left-hand' (side, direction), and *cəh* refers to the islands formed in the areas of flooded forest during the rainy season.

kəd-ni- ‘be seated on a bench’ (uses the nominal form *kəd* ‘bench’, as opposed to the verb *kəd-* ‘pass’ or the auxiliary form ‘quickly’)

- (125) *núp ʔāh kəd-ni-ye-pæm-ʔé-p=yíʔ*
 this 1sg bench-be-enter-sit-PERF-DEP=TEL
 ‘There on the bench where I’d sat when I entered...’ (TD.102)

hat-ni- literally ‘having a name’; used in nominalized form to mean ‘an important person’

- (126) *hat-ní-ip=ʔāy*
 name-be-DEP=FEM
 ‘An important woman’ (txt)

There is considerable evidence that these constructions involve the incorporation of a noun into a verbal construction, and that they form a distinct, probably closed class vis-à-vis the open, fully productive set of intransitive clauses of the type [noun *ni-*], which have the meaning ‘X exists’, ‘X is here’. First, the incorporated [noun + *ni-*] compounds form single phonological words: they take a verbal stress pattern (where stress falls on the final stem and/or inflectional affix), there is no pause phenomena dividing the noun from the verb, and the incorporated noun lacks distinctive tone (contrastive tone is characteristic of Hup nouns, but is not usually realized on Hup verbs; see §2.3.2.2). Second, the idiomatic meanings of some of these constructions supports their analysis as a set of compounds distinct from intransitive clauses; for example, *bab’-ni-* (sibling-be) ‘be accompanied by; accompany’ may refer specifically to siblings, but need not; also compare *hɔ-ni-* (liver-be) ‘think about something’, etc.

In addition to these factors, incorporating forms differ syntactically from intransitive clauses with *ni-*. For example, the incorporated verbs take a nominative pronoun, whereas non-incorporated nominal constructions can only take a possessive

pronoun. This is illustrated in example (127) for *cǎh-ni-* ‘dream’ and (128) for *wan* *ni-* ‘knife exists’:

- (127) a) *ǎh cǎh-ní-íy*
 1sg dream-be-DYNM
 ‘I dreamed.’ (OS)
- b) **nǎ cǎh ní-íy*
 1sg.POSS dream?? be-DYNM
- (128) a) **ǎh wǎn ní-íy*
 1sg knife be-DYNM
- b) *nǎ wǎn ní-íy*
 1sg.POSS knife be-DYNM
 ‘My knife exists/ is here.’ (i.e. ‘I have a knife.’) (EL)

However, some nouns can occur both in intransitive clauses with *ni-* and in incorporated constructions, as illustrated in example (129-30).

- (129) *ǎh hǎm-ní-íy*
 1sg sore-be-DYNM
 ‘I have a sore/sores.’ (EL)
- (130) *nǎ hǎm ní-íy*
 1sg.POSS sore be-DYNM
 ‘My sore exists.’ (i.e. ‘I have a sore.’) (EL)

Another syntactic indication of incorporation is the fact that non-incorporated *ni-* clauses are intransitive, whereas many incorporated constructions can take a direct object which is distinct from the incorporated noun. That the incorporated noun is itself not a direct object is evidenced by the fact that it *cannot* be marked for case, despite its number and animacy, whereas case-marking is obligatory for plural and human direct objects.

Examples (131-32) show plural, human incorporated nouns that are unmarked for case, with and without (case-marked) direct objects in the clause; example (133) shows an incorporated form used as a nominalized, headless relative clause, in which the object-marking occurs on the entire nominalized verb form but not on the incorporated noun.

- (131) *ka ʔǎp tã ʔǎy=d' əh tǎh-ní-íh*
 two woman=PL child-be-DECL
 'Two women gave birth/ had children.' (EL)

- (132) *ka ʔǎp=n'ǎn tih tǎh-ní-íy*
 two=PL.OBJ 3sg child-be-DYNM
 'She had twins.' (EL)

- (133) *ʔǎh hǎm-ní=n'ǎn hi-kéy-éy*
 1sg sore-be=PL.OBJ FACT-see-DYNM
 'I take care of those with sores.' (EL)

In contrast, examples (134-35) show non-incorporated direct objects with obligatory case marking.

- (134) ... *ʔǎh nǎh, ní tǎh=n'ǎn*
 1sg say-DECL 1sg.POSS child=PL.OBJ
 '...I said to my children.' (txt)

- (135) *ní hǎm=n'ǎn ʔǎh hi-kéy-éy*
 1sg.POSS sore=PL.OBJ 1sg FACT-see-DYNM
 'I take care of my sores.' (EL)

More evidence that the incorporated compound forms a single lexical item comes from one case—that of *do ʔ-d' əh-ni-* 'have children, become a parent'—in which an incorporated noun is obligatorily marked for plural. This plural-marking is frozen into the compound construction and does not change with the pragmatics of the situation (i.e. it appears regardless of whether the entities in question are actually single or multiple, as

in example (122) above and in (136). Note that the incorporated singular form has a completely different meaning, *do ʔ-ni-* ‘be a child’ (example 137).

- (136) *ʔāh do ʔ-d' əh-ní-íy*
 1sg child-PL-be-DYNM
 ‘I have children; I am a parent.’ (even if only one child) (EL)

- (137) *ʔāh do ʔ-ní-íy*
 1sg child-be-DYNM
 ‘I am a child.’ (EL)

In addition, incorporating *ni-* constructions act as units in derivation and other verb-related processes. They appear in the middle of longer verb compounds, such as *b'oy-cum-ni-* (study-beginning-be-) ‘begin to study’ in example (120) above, and can take verbal valency-adjusting prefixes like any other verb:

- (138) *hi-bab'-ni*
 FACT-sibling-be
 ‘four’ (lit. ‘caused to have a sibling/companion’)
- (139) *ʔūh-bab'-ni-d'o ʔ-yíʔ-íy*
 RECP-sibling-be-take-TEL-DYNM
 ‘Come to live with relatives (after having lived away)’ (EL)

Finally, still more evidence that the [noun + *ni-*] forms involve incorporation comes from negation strategies, which are different for predicate nominals and for verbal predicates (see chapter 16). Nominals may be negated with the ‘negative existence’ particle *pā̃* (‘is not present, does not exist’; example 140a), while verbal negation requires the suffix *-n#h* on the verb (140b). Incorporating forms typically take verbal negation (example 141).

- (140) a) *hǎp pǎ*
 fish NEG:EX
 ‘There are no fish; I have no fish.’ (OS)
- b) *hǎp kək-nǎ*
 fish pull-NEG
 ‘(He’s) not fishing.’ (EL)
- (141) *bab’-ni-nǎ j’ǎh ʔǎh=ti ʔ!*
 sibling-be-NEG DST.CNTR 1sg=EMPH.TAG
 ‘I have no one/ no siblings to accompany me.’ (T.PN.3)

As noted above, the productivity of incorporation with *ni-* appears to be limited; most incorporated forms are conventionalized and many have developed idiosyncratic meanings. However, there are one or two examples in my corpus where speakers use incorporating forms that are highly lexically specific and unusual, suggesting that the process may occasionally be used to produce new, non-conventionalized forms, as we see in example (142):

- (142) *ní-íy=mah, póʔd’ah cóʔ, d’ub-ní=d’ǎh*
 be-DYNM=REP upriver LOC tail-be=PL
 ‘They exist, they say, upriver; those (people) who have tails.’ (LG.C.21)

Comparative Note

Noun incorporation with *ni-* in Hup may be motivated by contact with Tukano, which uses a verbalizer *-ti* to make a noun into a verb meaning ‘have N’ (Ramirez 1997: 353). For example, the Tukano noun *pō’ra* ‘children’ (generic/suppletive plural) is verbalized with the *-ti* suffix to produce *pō’ra-ti* ‘have children’, just as Hup *doʔ=d’ǎh* ‘children’ (regular generic plural) occurs in the compound *doʔ-d’ǎh-ni-* ‘have children’ (136 above), and *d’ub* ‘tail’ occurs in *d’ub-ni-* ‘have a tail’ in (142) above.

10. Adjectives and adverbial expressions

This chapter addresses those parts of speech that are functionally and/or formally related to the verb. These are the adjectives, which form a small, closed class of their own, and the adverbial expressions, which are not a distinct word class in Hup, but are derived from other parts of speech and function as modifiers of the verb phrase. Because Hup's adjectives and adverbials are best understood in their relation to the verb, and—in the case of the adjectives—they act much like verb roots for morphosyntactic purposes and take many essentially verbal markers of aspect, mode, and valency (which are discussed in the following chapters), they are treated at this point in the grammar.

In addition to the more simple adverbials, Hup's strategies for expressing comparison—which typically use an adverbial phrase to present the standard of comparison—are also discussed in this chapter. Finally, locative postpositions, which combine with nouns to form adverbial phrases (or in some cases stand alone as spatial adverbs) are treated in the last section.

10.1. Adjectives

The class of adjectives is distinct from the classes of nouns and verbs in Hup (see §3.1.3). Adjectives' most crucial defining characteristics are the following: as predicates, they pattern much like verbs in their ability to take most verbal inflection, but unlike verbs they can appear in predicative position without a Boundary Suffix. As modifiers of nouns, adjectives are distinct from nominal modifiers in compounds in that they follow

the head noun (N[head] + Adj[mod]), whereas nominal modifiers precede the head noun (N[mod] + N[head]).

Adjectives in Hup make up a closed class, while other adjectival meanings are expressed by verbs. Semantically, a large proportion of the Hup adjectives denote dimension, color, age, and value—the range of meanings that Dixon (1977) notes as cross-linguistically most likely to be included in the adjective class (cf. Schachter 1985: 14-15). The following list of forms comprises the majority of the adjective class:

<i>náw</i>	‘good, beautiful’
<i>húp</i>	‘new, beautiful’, ¹¹⁵
<i>páy</i>	‘bad, ugly’
<i>póg</i>	‘big’
<i>w’ǎ</i>	‘long’
<i>w’ěh</i>	‘far, distant’
<i>g’ǎʔ</i>	‘thick’
<i>dǎb</i>	‘many’
<i>wán</i>	‘deep’
<i>cǐpmǎh</i>	‘small’, ¹¹⁶
<i>tǎh</i>	‘small’
<i>bǐg</i>	‘old (non-human)’, ¹¹⁷
<i>titíʔ</i>	‘dirty’
<i>yíb</i>	‘slippery, slick’
<i>tab’áʔ</i>	‘hard, dense’
<i>pǎb</i>	‘strong, fast’
<i>póh</i>	‘high’
<i>tú</i>	‘low’
<i>yǎw</i>	‘straight’
<i>tút</i>	‘cold’
<i>m’ǎ</i>	‘cold (water)’

¹¹⁵ Occurs more often in fused nominal form *tuhúp* (from *tǎh=húp*).

¹¹⁶ This adjective is distinct from the others; it contains Diminutive form *mǎh*, and lacks the ability to take most verbal inflection. It also cannot take the bound nominal form *tǎh=*, and is accordingly does not occur as the head of an NP (see also §6.6).

¹¹⁷ The forms *wǎhǎl* ‘old (man)’ and *wá* ‘old (woman)’ can be used as adjectives, but are also members of the noun class and are typically used as bound nouns (see §4.1.1).

<i>g'í</i>	'hot'
<i>yíwík</i>	'heavy'
<i>cíġ</i>	'sharp'

Color terms:¹¹⁸

<i>(tíh=)dó</i>	'red, pink' (also used for some yellow/orange things, particularly ripe fruits, flames of fire)
<i>(tíh=)cǵ</i>	'brilliant red (esp. face or body paint)'
<i>(tíh=)tohó</i>	'white'
<i>(tíh=)pǵpǵ</i>	'blue, green' (also used for yellow leaves)
<i>(tíh=)pohó</i>	'yellow'
<i>tíh=pǵy-j'ǵ</i>	'yellow' (lit. 'thunder-flower', a common, bright yellow flower)
<i>(tíh=)j'á</i>	'black ; dark colors in general'
<i>(tíh=)tītíh</i>	'black, dark'

The behavior of adjectives appearing as modifiers in noun phrases has already been covered in detail in §6.6. The most important features of adjectival modifiers are the [N Adj] word order within the NP, as mentioned above, and the fact that they are obligatorily bound to a preceding nominal (example 1). The adjective can itself head the NP, but as such it must take a default preceding nominal, the bound 3sg pronoun *tíh=* (example 2). Adjectival modifiers are an integral part of an NP, and accordingly function (together with the head noun) as nominalizations.

- (1) *tíh wǵn-hám-ay-áh, té tod pǵ g'et-pó-ow-ĥ=mah*
 3sg follow-go-INCH-DECL until hollow.tree big stand-EMPH1-FLR-OBL=REP
 'She went after (the spirit), to where a big hollow tree stood, they say.' (P.TB.2)
- (2) *tíh=pǵ nǵh-yíġ-ĥ*
 3sg=big fall-TEL-DYNM
 'The big one fell.' (EL)

¹¹⁸ The color terms typically appear in nominalized form with *tíh=*, even as predicates, but this is not obligatory.

The remainder of this discussion focuses on defining the properties of the adjective as a predicate. These properties are essentially verbal, yet are distinct from those of verbs in a number of important ways. Note that the more general clause-level properties of adjectival predicates—particularly in comparison to nominal predicates—are not addressed here, but are covered in §17.3.3.2.

Predicate adjectives typically appear in ‘bare’ form, lacking the Boundary Suffix that is obligatory for members of the verb class, as in examples (3-4). In this respect, they are in fact not unlike predicate nominals (see §17.3.3.1), which likewise appear without inflection, and do not usually require a copula.

- (3) *wowó=hin náw pǐd, hehé=hin náw pǐd*
 wowo.flute=also good DIST pan-flute good DIST
 ‘The *wowo* flute is also nice; the pan-flute is also nice.’ (H.txt.23)

- (4) *póg=mah tǐhǐy tód-óh, w’ǎ=mah*
 big=REP snake hollow-DECL long=REP
 ‘The snake’s hollow log was big, long, it’s said.’ (H.txt.44)

Crucially, however, predicate adjectives (with the exception of *cǐpmǎh* ‘small’; see footnote 116 above) differ from nominals in that they can optionally take any Boundary Suffix, particularly those aspect-marking inflectional forms that are normally associated only with verbal predicates, as well as most other verbal formatives. In most cases, the use of verbal aspectual inflection with an adjective indicates a dynamic state, relating to change or impermanence (see also §12.2):

- (5) a) *yúp tegd’uh póg*
 that.ITG tree big
 ‘That tree is big.’

- b) *yúp tegd'uh póg-óy*
 that.ITG tree big-DYNM
 'That tree is getting bigger.' (EL)
- (6) a) *tiyĩ? náw*
 man good
 'The man is good/handsome.'
- b) *tiyĩ? náw-ay*
 man good-INCH
 'The man is well/ satisfied after eating.' (EL)

Also like verbs, adjectives must be negated via a clausal negation strategy, rather than a nominal negation strategy (see §16.1.4). Examples of this process include *yiwik-nĩh* 'not heavy; light', *dəb-nĩh* 'not many; a few', and the following:

- (7) *g'ĩ-nĩh=hɔ̃ yuw-uh!*
 hot-NEG=NONVIS that-DECL
 'It's not hot!' (B.Cv)
- (8) *lamĩh pǎt w'ǎ-nĩh*
 2sg.POSS hair long-NEG
 'Your hair is not long' (EL)

Moreover, adjectives can appear in verb compounds, as if they were just another verb stem:

- (9) *nĩ mǎy ǎh hǎp-naw-yĩʔ-ay-áh*
 1sg.POSS house 1sg sweep-good-TEL-INCH-DECL
 'I swept my house well' (H.txt.56)

Finally, predicate adjectives can co-occur in bare form, as in (10); when they co-occur as modifiers, on the other hand, they require the bound form *tĩh=* (see §6.6).

- (10) *toho náw hĩdnĩh hohóđ-óh*
 white good 3sg.POSS clearing-DECL
 'It's beautiful and white, their clearing.' (because it is sand) (B.Cv2.131)

A final property of adjectives that distinguishes them from both nouns and verbs is their association with the Intensifier morpheme *muhún* / *mún* (dialectal variants; §15.1.2). This intensifier virtually never associates with nouns, and occurs with verbs only when these are negated by the clausal negator *-nʔh*; however, it is very common with adjectives in affirmative (as well as negative) utterances:

- (11) *títʔ muhún yúw-úh !*
 dirty INTS2 that.ITG-DECL
 ‘It’s really dirty!’ (OS)

- (12) *cǎp yǐʔ-ǎn=b’ay ʔam háy’-tǎǎn, yúp tʔh=páy muhún cáp-áh!*
 other man-OBJ=AGAIN 2sg mess.around-COND that.ITG 3sg=bad INTS2 INTS1-DECL
 ‘If you mess around with another man, that’s really really bad!’ (H.txt.60)

The Elative morpheme *-kǎd* also occurs with verbs and adjectives, but in the latter case, [adjective + Elative *kǎd*] form a compound adjectival unit, lacking a Boundary Suffix (see §10.2.2.2.A below). Elative *-kǎd* is always followed by a Boundary Suffix when it associates with verbs (i.e. it appears as part of the verbal compound).

While adjectives in Hup are best understood as comprising a closed class, there are a few cases in which uninflected verb stems follow nouns as modifiers. Although this is in general a diagnostic of adjectives as opposed to verbs or nouns, these uninflected verbal variants are not productive, but are frozen into specific lexicalized forms such as *kǎn pú* ‘shibé’ (a drink of farinha and water). They are therefore not considered to be part of the adjective class. Another unusual case is *dʔʔkey* ‘correct’, a lexicalized adjectival form derived from the verb compound *dʔʔkey-* (‘count-see’); this form is a derived adjective, but its etymological components are clearly members of the verb class.

10.2. Adverbs and adverbials

Adverbial expressions in Hup function as modifiers of the verb phrase, or in a few cases, of other adjectives (note that adjectives are more often modified by bound emphasis and intensifier morphemes; see §15.1-2). There is no distinct word class of adverbs; many adverbial expressions are simply adjectives used in an adverbial role, but nouns, verbs, and entire clauses can also function as modifiers of a verb phrase, as can ideophones (§15.7). This section focuses on simple adverbial expressions in Hup, including the clause-initial adverbial element *hĩ*, as well as Hup's strategies for expressing comparison—which generally rely on adverbials to indicate the standard of comparison. The variety of strategies that are used for deriving adverbial expressions from full clauses are discussed in §18.2.4.1 and §18.2.6.

Adverbial expressions in Hup are very frequently marked with the enclitic =*yĩʔ*. This form is nearly ubiquitous in the language, and has a number of functions which appear to be synchronically quite distinct—in addition to its role with adverbials, it appears as a verbal Telic suffix (§12.6), and as a marker of contrastive focus on nominal arguments (§7.1.2).¹¹⁹ On adverbials, =*yĩʔ* plays a marginally derivational role (extending to adverbial clauses; see §18.2.6.1). In some adverbial expressions, =*yĩʔ* is obligatory and appears to have the primary function of marking the phrase as adverbial, especially where its syntactic identity and function might be otherwise in doubt because

¹¹⁹ The historical and/or functional relationship (or even whether one actually exists) between these different manifestations of *yĩʔ* is not yet understood. Even the exact factors governing its use with adverbials are not at this point entirely clear.

of its membership in another word class. It is also present in many frozen adverbial lexical items. However, it is not obligatory on adverbial expressions generally.

Many adverbials in Hup are adjectives that do ‘double duty’ as verbal modifiers; they are simply used as adverbs as is, and occur without any overt derivation such as the presence of the adverbial marker =yíʔ. The most common of these adjectival adverbs include *pʰ* ‘fast’ (compare adjective ‘strong, fast’), *náw* ‘well’ (adjective ‘good, beautiful’), *páy* ‘badly’ (adjective ‘bad, ugly, strange’), *dɔʔkéy* ‘correctly’ (adjective ‘correct’), and *w’eh* ‘far’:

- (13) *náw ʔāh ni-nʰ-íp*
 good 1sg be-be.like-DEP
 ‘I do not live well’ (T.PN.23)
- (14) *tʰ ʔəg-əw-ay, náw cuʔ-yíʔ-íw-ay=mah-áh tʰ-íp*
 3sg drink-FLR-INCH good grab-TEL-FLR-INCH=REP-FOC 3sg-DEP
 ‘When he drinks, he ‘takes’ well (i.e. he doesn’t shake)’ (B.Cv.90)
- (15) *yúw-up w’eh cíʔ-íy bʰg j’ám-ap*
 that.ITG-DEP far urinate-DYNM HAB DST.CNTR-DEP
 ‘That one, (he) always urinates far away (from the house)’ (B.Cv.91)
- (16) *pʰ tʰ way-yíʔ-íy*
 fast 3sg go.out-TEL-DYNM
 ‘He went out fast.’ (EL)

While these forms do not in general require the adverbial form =yíʔ when used as adverbs, =yíʔ does appear to be necessary when the adverb directly *follows* the subject nominal, in order to distinguish it from an adjectival modifier within the NP. The following examples can be compared with (16) above:

- (17) a) *tiyíʔ pʰ=yíʔ way-yíʔ-íy*
 man fast=TEL go.out-TEL-DYNM
 ‘The man went out fast.’

- b) [tiyĩʔ **pʰ**] way-yĩʔ-ĩy
 man fast/strong go.out-TEL-DYNM
 ‘The fast/strong man went out.’ (EL)

In contrast to ‘fast’, ‘well’, ‘badly’, etc., many other adjectives normally take derivational =yĩʔ in order to act as adverbs in any context; these include ‘big’ and ‘small’ (examples 18-20). This tendency of adjectives to appear as adverbs with or without overt derivational morphology is determined largely on a lexically specific basis.

- (18) **póg=yĩʔ** wæd!
 big=TEL eat.IMP
 ‘Eat a lot!’ (OS) (commonly said upon invitation to share someone’s meal)
- (19) **cípmæh=yĩʔ** d’óʔ
 little=TEL take.IMP
 ‘Take just a little bit.’ (OS)
- (20) **tĩh=yawám=ʔǎy=b’ay** **cípm’æh=yĩʔ** náv-áh
 3sg=yng.sibling=FEM=AGAIN little=TEL good-DECL
 ‘His younger sister is only a little bit beautiful.’ (EL)

In a negative predicate, an adjective that modifies the verb normally occurs inside the verb compound; in other words, it is realized simply as a component verb stem in the compound, rather than as a derived adverb (see §16.1.4):

- (21) a) **tĩh** tɔʔɔh-**pʰ-n** **tĩh**
 3sg run-fast-NEG
 ‘He doesn’t run fast.’
- b) **pʰ** **tĩh** tɔʔɔh-ʔy
 fast 3sg run-DYNM
 ‘He runs fast.’ (EL)

In addition to adverbials derived from adjectives, Hup has a range of other adverbial expressions. These include the locative postpositions, discussed in 10.2.3

below. These appear together with nouns to form adverbial phrases, and can in some cases act as adverbials in their own right (particularly the subset ending in *-lah*, an etymologically unidentifiable morph), or in combination with the adverbial marker *=yíʔ*:

- (22) *máh=yíʔ tɬ ní-íy*
 near=TEL 3sg be-DYNM
 ‘He’s close by.’ (OS)

Hup also has a number of time adverbials, which include *nutǎñ* ‘today’, *j’əb* ‘(at) night’, *d’úʔ-ay* ‘(in the) afternoon’, *himíʔg’ě* ‘(at) midday’, *tán* ‘later (today)’, and *j’ám* ‘yesterday’. Other time adverbials are lexicalized or semi-lexicalized expressions that obligatorily involve *=yíʔ*, such as *núp-mæh-yíʔ* (this-DIM-TEL) and *nutǎñ-mæh-yíʔ* (today-DIM-TEL) ‘right now’ (example 23), *j’əb-tǎ-yíʔ* (night-still-TEL) ‘early morning’ (lit. ‘still night’), *d’əw-yíʔ* ‘today’ (possibly from the stative verb *d’əw-* ‘be new’), *j’ám-yíʔ* (yesterday/ DST.CNTR-TEL) ‘a long time ago’, and *páh-yíʔ* (PRX.CNTR-TEL) ‘a short time ago’ (example 24).

- (23) *nutǎñ=mæh=yíʔ ʔǎh wíʔ-tuk-hɤ-yǎh-ǎh!*
 today=DIM=TEL 1sg hear-want-NONVIS-FRUST-DECL
 ‘Right this minute I’d like to listen to it!’ (B.Cv.83)

- (24) *páh-yíʔ y’æt-pog-ʔé-y páh yúw-úh*
 REC.CNTR-TEL leave-EMPH1-PERF-DYNM REC.CNTR that-DECL
 ‘Just recently he left it.’

The form *=yíʔ* is obligatorily present in a number of other frozen adverbial expressions in Hup, some of which (like *páh-yíʔ* above) involve morphemes which exist elsewhere only as bound formatives. For example, *=yíʔ* is almost certainly

etymologically present in the frozen quantifier forms *ʔápyíʔ* ‘all’ (compare quantifier *ʔap*), *b’íyíʔ* ‘all, only’ (**ʔb’í*) (see §6.5.3), and the locative postposition *yǎhyíʔ* (ʔʔ*yǎh* ‘affine’) ‘intersecting and on top’.

Adverbials formed from verbs are relatively common in Hup. These are created according to a variety of strategies, many of which typically involve entire predicates or clauses (see §18.2.4.1 and §18.2.6). However, a single verb or compound verb can also form an adverbial. In a very few cases, this may be no more than an uninflected verb stem:

- (25) *ʔan-túk-d’áʔ* *ʔāh* *g’āʔ-g’óʔ-óh*
 make.love-want-be.against.vertical 1sg be.suspended-go.about-DECL
 ‘Wanting to make love, lying up against (her), I’m always like this (in hammock).’ (B.Cv.2)

Also relatively rarely, adverbials formed from verbs can involve an uninflected stem which is marked as non-predicative by Adverbial =*yíʔ*.¹²⁰

- (26) *yúp* *ba ʔtʔb’* *g’ǎh-pog-ʔé-w-ǎn* *híd* *wǎd=yíʔ* *kǎdhám-áy=mah*
 that spirit be-EMPH1-PERF-FLR-OBJ 3pl eat=TEL pass.go-DYNN=REP
 ‘They came quickly to eat the one who really was an evil spirit.’ (D-BWB.7)
- (27) *tǎh-ǎn* *tǎh* *cet-b’uy-yǎt=yíʔ* *kǎdham-ní-ay-áh*, *tǎh* *tǎʔǎh-hám-ǎw-ǎ*
 3sg-OBJ 3sg carry.on.back-throw-lie=TEL pass.go-be-INCH-DECL 3sg run-go-FLR-OBL
 ‘Throwing him down, he went away, all the while running.’ (FS.9)

¹²⁰ The adverbial identity of these verb + *yíʔ* expressions is at this point still in some doubt; the fact that they were pronounced without stress suggests that they may actually be part of the compound verbal predicate. Were this the case, however, *yíʔ* would have to be interpreted as the verbal Telic suffix, rather than as an adverbial marker, and normally in Hup Inner Suffixes such as the Telic do not come between verb stems within compounds. These constructions may represent a bridging context between two synchronically distinct functions of the form *yíʔ*, but this question must await future research.

More common mechanisms for forming adverbials from verb phrases require the inflection of the verb stem by the Dependent marker *-Vp*, Oblique case *-Vt*, etc.; these strategies typically involve entire clauses and are discussed in §18.2.4.1 and §18.2.6. Also, negative imperatives are obligatorily phrased as adverbial expressions (usually with *=yíʔ*); see §16.1.1.

10.2.1. ‘No reason’ adverbial *hĩ*

The adverbial expression *hĩ* ‘for no reason’, unlike most other adverbials in Hup, cannot be broken down etymologically and has no other role in the grammar; it also never occurs with the adverbial marker *yíʔ*. The adverbial form *hĩ* is exclusively clause-initial, and is a morphosyntactically and phonologically free form, which may be followed by the verb, subject, or other constituent of the clause. It indicates an action performed with no specific reason, outcome, or related action in mind, as illustrated in the following examples:

- (28) *hĩ* *ʔāh* *pĩniŋ-yəŋəy-yíʔ-té-h*
 no.reason 1sg tell.story-search-TEL-FUT-DECL
 ‘I’m just going to tell the story as best I can (although I don’t really know it well).’ (D-BWB.3)

- (29) *hĩ* *híd* *ʔəg-tég*
 no.reason 3pl drink-FUT
 ‘They’re just going to drink.’ (even though there is no particular occasion to celebrate, such as a party or workday) (OS)

- (30) *hĩ* *j’ek-yəŋəy-yíʔ-ŋy*, *yí-d’əh-əh*, *cəc!*
 no.reason steal-search-TEL-DYNM that.ITG-PL-DECL INTERJ
 ‘They’re always just out to steal stuff, darn it!’ (B.Cv.94)

The adverbial form *hĩ* is often used in responses to ‘why’ questions, particularly when the speaker is unable or unwilling to give a reason for his/her action. For example, (31) was uttered by a teenage boy in answer to my question ‘why did you quit school?’. Similarly, the speaker in (32) had been telling me how she had fallen out with the people of another village, but would give no more details when I asked ‘why did they scold/ yell at you?’.

- (31) *hĩ* *ʔāh way-yĩʔ-ĩy=nih*
 no.reason 1sg go.out-TEL-DYNM=EMPH.CO
 ‘I just left (school; for no particular reason).’ (OS)

- (32) *hĩ* *hĩd təw-yĩʔ-ĩy=nih*
 no.reason 3pl scold-TEL-DYNM=EMPH.CO
 ‘They just scolded.’ (AmL-PN.52)

Finally, the ‘no reason’ adverbial *hĩ* occurs in a few semi-formulaic relative-clause expressions used to describe people, such as *hĩ ham-g’óʔ-op=ʔāy* (no.reason go-go.about-DEP=FEM) ‘a woman who is just passing through’ (typically used in songs to describe a woman who has married into a group where she has few relatives), and *hĩ-ni-mún-up=ʔāy / ʔh* (no.reason-be-INTS2-DEP=FEM / MSC) ‘someone who is really just existing’, i.e. worthless or good-for-nothing.

10.2.2. Comparative strategies

Hup has a variety of strategies for indicating a comparison between entities, whether one of similarity or contrast. These strategies typically rely on an adverbial phrase or clause

to mark the entity that is the standard of comparison. This adverbial is usually marked as such by the Telic/adverbial form =y*iʔ*? (see discussion above).

10.2.2.1. ‘Like’ comparison

Hup has a number of strategies for expressing similarity or ‘like’ comparison. In addition to those discussed below, the Nominalizer -*nʔ**h* can be used to form a comparative expression; this is in keeping with its more general function of marking dependent or complement clauses:

- (33) [*ʔam biʔ-nʔh mɔy*] *ʔāh biʔ-té-h*
 2sg work-NMZ house 1sg work-FUT-DECL
 ‘I’ll build a house like the one you’re building.’

A. Comparative verb *nʔh*- ‘be like’

By far the most common means in Hup for expressing a ‘like’ comparison is the verb *nʔh*- ‘be like’, which frequently appears with other verb roots in a compound. In comparative expressions with *nʔh*-, the standard of the comparison (usually a noun) is marked as an adverbial phrase with the adverbial/Telic marker =y*iʔ*?. Note that =y*iʔ*? bears the primary stress in this construction, whereas in its more standard adverbial usage it is usually unstressed (see above); the reason for this is not clear, but it appears to be a feature of this particular construction.

Comparison with *nʔh*- frequently involves the compound verb forms *bahad-nʔh*- ‘appear like’ and *key-nʔh*- ‘look like’:

- (34) *ʔayũp=ʔh tʔh-ǎn wid-nǎn-ay-áh, [tʔh=tǎh ʔp=yʔʔ] key-nʔh-ǔy=mah*
 one=MSC 3sg-OBJ arrive-come-INCH-DECL 3sg=child.father=TEL see-be.like-DYNM=REP
 ‘A man came to her, (who) looked like her husband.’ (T.C)
- (35) *g’əwd’ǝk yúp [b’əy=yʔʔ] bahad-nʔh-ǔh*
 tubo.fish that.ITG traíra=TEL appear-be.like-DECL
 ‘The tubo fish looks like the traíra fish.’ (P.F.126)

Comparative *nʔh-* also frequently occurs alone as the only verb in the clause:

- (36) *[wǎd=yʔʔ] nʔh-ǔy nǔh-ǎn tʔh ?!*
 eat=TEL be.like-DYNM 2pl-OBJ 3sg
 ‘Is it just like food for you all?!’ (B.Conv.2.4)
- (37) *[tát deh=yʔʔ] nʔh-ǔy*
 taracua.ant water=TEL be.like-DYNM
 ‘It’s like Tat Deh.’ (white sand everywhere) (B-Cv.3.132)
- (38) *[b’əy=yʔʔ] tǝg nʔh-ǔy yúw-úh*
 traíra=TEL tooth be.like-DYNM that.ITG-DECL
 ‘Its teeth are like the traíra’s.’ (lit. ‘like a traíra’) (P-F.126)

The standard of comparison can be expressed as a numeral or interrogative pronoun, in addition to a noun:

- (39) *[ʔayũp=yʔʔ] hid nʔh-ǔy*
 one=TEL 3pl be.like-DYNM
 ‘They seem alike.’ (EL)
- (40) *[hǎp=yʔʔ] tʔh nʔh-ǔy=nih?*
 which=TEL 3sg be.like-DYNM=EMPH.CO
 ‘How is it (the coca)?’ (B.Cv.93)

The standard of comparison is also often expressed deictically as a demonstrative, particularly (but not exclusively) to indicate manner. In *Barriera*, this is realized as the full (inflected) demonstrative form plus adverbial *=yʔʔ* (examples 41-42); in the *Tat Deh*

dialect area, the uninflected demonstrative variants *ní* (this) and *yí* (that.ITG) can combine directly with the verb *níh-* (examples 43-44), as discussed in §6.4.

- (41) *[núp=yíʔ] níh-íp tih náʔ-áh, [nataš-níh=yíʔ] níh-íp=mah tih náʔ-áh*
 this=TEL be.like-DEP 3sg die-DECL Natasia-POSS=TEL be.like-DEP=REP 3sg die-DECL
 ‘Being about this (size) she died, being about like Natasia’s (child) she died.’
 (B.Cv2.134)
- (42) *wædæcku [núp=yíʔ] níh-šy*
 Valasco this=TEL be.like-DYNM
 ‘Valasco is like that.’ (BConv2.4)
- (43) *ʔín-añ yí níh-šy=cud ʔín=ʔín-íh*
 1pl-OBJ that.ITG be.like-DYNM=INFR 1pl=mother-DECL
 ‘Our mother is doing all this to us, apparently.’ (I-M.9)
- (44) *ní níh-šy bšg j’áñ b’oý ʔáh cúh-tæñ-æh*
 this be.like-DYNM HAB DST.CNTR traíra 1sg string-COND-DECL
 ‘Like this I always string fish.’ (I-M.24)

Alternatively, the inflected adverbial demonstrative *yí* ‘thus’ (*yí-t*) can act as a standard of comparison relating to manner, in the place of a demonstrative or other adverbial phrase marked with *=yíʔ*:

- (45) *yí híd níh-šy=yíʔ, yí híd níh-šy=yíʔ*
 thus 3pl be.like-OBL=TEL thus 3pl be.like-OBL=TEL
 ‘They did like this, like that.’ (I-M17)

Like any other Hup verb, *níh-* ‘be like’ takes verbal Inner and Boundary suffixes.

These include the counterfactual (example 46), and also the negative suffix *-níh*, which is homonymous with the comparative verb *níh-* (example 47):¹²¹

¹²¹ In general, confusion is avoided because the verb ‘be like’ must be followed by a Boundary Suffix (like verbs generally), whereas the Negative marker itself usually occurs as a Boundary Suffix and does not require inflection.

- (46) *mæh-yiʔ-tæñ-æh, yi nɪh-tæʔ-æy ʔãh-ãh*
 kill-TEL-COND-DECL that.ITG be.like-CNTRFCT-DYNM 1sg-DECL
 ‘If they killed him, I’d do like that.’ (LG-42)
- (47) *nutæñ-æy=d’əh-əh, nɪh-nɪh-ay j’am-áh, nutæñ-æh*
 today-DYNM=PL-DECL be.like-NEG-INCH DST.CNTR-DECL today-DECL
 ‘People of today, they don’t do like this anymore, these days.’ (LG-43)

B. ‘Measure’ *m’æ*

The ‘measure’ term *m’æ* is used for comparisons involving similarity in amount of time, physical size, or distance. The standard of comparison—a noun phrase—together with *m’æ-yiʔ* forms an adverbial phrase; *m’æ* signals both the quality indicated by the comparison (amount, size) and also (together with *=yiʔ*) functions to mark the clause as a comparative construction. Examples are given in (48-50):

- (48) *yũ tɪh=ʔp m’æ-yiʔ ʔid-ty*
 João 3sg=father MEAS-TEL speak-DYNM
 ‘John speaks for the same amount of time as his father.’ (EL)
- (49) *tɪh=ʔp m’æ-yiʔ (tɪh) w’ət-ty*
 3sg=father MEAS-TEL (3sg) long-DYNM
 ‘He’s as tall as his father.’ (EL)
- (50) *tɪh=báb’-nɪh b’ə m’æ-yiʔ tɪh bɪʔ-ɪh*
 3sg=sibling-POSS roça MEAS-TEL 3sg work-DECL
 ‘He made a garden the size of his brother’s.’ (EL)

Hup speakers use comparative *m’æ* most frequently for deictic comparison—relating a referent to something present in the surroundings—often accompanied by a gesture to illustrate the size or amount. This use typically involves the demonstratives *nu-m’æ* (this-MEAS), *n’i-m’æ* (that-MEAS), and interrogative *hɪ-m’æ* (Q-MEAS), as in

examples (51-53). In these cases the adverbial marker =*yíʔ* is optional and is usually left off; this may be because the demonstrative + *m'æ'* forms a lexicalized unit (also note that any possibility of confusion with the homonymous form *m'æ'* 'cold (water)' is minimized).

- (51) *nú-m'æ' ʔãh ʔəg-j'ap-yíʔ-ǂw-ay*
 this-MEAS 1sg drink-break-TEL-FLR-INCH
 'At this same time (of night) I stopped drinking.' (TD.Cv.99)
- (52) *nu-m'æ'=mæh=póʔ nãm hid w'ób-óh báʔ, nu-m'æ'=mæh tíh!*
 this-MEAS=DIM=EMPH1 curare 3pl set-DECL PROTST this-MEAS=DIM EMPH2
 'They put just this little bit of poison (on their darts), just this little bit (is enough to kill)!' (M.C)
- (53) *n'íp g'é-ep=teg m'æ' tíh ni-kamí*
 that stand-DEP=tree MEAS 3sg be-moment.of
 'When she was as far away as that tree standing there.' (M.KTW.108)

The form *m'æ'* also appears with the interrogative marker *hǂ* to mean both 'at what time' and 'whereabouts, how far' (see also §6.2):

- (54) *hǂ-m'æ-ay tíh ?*
 Q-MEAS-INCH 3sg
 'How far is he now?' (H.MTI.63)

C. 'Degree' marker =*tæn*

The 'degree' marker =*tæn* has a function similar to that of *m'æ'*. It signals a 'like' comparison relating to physical or temporal amount, and is often interchangeable with *m'æ'*. Like *m'æ'*, =*tæn* usually combines with a noun phrase to form an adverbial expression, which may be marked with =*yíʔ*. The primary difference between these two

comparative markers is that *=tæn* tends to relate more specifically than *m'æ'* to a *point* in time or space, rather than to an *amount* of time or space.

The form *tæn* occurs elsewhere in Hup as a verbal suffix indicating a conditional (forming a dependent clause). Degree *=tæn* differs from Conditional *-tæn* formally in that the degree marker is unstressed and usually follows nouns, whereas the Conditional is stressed and combines with verbs. While the two uses may be related (see discussion in §14.1), they are clearly fully distinct synchronically, and are glossed separately.

The Degree marker *=tæn* is favored (over *m'æ'*) for comparisons relating to height, and frequently occurs with body parts to indicate a level of the human body as a standard of the comparison:

- (55) *tih=ŋp=tæn=yiʔ* *w'ɔ'-ɔy*
 3sg=father=MEAS2=TEL long-DYNM
 'He's as tall as his father.' (EL) (cf. example (49) with *m'æ'*)
- (56) *lamih b'ɔɔk=tæn tih ní-íy*
 2sg.POSS ear=MEAS2 3sg be-DYNM
 'She comes up to your ear.' (OS)
- (57) *papáŋ=tæn wǎʔ d'ák-áy*
 waist=MEAS2 belt stick.against-DYNM
 'The belt is at the waist (hip-level).' (EL)
- (58) *ní-n'ih, ʔinih hǎwíg=tæn, tih kək-d'əh-way-huʔ-yiʔ-ay-áh!*
 this-NMZ 1pl.POSS heart=MEAS2 3sg pull-send-go.out-finish-TEL-INCH-DECL
 '(Up to) about here, at our heart level, he pulled out everything (all the evil spirit's insides)!' (P.BY.91)

It also occurs in the frozen postposition *háktæn* (*hakʔ*) 'in the middle of', and *nút=tæn* (*nút* 'this') 'right here' (used, for example, when showing where to cut something).

In other constructions, the Degree marker =*tæn* is used for comparisons relating to degree, direction, time, age, and manner. In example (59), =*tæn* (here meaning ‘in the same direction/ area as’) can be contrasted with *m’æ* (size of, see example 50 above):

- (59) *tɪh=báb’-nɪh b’ɔt=tæn=yiʔ tɪh bɪʔ-ɪh*
 3sg=sibling-POSS roça=MEAS2=TEL 3sg sibling-DECL
 ‘He made a roça in the same area as his brother’s roça.’ (EL)

In comparative constructions relating to manner, age, etc., =*tæn* often takes the Factitive prefix *hi-*. This produces a verbal form meaning approximately ‘be as much as, be similar to’, which can stand alone as a predicate, occur in a verb compound as a compounded element, and can optionally take verbal Boundary Suffixes, as examples (60-63) illustrate.

- (60) *tɪh=báb’ hi-tæn=yiʔ tɪh bɪʔ-ɪh*
 3sg=sibling FACT-MEAS2=TEL 3sg work-DECL
 ‘He works as hard as his brother.’ (EL)
- (61) *tɪhɥ=tog=mæh n’uɪh, yúp hi-tæn-æy=mah j’ǎh yúw-up tí*
 snake=daughter=DIM CNTR that.ITG FACT-MEAS2-DYNM=REP DST.CNTR that.ITG-DEP DEP.EMPH
 ‘Compared to Snake’s daughter, she’s (Snake’s daughter) is just the same age as that one!’ (TD.Cv.105)
- (62) *hɪd hi-tæn=yiʔ ʔid-d’ák-áy, ʔǎh=hin-ɪh*
 2pl FACT-MEAS2=TEL speak-stick.against-DYNM 1sg=also-DECL
 ‘I too was saying just the same as them (back to them)!’ (TD.Cv.103)
- (63) *ʔin yám-hi-tæn=yiʔ ʔam yám-áy*
 1pl dance-FACT-MEAS2=TEL 2sg dance-DYNM
 ‘You dance the way we do/ in our way.’ (EL)

Like *m'æ*, the Degree marker *=tæn* can occur in demonstrative expressions relating to time: *nutæn* 'today' (in relation to other days; compare *nút=tæn* 'right here') and *y#æn* 'that day' (past tense reference only). It also appears in the expression *?æyhitaæn=yi?* 'together'.

D. 'Same as' *n'íyí?*

Another strategy for expressing similarity involves the element *n'íyí?* 'same as', which follows a noun—the standard of comparison—to form an adverbial phrase. The form *n'íyí?* may be made up of the demonstrative form *n'i-* 'that', and almost certainly contains adverbial *=yi?*. It is preferred for comparisons relating to size and amount (and as such is interchangeable with *m'æ*), but can also be used for general comparison, as examples (64-66) illustrate.

- (64) *t#h=báb'-n#h b'ǎ n'íyí? t#h b#?-#h*
 3sg=sibling-POSS roça same.as 3sg work-DECL
 'He made a garden the size of his brother's.' (i.e. as his brother's garden is, he made (his)') (EL)

- (65) *t#h=ǎp-n#h n'íyí? t#h#h wæd-æh*
 3sg=father-POSS same.as 3sg.POSS eat-DECL
 'His food is the same amount as his father's.' (i.e. as his father's is, is his food) (EL)

- (66) *yáy yúp b'öy péc n'íyí?*
 fish.sp. that.ITG traíra scales same.as
 'The yáy fish has scales like the traíra fish.' (P.F.126)

10.2.2.2. Contrastive comparison

Hup has fewer morphological strategies to express contrast than similarity, and only one of these, the Elative, is really in common use. In addition to these morphological means, which are discussed below, contrast between two entities can be conveyed by a conditional expression ‘if you look at X’, with no other explicit comparative markers, as in (67), or simply by a coordinated pair of clauses pointing out the contrast (example 68).

- (67) *núp=ʔh=mæh tih=tæh=mæh=cud, tih=pög=ʔh-ǎn key-hipóʔ-tæh-æh*
 this=MSC=DIM 3sg=small=DIM=INFR 3sg=big=MSC-OBJ see-in.front.of-COND-DECL
 ‘This man seems small if you look over at the big one.’ (EL)

- (68) *núp kópu póg-óh, núp tód'=mæh cípm'æh muhún=mæh*
 this cup(Pt) big-DECL this container=DIM small INTS2=DIM
 ‘This cup is big; this glass is really small.’ (EL)

A. Elative *-kəd*

Hup’s most commonly used strategy for contrastive comparison makes use of the Elative marker *-kəd*, which derives from the verb root ‘pass’. This morpheme can fulfill both a comparative and a superlative function. It combines frequently with adjectives, resulting in a compound adjectival expression lacking a Boundary Suffix; it can also appear in verbal compounds as an Inner Suffix form. In addition to its function in expressions of contrast, it is used as a general intensifier (see §15.1.3.3). The Elative can only express contrast in terms of ‘more than, greater than’, and never ‘less than’; Hup speakers typically do not phrase contrasts as ‘less than’ expressions at all. Elative *-kəd* cannot be used together with the adjective *cípm'æh* ‘small’ to indicate ‘smaller’ or ‘smallest’; this

is probably due to the idiosyncratic, non-verbal character of this adjective (see §10.1 above).

Unlike the comparative strategies described above, use of the Elative does not usually involve an adverbial to express the standard of comparison. Where both the compared entity and the standard are explicitly stated, the comparison involves linked clauses. In examples (69-70), the first clause is a verbal or adjectival predicate involving the Elative; the second is the conditional ‘if (you) look at that one’ (as in example 67 above).

- (69) *núp mɔmbʹɔk pog-kɔ́ɔ=cud, núw-ǎn káy-tǎn-ǎh*
 this iron.pot big-PASS=INFR this-OBJ see-COND-DECL
 ‘This pot seems bigger if (you) look at that one.’
 (i.e. ‘This pot is bigger (than that one).’) (EL)

- (70) *núp-ǎy hipǎh=teg tɔn-kɔ́ɔ-ay=cud, núp=ǎh-ǎn key-hipóʔ-tǎn-ǎh*
 this=FEM know=THING hold-PASS-INCH=INFR this=MSC-OBJ see-in.front.of-COND-DECL
 ‘This girl seems to have more intelligence (lit. know-thing) if (you) look at that boy’ (i.e. ‘This girl is smarter than that boy.’) (EL)

The comparison can also be expressed with two coordinated clauses, in which ‘a little bit’ or ‘not much’ is contrasted with the Elative:

- (71) *tǎh=tǎh ǎn naw-kɔ́ɔ-ǎh, tǎh=yawám=ǎy=bʹay cípmʹǎh=yiʔ náw-áh*
 3sg=child.mother good-PASS-DECL 3sg=yng.sibling=FEM=AGAIN little=TEL good-DECL
 ‘His wife is really beautiful; his younger sister is only a little bit beautiful.’
 (i.e. ‘His wife is more beautiful than his sister.’) (EL)

- (72) *deh pǎh=mí tut-nǎh dǎʔ-ǎh, ǎstádu-ǎnídu-an=mah tut-kɔ́ɔ-ǎcáp-áh*
 water bubble.up=river cold-NEG remain-DECL Estados-Unidos-DIR=REP cold-PASS-INTS1-DECL
 ‘It’s not very cold on the Rio Tiquié; they say that in the US it’s really cold.’
 (i.e. ‘It is colder in the US than on the Rio Tiquié.’)

Yet another option expresses the standard in the postpositional phrase ‘beyond, ahead of’:

- (73) *tɬh=tæh ʔp=báb=ʔǎy h.ʔ ʔah=mah, tɬh=tæh ʔin naw-kǎd-ʔh*
 3sg=husband=sibling=FEM beyond=REP 3sg=wife good-PASS-DECL
 ‘More than her husband’s younger sister, his wife is exceedingly beautiful.’
 (i.e. ‘His wife is more beautiful than his sister.’) (EL)

In normal discourse, however, it is usually unnecessary to make the standard of comparison explicit in the sentence; here the elative function of *-kǎd* is primarily superlative, merging with its intensifier function (§15.1.3.3):

- (74) *nút- ʔǎy=d’ ʔh ʔid-kǎd-ʔh*
 here-who=PL speak-PASS-DECL
 ‘People from here speak best/ better.’ (A-Int.2)
- (75) *múč=yiʔ yúp naw-kǎd-ʔh!*
 flute.type=TEL that.ITG good-PASS-DECL
 ‘The *muc* flute is the best one!’ (H.txt.23)
- (76) *núp j’áh-an- ʔǎy=d’ ʔh m.ʔ w’ ʔ-kǎd-ʔp- ʔéʔ=cud ʔihníy*
 this land-DIR-who=PL house long-PASS-DEP-PERF=INFR.maybe
 ‘They maybe were the tallest buildings in the world.’ (lit. ‘houses-of-this-land’)
 (OS)

Finally, the Elative is also used to express ‘too many’:

- (77) *teg d’úh ʔin d’oʔ-kǎd-yiʔ-ʔy*
 tree 1pl take-PASS-TEL-DYNM
 ‘We got too many wood poles.’ (EL)

B. Other contrastive strategies

A contrast can also be indicated with the marker *dʔyiʔ*, as illustrated in examples (78-80).

The etymology of this term is unclear, but it certainly involves the adverbial marker *=yiʔ*, and a likely candidate for the first syllable is the verb root *dʔiʔ*, meaning ‘remain’ or ‘be lacking’, or the (probably related) ‘Verbal diminutive’ form *dʔiʔ* (see §12.10). The form

dʰyɪʔ indicates ‘a little more’; no explicit standard is usually specified, and it may therefore be best considered a type of intensifier. This strategy is used relatively infrequently in daily Hup discourse. Unlike the Elative marker *-kəd*, *dʰyɪʔ* can be used in combination with the adjective *cípm’æh* ‘small’ to indicate ‘smaller’ or ‘less than’ (example 80).

- (78) *náw dʰyɪʔ tɪh kəd-ní-h*
 good CMP 3sg PASS-INFR-DECL
 ‘He got better (after being sick).’ (EL)

- (79) *tɪh=bɪʔ dʰyɪʔ yɔh.ɔy=kəʔm*
 3sg=work CMP search.for=IMP
 ‘Look for one who does more work.’ (EL)

- (80) *cípm’æh dʰyɪʔ nɔʔ*
 little CMP give.IMP
 ‘Give less.’ (EL)

Another strategy for indicating a ‘greater than’ comparison is to use the locative postpositions *buycóʔ* ‘above’ or *hɔʔʔah* ‘beyond’. Either is acceptable in comparisons having to do with size, quantity, or volume, but *buycóʔ* is limited to this function; note that the Elative can also be used here (83 and 73 above):

- (81) *tɪh=ʔp buycóʔ/hɔʔʔah w’ɔʔ-ɔy*
 3sg=father above / beyond long-DYNM
 ‘He’s taller than his father.’ (EL)

- (82) *tɪh=ʔp buycóʔ/hɔʔʔah tɪh ʔɪd-ɪy*
 3sg=father above / beyond 3sg speak-DYNM
 ‘He speaks more (or louder) than his father.’ (EL)

- (83) *tɪh=ʔp hɔʔʔah tɪh b’óy-óy (tɪh b’óy-kəd-ɔh)*
 3sg=father beyond 3sg study-DYNM (3sg study-PASS-DECL)
 ‘He is a better teacher than his father.’ OR ‘He studied more than his father’ (EL)

As noted above, morphological comparative strategies in Hup cannot in general be used to express ‘smaller than, less than’, and even the expression of ‘more small’ is restricted. However, some speakers borrow the Tukano verb *d̥h̥á* ‘be small’, which in Tukano is used to form ‘smaller than’ comparative expressions:

- (84) *núp d̥h̥á=mæh*
 this small(Tuk)=DIM
 ‘This one is smaller / less than another.’ (EL)

10.2.3. Locative postpositions

Hup has a large set of locative postpositions.¹²² Morphologically, these are probably best considered to be free particles, although some appear to be marginally encliticized. With the exception of *g’odan* ‘inside’, all receive independent stress. They make up a closed class of lexicalized forms, which in some instances appear to be composed of identifiable lexical items, but are in many cases not easily broken down etymologically. Locative postpositions typically have an adverbial function within the clause.

While locative postpositions are important in expressing spatial relations in Hup, the rich positional verbal semantics of the language also contributes a great deal. Usually, a spatial relationship is expressed via a combination of a positional verb (such as *cud-* ‘be inside’) and a locative postposition. This can be seen in the examples below.

A number of the locative postpositions are used to encode temporal relations in addition to spatial relations, and in some cases they have further, more abstract discourse-

¹²² Determining the semantic parameters of the locative postpositions in Hup was aided by the Bow-Ped elicitation materials, Max Planck Institute for Psycholinguistics, Nijmegen.

related functions. While the use of locative adpositions to express temporal concepts is not rare cross-linguistically (e.g. compare English ‘before’, ‘after’), the particularly salient semantic overlap between spatial, temporal, and conceptual relations is also a feature of Hup grammar more generally (cf. Appendix I). The semantic extensions of the locative adpositions are included in the tables below.

The Hup locative postpositions fall into two sets, based primarily on their morphological properties. The forms in the first set, given in Table 10.1, are relatively heterogeneous. They are all morphologically frozen forms, although some appear to contain identifiable inflectional markers that occur elsewhere in the language (such as Directional/object *-an*, Locative *cóʔ*, Sequential *-yoʔ*, Telic/adverbial *=yíʔ*, and Measure *=tæn*). Most can also take additional inflectional markers, particularly Directional *-an* and Locative *cóʔ*, and the Diminutive intensifier *=mæh* can follow the locative postposition to emphasize closeness in the spatial relationship; e.g. ‘just above’, ‘just below’, etc. (see §15.1.4). The postpositions in this set are akin to adjective modifiers or bound nouns, in that they follow nouns in noun phrases, and case marking and other inflection occurs NP-finally. The locative NP as a whole typically functions adverbially. Most of these postpositions must be preceded by a noun, and cannot appear ‘bare’ (i.e. with no object at all), as adverbs; minimally, they take the default nominal form *tɪh=* (as do adjectives and bound nouns).

Table 10.1. Locative postpositions in Hup

Locative postposition	Spatial meaning	Temporal meaning or other semantic extension	Etymological clues? (Forms include inflectional material: <i>-an</i> DIR; <i>-yi?</i> TEL; <i>co?</i> LOC; etc.)
<i>g'od-an</i> <i>g'od</i> (variant TD)	inside 3-dimensional container; also within fire, water, etc.		Appears in various body part terms (e.g. <i>nəg'od</i> 'mouth', <i>mig'od</i> 'face')
<i>buycóʔ(-an)</i>	above, on top of (touching or suspended above)		?? Compare <i>b'uy-</i> 'throw', locative = <i>có?</i>
<i>hiyó?</i>	above, on top of (touching). (Preferred for something on side of hill rather than at highest point). Esp. for liquids; also used for water touching banks.	fault, error as cause of something	?? <i>hi-</i> 'descend' (or Factitive <i>hi-</i> ?) + <i>yo?</i> (SEQ) 'having descended'
<i>yəhyi?</i>	on top of and stuck in or running among other things		[?? compare <i>yəh</i> 'affine' and <i>deh-g'æt-yəh</i> 'igapo' (flooded forest); common semantic basis of mixing in among something else?] <i>yi?</i> Telic, adverbializer
<i>hūyan</i>	submerged (specifically) in water (all other liquids: <i>g'od-an</i>)		<i>hūy</i> 'following' particle ?? + <i>-an</i> Directional oblique (see §6.5.6)
<i>hæhɔ(-tæn)</i> <i>hæyɔ</i> (TD)	midway; middle of		(<i>-tæn</i> 'level', comparative form; also conditional; see §14.1 and §10.2.2.1)
<i>toḱ-tæn</i>	mid-level		(Body part) 'stomach'
<i>háktæn</i>	side (esp. at middle height)		
<i>hupáh</i> (<i>-at/ -co?</i>)	at back of [relatively close]		(Body part) 'upper back'
<i>widăy</i>	coming out of, at entrance		Verbal form <i>wid-way</i> 'arrive-go.out' ?
<i>tú (-an/-co?)</i>	next to [close]		
<i>máh (-an/co?)</i>	near, next to [little further away]		
<i>hipó?</i>	next to [still further away]; in front of	entire period (occurs in few expressions)	[Compare <i>hi-</i> (factitive) and <i>po?</i> 'open' ?]
<i>cúm (-an)</i>	base of, initial section of (from a reference point)	beginning, first	
<i>g'ætʔəh</i> (<i>-an/co?</i>)	at furthest point, end	end of a time period	
<i>mĩ?</i> (<i>-an</i>)	under; inside house ¹²³	at same time; in spite of	
<i>kakáh (-an)</i>	among, between		(reduplicated?)

¹²³ 'Inside a house' is *məy mĩ?*, literally 'under a house'; this is undoubtedly because many Hup houses (and probably all in the past) are composed of little more than a roof. The same phenomenon is reported in the Carib language Tiriyo (Meira to appear).

Examples of locative postpositions as they appear in noun phrases are given in (85-91).

Note that while *buycóʔ* ‘above’ appears to involve a frozen form of the locative marker *cóʔ*, it can additionally take this particle as well (example 88).

- (85) *děh hũʔyan=mah, tĩh jʔ ʃm-an=mah, tĩh tʃc-ʃh*
 water in.water=REP 3sg bathe-DIR=REP 3sg break.wind-DECL
 ‘In the water, where he was swimming, he broke wind.’ (H.BY.90)
- (86) *bʔ ʔʔ gʔodan ʔág cúd-úy*
 cuia inside fruit be.inside-DYNM
 ‘The fruit is inside the cuia.’ (EL)
- (87) *cā-dʔ ʔh mʔy tú bʔay-yĩʔ=dʔ ʔh-ʔh*
 other-PL house next.to return-TEL=PL-DECL
 ‘Others turned back (when) close to the (school) building.’ (P.B.8)
- (88) *tĩh nũh buycóʔ cóʔ!*
 3sg.POSS head above LOC
 ‘(He’s) on top of his head!’ (FS.8)
- (89) *cecádiu=mah nʔikán dʔóʔ-óh, tĩh yʔʔʃm=ʔh máh-an=ʔh nĩy*
 Cesario=REP over.there take-DECL 3sg.POSS powerful=MSC near-DIR=EPIST.be
 ‘Cesario takes it there, they say, maybe to where her boss is.’ (B.Cv.87)
- (90) *nũ-mʔ ʔ kakah híd bĩʔ-ʔh*
 this-MEAS between 3pl make-DECL
 ‘They made this much between (my hands).’ (H.txt.17)
 (referring to a pile of little ocarina flutes made from ucuqui seeds)
- (91) *yúp=mah tĩh mĩʔ=cud ʔũh teg=bʔ ʔk pōg bugʔ-gʔet-póʔ=ʔh*
 that.ITG=REP 3sg UNDER=INFR.EPIST tree=bark big pile-stand-EMPH1=MSC
 ‘“Meanwhile beneath her (hammock) apparently there was a big pile of bark.”’
 (I-M.12)

Examples (92-93) contrast spatial and non-spatial uses of the postposition *hipóʔ*, which can mean ‘in front of’, or ‘entire period’:

- (92) *bóda=tat cáʔ hipóʔ yǽt-ǽy*
 ball=FRUIT box in.front lie-DYNM
 ‘The ball is in front of the box.’ (EL)

- (93) *ʔāh=ǎʔ hipóʔ ʔāh hǎʔ-ǎh*
 1sg=life in.front 1sg write-DECL
 ‘I’ve been writing all my life.’ (RU)

Some of these forms are not limited to noun phrases, but can also be incorporated into verbal compounds. As such, they do not directly follow a nominal object, and are therefore no longer postpositions; however, they do maintain their spatial semantics. Examples include the expression *hi-mǎʔ-gʻet* (FACT-under-stand) ‘midday’, which presumably refers to the sun being directly overhead, *key-hipoʔ* (see-in.front.of) ‘opposite’ (compare examples 92-93 above), as in (94), and *mah* ‘near’ in example (95).

- (94) *núp=ǎh cípmʻæh=cud tǎh=pǒg=ǎh-ǎh key-hipóʔ-tǎh-ǎh*
 this=MSC small=INFR 3sg=big=MSC-OBJ see-in.front-COND-DECL
 ‘This guy seems small compared to the big guy.’
 (lit. ‘if you see him in front of the big guy’) (EL)

- (95) *tǎhǎh mah-gʻét=dʻəh*
 3sg.POSS near-stand=PL
 ‘The ones that go with him (work for him).’ (boys on a river-merchant’s boat)
 (OS)

Examples (96-97) illustrates the non-spatial use of *hiyóʔ* (‘on top of’), which occurs as a full noun meaning ‘cause, fault’. This semantic extension probably involves a metaphorical association such as ‘physical burden’ > ‘responsibility’ (social and mental burden); cf. English ‘charge’ (i.e. give responsibility), from French *charger* ‘load’.¹²⁴

- (96) *tǎhǎh hiyóʔ yúw-úh*
 3sg.POSS fault that.ITG-DECL
 ‘It’s his fault!’ (RU)

¹²⁴ Thanks to Eve Danziger for suggesting this association.

- (97) *ʔáħ cóʔ-óy yúp hiyóʔ tən-té-h*
 1sg LOC-DYNM that.ITG fault hold-FUT-DECL
 ‘I’ll be the one at fault/ to be blamed.’ OR ‘I’ll carry it above (something else)’
 (RU)

The members of the second set of locative postpositions are listed in Table 10.2 below. They all involve the bound form *-ʔah*, which has not been encountered anywhere else in Hup, and has no identifiable meaning of its own. While some of these forms are composed of *-ʔah* and an identifiable root, many are etymologically unanalyzable. In a number of cases, the first syllable apparently ends in a dental stop, which may be related to the Oblique marker *-t* (compare the locative forms of the Proximal and Distal demonstratives *nu-t*, *n’i-t*).¹²⁵ Like the forms in Table 10.1 above, these locative postpositions typically follow nouns; however, most (such as ‘upriver’, ‘downriver’, and ‘underneath’) can also occur by themselves as spatial adverbs. Many can take the Locative particle *cóʔ*, but they rarely receive case marking.

¹²⁵ This dental stop assimilates to the following glottal stop, producing what is phonetically a homorganic stop cluster [td]. Nasal spreading (from root to suffix) has also occurred in some cases where the root shares the vowel quality /a/ with the suffix.

Table 10.2. Hup locative postpositions formed with -*ʔah*

Locative postposition	Spatial meaning	Temporal meaning or other semantic extension	Etymological clues from base form?
<i>hũyʔah</i> (cóʔ) <i>hũytú-cóʔ</i>	behind [further away than <i>hupah-coʔ</i>]	after (at a later time)	<i>hũy</i> ‘following’ particle? (see above)
<i>kǎʔah</i> (cóʔ) [káda] (TD)	in front of	before	* <i>kǎ</i>
<i>hǎʔah</i> (cóʔ) [háda] (TD)	beyond, on other side of something		<i>hǎ</i> ‘out there, beyond (far off)’
<i>háyʔah</i> (cóʔ)	outside		* <i>hay</i>
<i>cǎʔah-mah</i> (cóʔ)	on other side; in another place		<i>cǎ-</i> ‘other’
<i>hǎʔʔah</i> (<i>hǎʔʔah</i>)	by here, close by		* <i>hǎʔ</i>
<i>cáʔah</i>	side, area		* <i>ca(h)</i>
<i>póʔah-cóʔ</i>	high above, not touching		<i>póh</i> ‘high’
<i>mǎʔah-cóʔ</i>	underneath		<i>mǎʔ</i> ‘under’ (see above)
<i>pótʔah</i>	upriver		?? Possibly related to <i>póh</i> ‘high’; compare <i>poʔah</i>
<i>mǎʔʔah</i>	downriver		?? Possibly related to <i>mǎʔ</i> ‘under’; compare <i>mǎʔah</i>
<i>déʔah</i>	at waterway (associated with some landmark)		<i>déh</i> ‘water’
<i>wáʔah</i>	on other side of waterway		* <i>wa(h)</i>
<i>deh páʔah</i>	at edge or bank of waterway		* <i>pa(h)</i>

Examples of these postpositions in use are given in (98-101).

- (98) *wag cáʔah=mah ní-nʔh=mah, tǎh yé-ay-áh*
 day side=near be-NMZ=REP 3sg enter-INCH-DECL
 ‘When it was close to daylight (i.e. day-side), he entered.’

- (99) *tǎnǎh bʔǎ cáʔah=hín tǎh=hín maç-gʔet-yóʔ, tǎh bʔǎ-tég tǎh=hín-íh*
 3sg.POSS roça side=also 3sg=also cut.brush-stand-SEQ 3sg cut.trees-FUT 3sg=also-DECL
 ‘He also, having cut the underbrush from his roça area, he too will clear trees.’
 (P.Sp.106)

- (100) *té hibʔah=tǎh=dʔǎh bʔay-ní-h, pótʔah-an*
 until create=offspring=PL return-INFR-DECL upriver-DIR
 ‘Until the ancestors returned, upriver.’ (H.txt.27)

- (101) *yǝn'ǝh=hin hĩ nĩŋ key-yǝʔ mǝy-ǝ hid y'ǝt-n'ǝh,*
 that.ITG=also only 2pl see-TEL.IMP house-OBL 3pl lay-NMZ
 'Only look at (i.e. don't steal) these things, that they've left in a house,

hidnǝh b'ǝ déǝh hid d'oʔ-túʔ-n'ǝh
 3pl.POSS roça by.water 3pl take-immersed-NMZ
 or put into the water at their roça-side stream.' (P.Sp.105)

Examples of their temporal use are provided in (102-4).

- (102) *ʔin dú=d'ǝh kótǝh cóʔ=yiʔ*
 1pl ancestor=PL before LOC=TEL
 'Before the time of our ancestors' (txt)

- (103) *yúp huǝǝh cǎ-d'ǝh wid-nǝn-ǝw-ǝh*
 that.ITG after other=PL arrive-come-FLR-DECL
 'After that, others arrived.' (H.txt.65)

- (104) *ʔayup g'ǝ huǝǝh*
 one year after
 'The year after next' (EL)

11. Adjusting valency

This chapter focuses on Hup's morphological strategies for adjusting the valency of a verb; i.e. the number of core arguments for which the verb categorizes. These strategies include two mechanisms for decreasing valency: the Reflexive and the Reciprocal/pluractional constructions; as well as two mechanisms for increasing valency: the Applicative and the Factitive (but note that the Reciprocal/pluractional and the Factitive do not always entail a change in valency). All of these except the Applicative involve prefixation, and in fact they exhaust the entire set of preverbal grammatical markers in Hup, which generally favors the suffixation or otherwise post-stem attachment of bound material. Additional valency-adjusting strategies—in particular the expression of causation via verb compounding—are summarized at the end of this chapter, and are also discussed in chapters 8 and 9.

11.1. Reflexive *hup-*

The prefix *hup-* defines a grammatical construction that is here labeled 'Reflexive'; however, it has a broader range of functions than that of the prototypical reflexive situation of an actor acting on him/herself, including a passive interpretation and a marginal reciprocal function. In general, the occurrence of *hup-* on the (obligatorily transitive) verb stem could be said to signal that the grammatical subject is being acted upon in some way, i.e. is him/herself an undergoer of the event.

In addition to its use as a valency-adjusting verbal preform, the form *hup* has various other manifestations, including its use as a free lexeme meaning 'human, person'

or ‘Hup Indian’ (hence the name of the language; see §1.2.1), and as an enclitic on noun phrases. Because of this multifunctionality, it can often be difficult to determine which use of *hup* we are faced with in a given sentence—undoubtedly reflecting the contexts for reanalysis that led historically to some of these different uses in the first place. Hence these other uses are relevant to the present discussion of Reflexive *hup*- as a valency-adjusting form, and they will therefore be introduced here as a preface to the Reflexive construction. How *hup* is to be interpreted, functionally and even formally (as free form, enclitic, or prefix), depends on its place in the clause, the transitivity and lexical identity of the verb, and even the context.

A. Free lexeme ‘human, person, Hup Indian’; adjective ‘beautiful, new’

In addition to its frequent use as an ethnonym meaning ‘Hup Indian’ (feminine *húp*=*ʔǎy*, masculine *húp*=*ʔh*, plural *húp*=*d’əh*), *húp* can be used as a noun meaning ‘person’, particularly in reference to an indefinite human participant. As such, it is a free lexical item; it typically takes independent stress (but note that subjects that directly precede verbs are often unstressed in Hup) and it is clearly separate from the verb and other clausal constituents. In combination with a transitive or intransitive verb, *húp* may act as an indefinite pronominal agent (examples 1-2) or object (in which case it takes the object-marking that is obligatory for human referents; example 3). The noun *húp* may also appear as the first constituent of a nominal compound, with the sense ‘relating to people, Hup Indians’ (e.g. *húp ʔǎl* ‘Hup language, speech’). A noun meaning ‘body’ or ‘person’

is a very common historical source for reflexive markers cross-linguistically (cf. Heine 2000, Schladt 2000).

- (1) *hǝp cǝǵ húp d'o ʔ-yǝʔ-ǝy=mah*
 fish net person take-TEL-DYNN=REP
 'Someone's taken the fish net (it's said).' (EL)
- (2) *húp pǎ*
 person NEG:EX
 'There was no one.' (LG.O.1)
- (3) *húp-ǎn tǝw-ǝy, húp-ǎn dóh-óy...*
 person-OBJ scold-DYNN person-OBJ curse-DYNN
 '(They) scold people, put curses on people...' (LG-C.46)

In addition to this nominal use, the free lexeme *húp* can act as an adjective meaning 'good, beautiful, new', as in expressions such as *b'ǎʔ húp* 'fresh beiju'. As such, it usually occurs with the nominalizing 3sg proclitic *tǝh*= (see §6.6), resulting in the phonologically reduced form *tuhúp*, as in *yǝd tuhúp* 'new clothes'.

B. Enclitic: Reflexive intensifier

As discussed in detail in §7.1.4, the form *hup* also appears as an enclitic, which attaches to noun phrases and acts as a Reflexive Intensifier, as illustrated in examples (4-5). As opposed to its use as a free lexical noun in examples (1-3) above, the enclitic *=hup* forms a phonological unit with its host; it is unstressed, has no pause separating it from the preceding NP, and its frequent combination with the third person singular and plural pronouns (*tǝh=hup* and *hǝd=hup*) has given rise to the semi-lexicalized variants [ʰǝrup] and [ʰtuhup] (note the stress on the first syllable, as opposed to the adjective form [tu'húp])

above). Such a formal identity between verbal reflexive markers and nominal intensifiers is cross-linguistically very common; compare English ‘N itself’ (cf. König and Siemund 2000).

- (4) *nĩŋ=hup* *pĩd* *bĩʔ-yóʔ*, *nĩŋ=hup* *dúh*
 2pl=RFLX.INTS DIST work-SEQ 2pl=RFLX.INTS buy.IMP
 ‘All of you yourselves having worked, you yourselves buy (things).’
 (i.e. we will no longer give you these things as gifts) (P-B.2)
- (5) *tegd’uh* *tæh* *túhup* *j’ap-yĩʔ-ĩy*
 tree small 3sg.RFLX.INTS divide.in.two-TEL-DYNM
 ‘The stick broke in half by itself.’ (EL)

In contrast to these uses of *hup* as a free lexical noun and as a nominal enclitic, it appears strictly as a verbal preform in its manifestation as a valency-decreasing Reflexive marker. As a Reflexive, *hup-* indicates generally that the grammatical subject is being directly acted upon. Interpretations of the constructions in which it occurs can vary; the use of *hup-* can result in a standard reflexive reading (i.e. the subject acts on him/herself directly), a passive (some other participant acts on the subject), or—more marginally—a reciprocal (coordinated subjects act on each other), depending on the semantics of the verb and on the general context.

A correlation between passive, reflexive, and reciprocal constructions is not uncommon cross-linguistically. Shibatani (1985: 826) observes that many languages exhibit such a correlation, including Spanish, Russian, Quechua, and Yavapai, and he offers the explanation that this similarity “arises largely from a semantic property of these constructions: in all of them, surface subjects are affected” (1985: 840). In other words, these constructions all involve a reduction in the Transitivity of the clause (in the sense of

Hopper and Thompson 1980), in that the grammatical subject is in some way also a semantic patient.

Formally, the Reflexive form *hup*- displays the properties typical of Hup preforms: it is unstressed, is not separated from its verbal host by pause phenomena, and no other constituents can come between it and the verb (with the exception of an object of a ditransitive verb; see below). Requirements for the use of Reflexive *hup*- include the stipulation that it can occur only with a transitive or ditransitive verb; it is ungrammatical with an intransitive verb, as illustrated in example (6a). In any case where the form *hup* does occur in a clause with a subject nominal and an intransitive verb, it can *only* be interpreted as a Reflexive intensifier, encliticized to the noun, as in (6b); it cannot act as an impersonal subject, since a subject is already present.

- (6) a) **hĩd* *hup*-*g'ãʔ-ãý*
 3pl RFLX-be.suspended-DYNM
- b) *hĩd=hup* *g'ãʔ-ãý*
 3pl=RFLX.INTS be.suspended-DYNM
 'They themselves lie in their (own) hammocks.' (EL)

Finally, subjects of clauses containing the verbal Reflexive are almost always animate; exceptions appear to be limited to reflexive forms that are semi-lexicalized and/or semi-idiomatic, such as the following:

- (7) *cug'ǎť* *hup*-*kǎd-ǎý*
 leaf/paper RFLX-pass-DYNM
 'The leaf turns over.' OR 'The leaf got turned over (by someone).' (EL)
- (8) *hup-túk,* *yúp* *mǎm-ǎh!*
 RFLX-want that axe-DECL
 'That axe is valuable!' (lit. 'makes itself be wanted') (P.Sp106)

11.1.1. Reflexive reading of *hup*:- subject acts on self¹²⁶

Depending on the semantics of the verb, the interpretation of the Reflexive form *hup*- can be that of a prototypical reflexive, in which the subject acts on him/herself (examples 9-10). This use is quite productive. As is the case elsewhere in Hup, the full subject NP need not be explicitly stated, particularly when the reflexive meaning is clear from the semantics of the verb. This is illustrated in example (10) (here an additional object-marked participant *ʔān* ‘me’ is present, but is understood not to be the direct object of the clause).

- (9) *náw=yíʔ dǝʔ-mǝʔ bǝʔ ʔam hup-hǝk !*
 good=TEL remain-UNDER work.IMP 2sg RFLX-cut.APPR
 ‘Go carefully on that last bit, you’ll cut yourself!’ (B-Cv.10)
- (10) *ʔān hup-yǝd-cǝw-ǝy=cud núp-tiʔ ?*
 1sg.OBJ RFLX-hide-COMPL-DYNM=INFR this-EMPH.TAG
 ‘This one’s already hidden (himself) from me, huh?’ (JA.8)

The true reflexive use of *hup*- also can be seen in a number of semi-lexicalized or idiomatic verbal forms, such as *hup-hǝb*- ‘be in a state of bereavement, loss’ (**ʔhǝb*-); *hup-hipāh*- ‘have good sense (i.e. according to one’s social responsibilities), be aware of oneself and one’s surroundings’ (lit. ‘know oneself’; *hipāh*- ‘know, think’, itself a lexicalized Factitive verb, see §11.4 below), as in example (11); and *hup-kǝd*- ‘turn over; turn (oneself) around’ (*kǝd*- ‘pass, overtake’), as in example (12) and in (7) above. It also appears word-internally in some expressions involving the Completive aspect suffix

¹²⁶ Note that while the use of *hup*- is not *restricted* to a true reflexive reading (subject acts on self), it is the only available strategy for producing such a reading. The co-occurrence of an explicit co-referential subject and object in the clause is ungrammatical; e.g. **ʔāh ʔān yǝd-ǝy* (1sg 1sg.OBJ hide-DYNM) ‘~I hide myself’.

-*cṣp-/cṣw-*, as in *wæd-hup-cṣw-ṣy / cṣp-ṣy* (eat-RFLX-COMPL-DYNM) ‘already eaten’

(see §12.4).

- (11) *nṣ tæḥ=d’əh ʔəg-na ʔ-yṣʔ-ṣy, hup-hipāh-nṣh...*
 1sg.POSS offspring=PL drink-lose.consciousness-TEL-DYNM RFLX-know-NEG
 ‘My kids got drunk, they were out of their senses...’ (TD.Cv.103)

- (12) *tṣh hup-kəd-kədhi-yṣʔ-ní-p=b’ay*
 3sg RFLX-pass-pass.descend-TEL-INFR-DEP=AGAIN
 ‘She turned herself around and went down again quickly.’ (I-M.20)

Another apparently idiomatic use of Reflexive *hup-* relates to pregnancy (examples 13-14). Here the expression ‘the woman is pregnant’ could perhaps be interpreted literally as ‘the woman interiorizes herself’ (but note the presence of the object ‘offspring’ in (13)). Alternatively, this example could be an idiosyncratic case of noun-incorporation (see §9.6).

- (13) *tā ʔāy tæḥ hup-cúd-úy*
 woman offspring RFLX-be.inside-DYNM
 ‘The woman is pregnant.’ (EL)
- (14) *ʔāh hup-cúd-uw-āñ wṣy-ṣy ʔām ?*
 1sg RFLX-be.inside-FLR-OBJ love-DYNM 2sg
 ‘Do you love the one I am pregnant with?’ (BWB)

Reflexive *hup-* is also a component of several derived non-verbal constructions, such as *hup-hipāḥ=teg* ‘consciousness, intelligence’ (lit. ‘self-knowing thing’), and the idiomatic *hup-nṣ* ‘alone’ (possibly from *nṣ* ‘say’), as in (15). In the expression ‘show oneself (to others)’, *hup-* occurs together with the form *cap*, which is used elsewhere as a noun meaning ‘body’ (and as an intensifier, see §15.1.1); hence ‘self’s body’, or ‘oneself’ (example 16).

- (15) *hup-nɔ pɛd wæd-æy*
 RFLX-say DIST eat-DYNM
 ‘They each eat by themselves.’ (LG-O.14)
- (16) *ʔǎh=togtúg nɛh mɔy g’od-ót, ʔam hup-cap-be-tæʔ-n’ɛh*
 1sg=son.in.law POSS house inside-OBL 2sg RFLX-body-show-CNTRFACT-NMZ
 ‘Inside my son-in-law’s house, you would show yourself thus.’ (D.txt)

The status of *hup*- as a verbal preform—as opposed to a nominal enclitic—is the single formal criterion that differentiates it from the Reflexive intensifier form. However, its status as prefix or enclitic (both normally unstressed forms), or even as free lexical noun (unstressed in some contexts) can be ambiguous, especially in fast speech where pause phenomena are less salient. In examples (17a-b) of the following elicited paradigm, the identical ordering of constituents (subject, *hup*, verb) can lead to the interpretation of *hup* as either a Reflexive intensifier or a verbal Reflexive, depending on pause phenomena and intonation, as well as on the context and the transitivity of the verb. In examples (17c-d), on the other hand, the presence of object-marking on one of the participants forces or encourages the interpretation of *hup* as a full NP; however, (17d) (especially given the lack of stress common on Hup preverbal subjects) can also be interpreted as involving the Reflexive intensifier (with essentially the same meaning), or the passive form of the Reflexive (cf. §11.1.2 below). Finally, example (17e) shows that when the clause includes an inanimate object NP, *hup* is interpreted as a full nominal subject, since the Reflexive and Reflexive intensifier forms of *hup* favor an animate subject (so ‘tree’ cannot be interpreted as the subject).

- (17) a) *tɛh=hup kɛ-ɛy, (tegd’úh-úh)*
 3sg=RFLX cut-DYNM tree-DECL
 ‘He himself cut (the tree).’

- b) *tɬh hup-kɬ-ɣ̃*
 3sg RFLX-cut-DYNM
 ‘He cut himself.’
 also: ‘He got cut (by someone else).’ (cf. §11.1.2 below)
- c) *tɬh húp-ǎn kɬ-ɣ̃*
 3sg person-OBJ cut-DYNM
 ‘He cut someone.’
- d) *tɬh-ǎn hup kɬ-ɣ̃*
 3sg-OBJ person cut-DYNM
 ‘Someone cut him.’
- Or: *tɬh-ǎn=hup kɬ-ɣ̃*
 3sg-OBJ=RFLX.INTS cut-DYNM
 ‘(Someone) cut him-himself.’
- Or: *tɬh-ǎn hup-kɬ-ɣ̃*
 3sg-OBJ RFLX-cut-DYNM
 ‘(Someone) got cut by him.’ (cf. §11.1.2 below)
- e) *tegd’úh hup kɬ-ɣ̃*
 tree person cut-DYNM
 ‘Someone cut the tree.’

The nominal Reflexive intensifier and the verbal Reflexive prefix often co-occur in Hup, as in examples (18-19). Their co-occurrence can help to clarify that a reflexive activity is indeed involved, particularly in contexts where a single occurrence of *hup* could be ambiguous between interpretations as a nominal and verbal formative. The addition of the contrastive emphasis (Telic) marker =*yíʔ* to the Reflexive intensifier helps to stress the uniqueness of the referent. The resulting ‘by oneself’ construction can reinforce the reflexive reading of the clause in potentially ambiguous cases, such as example (19) (as opposed to the alternative passive reading of verbal *hup-*, as in ‘he got cut’; see §11.1.2 below). However, note that the PN=*hup=yíʔ* construction can also be used with reciprocals (e.g. 34 below), so is not strictly reflexive.

- (18) *ʔám=hup hup-hipǎh!*
 2sg=RFLX.INTS RFLX-know.IMP
 ‘You yourself think (for) yourself.’ (i.e. ‘it’s up to you; you decide’) (H.71)
- (19) *tih=hup=yíʔ hup-kǎ-ǎy*
 3sg=RFLX.INTS=TEL RFLX-cut-DYNM
 ‘He (himself) cut himself.’ (EL)

The Reflexive preform *hup*—like its companion valency-adjusting preform, the Reciprocal *ʔih*—has a curious morphosyntactic property: while normally phonologically and morphosyntactically attached to the verb as a prefix, it can—in the context of a ditransitive verb with a distinct, stated object—optionally appear separated from the verb by the object nominal, as in (20).

- (20) *tih=hup=yíʔ hup=yág w’ǎ-ǎy*
 3sg=RFLX=TEL RFLX=hammock tie.hammock-DYNM
 ‘He’s tying his hammock for himself’ (EL)

As discussed below for the Reciprocal (§11.2), the object and verb may be in a noun-incorporating relationship in this construction, as evidenced by the inability of otherwise grammatical nominal morphology (e.g. demonstratives, plural marker, etc.) to modify the noun. In the case of the Reflexive preform, *hup* is unstressed in this pre-object position just as it is in pre-verbal position (and thus continues to resemble a prefix phonologically), whereas *ʔih* in this context takes independent stress as a phonologically free particle. Consultants judge both options (RFLX OBJ-V and OBJ RFLX-V) to be semantically equivalent and equally grammatical; thus *yág hup-w’ǎ-ǎy* (hammock RFLX-tie.hammock-DYNM) ‘tying his hammock for himself’ is judged to be the acceptable counterpart of (20) above.

As an additional note on the morphosyntax of reflexive constructions, they may involve causative verb compounds (which have internally complex valency but result in fully transitive verb forms; see §9.4.1.2 and §11.5.1 below):

- (21) *těg-ét ʔāh hup-huḥ-b'uy-wōb-op*
 wood-OBL 1sg RFLX-carry-throw-set.on-DEP
 'I got it (lit. 'put [the sore] on myself') from carrying and throwing down wood.'
 (referring to a sore on his foot) (B.Cv.96)
- (22) *tīh=dóʔ=d'əh tīh=ʔp-añ mǎy hup-g'et-yǎh-ǎy*
 3sg-child=PL 3sg-father-OBJ house RFLX-stand-send-DYNM
 'The children are sent home by their father.' (EL)

11.1.2. Passive reading of *hup*-. subject is acted upon by another participant

In other pragmatic contexts, or with verbs for which a single-participant reflexive reading is semantically unlikely, the verbal preform *hup*- can produce a passive reading, in which the subject (the semantic undergoer) is acted upon by some other participant (the semantic actor). In these cases, the animate actor (which would be the agent of the corresponding active clause) may be explicit, whereby it obligatorily takes the Object case-marker *-añ* (even if it is an animal, despite the fact that case-marking with *-añ* is *optional* for animal objects in active Hup clauses, see §4.3.1.2), as in examples (23) and (26) below. Alternatively, the actor may be dropped, as in (24) and (25). A reflexive construction of this type can only have a *core* participant appear in subject position, as opposed to a participant that is apparently non-core but is nevertheless object-marked, i.e. an affected participant appearing as the 'object' of a normally intransitive verb (see §8.2). As in the case of the single-participant reflexive reading, the grammatical subject in these

passive-like clauses is almost always animate, and tends to be human; this is in keeping with the cross-linguistic tendency for subjects (semantic undergoers) in passive constructions to be high on the animacy/empathy hierarchy.

When the grammatical subject has a high level of responsibility and agency in bringing about the event, the semantic overlap between the reflexive and passive interpretations is particularly clear. For example, (23) is frequently said as a warning to someone—especially a child—who is venturing out in the woods alone:

- (23) *ʔám ya ʔám-ǎñ hup-wæd-té-h*
 2sg jaguar-OBJ RFLX-eat-FUT-DECL
 ‘You’ll get (yourself) eaten by a jaguar.’ (OS/EL)

Constructions with Reflexive *hup-* are nevertheless often neutral as to the degree of the subject’s agency in bringing about the event, and may take a quite straightforward passive interpretation. Further examples are provided in (24-26). Example (24) comes from a story in which the jaguars have just thrown their victim’s head into the river, only to witness it floating in the current and making a spooky sound, foretelling their own coming demise.

- (24) *hǎd-ǎñ tǎh nín’-iw-ay*
 3pl-OBJ 3sg bad.omen-FLR-INCH
 ‘It ‘bad-omened’ them.

“*hup-nín’-íy, ʔǎñ-ǎh,*” *nɔ-yóʔ=mah*
 RFLX-bad.omen-DYNM 1pl-DECL say-SEQ=REP
 ‘We’ve gotten ‘bad-omened’,” they said...’ (H.71)

- (25) *hup-hipo ʔ-nǎh-ay=nih=mah yí-d’ǎh-ǎh*
 RFLX-meet-NEG-INCH=EMPH.CO=REP that-PL-DECL
 ‘And they were not caught, they say (by their mother).’ (I-M.20)

- (26) *nu-cáʔ-áy=n'ǎn ʔǎh hup-ʔid-muhúʔ-ũtiʔ*
 this-side-DYNM=PL.OBJ 1sg RFLX-speak-play-EMPH.TAG
 'I get scolded by the people around here.' (T-PN.3)

Note that the occurrence of the preform *hup-* as separated from the verb by a stated direct object is acceptable with the passive interpretation, as in the more prototypical reflexive case (see §11.1.1 above):

- (27) *híd=báb' hup=yág w'ǎ-ǎ*
 3pl=sibling RFLX=hammock tie.hammock-DYNM
 'Their brother is having his hammock tied (by someone else).' (EL)

As discussed above, the interpretation of *hup* as a prefixed verbal Reflexive or an encliticized nominal Reflexive intensifier may be ambiguous. Where the subject undergoer of the (passive) clause outranks the actor (agent of the corresponding active clause; now an oblique argument) in terms of person or humanness, a passive reading is typically the default interpretation of a clause with *hup* (regardless of word order, as in example (23) above). On the other hand, in the case where the oblique actor outranks the subject undergoer, the interpretation of *hup* can be sensitive to variation in word order. This is illustrated in the elicited paradigm in example (28); the clause receives a reflexive/passive reading in (28a-b), but when the morphologically unmarked (i.e. nominative-case) participant immediately precedes the reflexive marker (28c-d), the default interpretation of the clause is active, and *hup* is understood as the Reflexive intensifier.

- (28) a) Preferred or default interpretation: **REFLEXIVE (passive)**
ya ʔám tiyĩʔ-ǎn hup-mǎh-ǎy
 jaguar man-OBJ RFLX-kill-DYNM
 'The jaguar was killed by the man.'

- b) Only possible interpretation: REFLEXIVE (passive)

hup-mæh-æý tiyĩʔ-ǎñ ya ʔám-áh
 RFLX-kill-DYNM man-OBJ jaguar-DECL¹²⁷
 ‘The jaguar was killed by the man.’

- c) Preferred or default interpretation: **REFLEXIVE INTENSIFIER**

*tiyĩʔ-ǎñ ya ʔám=**hup** mæh-æý*
 man-OBJ jaguar=RFLX.INTS kill-DYNM
 ‘The jaguar itself killed the man.’

- d) Preferred or default interpretation: REFLEXIVE INTENSIFIER

*ya ʔám=**hup** mæh-æý tiyĩʔ-ǎñ-áh*
 jaguar=RFLX.INTS kill-DYNM man-OBJ-DECL
 ‘The jaguar itself killed the man.’ (EL)

As noted above, animate actors or ‘perpetrators’ (the agents of the corresponding active clauses) of events expressed as reflexive (passive) constructions are marked with the Object case suffix *-ǎñ*. However, while actors in these constructions are usually animate, they are not obligatorily so. When an actor is inanimate, it *cannot* take the Object marker *-ǎñ*, in keeping with the restrictions relating to animacy (i.e. differential object marking) that govern the use of the Object marker in Hup (see §4.3.1.2). Instead, inanimate actors must take the Oblique case-marker (*-Vĩ*), as we see in example (29), reading (a). Alternatively, the fact that animal objects in active (non-reflexive) clauses are *optionally* marked with Object *-ǎñ* permits the interpretation in reading (b), in which ‘deer’ is understood as the (unmarked) grammatical object of the killing event, rather than the subject undergoer—making *hup*, in turn, the indefinite human subject, and not a verbal Reflexive at all.

¹²⁷ Declarative *-Vh* is required on clause-final subjects (see §17.2).

(29) *məhʃy tegd'úh-út hup (-) məh-æy*

Reading a: deer(S) tree-OBL RFLX- kill-DYNM

Reading b: deer(O) person(A)

a: 'The deer got killed by the (falling) tree.'¹²⁸
(i.e. the wind blew it down, no human involved)

b: 'Someone (human) killed the deer with a tree/log.'
(note that if 'deer' takes overt object-marking, this is the only possible interpretation)

Such a default interpretation of *hup* as an indefinite subject is also likely to occur with change-of-state verbs (which can easily take one or two core arguments), as in example (30a), since the subject in the simple clause without *hup* may already be understood to be the undergoer of the event (30b):

(30) a) *bĩʃ(-ań) dəh-ét húp pu-yĩʔ-ǵ=cud*
rat(-OBJ) water-OBL person(A) wet-TEL-DYNM=INFR
'Someone wet the rat with water.'

b) *bĩʔ dəh-ét pu-yĩʔ-ǵ=cud*
rat(S) water-OBL wet-TEL-DYNM=INFR
'The rat got wet in the rain/ water.' (EL)

The use of *hup* as an impersonal subject and as a Reflexive marker (in a reflexive construction with a passive interpretation) may even be pragmatically equivalent. For example, (31) (which had neither of the first person forms in parentheses when originally uttered) may be grammatically ambiguous, if the intonation and pause clues defining *hup* as a free or bound form are not clear (as is often the case in fast speech). The clause may be understood either as a straightforward ditransitive construction with a pro-dropped (object) recipient 'me' and impersonal subject 'someone' (as in 31a), or as a reflexive

¹²⁸ The preferred way to express the same concept involves the Factitive prefix *hi-* (see §11.4):

məhʃy tegd'úh-út nəh-hitǎʔ-ǵy
deer tree-OBL fall-FACT.crush-DYNM
'The deer was crushed by the (falling) tree.' (EL)

(passive) construction with a pro-dropped subject ‘I’ (as in 31b). Pragmatically, however, the same message is conveyed by either reading.

- (31) a) *těg=mæh (ʔǎn) hup huĩh-n ĩh*
 wood=DIM (1sg.OBJ) person(A) carry-NEG
 ‘No one carries any wood (for me).’
- b) *těg=mæh hup-huĩh-n ĩh (ʔǎh-ǎh)*
 wood=DIM RFLX-carry-NEG (1sg{S}-DECL)
 ‘(I) don’t get any wood carried (for me).’ (T-PN.4/EL)

The passive reading of the reflexive also occurs with ditransitive constructions:

- (32) *ʔñ tǎh=mæh-ánd’ əh hup-d’o ʔ-tubúd-úh*
 1pl son=DIM-ASSOC.PL RFLX-take-INTS3-DECL
 ‘My son and I were taken (i.e. served) a lot (of caxiri).’ (TD.Cv.103)
- (33) *ʔǎh cecádio-ǎn hǎh hup-n ʔ-óy*
 1sg Cesario-OBJ merchandise RFLX-give-DYNM
 ‘I was given merchandise by Cesario.’ (EL)

11.1.3. Reciprocal reading of *hup*:- subjects act on each other

When a Reflexive construction occurs with a plural subject, or with multiple coordinated singular subjects, a reciprocal reading may also be possible (in addition to the reflexive and passive readings), as in (34).¹²⁹ However, the Reciprocal/pluractional marker *ʔũh*- is normally preferred in this context.

- (34) *tǎ ʔǎy=d’ əh hup-kəmən-d’ ó ʔ-óy*
 woman=PL RFLX-encircle.with.arms-take-DYNM
 ‘The women embrace each other.’ (EL)

¹²⁹ Note that to indicate a coordinated reflexive action on the part of multiple subjects (i.e. ‘doing V to themselves, together’), an alternative strategy involves the Reciprocal/pluractional marker *ʔũh*- and the Reflexive intensifier form *hǎl=hup=yiʔ* (see §11.2 below).

In some cases, Reflexive *hup-* (with its reciprocal interpretation) is interchangeable with the Reciprocal/pluractional preform *ññh-*:

- (35) *tát deh-ét=ññy=d'əh ññh-nɔʔ-nñh...*
 Ant Water-OBL-who=PL RECP-give-NEG
 'The people of Tat Deh don't give (food) to each other...'

bahéra-át=ññy=d'əh wæð hup-nɔʔ-nñh
 Barreira-OBL-WHO=PL food RFLX-give-NEG
 'the people of Barreira don't give food to each other.' (LG-O.14)

In example (36), a reflexive construction has a reciprocal interpretation—but an asymmetrical one, since it is unlikely that two piranhas would actually eat each other in a true reciprocal sense. As discussed in §11.2 below, such an asymmetrical interpretation is a normal possibility for reciprocal constructions generally in Hup.

- (36) *ʔñ=d'əh hñd=hup=yíʔ hup-wæð-æy=cud*
 piranha=PL 3pl=RFLX.INTS=TEL RFLX-eat-DYNM=INFR
 'The piranhas themselves are eating each other.' (EL)

Comparative / Historical Note:

Dâw uses the form *xup* both as a reflexive intensifier, a reflexive marker, and as a noun meaning 'human body'; the related form *xub* precedes the verb and acts as a reciprocal marker. Note that Dâw has a different word for 'human being' (S. Martins 2004: 379-83), whereas Hup uses the distinct form *cáp* for 'body' (and *hup* for 'human being'). No information is available on the reflexive construction in Yuhup, but Nadëb uses the apparently unrelated reflexive/reciprocal/ passive form *ka-* (Weir 1984: 107).

The formal identity of the noun 'person', the nominal intensifier, and the verbal reflexive marker (with its several functions) is undoubtedly an indication of their

historical relationship. Such a relationship is cross-linguistically common, and has been attributed to the following general path of grammaticalization, which seems to be attested in a number of the world's languages (cf. Heine 2000, König and Siemund 2000: 56):

Nominal source (usually 'body') → Intensifier → Reflexive → Reciprocal → Middle → Passive

In Hup, the form *hup* reflects all of these semantic areas (except perhaps the middle voice). It is hoped that further study will shed more light on the processes of grammaticalization that led to the present system.

11.2. Reciprocal / pluractional *ʔuʔh-*¹³⁰

The verbal preform *ʔuʔh-* in Hup is typically used to signal a reciprocal interaction (and is usually preferred over Reflexive *hup-* for this function), and as such decreases valency. However, *ʔuʔh-* is not limited to a strictly reciprocal function, but is also used to indicate a more general interaction of two or more agentive entities in the performance of an activity; this use does not necessarily involve a change in valency.

Examples of the more prototypical, symmetric reciprocal use of *ʔuʔh-* include *ʔuʔh-cob-* (RECP-point) 'point at each other', and the semi-lexicalized forms *ʔuʔh-g'əʔ-* (RECP-bite) 'fight' (especially dogs; example 37) and *ʔuʔh-mæh-* (RECP-beat/kill) 'fight' (especially in the latter form, speakers frequently drop the /h/ in *ʔuʔh-*). Another example

is provided in (38). Asymmetric and generally pluractional examples of *ɺɺh-* are given below.

- (37) *ya ɺamboʔ=d' əh ɺɺh-g' əʔ-əy*
 dog=PL RECP-bite-DYNM
 'The dogs are fighting.' (lit. 'biting each other') (EL)
- (38) *pəʔ hid ɺɺh-pəʔ-əy, hu' hid ɺɺh-pəʔ-əy,*
 dabacuri 3pl RECP-dabacuri-DYNM game.animal 3pl RECP-dabacuri-DYNM
 'They (the Ancestors) had dabacuris for each other; they ritually presented game to each other;
- həʔ hid ɺɺh-pəʔ-əy...*
 fish 3pl RECP-dabacuri-DYNM
 they ritually presented fish to each other...' (H.40)

The formal characteristics defining Reciprocal/pluractional *ɺɺh-* include the fact that it usually appears as a verbal prefix (cf. §3.4.1.1), realized as a phonological unit together with its host: it is unstressed, and is not separated from the verb by a pause. However, in the context of a ditransitive verb with a stated direct object (i.e. a non-beneficiary/recipient), it may optionally occur as a phonologically free prepositional particle, detached from the verb stem (a similar phenomenon is attested for the Reflexive prefix *hup-*; see §11.1 above). In this context (and only this context) *ɺɺh-* may be separated from the verb stem by the object nominal, and receives independent stress (rising tone). Consultants describe this construction as semantically equivalent to the alternative order of [Obj *ɺɺh*-Verb] (e.g. *hid nám ɺɺh-nəʔ-əy*). The phenomenon is illustrated in example (39); see also (54) and (55) below.

¹³⁰ This discussion was informed by materials from the *Reciprocals across languages* project (Evans and Nordlinger 2004), and the Reciprocals project and elicitation materials produced by the Max Planck Institute for Psycholinguistics (Evans et al. 2004).

- (39) *hɪd ʔũh nam nɔʔ-ɔy*
 3sg RECP poison give-DYNM
 ‘They give poison to each other.’ (LG.txt)

This occurrence of *ʔũh* as a free prepositional particle probably represents a unique form of object-incorporation in the verb (although noun incorporation is otherwise largely unproductive in Hup; see §9.6). Evidence for this is the fact that the object nominal is itself unstressed (like all non-final compounded elements in verbs), and that it cannot be modified by the Plural marker =*d’əh*, the Object case marker -*ǎn* (regardless of animacy), a demonstrative, an adjective, or any other modifier—unlike object nominals that precede [*ʔũh* + Verb] or occur anywhere else in a clause:

- (40) a) *hɪd ʔũh [*núp] nam nɔʔ-ɔy*
 3pl RECP this poison give-DYNM
 ‘They give each other [*this] poison.’
 b) *hɪd ka ʔáp=d’əh ʔũh tog [*=d’əh, *-ǎn, *-n’ǎn] bé-éy*
 3pl two=PL RECP daughter [*PL *OBJ *PL.OBJ] show-DYNM
 ‘The two of them show each other their daughters.’
 c) *hɪd ʔũh hɔp [*pɔg] nɔʔ-ɔy*
 3pl RECP fish big give-DYNM
 ‘They give each other [*big] fish.’ (EL)

Other features of Reciprocal/pluractional *ʔũh*- include the fact that virtually all examples of its use—in keeping with the semantics of reciprocal or interactive activity—involve a transitive verb (either mono-transitive or ditransitive). However, consultants do judge certain intransitive Reciprocal constructions to be grammatical, with a pluractional interpretation (example 41). Note that in such cases *ʔũh*- does not decrease the valency of the construction per se, as it does in more prototypical Reciprocal uses; rather, the fact

that it entails multiple interactive participants could actually be construed as a net increase in valency.

- (41) *ʔiʔhiwʔh* *hɪd* *ʔiʔh-g'āʔ-āy*
 between.associates 3pl RECP-be.suspended-DYNM
 'They are together in the same hammock.' (EL)

Also in keeping with its semantics, Reciprocal/pluractional *ʔiʔh*- usually requires a plural subject, whereas a singular subject is normally ungrammatical:

- (42) **yúp=ʔh* *ʔiʔh-nʔm'-ʔy*
 that.ITG=MSC RECP-poke-DYNM

However, in a few cases where the Reciprocal/pluractional marker is semi-lexicalized together with the verb stem, consultants judge a singular subject to be grammatical (but an explicit object such as *cāp=ʔh-an* (other=MSC-OBJ) 'someone else' is not permitted):

- (43) a) *yúp=ʔh* *ʔiʔh-mæh-āy*
 that.ITG=MSC RECP-hit/kill-DYNM
 'That man is fighting (with someone).'
- b) *yúp* *ya ʔamboʔ* *ʔiʔh-g'āʔ-āy*
 that.ITG dog RECP-bite-DYNM
 'That dog is fighting (with some other dog).' (EL)

Where the subject of the clause is a conjunction of two (or more) singular entities (which appears to be rare in natural discourse), consultants prefer the use of the 'Associative plural' suffix *-and'əh* (see §4.4.6) on both:

- (44) *tiyĩʔ-and'əh* *tā ʔāy-and'əh* *hǎp* *ʔiʔh-nʔʔ-āy*
 man-ASSOC.PL woman-ASSOC.PL fish RECP-give-DYNM
 'The man and woman give fish to each other.' (EL)

Although subjects of the Reciprocal/pluractional construction are almost always animate, this is not a requirement. For example, two trees may reciprocally hit each other in the wind, or two canoes bump against each other in the waves:

- (45) *hɔhtɛg=d'əh ʔa ʔáb'-át ʔiʔh-nɔh-d'ák-áy*
 canoe=PL wave-OBL RECP-fall-be.against.vertical-DYNM
 'The canoes are hitting against each other in the waves.' (EL)

A final formal aspect of Reciprocal/pluractional *ʔiʔh-* is its use in verbal compounds. In this context, it precedes the entire compound, as in (46); no cases have been encountered in which *ʔiʔh-* occurs compound-medially (i.e. with scope over a single compound-internal stem), in contrast to the other two valency-adjusting preforms, Reflexive *hup-* and Factitive *hi-*.

- (46) *húp=d'əh ʔiʔh-tab'ah-g'et-d'əh-hi-iy*
 person=PL RECP-slap-stand-send-descend-DYNM
 'The people are standing in a row slapping each other.' (EL)

Finally, note that—at least in the case of semi-lexicalized reflexives—the Reciprocal and Reflexive markers can co-occur in a compound; *ʔiʔh-* precedes *hup-*:

- (47) *híd ʔiʔh-hup-yád-áy*
 3pl RECP-RFLX-hide-DYNM
 'They are hiding from each other.' (EL)

The semantics of *ʔiʔh* is relatively flexible. While examples of its more symmetric reciprocal use are given above (e.g. 37-38), it is also used in cases of asymmetric reciprocity, as in examples (48-49). In (48), the participants' speaking amongst themselves is an example of a 'mêlée'-type reciprocal event, in which an activity is

performed among a group of people, with no necessarily symmetric interaction between pairs of actors. Example (49) illustrates a ‘chain’ type situation, in which the first entity acts on the second, the second in turn acts on the third, and so on.

- (48) “*ʔm̥=ʔn=tæ̃h=cud yúw-úh...*” *híd ʔũh-nɔ̃-ay-áh*
 1pl=mother=son=INFR that-DECL 3pl RECP-say-INCH-DECL
 ‘“That’s our mother’s child...” they were saying amongst themselves.’ (I-M16)

- (49) *cug’æ̃t=d’əh ʔæ̃y-hiyóʔ ʔũh-nɔ̃h-wób-óy*
 book=PL together-on.top.of RECP-fall-rest.on-DYNM
 ‘The books fell on top of each other.’ (EL)

The use of *ʔũh* to signal asymmetric reciprocity, as in the examples above, blends into an even more generally pluractional function. As such, *ʔũh* typically indicates the general interactive involvement of multiple agentive participants in an event. In the second occurrence of *ʔũh* in (50), for example, the spirits’ chasing after a girl (who is being carried away by another spirit) is necessarily asymmetrical and barely reciprocal at all (compare English “on each others’ heels”); moreover, ‘that girl’ is the case-marked direct object of the clause, indicating that Reciprocal/pluractional *ʔũh* has no effect on valency here. Similarly, in the second part of (51), the use of *ʔũh-* is linked to a general reciprocal *situation* (that of interacting together (sharing coca) on the basis of affinal relationships), whereas the actual event signaled by the verb is not itself reciprocal at all. Note that this use of *ʔũh* does not actually affect the valency of the verb.

- (50) *ʔũh-nɔ̃-hám-áy=mah yíʔ-d’əh-əh, yúp=ʔäy-ăn ʔũh-toh-hám=d’əh*
 RECP-say-go-INCH=REP that-pl-DECL that=FEM-OBJ RECP-chase-go=PL
 ‘(“Mine, mine!”), those (the spirits) all went saying to each other, chasing after that girl (together).’ (E-SB)

- (51) *ʔin ʔiħ bab'-ni-d'o ʔ-pĩd-ħ;* *ʔĩ=yǎh=d'əh-ǎ ʔin bab'-ni-yóʔ...*
 1pl RECP companion-be-take-DIST-DECL 1pl=affine=PL-OBL 1pl companion-be-SEQ
 'We all joined company with each other; having joined company with our
 affines...

puʔiħ b'ǎʔ ʔiħ-næm'-key-yóʔ, ʔin ni-pĩd-ħ
 coca gourd RECP-lick-see-SEQ 1pl be-DIST-DECL
 having tasted the coca together, we stayed thus.' (Alb.Int.47)

Pluractional *ʔiħ* may even be used when only two entities are involved in the event. For example, (52) comes from a description of a scene in a picture story¹³¹ in which the boy and dog have just fallen into a stream; both are trying to get out, and in the process the dog has climbed onto the boy's shoulders. This use of the reciprocal is probably best understood as a characterization of the general scene of their struggle to leave the stream (much like the English 'climbing over each other').

- (52) *ʔǎy-buycóʔ, yĩkán deħ-an nǎh-tu ʔ-yóʔ,*
 together-on.top over.there water-DIR fall-immersed-SEQ
 'On top of each other, having fallen there in the water,

hĩd ʔiħ-hitoy'-cak-ní-b'ay-áh
 3pl RECP-support.on.head-climb-be=AGAIN-DECL
 they are climbing up on each other.' (FS.10)

In many cases, in fact, use of a reciprocal-type expression with *ʔiħ* to express pluractionality is optional, and is interchangeable with a straightforward transitive clause. The Reciprocal/pluractional form may be used when the speaker simply wishes to characterize the event as an interaction between participants, while the identity of the participants—particularly who does what to whom—is unimportant. For example, after watching a video clip of one person taking off his watch and giving it to another person

(i.e. a prototypically *non*-reciprocal event), consultants phrased their description of the event as a reciprocal (example 53); they did the same for a clip of two people sitting side by side, with one turning repeatedly to look at the other. Conversely, Reciprocal/pluractional *ʔiħ* is *not* grammatical when there is no interaction between participants in the scene, such as in a clip of people sitting side by side and looking straight ahead.¹³²

- (53) *húp=d'əh hedógio ʔiħ-po ʔ-nɔʔ-pæm-æy*
 person=PL watch RECP-open-give-sit-DYNM
 'The people are taking off and giving a watch while sitting.' (EL)

Similar examples are encountered in my corpus (54-55), in which a construction involving *ʔiħ* refers to an event which is not reciprocal at all—one participant is strictly the agent, the other strictly the patient. Both of these examples come from stories in which one participant plays a nasty trick on the other, and in both cases the storyteller is 'foreshadowing' the event before it actually takes place. It is probably the teller's desire to hint at the event to come—without going into too much detail too early—which leads him/her to use the reciprocal construction to convey a general interactive sense. In (54), we see *ʔiħ-* used both in its standard reciprocal sense (with 'say') and in its pluractional sense (with 'pierce').

¹³¹ Mercer Meyer's *Frog Where Are You?*

¹³² Video clips are part of the Reciprocals project elicitation materials (Evans et al 2004).

- (54) “*máy j’əm-lay-nǎŋ, ǎŋ=tǎǎ!*” *híd ǎŋh-nǎ-d’ób-ay-áh...*
 let’s.go bathe-VENT-COOP mother=son 3pl RECP-say-go.to.river-INCH-DECL
 “‘Let’s go bathe, mother’s son!’ they said to each other, going down to the river...”

híd ǎŋh yǎŋmǎy yók-ay-áh
 3pl RECP anus pierce-INCH-DECL
 they would engage in anus-piercing together’
 (i.e. one would poke out an anus for the other). (YY.P)

- (55) *híd ǎŋh kǎwǎg wǎt-té-ay-áh*
 3pl RECP eye pull.out-FUT-INCH-DECL
 ‘They will engage in eye-pulling-out together.’ (i.e. one would pull out the other’s eyes) (CO.H)

Because of this functional flexibility of Reciprocal/pluractional *ǎŋh*, its interpretation may be ambiguous between truly reciprocal and simply interactional. Fixed lexical expressions may help to reinforce one or the other interpretation of a predicate marked with *ǎŋh*-. For example, even a kind of interactive *reflexive* interpretation is possible when lexically specified. Both (56) and (57) involve the Reciprocal marker, but the preferred interpretation is that the two participants are acting jointly to poke their own bodies, not the other person’s.

- (56) *tǎǎǎy, tiyǎ? híd=hup(=yǎ?) ǎŋh-nǎm’-ǎy*
 woman man 3pl=RFLX.INTS(=TEL) RECP-poke-DYNM
 ‘The man and woman together are each poking themselves.’ (EL)

- (57) *tǎǎǎy, tiyǎ? hídñh cáp-át ǎŋh-nǎm’-ǎy*
 woman man 3pl.POSS body-OBL RECP-poke-DYNM
 ‘The man and woman together both poke on their own bodies.’ (EL)

A true reciprocal interpretation can also be reinforced by adding an explicit lexical reciprocal expression, as in (58).

- (58) *tiyĩʔ tãʔǎy (ʔũhhiwĩh) ʔũh-nɔm'-ɔy*
 man woman (between.relatives) RECP-poke-DYNM
 'The man and woman poke each other.' (EL)

This lexical expression *ʔũh-hiwĩh* is translated as 'between relatives/close associates', and also occurs in nominalized form as a generic kin term, *ʔũh-hiwĩh=d'əh* 'relatives, close associates'. It is apparently formed from the Reciprocal marker¹³³ and the verb *hiwĩh-* (itself made up of the Factitive prefix *hi-* and a root that consultants say is meaningless on its own), which means 'restrain from fighting or danger'. The kin term *ʔũh-hiwĩh=d'əh* would thus be a (semi-lexicalized) headless relative clause meaning 'those who restrain each other from trouble'.

Another expression is the collocation *ʔǎy-hi-póʔ=yíʔ* (together-FACT-open/take.out=TEL), which involves the morphologically complex form *hipóʔ* 'opposite'. This collocation can be used to express opposite or facing spatial orientation, but often acts to reinforce a reciprocal interaction:

- (59) *tiyĩʔ=d'əh ʔũhhiwĩh hǎp ʔũh-nɔʔ'-ɔy, ʔǎy-hi-póʔ=yíʔ*
 man=PL between.relatives fish RECP-give-DYNM together-FACT-open=TEL
 'The men are giving fish to each other, reciprocally.' (EL)

Other expressions involving the bound form *ʔǎy-* 'together' also encode togetherness and interaction, but are not necessarily reciprocal; these include *ʔǎy-hiyóʔ* and *ʔǎy-buycóʔ* (together-on/above) 'on top of each other' (see example 47 above), *ʔǎy-ǎí(=yíʔ)* (*ʔǎy-OBL(=TEL)*), and *ʔǎy-tæn(=yíʔ)* (*ʔǎy-comparative(=TEL)*) or *ʔǎy-tæn* 'together', as in (60).

- (60) *ʔǎy-tæn=yɪʔ hid mæh-b'uy-d' əh-ham-yɪʔ-ay-áh!*
 together-MEAS2=TEL 3pl kill-throw-send-go-TEL-INCH-DECL
 'Together they killed (them) all and threw them out of the way!' (H.76)

In addition to its realization as a Reciprocal/pluractional marker, the bound form *ʔũh* has a remarkable number of other uses in Hup (cf. §3.3). As an Inner Suffix, it creates an applicative construction (see §11.3 below); it also appears as a verbal Boundary Suffix marking optative mood and as a particle (not limited to verbs) marking epistemic modality (§11.3 and §14.7-8).¹³⁴

Yet another realization of *ʔũh* is as a free lexical noun meaning 'sibling of opposite sex'. As such, it may be alienably possessed (as in 61 and 62) or inalienably possessed (as in 62); it also receives the bound nominal =*ʔǎy* 'female' when the referent is female (*ʔũh*=*ʔǎy* 'sister'; examples 61-62). Note that other, different words for 'sibling', 'close relative or companion', and 'older/younger brother/sister' (real or classificatory) also exist in Hup, and are in fact more frequently used than *ʔũh*.

- (61) *núp ʔm=dú nĩh, huĩ tuĩ=ʔh nĩh ʔũh=ʔǎy,*
 this 1pl=ancestor POSS tobacco light=MSC POSS sibling=FEM
 'There was our ancestor Cigar-Lighter's classificatory sister,

ʔũh=ʔǎy ní-íy b' ʔyɪʔ=mah
 sibling=FEM be-DYNM only=REP
 everyone's sister was there.' (LG.C.24)

- (62) *nĩɣ=ʔp=ʔũh=ʔǎy=hɔ ní-íy yǎh ʔǎh-ǎh*
 2pl=father=os.sibling=FEM=NONVIS be-DYNM FRUST 1sg-DECL
 'I guess I actually am your father's sister.' (TD.Cv.104)

¹³³ But see the related use of *ʔũh* as 'sibling of opposite sex' (described below).

¹³⁴ It is also likely that the same form *ʔũh* occurs in the lexeme *dap ʔũh* 'hand' (possibly from *d'ap* 'flesh' + *ʔũh*; i.e. 'togetherness of flesh'); compare Tukano *amû pa ʔma* 'hand' (lit. 'superior part group').

- (63) *nĩ* *ṛĩh=n'ǎn* *núp* *j'ah-át* *kək-næn-g'et-yó?*
 1sg.POSS sibling=PL.OBJ this land-OBL pull-come-stand-SEQ
 'Having brought my siblings to stay in this land,
- cək-w'ət* *nəg'od* *tǎh=d'əh* *nĩh* *j'ah-át...*
 toucan mouth offspring=PL POSS land-OBL
 the land of the Toucan's Beak Clansmen...' (A.Song.15)

Historical Note

There is considerable evidence that a historical relationship exists between the Reciprocal/pluractional marker and the nominal form *ṛĩh* 'sibling of opposite sex'. From a comparative perspective, there is cross-linguistic precedent for a connection between a reciprocal marker and a kin term 'sibling' or 'brother' in Biblical Hebrew (in which reciprocity can be expressed as '(a) man [(to) his-brother]'); Orin Gensler, p.c.), and in Tok Pisin (Evans and Nordlinger 2004). Similarly, reciprocal expressions are built on 'fellow' or 'comrade' in Welsh, Koromfe (Niger-Congo), and Sechellois (Evans and Nordlinger 2004). Thus the semantic leap from 'sibling' or 'comrade' to reciprocal interaction is not so great that a number of languages could not make it independently; this is undoubtedly because interaction among siblings is—in many or most cultures—prototypically cooperative, relatively egalitarian, and therefore reciprocal.

In Hup, moreover, there is language-*internal* precedent for a transition from the expression of 'sibling' to reciprocity or interaction. The kin term *báb* 'real or classificatory sibling' is incorporated in a few lexically specific verb forms (cf. §9.6 on noun incorporation), all of which have reciprocal or more generally interactive semantics. The most common are *bab'-ni-* 'accompany; be consanguinally related to' and *bab'-ʔid-*

‘chat together’. As example (64) illustrates, the interpretation of the clause containing *bab*’ may in certain contexts be ambiguous:

- (64) a) *hĩd bab’-?ĩd-řy*
 3pl sibling-speak-DYNM
 ‘They are chatting (together).’
 b) *hĩd=báb’ ?ĩd-řy*
 3pl=sibling speak-DYNM
 ‘Their sibling is talking.’ (EL)

While these two verbal forms of *bab*’ are the only ones in really common use, there is actually some evidence that the incorporation of *bab*’ into verbs is marginally productive. One speaker used the verbal *bab’-g’et-* (sibling-stand) and even the variant *bab’-bab’-g’et-* (in which ‘sibling’ is repeated) to describe a picture of several pairs of books standing on end on a table, with each pair propped together at the top to form an acute angle. Similarly, another speaker used *?ũh-bab’-pæm-* (RECP-sibling-sit-) to describe a video clip of two men sitting side by side, with one turning repeatedly to look at the other.

The kin term *?ũh* ‘opposite-sex sibling’ probably went through an initial process of incorporation into the verb, much like that which *bab*’ ‘classificatory sibling’ has undergone, and probably beginning with a few specific lexical items only. Unlike *bab*’, however, *?ũh* would have become generalized by analogy until it was fully productive as a noun-incorporated form in the language. This phase of noun incorporation must have been fleeting, probably because noun incorporation is an unproductive process in Hup generally; thus *?ũh-* became reanalyzed as a verbal formative, rather than a bound root.

In the process, it retained a degree of independence from the verb, such that it still occurs as a free form in the context of a pre-verbal object in a ditransitive clause. As with *bab'* in example (64) above, a clause may be formally ambiguous between the two interpretations of *ũh*, especially when Reciprocal/pluractional *ũh* appears as a free particle:

- (65) a) *hĩd ũh [cug'æt bé-éy]*
 3pl RECP leaf show-DYNM
 'They show each other a leaf.' (Or: 'They are engaged in leaf-showing.')
- b) *hĩd=ũh cuk'æt bé-éy*
 3pl=os.sibling leaf show-DYNM
 'Their brother shows (someone) a leaf.' (EL)

Moreover, because the semantics of Reciprocal/pluractional *ũh* is not exclusively reciprocal, but can be generally interactional, the interpretation of the two clauses in (65) may be pragmatically very similar.

But of the several words for 'sibling' in Hup, why was it '*opposite-sex* sibling' that underwent this grammaticalization to a reciprocal, rather than *báb'* 'real or classificatory sibling', or some other sibling term? The definitive answer to this question may never be known, but one possibility is the region-wide cultural importance of opposite-sex siblings in marriage exchange. In the Vaupés region generally, the preferred marriage pattern is sister exchange—ideally involving blood siblings, not simply classificatory siblings—such that a brother-sister pair (of one clan/ family) is matched to a brother-sister pair (of another clan/ family). This is a strong prerogative among many of the region's groups, and the close relationships that sometimes arise between blood brothers and sisters are said to have the "purpose" of providing for their marriage (cf.

Goldman 1963: 122-3, Chernela 1993: 66, Jackson 1983: 126-27). While the Hupd'əh are generally more lackadaisical about marriage rules than are the River Indians, they are certainly aware of this regional ideal, and conform to it when possible or convenient.

There are several examples from my text corpus in which *ʔũh-* occurs as a Reciprocal/pluractional marker in relation to affinal relationships and sister exchange (examples 66-67). Here *ʔũh* precedes a kin term, which may or may not be incorporated into the verb; this is formally little different from a construction in which nominal *ʔũh* 'sibling' precedes another kin term as an inalienable possessor.

- (66) *ʔũh-yəh-ní-íy,* *yúp məhəy=kəʔ=təh=d'əh,*
 RECP-affine-be-DYNM that deer='bone'=offspring=PL
 'Affinally associated with each other, those the Deer-Bone clansmen,
hăy, yúp cəkw'ət=nəg'od=təh=d'əh
 um that toucan=mouth=offspring=PL
 um, and those Toucan's-Beak clansmen.' (LG.C.25)

- (67) ...*ʔũh yawám=ʔăy ní-íy, cəkw'ət=nəg'od=təh=ʔh...*
 RECP younger.sibling-FEM be-DYNM toucan=mouth=offspring=MSC
 '...Having each others' younger sisters, that Toucan's-Beak clansman...'

It is also noteworthy that while Reciprocal/pluractional *ʔũh-* is a verbal prefix which cannot in general associate with nouns (example 68a), it *can* associate with kin terms even where no verb is present in the clause (68b-c).

- (68) a) **ʔũh-cug'əh=d'əh*
 RECP-leaf/paper=PL
 **ʔũh-məy=d'əh*
 RECP-house=PL

- b) *ʔũh-y ʔh=d' ʔh* *yɛ-d' ʔh-ʔh*
 RECP-affine=PL that.ITG-PL-DECL
 ‘They are affinal relatives/ cross-cousins.’
- c) *pedu-and' ʔh* *ʔũh-báb'=d' ʔh*
 Pedro-ASSOC.PL RECP-sibling=PL
 ‘Pedro and he/they are brothers.’ (EL)

If constructions involving [*ʔũh* + incorporated object + *ni*-] like those above were historically among the first productive uses of *ʔũh* as a reciprocal/pluractional marker—which later spread by analogy to other verbs—this would perhaps explain the idiosyncratic ability of *ʔũh* to appear as a free particle, separated from the verb by an incorporated object. This would also explain the puzzling fact that the reciprocal/pluractional construction is one of the only environments in Hup in which noun incorporation appears to be a productive process.

To conclude, Hup may provide us with an interesting case in which a cultural phenomenon—sister exchange in marriage—has influenced grammar. It is hoped that further investigation into the history of the form *ʔũh*, as well as comparative examination of data from Hup’s sister languages,¹³⁵ will shed more light on this story.

11.3. Applicative - *ʔũh*-

Unlike the other valence-adjusting forms described in this chapter, the Applicative marker is not a prefix, but an Inner Suffix. This is the form -*ʔũh*-, which is otherwise

¹³⁵ The comparative data that is currently available from Hup’s sister languages offers few clues. The pre-verbal form *ʔũh*- appears to have a reciprocal function in Yuhup, but there is no indication in Ospina (2002) that it is used as a free lexeme. Dâw apparently uses *hub* as both a reflexive and a reciprocal

formally identical to the Reciprocal/pluractional preform described above (§11.2).

Like all Inner Suffixes in Hup, the Applicative marker is normally obligatorily followed by a Boundary Suffix (except in imperative and apprehensive moods; cf. §3.4.1).

In contrast to the Reciprocal/pluractional preform *ʔũh-*, which often functions to decrease valency, Applicative *-ʔũh-* is a valency-*increaser*: it always adds a participant, which is crucially animate. The most common use of the Applicative involves creating a ditransitive construction from a transitive verb by adding a recipient or a beneficiary/ maleficiary, as in examples (69-72). In these examples, the Applicative suffix is in general required for a ditransitive reading to be possible.

- (69) *tĩh=dehwaħ* *tĩh=tæħ=n'añ* *tĩh b'əh-g'et-ʔũħ-ũħ*
 3sg=bad.manicuera 3sg-child=PL.OBL 3sg pour-stand-APPL-DECL
 'She fixed bad manicuera for her children.' (I-M)

- (70) *ʔañ=tæħ ʔp* *ʔañ* *tĩh d'o ʔ-ʔũħ-ũħ*, *yěw...*
 1sg=child.father 1sg.OBJ 3sg take-APPL-DECL armadillo
 'My husband took armadillos for me...'

ʔañ *tĩh mæh-ʔũħ-ũħ*, *hăť*
 1sg.OBJ 3sg kill-APPL-DECL, crocodile
 killed crocodiles for me.' (MM-PN4)

- (71) *ʔám-añ* *d'o ʔ-ʔũħ-nĩh-áh* *ʔăh-ăp*
 2sg-OBJ get-APPL-NEG-FOC 1sg-DEP
 'I'm not going to get any (cookies) for you!' (BCv)

- (72) *ʔañ* *těg* *hũh-ʔũħ*
 1sg.OBJ wood carry-APPL.IMP
 'Carry some wood for me!' (OS)

marker, and Martins' work makes no mention of any form *ʔũh*; in Nadëb the reciprocal/reflexive construction is reportedly quite distinct from that found in Hup; see §11.1 above.

If the semantics of the verb does not allow for a recipient, then the additional participant introduced by the applicative is by default understood to be a beneficiary or maleficiary—someone who is affected by the action, or in whose place the action is being performed. This is always the case with lexically intransitive verbs, as in examples (73-74).

- (73) *hɪd nɔm'-ʔuʰ-uʷ*
 3pl poke-APPL-DYNM
 'They are poking (someone) for him.'
 OR: 'They are poking (someone's stuff, without that person's knowledge or request).' (EL)
- (74) *g'ãʔ-ʔuʰ-nɪh nɪh!*
 be.suspended-APPL-NEG be.IMP
 'Don't lie in (my/ someone else's) hammock!' (EL)

If explicitly stated, this participant is (as we have already seen) marked as an object (provided the animacy/number requirements for object-marking permit):

- (75) *hɪd (tɪh-ãñ) g'ãʔ-ʔuʰ-uʷ*
 3pl 3sg-OBJ be.suspended-APPL-DYNM
 'They're lying in (someone's) hammock.' (i.e. without his knowledge or approval) (EL)

The Applicative also occurs with ditransitive verbs, where it adds a fourth participant. The default interpretation of these constructions is usually benefactive; the agent is performing the action in the place of another person, as a service:

- (76) *hɪd-ãñ hɔ̃p tɪh nɔʔ-ʔuʰ-uʷ*
 3pl-OBJ fish 3sg give-APPL-DYNM
 'He's giving them fish (as a service to someone else, probably the owner of the fish).' (EL)

- (77) *núw-ǎñ tǎh-ǎñ wi-ǎñh*
 this-OBJ 3sg-OBJ give.back-APPL.IMP
 ‘Give this back to him (for me).’ (RU)

11.3.1. Additional functions of -*ǎñh*

As mentioned in §3.3, *ǎñh* is one of the most polyfunctional forms in Hup. In addition to its uses as a Reciprocal/pluractional prefix, a free lexical noun ‘sibling of opposite sex’, and an Applicative suffix, *ǎñh* has two other post-verbal realizations, with distinct uses not related to valency.

As a verbal Boundary Suffix, it functions to express the optative mood (see §14.7):

- (78) *tán pátima wæd-ǎñh*
 later Fatima eat-OPT
 ‘Let Fatima eat (it) later.’ (OS)

As a particle following nominal, adjectival, and verbal predicates, *ǎñh* indicates epistemic modality (see §14.8):

- (79) *hǎp yǎǎ=d’əh ǎñh!*
 fish roast=PL EPIST
 ‘Maybe it’s people cooking fish.’ (discussing a smell) (OS)

Note that the Optative, Epistemic, and Applicative uses of *ǎñh* cannot co-occur; i.e. they are in complementary distribution with each other.

Despite the impressively wide range of functions demonstrated by the form *ʔiħ*, there is good reason to suppose that some or all of these may be historically related. As discussed above, a relationship between the use of *ʔiħ* as a reciprocal or pluractional prefix and as a kin term ‘sibling of opposite sex’ is cross-linguistically plausible, and is arguably motivated in Hup. Likewise, positing a historical chain of grammaticalization connecting the various post-verbal uses of *ʔiħ*—from Applicative to Optative to Epistemic modality, in that order—appears to be justified, as argued in the Historical Notes in §14.7 and §14.8.

But does a relationship exist between the pre-verbal and the post-verbal uses of *ʔiħ*? There are significant differences between them, in addition to their distinct formal realizations. In particular, pre-verbal Reciprocal/pluractional *ʔiħ*- often causes valency to decrease, while post-verbal Applicative -*ʔiħ*- causes it to increase. Also, the participants in a prototypical reciprocal relationship are both equally agentive, whereas in an applicative relationship one participant is typically an agent and the other a recipient/beneficiary.

Nevertheless, there is reason to think that the Applicative and the Reciprocal/pluractional constructions may be historically related, although homonymy cannot at this point be definitively ruled out. First, their semantics have an important overlap: in both cases, *ʔiħ* signals an interactive, coordinated, and often cooperative relationship between multiple participants, which are almost always human. Moreover,

¹³⁶ Thanks to Mark Donahue for his insightful comments on the material in this section.

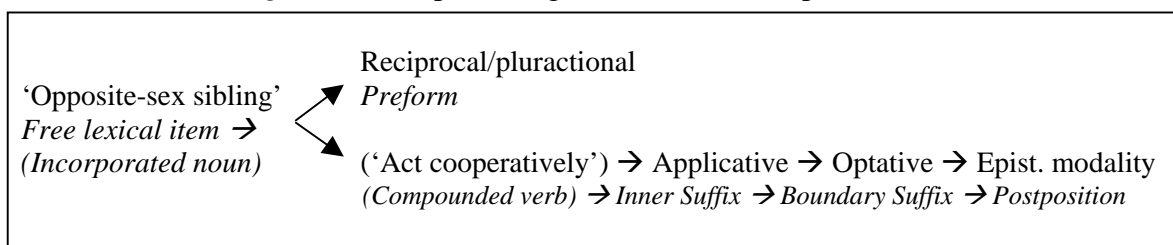
the Reciprocal/pluractional construction in Hup is semantically flexible, and can be used to refer to events that actually do involve an agent's acting on a patient (e.g. 53-55 above); that is, it is not in fact restricted to events with equally agentive participants. Finally, there is some cross-linguistic precedent for a historical relationship between reciprocal and applicative or other valency-increasing constructions—although this seems to be relatively rare among the world's languages. The Austronesian language Nias (Indonesia) uses the same morpheme for both reciprocal and applicative functions (Lea Brown, p.c.), and there is evidence that a reciprocal marker developed into a morphological causative in Asheninca (Arawak family, Peru; D. Payne 2002: 501-2).

How could such a relationship between the Reciprocal/pluractional preform and the Applicative suffix come about in Hup? Of several possibilities, two paths of development seem most likely. The kin term 'opposite-sex sibling' could have given rise independently to the Reciprocal prefix and the Applicative suffix; the step from noun to Applicative would have required a noun to be first derived as a verb and then incorporated into a verb compound, thence developing later into an Inner Suffix. Alternatively, the link between the Reciprocal prefix and the Applicative suffix could have been more direct, such that the already-incorporated noun 'sibling' would have developed into the Reciprocal marker and at the same time been reanalyzed as a verb root; this would then have moved into compound-final position and developed into an Inner Suffix.

Of these two options, the second seems the most probable. Direct noun → verb derivation is not in general productive in Hup (see §3.1), and there is currently no verb root *ʔiŋh-* in the language, making the first trajectory seem unlikely. On the other hand,

the second is supported by the probability that—as discussed in §11.2 (Historical Note)—the preform *h̃h* did pass through an initial stage as an incorporated noun, which was later reanalyzed as a Reciprocal formative—likely motivated in part by Hup’s general avoidance of noun incorporation. At the same time, the incorporated kin term may have been fleetingly reanalyzed as a component verb root within a compound. This would have allowed speakers to move it to compound-final position in some contexts—the usual place for verb roots that contribute aspectual, modal, and other types of information to the compound as a whole (see §9.4.2.4)—where it would have had the semantics of ‘act cooperatively’ or ‘act in a beneficial manner’. From there, it was a short step to an Inner Suffix (see §3.7 and §9.4.3).

Figure 11.1. A possible grammaticalization path for *h̃h*



11.4. Factitive *hi-*

The Factitive prefix *hi-*¹³⁷ is the least productive of the valency-adjusting operations discussed in this chapter. Many of the constructions in which it occurs are fully lexicalized, and have idiosyncratic, highly specific meanings relative to the stems from

¹³⁷ Factitive *hi-* is homonymous with the verb root *hi-* ‘descend’. This does not in general lead to confusion, since the verb *hi-* (like other motion/path verbs) typically appears compound-finally in any verb compound (cf. §9.4.2), whereas the Factitive is always followed by a verb root.

which they are apparently formed; in other cases these stems do not even occur as independent verbs¹³⁸. Both phonologically and morphosyntactically, the prefix *hi-* is relatively tightly bound to its host stem, in comparison to the Reflexive and Reciprocal/pluractional preforms (see §3.4.1.1). A dialectal variant *mi-* of Factitive *hi-* is encountered among some speakers from the Vaupés river (around Fatima and Santa Atanasio villages).

The *hi-* prefix most commonly combines with intransitive stems having stative or state-change semantics, and acts as a valency-increaser. However, *hi-* can also combine with active stems and those that typically take two arguments, and—especially in the latter case—does not necessarily add a syntactic argument to the clause. In such cases, *hi-* often functions rather to adjust the Transitivity of the clause without actually affecting its grammatical valency, by making the syntactic agent in some sense a semantic undergoer, or the syntactic patient/object relatively agentive (i.e. somehow responsible for inducing the event). Transitivity is here understood as a relative phenomenon in the sense of Hopper and Thompson (1980); as they put it, the idea of Transitivity, or the “carrying-over or transferring an action from one participant to another”, can be broken down into “component parts”, such as the telicity and punctuality of the verb, the volitionality and agency of the subject (S), and the affectedness of the object (O) (1980: 253). From this perspective, clauses may exhibit a range of Transitivity, regardless of the actual valency of the verbs involved. Most of the constructions with *hi-* have a causative

¹³⁸ The Factitive construction in Hup is reminiscent of the ‘causative’ *hiphil* forms in Biblical Hebrew, which are also only semi-productive and highly idiosyncratic (Orin Gensler, p.c.).

contour and/or a focus on the resulting state that the event brings about or causes in one participant; *hi-* is for this reason glossed ‘Factitive’.

Crucial to the use of *hi-* are the *semantic* roles of actor and undergoer, in addition to the syntactic roles of agent and object. In many cases *hi-* is essentially signaling that these roles do not match up according to the prototypical model.¹³⁹ To the extent that this construction relates to “subject affectedness”, or that it is “intermediate in transitivity between one-participant and two-participant events”, it bears some resemblance to the middle voice (Kemmer 1993: 2-3). However, it is unlike a typical middle voice form in that it normally results in a multi-valent construction.

Factitive *hi-* usually occurs with stems that normally take only one argument, particularly adjectives and stative or state-change verbs. In most cases it adds a participant, increasing the valency of the clause, and has a causative reading. In (80-81), the Factitive adds an agent, and the grammatical object O would be the subject S_O—semantically the undergoer—of the corresponding intransitive clause, as the non-Factitive examples in (b) illustrate.

- (80) a) *núw-ǎñ hi-d’ǰ-ǰé?!*
 this-OBJ FACT-go.out-PERF.IMP
 ‘Put out this one!’
- b) *teghǰ d’ǰ-yǰǰ-ǰy*
 fire go.out-TEL-DYNM
 ‘The fire has gone out.’ (OS)
- (81) a) *ǰǎh cug’ǎǰ hi-cǰǰ-d’ǎk-ǎy*
 1sg leaf/paper FACT-stick-stick.against-DYNM
 ‘I stuck the paper to something.’

¹³⁹ In this, *hi-* resembles an inverse marker, but this is not its primary function.

- b) *cug'ǽt ciʔ-d'ák-áy*
 leaf/paper stick-stick.against-DYNM
 'The paper is sticking to something.' (EL)

The same is true for adjective roots—here receiving verbal inflection and acting as stative verbs:

- (82) *kamíca ʔǎn hi-póg-óh*
 shirt(A) 1sg.OBJ FACT-big-DECL
 'The shirt makes me look big/fat.' (EL)
- (83) *baktǐb' tǐh-ǎn hi-páy-áy*
 evil.spirit(A) 3sg.OBJ FACT-bad-DYNM
 'An evil spirit is making him bad.' (EL)
- (84) *ʔǎh=ʔp-ǎn ʔǎh hi-pǐb-ǎy*
 1sg=father-OBJ 1sg(A) FACT-strong-DYNM
 'I'm helping my father.' (lit. causing my father to have [more] strength/capacity)
 (EL)

While the causative contour in the examples above is typical of the Factitive construction, it is not entailed. This is illustrated by examples such as (85) (which might be said of a young girl suspected of illicit affairs), in which a participant is added without producing a causative reading. Here, the Factitive indicates that the grammatical object carries out the activity *under the supervision* of the subject.

- (85) *tǐh=ʔin tǐh-an hi-ʔǎh-ǎy*
 3sg=mother 3sg.OBJ FACT-sleep-DYNM
 'Her mother is watching over her sleeping.' (RU)

The Factitive examples with causative semantics can be contrasted with causative constructions created via verb-compounding of transitive and intransitive stems (see §9.4.1.2 and §11.5.1 below), such as those involving the verb *d'oʔ* 'take' (example 86). In the Factitive cases, the undergoer of the event (i.e. the person being made to look big,

or being made bad) possesses more or at least as much capacity for agency as does the actor, whereas the verb-compounding strategy requires an animate agent (as semantic actor) which is almost always of higher agency than the object (semantic undergoer). The functional distinction between the events expressed by the Factitive and causative constructions in (83) vs. (86) is also encoded in English; it would be natural to express the event in (83) in either active voice ('the spirit is making the man bad') or passive voice ('the man is being made bad by the spirit'), but (86) is best expressed by an English active voice ('I ruined my tape-player', but ??'my tapeplayer was ruined by me').

- (86) *nĩ* *húpnúh* *ĩǎh* *d'o ʔ-pay-yĩʔ-ĩy*
 1sg.POSS person.head(O) 1sg(A) take-bad-DYNM
 'I've ruined my tape player (lit. person-head).' (EL)

Factitive constructions such as those in the examples above are clearly transitive (while based on an intransitive stem), as evidenced by their ability to occur in reflexive form with a passive reading (which requires a verb with at least two arguments, see §11.1):

- (87) *tiyĩʔ* *hup-hi-páy-áy* *ba ʔĩb'-ǎh*
 man(S) RFLX-FACT-bad-DYNM evil.spirit-OBJ
 'The man is being made bad by the evil spirit.' (EL)

Alternatively, the Factitive construction may add a *semantic* participant, but the clause retains only one core syntactic argument. In these cases, S_O (the subject undergoer) of the non-Factitive form is the same as the S_O of the Factitive form, as (88a) and (b) illustrate (whereas in the above examples S_O > O):

- (88) a) *m'æ-teg-ét* *déh* *hi-m'æ-ǎy*
 cool=THING-OBL water(S) FACT-cool-DYNM
 'The water is made cold by the freezer.'

- b) *m'æ=teg-ét dēh m'æ-æy*
 cool=THING-OBL water(S) cool-DYNM
 'The water is cold in the freezer.' (EL)

- (89) *kamíca-át tiyĩ? hi-póg-óy*
 shirt-OBL man(S) FACT-big-DYNM
 'The man is made to look big/fat by the shirt.' (EL)

- (90) *tiyĩ? hi-páy-áy*
 man(S) FACT-bad-DYNM
 'The man is being made bad.' (EL)

The interpretation of these Factitive constructions (88-90) is much like that of a passive, which also expresses a semantic undergoer as a grammatical subject; compare passive-like reflexive constructions with *hup-* in §11.1—but unlike these there is no particular preference for animate subjects. Moreover, Hup Factitive constructions with *hi-* usually involve intransitive verb stems, but reflexive constructions require stems having two arguments.

It is also possible for the participant added by the Factitive construction to be a semantic undergoer phrased as a syntactic object. In such cases, the subject undergoer S_O of the intransitive non-Factitive verb (which is usually one of state-change) corresponds to the agent of the Factitive construction ($S_O > A$):

- (91) *lám hi-g'et-d'o?-lũh-ũy, káy-hə, nɔh!*
 2sg FACT-stand-take-APPL-DYNM look.IMP-TAG2 say
 'Hey, watch out, you're about to step on (the tape-player)!' (B.Cv.136)

- (92) *dēh lǎn hɔm-ɔ hi-yé-éy=hɔ*
 water 1sg.OBJ wound-OBL FACT-enter-DYNM=NONVIS
 'The water is going into my sore.' (RU)

- (93) *těg g'uk hi-yé-éy tɪh?*
 wood bundle FACT-enter-DYNM 3sg
 'Did the wood go (tie up) into a bundle all right?' (RU)

The object need not be made explicit in the clause, as is typical for the Factitive *hi-way-* ‘flood, (liquid) spilling out of container’ (from *way-* ‘go out’), as in (94). Note the semantic difference between the Factitive (‘A goes out into (O)’ or ‘A causes (O) to be gone-out-into’) and more standard causative forms of this verb: e.g. *d’oʔ-way-* ‘A causes O to go out’, in which the object of the derived causative is the subject of the intransitive verb *way-* ‘go out’.

- (94) *děh hi-wáy-áy*
 water FACT-go.out-DYNM
 ‘The water is flooding.’ (i.e. ‘going out into something’) (OS)

Example (95) (which comes from a story about a girl’s altercation with a tapir) illustrates a similar but relatively creative use of Factitive *hi-*, in which it has scope over an entire compound verb:

- (95) *tʃh-ǎn tǎh hi-cuj-d’ák-aw-ay*
 3sg-OBJ tapir FACT-have.diarrhea-stick.against-FLR-INCH
 ‘The tapir covered her (lit. stuck her all over) with diarrhea.’ (H.81)

In addition to occurring with more prototypical intransitive roots, the Factitive construction can occur with verbs that can—at least optionally—take two core arguments. It is not entirely clear whether these can be considered ambitransitive stems that are being treated as intransitive for the purposes of the Factitive construction (such that the Factitive is adding a participant), but in certain cases the verbs in question almost always pattern as transitive elsewhere in Hup (e.g. *hi-suʔ* [FACT-grab] and *hi-s’ǰp* [FACT-tie] below). In most of these instances, the Factitive form of the verb differs from its straightforward transitive use in that the syntactic agent is perceived as being in some

way a semantic undergoer, and/or the syntactic object is understood as relatively agentive, often bearing some responsibility for bringing about the event. This constitutes an adjustment of the Transitivity of the clause.

In (96), for example, the Factitive is used with an active root, the verb *ʔɔ-* ‘cry’, which by itself is usually used intransitively but can take an object-marked second participant, which represents the animate entity who is understood to be the ‘object’ or reason for the crying. Here the presence of Factitive *hi-* is optional; the example can be translated as ‘the child is crying for his mother’ with or without the Factitive, but *hi-* adds the further sense that the child’s crying is a direct result of the mother’s actions (such as leaving him behind when she goes to the roça). In other words, the state of crying has in essence been induced in the child *by* his mother, whereas the non-Factitive form focuses on the child’s crying as an activity, with the mother conceived as a goal.

- (96) *tɪh=ʔn-ãñ* (*hi-*) *ʔɔ-ɔy*
 3sg-mother-OBJ (FACT-)cry-DYNM
 ‘(The child) is crying for his mother.’ (EL)

Another example is *tæʔmɔ-* ‘smile, laugh’, which without the Factitive can occur with either one or two arguments. The Factitive form *hi-tæʔmɔ-* ‘laugh at/because of someone’ in (97a) conveys the sense that the laughter is induced by something the object of the laughter does—his appearance, his jokes, his mistakes—whereas (97b) need not have an identifiable stimulus.

- (97) a) *yũ* *ʔãñ* *hi-tæʔmɔ-ɔy*
 João 1sg.OBJ FACT-laugh/smile-DYNM
 ‘João is laughing at me/ because of me.’ (EL)

- b) *yũ ɭǎn tǣmʃ-ɔ̃*
 João 1sg.OBJ laugh/smile-DYNM
 ‘João is smiling at me.’ (EL)

Other examples include *hi-key-* ‘look after, take care of’ (98a), typically used in reference to children and sick people; this may be motivated by the fact that such people by nature require care from others around them. The root *key-* ‘see, look (at)’ (98b), on the other hand, is neutral as to whether or not it is actively induced by its object. Also compare Factitive *hi-ɬey-*, used in reference to a dog’s barking (99a), whereas the transitive or ambitransitive root *ɬey-* refers to the human activity, ‘call’ (99b); this Factitive form possibly derives from the fact that a dog’s barking is typically directly triggered by some present entity, such as an animal or a strange person, whereas a person’s calling may be conceived as more independent and self-directed. Another case is *hi-təw-* ‘be jealous of, angry at’ (i.e. ‘be made to scold/angry by O’), formed from the verb *təw-* ‘scold, yell at, be angry at’.

- (98) a) *ɭǎn hi-kéy-ep=ɭǎy*
 1sg.OBJ FACT-see-DEP=FEM
 ‘The woman who looked after me’ (when I was a child) (T.PC.5)
- b) *ɭǎn kéy-ep=ɭh*
 1sg.OBJ see-DEP=MSC
 ‘The man who saw me’ (EL)
- (99) a) *tính̃ ya ɭamboʔ=b’ay tú hi-ɬey-kəcʰ-ɔ̃*
 3sg.POSS dog=AGAIN nearby FACT-call-be.in.front-DYNM
 ‘As for his dog, he is running ahead barking.’ (FS.9)
- b) *ɭám-ǎn ɬey-éy=hɔ̃*
 2sg.OBJ call-DYNM=NONVIS
 ‘(I hear them) calling for you.’ (OS)

Somewhat more difficult to explain is the Factitive *hi-cuh-* ‘sew’ (or literally, ‘make strung’; example 100a), based on *cuh-* ‘string (something)’, typically used to describe stringing beads, as in (100b), or fish that one has caught and plans to carry home.

Possibly, as in the examples above, in (100a) the nature of the object to be sewn is conceived as inducing or requiring the event (especially since, among the Hupd’əh, sewing usually involves repair rather than making from scratch)—just as in English one might say that a torn piece of clothing ‘needs’ sewing.

- (100) a) *nĩ* *yũd* *ʔāh* ***hi-cúh-úh***
 1sg.POSS clothes 1sg FACT-sew-DECL
 ‘I sewed my clothes.’ (EL)
- b) *tĩ* *w’ə-ə* *ʔāh* ***cuh-ʔe ʔ-yǎh-ǎh***
 cord long-OBL 1sg string-PERF-CNTRFACT-DECL
 ‘I had strung (the beads) on a long string (in vain).’ (I.M.84)

Like *suh-* ‘string’, the Factitive *hi-j’ǎp-* ‘tie up, cause to be tied up’ is formed from a verb that is almost always used transitively: *j’ǎp-* ‘tie (something to something else)’. This Factitive form is usually used in reference to house doors, which (when they exist) are often tied shut with vines when the residents leave. As in (98-100) above, the Factitive may be motivated partly by the relative conceptual foregrounding or importance of the resulting state the activity produces in the object. For example, the important information in (101a) is the resulting state of the object (a secured house), whereas in (101b) the final state of the basket itself is relatively unimportant, while the relevant point is the effect on the spirit.

- (101) a) *mǎy* *tĩh* ***hi-j’ǎp-yǎh-ǎh***
 house(O) 3sg(A) FACT-tie-FRUST-DECL
 ‘She had tied up the house (in vain).’ (P.BT.94)

- b) *túʔ-út hid j'ɪ̃p-m'æc-d'ak-yɪʔ-ay-áh*
 pole-OBL 3pl(A) tie-tight-be.against.vertical-TEL-INCH-DECL
 'They tied (his basket) tightly against the house-pole.' (P-BY.85)

Still another example of a Factitive form of a (normally) transitive verb is *hi-cuʔ*

(from *cuʔ* 'grab'). This form has two alternative meanings in common use: 'cover (something) up' (e.g. to protect it from rain), such as a child, a book, etc. (see example 102a below; also compare the derived nominal *mɔmb'ɔk hi-cúʔ* 'pot lid'), and 'get touched by' (e.g. a stinging insect), as in (102b). The latter usage appears to have more to do with a high level of affectedness and low level of agency on the part of the agent, rather than with the agency or foregrounding of the object.

- (102) a) *j'uk=tɕh ʔãh hi-cúʔ-úh*
 itch=caterpillar 1sg FACT-grab-DECL
 'I touched an itch-caterpillar.' (i.e. by accident); 'I got touched by an itch-caterpillar.' (EL)
- b) *j'uk=tɕh ʔãh cúʔ-úh*
 itch=caterpillar 1sg grab-DECL
 'I touched an itch-caterpillar.' (i.e. on purpose) (EL)

Factitive verbs can undergo additional adjustments of valency with the Reflexive marker *hup-*. The following elicited paradigm contrasts unmodified, Factitive, Reflexive, and Factitive Reflexive variants of the transitive stem *cuʔ* 'grab':

- (103) a) *ʔãh cúʔ-úy*
 1sg grab-DYNM
 'I grab (something)'
- (b) *ʔãh hi-cúʔ-úy*
 1sg FACT-grab
 'I cover (something else; e.g. against rain).' (lit. 'cause (it) to be covered/secured')

- (c) *ʔāh hup-cú ʔ-úy*
 1sg RFLX-grab-DYNM
 ‘I grab onto myself.’
- (d) *ʔāh hup-hi-cú ʔ-úy*
 1sg RFLX-FACT-grab-DYNM
 ‘I cover myself.’ (‘cause myself to be covered’)
- (e) *n’ip=ʔh-ǎn tʔh=dóʔ hup-hi-cú ʔ-úy*
 that=MSC-OBJ 3sg=child RFLX-FACT-grab-DYNM
 ‘The child got covered by that man.’

Many examples of Factitive *hi-* occur in expressions that are idiomatic or have very specific or idiosyncratic contexts of use, especially relative to their component verb stems, when these can be identified; some of these are frozen forms. In most cases, the Factitive verb relates to a state which has been triggered or induced in the undergoer by some other participant, often having to do with emotion or cognition (in which these resemble middle voice forms, see Kemmer 1993: 19). Examples are listed in (104):

- (104) *hi-coco-* ‘be happy’ (lit.? ‘be induced to relax’ + reduplication)
co- ‘rest’
hǎwíg hi-huʔ-ũy ‘be sad’ (lit. ‘have one’s heart be ending’)
huʔ- ‘end, finish’ (*hǎwíg* ‘heart’)
hi-pāh- ‘know, think, believe’
pāh- ‘make high-pitched sound’ (certain small animals: paca, cutia)
hi-cʔh- ‘look after, take care of (something)’ (esp. so that it is not stolen);
 (lit.? ‘be made tired/taxed by continuous observation of thing’)
cʔh- ‘be tired’ (through exertion)
 Also compare Reflexive *hup-hi-cʔh-* ‘observe ritual restrictions’.
hi-g’iʔ- ‘heat up (pot, etc.)’
 ?? Root unclear: *g’iʔ-* ‘heat certain fruits in water to make edible’;
g’i- ‘hot’
hi-b’ay- ‘get come-back-to’ (used in reference to a girl’s second menstruation)
 Or: ‘be induced to come back (by/because of someone)’
b’ay- ‘return’

Other examples include *hi-kəd-* ‘turn over’ (e.g. drying clothes; lit.? ‘cause to change location/side’), (*kəd-* ‘pass, overtake’), and *hi-poʔ-* ‘meet’ (*poʔ-* ‘open, expose’). Another is *hi-b’ah-* ‘be created’, which is usually used in reference to the creation of the world by the creator-figure (105); it appears to derive from *b’ah-* ‘split (lengthwise), flat side’.¹⁴⁰

- (105) *wæð tʰ d’oʔ-hi-b’ah-ní-h, ʔág-áh*
 food 3sg take-FACT-divide-INFR2-DECL fruit-DECL
 ‘He created food, fruits.’ (LG.C.10)

The Factitive prefix can also be used semi-productively but somewhat idiosyncratically with certain verb compounds like those in (106-7), relating to bringing a supernaturally induced illness upon oneself through contact with a cursed item:

- (106) *kəd-ət ʔāh hi-pæm-d’óʔ-óy*
 bench-OBL 1sg FACT-sit-take-DYNM
 ‘I got (it) from sitting on the bench’ (which was cursed). (EL)

- (107) *nř yūd-út ʔāh hi-cud-d’óʔ-óy*
 1sg.POSS clothes-OBL 1sg FACT-be.inside-take-DYNM
 ‘I got (it) from wearing (lit. being inside) my clothes’ (which were cursed). (EL)

In addition to these idiosyncratic Factitive forms, there are many others for which consultants can give no meaning to the ‘basic’ stem at all. Some of these are summarized here:

¹⁴⁰ The semantic connection between these two senses is opaque (and their actual connection speculative), but it may have to do with the fact that one can easily derive many pieces from one by splitting wood lengthwise, whereas it is much more difficult to do so by chopping a log into sections (especially in the days before metal tools). Thus the factitive ‘create’ may mean more literally ‘derive many from one; be made to multiply’.

(108)	<i>hi-kĩk-</i>	‘knead or grate a soggy substance’	* <i>kĩk-</i>
	<i>hi-taʔ-</i>	‘meet’	* <i>taʔ-</i>
	<i>hi-tãʔ-</i>	‘crush, fall on’	* <i>tãʔ-</i>
	<i>hi-tab-</i>	‘be full’	* <i>tab-</i>
	<i>hi-yaw’-</i>	(v) ‘squeeze to extract’ (e.g. dye from genipapo leaves)	
		(n) ‘strong manioc beer’	* <i>yaw’-</i>
	<i>hi-wĩh-</i>	‘hold back from fighting, chastise’	* <i>wĩh-</i>
	<i>hi-mĩhĩn-</i>	‘forget’	* <i>mĩhĩn-</i>
	<i>hi-bi-</i>	‘be angry/jealous regarding a spouse or lover’	* <i>bi-</i>
	<i>hi-tamaʔ-</i>	‘thank or speak well of someone’	* <i>tamaʔ-</i>

Still other examples of *hi-* constructions are idiosyncratic in that they involve stems that function elsewhere in Hup not as verbs, but as bound formatives (with a purely grammatical function) or other parts of speech.¹⁴¹ In their Factitive form, however, they are fully verbal. For example, the expression *hup-hi-tég-éy* ‘be sad’ (which combines Reflexive *hup-* with Factitive *hi-*) appears to involve the root *teg*, which occurs elsewhere as a future suffix, a free noun ‘wood, sticks’, and a bound noun ‘stick, thing’ (see §13.1):

(109)	<i>ʔãh</i>	<i>hup-hi-tég-éy=hõ</i>
	1sg	RFLX-FACT-DYNM=NONVIS
	‘I’m sad.’ (EL)	

Similarly, the *hi-* prefix occurs with the Counterfactual form *-tãʔ* ‘be as if’ in the expression *hi-tãʔ* ‘imitate; try out’ (example 110, a description of the methods Curupira uses to lure humans into his clutches). It is also found with Sequential *-yóʔ* in the locative postposition *hiyóʔ* ‘on top of’ (see §10.2.3), and in the comparative construction

¹⁴¹ Also compare the occurrence of *hi-* with the Completive aspect suffix *-cĩp/-cĩw-*; see §12.5.

hi-tǎñ=yi? ‘as much as, just as’ (example 111); *tæn* occurs elsewhere as a dimension or measurement particle, and as a conditional marker; see §10.2.2.1).

- (110) *mǎh-ǎñ=mah cǎp tǎh hi-tǎñ-ǎñ, doh ǎñ-ǎñ*
 inambu-OBJ=REP other 3sg FACT-CNTRFACT-DECL Curupira-DECL
 ‘The inambu is another that he **imitates**, that Curupira.’ (T.C)
- (111) *yág... tǎh w’ǎ-ǎ=yi?, tǎh hi-tǎñ=yi? pǎl tǎh w’ǎ-cák-áh*
 hammock 3sg tie-OBL-TEL 3sg FACT-MEAS2-TEL DIST 3sg tie.rope-ascend
 ‘Exactly as he tied his hammock, each time **just as he did** she would tie (hers) higher and higher.’ (as he kept moving his hammock up to get away from her) (D.BWB)

Finally, the *hi-* prefix occurs with the nouns *wág* ‘day’ and *j’ǎb* ‘night’ in the expressions *hi-wag-* ‘stay up until dawn’ and *hi-j’ǎb-* ‘go on until nightfall’ (but such temporal expressions have aspects of both nouns and verbs; see §4.1.3).

11.5. Other valency-related operations

This section summarizes Hup’s other strategies for adjusting valency, which are all discussed elsewhere in this grammar as well.

As discussed in §8.2.1, Hup has two pairs of verb roots for which transitive and intransitive variants are distinguished by the presence or absence of glottalization on the initial consonant, but this strategy is not productive. These verbs are *yæt-* ‘rest on ground’ and *y’æt-* ‘place in resting position on ground’, and *wob-* ‘rest on object’ and *w’ob-* ‘place on object’.

11.5.1. Derivation of causatives

As described in detail in §9.4.1.2, Hup makes productive use of verb compounding to create expressions of complex valency. These compounds are formed via the combination of transitive and intransitive stems, and result in a transitive verb. In general, Hup is a ‘transitivizing language’ in the terminology of Nichols et al (2004); that is, causatives are usually derived (either via verb compounding or Factitive *hi-*, as discussed in §11.4 above).

The most commonly used causativizing stems in verb compounds are somewhat grammaticalized, and contribute a semantics to causative constructions that is distinct from their meanings as independent verbs. Among the most productive of these are the compound-initial transitive stems *d'oʔ-* (literally) ‘take’ (causation with direct involvement), as in *d'oʔ-ʔʒh-* (take-sleep) ‘put to sleep’ (i.e. a child); *d'ʒh-* ‘send’ (causation with less direct control over the event), as in *tac-d'ʒh-ye-* (kick-send-enter) ‘cause to go into (house, etc.) by kicking’; and *g'et-* ‘stand’ (oversee, bring about another’s action), as in *g'et-biʔ-* (stand-work) ‘lead/oversee in working’. Several compound-final roots are also used productively to create causative verb compounds; these include *biʔ-* ‘work’ (bring about through effort), as in *peʔ-biʔ-* (sick-make) ‘make (someone) sick’; and *yæʒh-* ‘compel, request, order’ (force or request another’s action), as in *wæd-yæʒh-* (eat-order) ‘compel or order to eat’. Note that different causative verb roots can sometimes also be substituted for each other, resulting in variations in meaning, such

as *g'et-wæd-* (stand-eat-) ‘feed, provide with food’, vs. *wæd-yæh-* (eat-order/compel)

‘make, order to eat’.

The pattern for forming causative and non-causative variants of verbs varies across lexical items.¹⁴² The majority of intransitive roots must participate in a causative verb compound in order to have a causative interpretation, such as *pæm-* ‘sit’, *wæd-* ‘eat’, and *wæc-* ‘boil’:

- (112) a) *děh* *wæc-ŷy*
 water boil-DYNM
 ‘The water is boiling.’
- b) *pěd* *děh* *d'o ʔ-wæc-ŷy*
 Ped water take-boil-DYNM
 ‘Ped boils the water.’ (EL)

In other cases (mostly involving stative verbs; cf. §8.2), the derived form of the causative is optional, and the underived form may be used both as a causative and a non-causative, without any apparent semantic difference:

- (113) a) *hĩʔ=teg* *təh-yĩʔ-ŷy*
 write=stick break-TEL-DYNM
 ‘The pencil broke.’ (EL)
- b) *pěd* *hĩʔ=teg* *(d'o ʔ)təh-yĩʔ-ŷy*
 Ped write=stick (take-)break-TEL-DYNM
 ‘Ped broke the pencil.’ (EL)

Occasionally, the causative form is basic, and the non-causative is derived via the addition of the Reflexive prefix *hup-*:

- (114) a) *pěd hup-yǎl-ǎy*
 Ped RFLX-hide-DYNM
 ‘Ped hides.’ (EL)
- b) *mǎt pěd-án yǎl-ǎy*
 Mǎt Ped-OBJ hide-DYNM
 ‘Mǎt hides Ped.’ (EL)

In one or two cases both forms are derived, as in ‘turn over’, from the verb *kǎd-* ‘pass’:

- (115) a) *cug’ǎt hup-kǎl-ǎy*
 leaf RFLX-pass-DYNM
 ‘The leaf turned over.’ (EL)
- b) *pěd cug’ǎt d’o ʔ(hup-)kǎl-ǎy*
 Ped leaf take-(RFLX-)pass-DYNM
 ‘Ped turned the leaf over.’ (EL)

Finally, suppletive causative and non-causative pairs are rare in Hup, but there are a few examples, such as *na ʔ-* ‘die’ and *mǎh-* ‘kill’; *key-* ‘see’ and *be-* ‘show’.

In some cases, more than one derivational option is available in creating a causative form, with corresponding semantic distinctions. For example, the causative form *tuj-d’ak-* ‘set alight’ is preferred as the counterpart of the non-causative *hǎ* ‘burn’ (e.g. for a house, clothes, possessions, wood, etc.; example 116), but the root *hǎ* may also be used causatively in very particular circumstances where there is no normal setting of a fire—e.g. by means of a bomb (example 117). The morphological causative form *d’o ʔ-hǎ* can be used in reference to letting someone’s food burn while it is cooking (example 118).

¹⁴² Many of these elicited couplets were suggested by Johanna Nichols (p.c.).

- (116) *tɪnʰ mɔ̌ tɪn tuj-d'ak-yæ̌-ay-áh*
 3sg-POSS house 3sg light.fire-be.against-FRUST-INCH-DECL
 'He set fire to/ burned down his house.' (M. KTW.109)
- (117) *pěd hɔ̌yíʔ-ǵ, tɪnʰ mɔ̌*
 Ped burn-TEL-DYNM 3sg.POSS house
 'Ped caused his house to burn down (e.g. by means of a bomb).' (EL)
- (118) *pěd tɪnʰ wæ̌d d'oʔ-hɔ̌yíʔ-ǵ*
 Ped 3sg.POSS food take-burn-TEL-DYNM
 'Ped made/let his food burn.' (EL)

12. Aspect

The majority of verbal formatives in Hup have to do with tense, aspect, or mood, since Hup verbs do not inflect for person or number. This chapter focuses on formatives relating to aspect. In contrast to tense, which locates the event in “situation-external time”, aspect is concerned rather with the “internal temporal constituency of the one situation” (Comrie 1976: 5). The expression of aspect—far more than that of tense—plays a central role in Hup grammar.

12.1. Hup’s aspect markers and their properties

The basic aspectual distinctions expressed in Hup are dynamic, inchoative, perfective, completive, telic, habitual, and iterative (of which there are several subtypes). Other aspect-related forms include verbal diminutives and an ‘on-going event’ marker. In addition, Hup has one inflectional form that deals with the location of the event in space. Although its semantic contribution is not a temporal one, this ‘Ventive’ suffix is functionally parallel to the markers of aspect, and is therefore discussed together with them in this chapter.

The bound formatives discussed in this chapter, as elsewhere in the grammar, are treated here primarily on the basis of their semantics rather than their form-class (as Boundary Suffixes, Inner Suffixes, etc.). As regards their formal identity, the aspectual formatives are generally heterogeneous, and include Inner Suffixes, Boundary Suffixes, enclitics, and particles (see §3.4), which correspond to the following verbal template (repeated from §8.3):

(Proclitic) = Prefix(es) - **Stem** - Inner Suffix(es) - **Boundary Suffix** = Enclitic(s) Particle(s)

While there is no strictly *formal* indicator that a given formative relates to aspect in Hup, the set of Inner Suffixes is nevertheless particularly well-represented among the Hup aspect-marking formatives (see §3.4 and §8.1). Even the majority of those aspectual forms that appear as enclitics or particles also have an alternative identity as Inner Suffixes (see §3.5), and several have phonologically reduced variants that can *only* appear as Inner Suffixes (see §3.6) and are in many contexts preferred over their peripheral counterparts. This general tendency to mark aspect in the morphological slot directly adjacent to the verb stem iconically reflects aspect's integral semantic association with the verb (see Bybee 1985: 35).

As discussed in §3.7 and §9.4.3, many bound formatives in Hup—particularly Inner Suffixes—probably derive historically from compounded verbs, and some morphemes currently appear to be in a historically transitional phase between verb root and Inner Suffix. Accordingly, some compound-final verb roots can act as auxiliaries and contribute aspect-related information to the verb (e.g. *j'ap*- 'break, divide in two', used occasionally in compounds to mean 'quit doing Verb'). Because these are still identified primarily as verb stems rather than formatives, however, they are discussed in §9.4.2.4 rather than in this chapter.

Such processes of grammaticalization are probably also responsible for the highly 'promiscuous' nature of many of Hup's aspect-marking formatives. Although the forms discussed in this chapter are considered to be primarily verbal, many can also attach to nouns and other parts of speech as well. Sometimes this is limited to predicates (i.e.

predicate nominals as well as verbal and adjectival predicates), but in other cases the markers can attach to nominal arguments and other non-predicative constituents as well. The meanings conveyed by the bound forms may in some cases be semantically similar or even the same regardless of the word class of their host, and can sometimes be supposed to have a vague semantics which is largely dependent on context. However, many identical forms have very different meanings depending on their morphosyntactic environment—so different in some cases that even a historical relationship between the variants may not be obvious.

Despite these differences, the fact that so many aspectual markers perform additional functions suggests that these uses do not simply involve homonymy. In particular, the parallelism between verbal aspect and nominal discourse-marking morphology (see §7.1) may be best explained as a reflection of a general characteristic of Hup grammar—it often uses the same strategies to express the relationships between events and time periods as it uses to express the relationships between entities. (Note that this is also reflected in Hup’s parallel treatment of many spatial and temporal concepts, using a single form to express ‘under’ and ‘at the same time’, ‘in front of’ and ‘before’, and ‘behind’ and ‘after’, as discussed in §10.2.3). The alternative non-verbal uses and meanings of the aspectual formatives are summarized briefly in the relevant sections of this chapter, and most are discussed in more detail in §7.1 and other chapters.

As noted in §8.3, the aspect-related formatives discussed in this chapter—like other formatives in Hup—are subject to various co-occurrence restrictions. Other than those restrictions limiting Boundary Suffixes to one per verb (outside of exceptional circumstances), these restrictions appear to be motivated mainly by semantics, rather than

by morphological slot restrictions. The incompatibility of each morpheme with others is mentioned in the relevant sections of the discussion; however, these restrictions are probably not exhaustive. The full extent of the co-occurrence restrictions of all Hup formatives will have to be ascertained by future research.

As a final note, the glosses given to the various aspectual formatives ('Inchoative', 'Perfective', etc.) should be understood as very general characterizations of these morphemes' uses, which are to some degree language-specific, and do not necessarily coincide exactly with the way these categories are expressed in other languages. As observed in §1.7, this is reflected in their capitalization.

The various aspect-related distinctions and forms discussed in this chapter are summarized in Table 12.1:

Table 12.1. Verbal aspect markers in Hup

	Semantics	Form(s)	Formative type	Gloss	Occurrence with other parts of speech
Dynamic	on-going event (with relation to speech moment or context of utterance)	-Vý	Boundary Suffix	DYNM	Nouns, etc. in some clause-combining contexts, esp. with Emphatic Coordinator =nih (restricted uses)
Inchoative	beginning an event or entering a state	-ay	Boundary or Inner Suffix	INCH	Nouns: Inchoative focus
Perfective	event viewed with respect to endpoint	-ʔeʔ -ʔe-	Inner Suffix	PERF	Predicate nominals
Completive	event completed prior to the speech act	-cɸp- -cɸw-	Inner Suffix	COMPL	
Telic	entity (S/O) is completely involved or affected; do completely	-yɪʔ	Inner Suffix	TEL	As enclitic on nouns: Contrastive emphasis. As enclitic on adjs, Vs, entire clauses: adverbializer.
Ventive	movement between current location of participant and location where event is carried out	-ʔay-	Inner Suffix	VENT	
Habitual	customary, recurrent event (no endpoint)	bɸg	Particle (or Inner Suffix)	HAB	
		-bɸ-	Inner Suffix		
Iterative	'over and over'; also durative 'for a long time' (has endpoint)	pɸd	Particle (or Inner Suffix)	DIST (Distributive)	Nouns: quantifier
	single repetition of an action or some aspect of a resulting state	=b'ay	Enclitic (or Inner Suffix)	AGAIN ('Repeated instance')	Nouns: Topic-switch marker
	event or state has multiple intrinsic realizations	(reduplication)	reduplication of verb root: CV-CV(C)	RED	Nouns (similar use; frozen lexical forms only)
Verbal 'diminutives'	do activity a little bit	-kodé (Tukano)	Boundary Suffix	VDIM	
		dɸʔ	Particle	VDIM2	
'Ongoing event' marker	activity or state is still in process	tæʔ	Particle	YET	Some predicate nominals

As the template above clarifies, the relative order of formative types in the verb is Inner Suffix – Boundary Suffix = Enclitic Particle. Within these formative groups, the relative order of the individual aspect markers in the verb word is roughly the following (see also the complete template in §8.3). Note that a number of these formatives—including but not limited to those that are listed in the same slot—cannot co-occur.

Inner Suffixes:

- Telic -yíʔ-
- Ventive -ʔay-
- Completive -cǎp- / -cǎw-
- Perfective -ʔeʔ- (variant -ʔe- must directly precede vowel-copying Boundary Suffix)
- Habitual -bíg- (variant -bí- must directly precede vowel-copying Boundary Suffix)
- Distributive -píd-

Inner or Boundary Suffix:

- Inchoative -ay
- *Boundary Suffix:*
 - Dynamic -Vý
 - Verbal ‘diminutive’ -kodé

Enclitic (can also appear in Inner Suffix position; see §3.5):

- ‘Repeated instance’ =b’ay

Particles (some can also appear in Inner Suffix position; see §3.5):

- Habitual bíǵ
- Distributive píǵ
- Ongoing event tǵ
- Verbal ‘diminutive’ díʔ

12.2. Dynamic -*V̌y*

The vowel-copying Boundary Suffix -*V̌y*, also discussed in §17.3, is functionally complex. When it occurs on a clause-final verb, it acts as the primary marker of clause type—in mutual exclusion on the clausal level with the other vowel-copying Boundary Suffixes, the Declarative marker -*V̌h*, the Interrogative -*V?*, and the Dependent marker -*Vp*—and indicates a declarative clause in which the event described is concurrent with the temporal frame of reference. When marking a clause-internal verb, on the other hand, it can co-occur with these other (more exclusively clause-final) markers, and simply exercises its ‘dynamic’ function of indicating temporal continuity rather than marking a specific clause type. As such, -*V̌y* involves viewing a situation as a dynamic process, as opposed to conceiving it as a more time-independent state or inherent characteristic. This ‘dynamic’ function of -*V̌y* is largely aspectual, and is related to what is cross-linguistically identified as imperfective aspect.

According to Comrie (1976: 41), imperfective aspect as a cross-linguistic category has to do with “viewing a situation with regard to its internal structure”. This generally implies what Chung and Timberlake (1985: 214-5) characterize as aspectual dynamicity; that is, the capacity of an event or state to change over time. This may involve an actual process, or the possibility of change in some potential future world. The use of Dynamic -*V̌y* in Hup is consistent with these characterizations in that it tends to indicate an action in progress, an ongoing process, or a dynamic state—in relation to a given temporal frame of reference, usually that of the speech moment.

Dynamic $-V\acute{y}$ is the default verbal inflectional form in Hup. As discussed in §8.3, Boundary Suffixes are in general mutually exclusive, such that only one is usually present on a verb at a time; $-V\acute{y}$ is among the most common of all of these. In elicitation contexts, verbs are normally given with the $-V\acute{y}$ ending in response to the Portuguese infinitive. However, given its dynamic sense, it is usually best translated as ‘be V-ing’.

While the $-V\acute{y}$ suffix belongs to the small set of vowel-copying Boundary Suffixes listed above (whose other core members are Declarative $-V\acute{h}$, Interrogative $-V?$, and Dependent $-Vp$), it is unlike these members in a number of ways. As verbal suffixes, the forms other than $-V\acute{y}$ are normally found only clause-finally (although some can serve a focus-related function on clause-internal arguments), whereas $-V\acute{y}$ can occur on any verb regardless of its place in the clause. As discussed in §3.5, this difference in patterning affects the placement of peripheral formatives, which always follow $-V\acute{y}$ (as enclitics or particles), but normally precede the other vowel-copying Boundary Suffixes—‘drawn in’, as it were, to the verb core by these suffixes’ requirement of being clause-final.

On clause-final verbal predicates, $-V\acute{y}$ has several features in common with Declarative $-V\acute{h}$ (see §17.3.2): both of these suffixes occur clause-finally on declarative clauses, and in many contexts can be interchanged with little effect on the semantics of the clause. Nevertheless, they pattern in very different ways: in particular, Declarative $-V\acute{h}$ is *always* clause-final, is not restricted to verbs, and occurs *only* in declarative clauses, whereas Dynamic $-V\acute{y}$ is almost exclusively verbal, occurs on the verb regardless of its place in the clause, and when not clause-final has little to do with clause type.

Moreover, while Declarative $-V\acute{h}$ and the other vowel-copying suffixes in this set are essentially semantically empty beyond their marking of clause type—Declarative $-V\acute{h}$ is best understood as *unmarked* for aspect (or tense) altogether— $V\acute{y}$ makes a distinct semantic contribution to the verb, relating to temporally on-going or ‘dynamic’ aspect. Functionally, however, the factors governing speakers’ choices between aspect-neutral Declarative $-V\acute{h}$ and the aspectually Dynamic $-V\acute{y}$ are complex, and are not fully understood; these are touched on in the examples in this section, and discussed again in more detail (with a focus on the Declarative marker) in §17.3.2.

Examples (1-3) below illustrate the prototypical use of Dynamic $-V\acute{y}$ to mark events as current and on-going in the context of the moment of speech, and they also outline some of the factors governing the choice of the Dynamic over the Declarative. As example (1) illustrates, on-going events, marked with the Dynamic suffix, can be contrasted with events that took place at some point in the past and are not currently on-going, which are typically unspecified for aspect and marked with the Declarative suffix $-V\acute{h}$. Example (2a) is a typical yes-no question, in which the verb appears clause-medially in its Dynamic form (note that the Declarative is ungrammatical here both because the verb is not clause-final and because the clause is interrogative); (2b) is the expected response given that the event that is currently in progress. Finally, (3) illustrates the co-occurrence of the Dynamic and Declarative markers within the same clause, where $-V\acute{h}$ marks the end of the clause and Dynamic $-V\acute{y}$ marks the verb itself. This non-verb-final clause structure is especially common in discourse relating to current, on-going

events, and allows the marking of both Dynamic aspect on the verb and Declarative mode on the clause itself (see §17.3).

- (1) a) (Q: Do you speak Tukano?)
 A: *wəh-ɔʔ?* *wəh=mæh...* *ʔid-ɬ*
 River.Indian-INT Riv.Indian=DIM speak-DYNM
 ‘Tukano? I speak... a little Tukano.’
- b) (Q: How did you learn?)
 A: *nɪ-d'əh-ɬ* *cəkʷ'əh=d'əh-ɬ* *ham-g'oʔ-yóʔ* *ʔāh* *ʔid-ɬ*
 this-PL-OBL Tukano=PL-OBL go-go.about-SEQ 1sg speak-DECL
 ‘Having gone around with those Tukanos, I spoke.’ (i.e. learned to speak) (AmL.PN.55)
- (2) a) *těg* *təʔ-ɬ* *ʔám?*
 wood light.fire-DYNM 2sg
 ‘Are you lighting a fire?’ (OS)
- b) *həʔ* *təʔ-ɬ*
 yes light.fire-DYNM
 ‘Yep, I’m lighting one.’ (OS)
- (3) *tɬ* *tɬ-ɬ* *yúw-úh* *tóg!*
 3sg lie-DYNM that-DECL daughter
 ‘He’s lying, that one, daughter!’ (B-Cv.2.7)

The dynamic or imperfective-like aspectual function of the -*Vý* suffix is especially apparent with predicate adjectives. As discussed in §3.1.3 and §10.1, adjectives pattern much like verbs in their inflectional properties, although unlike verbs they do not require a Boundary Suffix. When an adjective is inflected by the Dynamic suffix, the state or characteristic it indicates is understood to have a dynamic quality, whereas the adjective by itself (or when nominalized by the 3sg preform *tɬ*=, see §6.6) is more likely to represent a permanent or inherent characteristic. This is consistent with Chung and Timberlake’s observation (1985: 216) that a state may be conceived as dynamic and expressed by means of progressive or other imperfective morphology when it is

“accidental, temporary, or subject to change”. The examples in (4-6) illustrate the dynamic interpretation of adjectives marked by -*V́y*. This is contrasted with their uninflected forms; expressing the inherent softness of someone’s feet or the redness of a flower with the Dynamic marker is judged extremely odd by consultants.

- (4) a) *ʔāh wæy-æy, ʔáh-áh*
 1sg soft-DYNM 1sg-DECL
 ‘I’m getting feeble.’ (T-PN1)
- b) *tính j’ib wæy=mæh*
 3sg.POSS foot soft=DIM
 ‘Her feet are soft!’ (OS)
- (5) a) *dapúh dó-óy*
 hand red-DYNM
 ‘The hand is red.’ (e.g. painted with urucu)
- b) *j’ɔ́ tñ=dó-óh*
 flower 3sg=red-DECL
 ‘The flower is red.’ (inherent characteristic) (EL)
- (6) a) *náw-áy tǽ*
 good-DYNM YET
 ‘Still doing well’ (state/process conceived as temporary)
- b) *náw tǽ*
 good YET
 ‘Still good’ (inherent characteristic) (EL)

As a Boundary Suffix, Dynamic -*V́y* co-occurs with most other aspectual distinctions. This is formally possible since the majority of these are realized as Inner Suffixes (obligatorily followed by a Boundary Suffix) or as peripheral formatives (obligatorily preceded by a Boundary Suffix). Semantically, when -*V́y* co-occurs with other aspect or time-related markers, it functions primarily to indicate the currently

dynamic and on-going nature of the proposition or the event's result, usually within the temporal context of the speech act—rather than the internal temporal consistency of the event itself. Thus while *-V́y* itself relates to aspect, its function is more basic than that of most other aspect markers in Hup. In contrast to Dynamic *-V́y*, other Boundary Suffixes that occur in its place (and in mutual exclusion with it) may indicate a different temporal context; e.g. Declarative *-V́h* often implies (but does not entail) a past event, and the Future marker *-teg / -te-* indicates a future event.

Examples (7-9) illustrate the occurrence of the Dynamic marker with aspectual Inner Suffixes (Telic, Perfective, and Completive), and contrasts these with the Declarative marker—which is not marked for aspect, but typically relates to events that are *not* currently dynamic and on-going; in this case, they are relatively further removed in the past from the moment of speech.

- (7) a) *tíh ʔəg-yíʔ-ǵ*
 3sg drink-TEL-DYNM
 'He's drunk it all.' (OS)
- b) *tíh ʔəg-yíʔ-ǵh*
 3sg drink-TEL-DECL
 'He drank it all (some time ago).' (OS)
- (8) a) *déh d'oj-ʔé-y*
 water rain-PERF-DYNM
 'It's raining (temporarily)'
- b) *déh d'oj-ʔé-h*
 water rain-PERF-DECL
 'It rained (and stopped)' (OS/EL)
- (9) a) *j'əm-yíʔ-cǵw-ǵ* *ʔáǵ-ǵh*
 bathe-TEL-COMPL-DYNM 1sg-DECL
 '(I've) already bathed.' (OS)

- b) *tedé=d' əh-ə́ tɪh biʔ-ni-cɸ-ɪh*
 three=PL-OBL 3sg work-be-COMPL-DECL
 'He's already worked with three of them (in the past)' (P.Sp.110)

For a verb like *naʔ* 'die, lose consciousness', for which the internal temporal consistency of the situation may not be easily conceptualized, speakers rarely use the Dynamic marker alone, but prefer the Telic marker (or simply the Declarative), as in (10). However, the simple Dynamic is typically used if a gradual, on-going death can be supposed, as in the case of a fish pulled out of the water (11). The simple Dynamic form of the compound verb *ʔəg-naʔ-áy* (drink-die-DYNM) 'get drunk' (i.e. 'be in the process of losing one's sensibilities due to drinking (alcohol)') is also commonly used, since becoming drunk is conceived as a relatively gradual process.

- (10) *tɪh=tə́h naʔ-yɪʔ-ɪ;* *ko ʔəp=d' əh tɪh=tə́h=d' əh náʔ-áh*
 3sg=child die-TEL-DYNM two=PL 3sg=child=PL die-DECL
 'His child died; two of his children died.' (B.Cv.134)
- (11) *náʔ-áy tɪh?*
 die-DYNM 3sg
 'Is it dying?' (esp. a fish) (EL)

The Dynamic suffix is most often used with present-tense events, but not exclusively. Its association with the present is best understood as an epiphenomenon of its aspect-related function of signaling the dynamic nature of an event, state, or result as concurrent with the temporal frame of reference (usually the moment of the speech act)—just as the comparably common use of Declarative *-Vh* for past events is related to its aspectually unmarked identity. Although in elicitation contexts involving a distant past or future time adverbial ('a long time ago'; 'tomorrow'), speakers prefer the Declarative or Future suffixes to the Dynamic on clause-final verbs, in discourse the Dynamic and

Declarative markers are to some degree independent of tense, and certainly do not entail a particular tense value. (Note also that the two often co-occur in the clause when a clause-internal verb (+ -*V̇y*) is followed by a clause-final subject nominal (+ -*V̇h*); see example (9a) above and §17.3. For example, verb-final constituent order with the Declarative suffix is typically preferred in past-tense or procedural (i.e. tense-neutral) narrative, but the Dynamic also occurs (or co-occurs) in this context, as examples (12-14) illustrate. The factors determining speakers' choices of these markers are not yet fully understood, but they are linked to a complex mix of phenomena, such as constituent order (i.e. the Declarative can only occur clause-finally, whereas the Dynamic can occur on any verb), position of peripheral particles (which must follow the Dynamic, but precede the Declarative), etc., in addition to whether or not the event is marked as concurrent with the speech moment or temporal frame of reference.

- (12) *yǝnǝh-ǝw-áy=nih* *ǝám-ǝñ ǝǝh-ǝh, púy',* *nǝ-ǝy=mah*
 that.ITG-be.like-FLR-INCH=EMPH.CO 2sg-OBJ 1sg-DECL younger.brother say-DYNN=REP
 '“I wanted it thus for you, little brother,” he said.’ (LG.C.14)
- (13) *g'ǝǝ=tǝh mǝǝǝh có? tǝy-g'et-d'ǝh-hí-ty=mah*
 bone=son downriver LOC push-stand-send-descend-DYNN=REP
 'Bone-Son pushed (the White people) all downriver.' (LG.C.31)
- (14) *nǝn'ǝh wǝd-yǝǝ-ǝy. cǝ=wǝd ǝñ-ǝñ wǝd-ǝh; dapúh tǝg-ǝy!*
 this-NMZ eat-TEL-DYNN rainbow=old/RESP 1pl-OBJ eat-DECL hand tooth.rot-DYNN
 '(He) eats this part up. Old Rainbow-Man eats us; makes (our) hand/finger rot out!' (H.40)

Similarly, consultants can identify no semantic or functional difference between many clause variants involving peripheral formatives and the Dynamic and Declarative markers, as in (15). There is certainly no entailment that one is past and the other non-past.

- (15) a) *tɪh ye-tæʔ-æʔ yæh*
 3sg enter-CNTRFACT-DYNM FRUST
 ‘It almost went in!’ (ball into goal) (OS)
- b) *tɪh ye-tæʔ-yæh-æh*
 3sg enter-CNTRFACT-FRUST-DECL
 ‘It almost went in!’ (ball into goal) (EL)

In past-tense narrative, the Dynamic often occurs in relation to events that are framed within the context of another event, which is itself expressed with a Declarative or other aspectual or clausal marker. The Dynamic may function here to bring into focus the internal dynamicity of the framed event(s) with respect to their context within the narrative event sequence:

- (16) *yíkán ʔín ní-ay-áh, bɔyɔh ʔín bíʔ-ɣ;*
 over.there 1pl stay-INCH-DECL tapiri.shelter 1pl make-DYNM
 ‘There we stayed (a while/ while we were there), we built a tapiri shelter.
- yí-nɪh-yóʔ, ʔɔk ʔín yɔ-ɣ, ʔín ní-ay-áh*
 that.ITG-be.like-SEQ giant.armadillo 1pl follow-DYNM 1pl be-INCH-DECL
 Having done this, we followed an armadillo; we stayed there.’ (S-PN2)
- (17) *...hiyáw’ ʔáh ʔəg-g’óʔ-óy, j’ɬw kæʔ deh ʔáh ʔəg-ɣ,*
 strong.caxiri 1sg drink-go.about-DYNM pupunha bury liquid 1sg drink-DYNM
 ‘I went drinking strong caxiri, I drank buried-pupunha beer,
- ʔəg-yóʔ ʔáh yamhidɔʔ-g’óʔ-óy, ʔáh ni-ʔe-h*
 drink-SEQ 1sg sing-go.about-DYNM 1sg be-PERF-DECL
 having drunk I would go singing; I lived (thus).’ (MM.1)
- (18) *yɪt tɪh tɔw-ɣ wíʔ-yóʔ j’ám...*
 so 3sg scold-DYNM hear-SEQ DST.CNTR
 ‘So, having heard that he was scolding (i.e. listened to his scolding)...’ (P-BH1)

Like many other formatives in Hup, Dynamic -Vý has other uses that appear to be in some way distinct from its primary function as a verbal Boundary Suffix related to

aspect. As is the case with so many of Hup's multifunctional formatives, it is difficult to prove that these multiple uses involve polysemy, as opposed to homonymy. However, especially in light of the frequency of this polyfunctionality among verbal aspect markers and other forms generally in Hup (see, for example, the discussions in §3.3 and §7.1), polysemy—at least in a diachronic sense—seems likely.

In addition to its use as an aspect-marking Boundary Suffix, Dynamic *-V́y* appears to have a function relating to clause coordination, as discussed in more detail in §18.1.2. As such, it occurs in contexts that are non-canonical given its normal properties as a Boundary Suffix, such as following the Negative suffix *-nɪh* in example (19)—because *-nɪh* also normally occurs as a Boundary Suffix, under most circumstances these two forms are mutually exclusive.

- (19) *tɪh ʔɔh-nɪh-ɣ̌, tɪh mæh-æh*
 3sg sleep-NEG-DYNM 3sg kill-DECL
 ‘He didn’t sleep, he killed (fish).’ (RU)

Dynamic *-V́y* also tends to precede the Emphatic Coordinator enclitic *=nih*,¹⁴³ used primarily to signal coordination (see §18.1.3). Most notably, whereas Dynamic *-V́y* is limited almost entirely to association with verbs, in the context of *=nih* it may occur following virtually any part of speech, including a verb stem (example 20), a bound noun bracketing a relative clause (21), a negative marker (and ‘Filler’ syllable) (21), and a Telic/adverbializer enclitic (22).

¹⁴³ The *-Vy* suffix receives extra stress and vowel lengthening in these constructions, as it does in the nominal compound forms below.

- (20) *tɪh kéy-éy=nih*
 3sg see-DYNM=EMPH.CO
 ‘He’s seen too.’ (a boy who has been initiated to see the Yurupari flutes) (RU)
- (21) *tɪh=dó wɔn-ɔp=ɪh-ɪy=nih, tɪh=tohó wɔn-nɪh-ɪw-ɪy=nih*
 3sg=red follow-DEP=MSC-DYNM=EMPH.CO 3sg=white follow-NEG-FLR-DYNM=EMPH.CO
 ‘The brown (dog) chases animals, the white one does not.’ (P-EL)
- (22) *núp ɪnɪh=hin cáp=yɪɪ-ɪy=nih káh*
 this 1pl.POSS=also other=TEL-DYNM=EMPH.CO ADVR
 ‘Also ours (i.e. language) is different, too.’ (after listing various other dialects)
 (A-Int.3)

The -*Vý* suffix has an additional non-aspectual function: it acts as an attributive marker in a small set of nominal compounds, many of which involve an adjective as the first element (see §5.1.4):

- (23) *núp j’ɔb-ɪy=d’ɔh*
 this night-DYNM=PL
 ‘Those of tonight’ (OS)
- (24) *hɪkán-ay=ɪáɪ ɪám?*
 where-DYNM=FEM 2sg
 ‘A woman-from-where are you?’ (i.e. ‘where are you from?’) (OS)
- (25) *póh-óy dɛh*
 high-DYNM liquid
 ‘Water from roof’

Despite their profound differences, there is a possible semantic link between these various realizations of the -*Vý* suffix. Like the verbal Dynamic marker, which signals a dynamic and concurrent relationship between coordinated events, time frames, and/or the current speech moment, -*Vý* used as a coordinator and even as an attributive marker may be signaling a dynamic connection between two or more events, propositions, or entities—i.e. they are intrinsically associated, interdependent, and temporally consistent.

Such a conceptual and/or historical link between temporal, spatial, and propositional or abstract concepts has considerable precedent elsewhere in Hup.

12.3. Inchoative *-ay*

The suffix *-ay* combines with predicates to mark inchoative aspect, and indicates a transition into a state or the initiation of an event. Inchoative *-ay* is independent of tense; when occurring alone with no other aspect or tense markers, its interpretations can vary as to whether an event or a transition into a state has just begun, is currently beginning, or is about to begin, vis-à-vis a given temporal reference point.

Formally, Inchoative *-ay* is unusual in that it can act either as a Boundary Suffix or as an Inner Suffix, followed by another Boundary Suffix. Like several other vowel-initial Boundary Suffixes, *-ay* is unstressed, while the stem it follows receives stress. Also—like all other vowel-initial suffixes in Hup—Inchoative *-ay* conditions consonant-gemination on stems, as discussed in §2.1.2.1. Because it is consistently oral, this results in a homorganic nasal-oral consonant cluster when the stem is nasal, such that the surface realization of a form like *hám-ay* (go-INCH) is [hám-bay] (compare *hám-áy* (go-DYNM) [hám-máy]).

In direct combination with verb roots, *-ay* typically indicates that an event is about to take place:

- (26) *b'ěh-ay*
 cross.stream-INCH
 ‘(I’m) going across the stream.’ (i.e. home to the other end of the village) (OS)

- (27) *hám-ay*
go-INCH
'(We're) going.' (said on the point of leaving; equivalent to 'goodbye') (OS)

It can also indicate that the event has just begun to take place:

- (28) *děh d'oj-ay*
water rain-INCH
'It's beginning to rain.' (OR: 'It is about to rain.') (OS)
- (29) *n'i-có? tih ní-ay*
there-LOC 3sg be-INCH
'He's living there now.' (recently left previous home) (OS)
- (30) *yú-ay=mah, tih-ih-ih*
wait-INCH=REP 3sg-FLR-DECL
'She's waiting, she says.' (she has just started) (B-Cv.1.5)
- (31) *húp-ǎn tih wæd-tú-ay, píċ-ĩw-ay=mah*
person-OBJ 3sg eat-want-INCH scream-FLR-INCH=REP
'(When) he wants to eat a person (i.e. upon entering a state of wanting), he begins screaming (to attract them).' (C.1)

The Inchoative is common in imperative mood (see §17.4), especially for slightly impatient imperatives. In these constructions, both *-ay* and the preceding stem (or Inner Suffix) take the stress and high tone of the imperative mood:

- (32) *húptok g'ɔp-áy!*
caxiri serve-INCH.IMP
'Start serving caxiri!' (i.e. it's ready, go ahead)
- (33) *?ɔh-yĩ?-áy!*
sleep-TEL-INCH.IMP
'Go to sleep!'

In negative clauses, Inchoative *-ay* is typically used to indicate a negative *future* event (as in example 34), and is among the only grammatical means for doing so, since the Future suffix *-teg / -te-* is ungrammatical in negative clauses (see §13.1).

Presumably, the idea of entering into or initiating a negative state is semantically akin to the expectation that the negative state will exist at some time in the future. However, use of *-ay* in a negative construction is not restricted to future reference, and may also be used to describe a current transition into such a state, as in (35).

- (34) *ʔāh ham-nīh-ay*
 1sg go-NEG-INCH
 ‘I’m not going to go.’ (OS)

- (35) *pe ʔ-nīh-ay*
 sick-NEG-INCH
 ‘(I’m) not sick anymore.’ (OS)

The Inchoative marker co-occurs with (and typically follows) many other aspect markers. It is particularly common following the Telic marker (an Inner Suffix that indicates complete involvement of the participants, see §12.6). In (36), the same utterance with Dynamic *-V̌y* in place of the Inchoative would be translated as ‘are you (fully) used to’, whereas the Inchoative lends the sense of a transition; similarly, the Inchoative in example (37) indicates the transition to a state of being cool (whereas the Dynamic would mean that it was completely cool and may have been so for some time).

- (36) *húp=d’əh mäh ni-hipāh-yīʔ-ay ʔām?*
 Hup=PL near be-know-TEL-INCH 2sg
 ‘Are you getting used/ have you gotten used to living with the Hupd’əh?’ (OS)

- (37) *kapé m’æ-yīʔ-ay*
 coffee cool-TEL-INCH
 ‘The coffee is cooling off; is just cool enough to drink.’ (OS)

When the Inchoative is itself followed by a Boundary Suffix, this is most frequently Declarative *-V̌h*—although this is of course restricted to clause-final environments (in keeping with the rules governing *-V̌h*, see §17.3.2). However, the

Inchoative and the Boundary Suffix *-V̇y* (Dynamic) do not co-occur.¹⁴⁴ This fact may have a semantic explanation: the Inchoative itself encodes an element of dynamicity (vis-à-vis the temporal reference point) that is otherwise conveyed by Dynamic *-V̇y*; the final *-y* of the Inchoative may even be a formal reflection of this. Thus while the Declarative is preferred on clause-final *-ay* when the event is not concurrent with the speech moment, *-ay* occurs by itself when the event is on-going (as in the examples above).

The combination of Inchoative and Declarative is very common in past-tense narrative and in general descriptive discourse, where it tends to alternate with clauses marked by the Sequential *-yóʔ*, chaining events together in a sequence. The event is introduced with Inchoative *-ay-áh*, then re-summarized with Sequential *-yóʔ*, and then the next event is introduced, as in example (38) (see also §18.2.6.3). This use of the Inchoative has to do less with the actual aspectual nature of the event than with the packaging of information within the text.

- (38) *yɔj-yiʔ-yóʔ... tɪh=tɪh hid d'oʔ-d'ák-ay-áh*
 peel-TEL-SEQ 3sg=string 3pl take-stick.against-INCH-DECL
 'Having peeled it, they attach its string.'

tɪh=tɪh d'oʔ-d'ák-yóʔ ...
 3sg=string take-stick.against-SEQ
 'Having attached its string...' (P.txt)

The Inchoative + Declarative form *-ay-áh* is also used in other contexts in which the simple Declarative appears, such as with the first person plural pronoun to create an

¹⁴⁴ However, one apparent exception to this rule has been encountered:

dɛh hɔp-ɔy-ay
 water dry.up-DYNM-INCH
 'The water is starting to subside.' (OS)

inclusive future sense (examples 39-40; see §13.3), and following the Future suffix

-te- (where it yields a progressive or prospective future; compare English “going to do V”), as in example (41).

- (39) *ʔin ʔɔ́h-ay-áh*
 1pl sleep-INCH-DECL
 ‘We’re (all) going to sleep.’ (i.e. ‘good night’) (OS)

- (40) *ʔin du-wæd-ʔáy-ay-áh*
 1pl buy-eat-VENT-INCH-DECL
 ‘We’ll go and buy something to eat.’ (Paulo.1)

- (41) ... *ʔin hi-ciʔ-wob-té-ay-áh!*
 1pl FACT-stick-rest.on-FUT-INCH-DECL
 ‘...We’ll stick (her hair) on!’ (B.Cv1.80)

The Inchoative suffix also combines with predicate nominals (including some relative clauses, as in 46), where it performs the same inchoative functions as with the verbal predicates above:

- (42) *tɪh b’ɔk b’ɣiʔ-ay*
 3sg skin only-INCH
 ‘Only his skin is left now.’ (OS)
 (said to tease a small child, after the “monster” adult has just pretended to suck out his insides)

- (43) *děh-ay ʔin-ɪh*
 water-INCH 1pl-DECL
 ‘We’re about to get rained on.’ (OS) (cf. example 28)

- (44) *tɪh nuh-ay, nup=m’æ tɪh cadáp-áh*
 3sg tapioca/solid matter-INCH this=MEAS 3sg settle.out-DECL
 ‘It develops the solid matter (as the water boils off), just this much settles out.’
 (MD-C.73)

- (45) *tʰ nʉh-ay mʰʔ=mah tʰ ʔʰd-ʰh, tʰ báb'=n'ǎn*
 3sg head-INCH UNDER=REP 3sg speak-DECL 3sg sibling=PL.OBJ
 'Despite having become only a head, he spoke to his relatives.' (H.107)
 (a jaguar had eaten the man's body)
- (46) *hʰd=n'ǎn hikəd-ní=d'əh-ay*
 3pl=PL.OBJ change-be=PL-INCH
 'It's we (the Hupd'əh) who have now taken their place.' (P-B.6)

It does the same with predicate adjectives; for example, when asked how one is after an illness, or whether one has had enough to eat after a meal, one responds *náw-ay* (good-INCH) 'I'm well/ satisfied', whereas the response *náw* 'good' is appropriate in circumstances where no transition from a less-well state is involved. Similarly, *pǎ-ay* (NEG:EX-INCH) means 'all gone, none left', whereas *pǎ* means 'none, does not exist'. A further example is given in (47).

- (47) *g'ʰ-ay ʔʰn-ʰh*
 hot-INCH 1pl-DECL
 'We're about to get hot.'/ 'It's getting hot on us.' (OS)

Inchoative *-ay* has the same function with other kinds of predicates as well, such as the adverbial expression *máh=yiʔ* (near=TEL) 'close by':

- (48) *ʔʰn máh=yiʔ-ay*
 1pl near=TEL-INCH
 'We're getting close; nearly there.' (OS)

In what is probably a related function, Inchoative *-ay* follows the Directional marker *-an* (resulting in the form *-an-ay* [an-day]), to form a temporal adverbial in a dependent clause (see §18.2.6.2):

- (49) *tɪh hɔp-hí-an-ay=mah j'ám, núp poŋʔah...*
 3sg dry.up-descend-DIR-INCH=REP DIST.PAST this upriver
 'As it (the water) went down, there upriver...

tu-d'oʔ-kəd-pæ-æy=mah
 go.down-take-pass-go.upstream-DYNM=REP
 he pushed (a fish-trap) upstream.' (M-DT.80)

A distinct—but undoubtedly related—function of Inchoative *-ay* is its use as a marker of Inchoative focus, especially with nominal arguments (see §7.1.1), as in (50). This can perhaps be compared with the use of 'now' with nominals in English as a marker of topic or focus.

- (50) *hɪd-ǎn tɪh mæh-æw-ay... hɪd=ʔn-ay*
 3pl-OBJ 3sg kill-FLR-INCH 3pl=mother-INCH
 'She beat them, their mother (did).' (I-M.19)

A very common use of Inchoative *-ay* involves its combination with the 'Filler' syllable *-Vw-*. While the Filler syllable has a range of functions in Hup, and in general appears to be itself semantically empty (see §15.2.4), its combination with the Inchoative suffix results in an inchoative form (*-Vw-ay*) with marginally distinct semantics from *-ay*. The primary function of this form is to signal entry into a relatively long-term or (semi-) permanent state. With an active verb, this long-term state is understood to be the result of the event in question.

Examples of the use of this long-term state use of *-Vw-ay* include *hipǎh-ǎw-ay* (know-) 'knows it completely' (e.g. a language in which one has attained fluency); *b'óy-ow-ay* (study-) '(she's) studying' (e.g. has begun for the day and will continue all day); *nǎn-æw-ay* (come-) 'coming to stay for good or long-term'; *macá-aw-ay* (get.strong-) 'fully recovered' (after an illness; compare *macá-ay* (get.strong-INCH), used to mean

‘getting better’); and *kéy-ew-ay* (see-), used in reference to a boy who has been initiated into the Yurupari tradition, i.e. he has entered the stage of seeing the instruments, from which there is no going back.

Other examples include (51), which was uttered in response to my question of why a dog had died; it was starving, and had entered the stage being on the edge of death, with no recovery expected. The same thing is sometimes said of people who are very old or terminally ill, once they reach the stage of being bed-ridden. Likewise, example (52) was in reference to a small child who had reached the stage of having learned to walk.

Further examples are given in (53-55).

- (51) *tĩh náʔ-aw-ay*
 3sg lose.consciousness-FLR-INCH
 ‘He was dying.’ (OS)
- (52) *tĩh g’et-g’óʔ-ow-ay*
 3sg stand-go.about-FLR-INCH
 ‘She’s walking.’ (OS)
- (53) *pěd tǎh ʔp ni-túk-uw-áy=nih=cud=mah*
 (name) child.father be-want-FLR-INCH=EMPH.CO=INFR=REP
 ‘It looks like Ped (has come to the stage of) wanting (i.e. being ready for) a husband, (it was said).’ (OS)
- (54) *tĩh ʔəg-nĩh tǎ=yiʔ, wiʔwiʔ-ʔy=mah... tĩh ʔəg-aw-ay,*
 3sg drink-NEG YET=TEL tremble-DYNM=REP 3sg drink-FLR-INCH
 ‘When he hasn’t drunk yet, they say he trembles... once he starts drinking,
náw cuʔ-yiʔ-aw-ay=mah-áh tĩh-ʔp!
 good grab-TEL-FLR-INCH=REP-FOC 3sg-DEP
 he’s fine, they say, that one!’ (P.Cv.)
- (55) *yũd ʔin cúd-uw-ay*
 clothes 1pl be.inside-FLR-INCH
 ‘We wear clothes now.’ (in reference to the days in which the Hupd’əh wore loincloths) (EL)

Whereas the simple Filler + Inchoative form is used for a current, on-going state, the Declarative is typically added for a state that is not concurrent with the present moment, as it is with the simple Inchoative (see above):

- (56) *tɪh cak-g'ǎʔ-aw-ay-áh*
 3sg climb-be.suspended-FLR-INCH-DECL
 'He climbed up and lay down in the hammock (never to wake again).' (I-M.12)
- (57) *tɪh-ǎn wɪd-hám-ay-áh, dɔʔkěy hám-aw-ay-áh*
 3sg-OBJ arrive-go-INCH-DECL right go-FLR-INCH-DECL
 'They fit him, went just right.' (H-CO.4)

The 'long-term' Inchoative also figures in contexts of clause coordination, indicating that when X begins, Y will occur (see §18.1.2):

- (58) *huɪh-an wɪd-hám-aw-ay,*
 São.Gabriel-DIR arrive-go-FLR-INCH
 'When I go to São Gabriel,
- wág kəd-nɪh 'verdúra' ʔǎh wəd-té-h*
 day pass-NEG greens(Pt) 1sg eat-FUT
 I will eat green vegetables every day.' (EL)

In some contexts, the use of the 'long-term' Inchoative appears to be linked not to aspect, but to emphasis. This probably relates primarily to the ability (elsewhere in Hup) of the Filler syllable to mark emphasis (see §15.2.4), as well as that of the Inchoative to mark focus. This is illustrated in the following examples (from a conversation held by several men who had perhaps had a little too much to drink); note that the use of Filler -Vw- here is general, occurring on both verbs and nouns.

- (59) *ʔan-yæh-nɪh-ɪw-ay mæh-æw-ay ʔǎh-ǎw-ǎh, céc!*
 make.love-allow-NEG-FLR-INCH hit-FLR-INCH 1sg-FLR-DECL INTERJ
 'If she doesn't let me make love to her I hit her, darn it!' (B-Cv.2.3)

- (60) *hǎy-ǎñ key-d'óʔow-ay ʔǎh-ǎw-ǎh,*
 um-OBJ see-take-FLR-INCH 1sg-EMPH-DECL
 'I've caught a glimpse of what's-his-name,

nút tǎk j'óŋ! hi-yǎt-ǎw-ay!
 here hip hit descend-lie-FLR-INCH
 he hits her hip here! and gets down from the hammock!' (B-Cv.2.3)

12.4. Perfective -ʔeʔ/ -ʔe-

The formative -ʔeʔ- and its phonologically reduced variant -ʔe- indicate a type of perfective aspect: they focus attention on an event via-à-vis its final *endpoint*, such that the event is conceptualized as a single, bounded situation with a limited duration. This function is generally consistent with the definition of perfectivity provided by Comrie (1976: 16), who states that “perfectivity indicates the view of a situation as a single whole, without distinction of the various separate phases that make up that situation”. In Hup, expression of perfectivity is independent of tense; an event can be perceived as temporally bounded regardless of whether it occurred in the past, is currently on-going, or will occur in the future.

While the function of the -ʔeʔ/ -ʔe- suffix seems to be best captured by the label ‘perfective’, its use does not actually *exclude* additional reference to the internal temporal structure of the event. This is in keeping with Comrie’s observation (1976: 21) that “perfectivity involves lack of explicit reference to the internal temporal consistency of a situation, rather than explicitly implying the lack of such internal temporal consistency”. In Hup, the Perfective marker itself does no more than define the event as temporally bounded, and can co-occur with various other verbal aspectual forms that provide further

aspectual information about the event, such as the Dynamic suffix *-Vy*, the ‘long-term’ Inchoative form *-Vw-ay*, and the Distributive marker *-píd-*. The Distributive marker, for example, indicates repetition of an event within a specific period of time; thus its combination with the Perfective marker signals that the event is repeated within a bounded time frame.

Formally, the Perfective marker is usually realized as an Inner Suffix on verbs, although it can also occur with predicate nominals and other parts of speech. It belongs to the set of formatives that have both a full (CVC) variant and a phonologically reduced (CV) variant. As is true of all the phonologically reduced variants in this set, the CV form can occur only as a verbal Inner Suffix, followed by a member of the set of vowel-initial Boundary Suffixes (see §3.6). The Boundary Suffix itself drops its copied vowel in this context and contributes only its consonant C (such that the combination of the Perfective form with Dynamic *-Vý*, Dependent marker *-Vp*, and Declarative *-Vh* yields *-ʔẽ-y*, *-ʔẽ-p*, *-ʔẽ-h*).

The combination of the Dynamic suffix with Perfective *-ʔe-* typically relates to a currently on-going event that is expected to be of limited duration, as the following examples illustrate. Although the two labels appear to be mutually exclusive, these forms in Hup are perfectly compatible—the Perfective fixes the event as bounded and having an endpoint, but is neutral as to whether that endpoint has been reached; the Dynamic indicates that the event is on-going or relevant with respect to the moment of speech or other reference point. For example, a speaker might utter (61) in a situation where rain has arrived and disrupted plans to go out, and the speaker intends to wait for the rain to

subside before leaving. If the speaker had planned to stay in all day anyway, he would be more likely to use only the Dynamic to remark on the rain.

- (61) *děh d'oj-ǝ-y, (tán ǝm hám-áh)*
 water rain-PERF-DYNM later 1pl go-DECL
 'It's raining (for now), (later we'll go).' (i.e. when it stops) (RU)

Similarly, example (62) was uttered by a woman who was washing clothes when I came along and greeted her by asking 'are you washing clothes?'¹⁴⁵ (with an Dynamic: *yǔd j'id-ty ǝm?* [clothes wash-DYNM 2sg]. She responded with the Perfective, apparently as an indication that she was nearly done and looking forward to the end of the task:

- (62) *yǔd j'id-ǝ-y!*
 clothes wash-PERF-DYNM
 'I'm washing clothes!' (i.e. at the moment; almost done) (OS)

The Perfective also occurs with the Dynamic to announce an initiated activity that is not intended to last very long, or an activity of which the outcome will be of limited duration. This use can be contrasted with the similar 'announcing' function of the Inchoative *-ay* (see §12.3), which is open-ended with respect to an end-point. For example, in *Barriera Alta*, where a stream cuts through the village, the Perfective form in (63) is typically used by someone who is announcing his/her intention to go to cross the stream to visit someone on the other side (i.e. crossing only to stay briefly), whereas the same visitor would later use the Inchoative—*b'éh-ay* (cross.water-INCH)—to express his/her intent to return home (i.e. crossing to stay for some time, with no expected soon

¹⁴⁵ Hup greetings conventionally involve an inquiry into a current (usually obvious) activity, and the responses are usually an affirmative statement of the same.

return) when the visit is over. In (64), the speaker was likewise announcing his intention to carry out the activity in a quick, brief fashion.

- (63) *b'eh-ǰě-y*
 cross.water-PERF-DYNM
 '(I'm) going across the creek (to other side of village ~and will be back).' (OS)
- (64) *j'əm-yǰ-ǰě-y* *ǰǎh=hín-íh !*
 bathe-TEL-PERF-DYNM 1sg=also-DECL
 'I'm going to take a quick bath too!' (OS)

Similarly, the Perfective may be used in an interrogative clause involving an initiated or immediate future event whose duration is expected to be short-term:

- (65) *j'əm-ǰě-y* *ǰám ?*
 bathe-PERF-DYNM 2sg
 'Are you going to bathe?' (OS)

The Perfective + Dynamic combination is also occasionally used with verbs like *ham-* 'go' to announce that one intends to go into an area quickly and for a very brief time, such as when warning people chopping down a tree that one is going to walk across the path of its intended fall (example 66) (compare Inchoative *hám-ay* 'going [away for a longer period]', typically used to announce one's departure).

- (66) *ham-ǰě-y*
 go-PERF-DYNM
 '(I'm) going (there, just for a minute)!' (EL)

The combination of the Perfective and the Inchoative marker *-ay* (or its 'long-term' variant *-Vw-ay*) indicates the transition to a state that is characterized by the full extent of the event, whereas the absence of the Perfective implies that the event is/was still in progress:

- (67) a) *tegd'úh cap-ŕew-ay nɔh-yíŕ-ŕy*
 tree grow-PERF-FLR-INCH fall-TEL-DYNM
 'The tree that had already grown big has fallen.'
- b) *tegd'úh cáp-aw-ay nɔh-yíŕ-ŕy*
 tree grow-FLR-INCH fall-TEL-DYNM
 'The tree that was growing big has fallen.' (EL)

In combination with the Sequential marker *-yóŕ*, the Perfective focuses on the endpoints of a sequence of planned events:

- (68) *hæŋ-nɰh-áh ɽǎh-āp, ɽǎh b'aŕ-ŕeŕ-yoŕ pǎd, ɽǎh wɔn'-ŕeŕ-yoŕ*
 fast-NEG-FOC 1sg-DECL 1sg make.bread-PERF-SEQ DIST 1sg make.mingau-PERF-SEQ
 'I won't be quick, I have to make manioc bread, and I have to make mingau
- pǎd; hæŋ wí-d-ay-nɰh tán b'ɰ-an ɽǎh-ǎh*
 DIST fast arrive-INCH-NEG FUT.CNTR manioc.field-DIR 1sg-DECL
 too; I won't get to the field very soon.' (woman listing things she has to do) (RU)

The Perfective is especially common when describing events that occurred in the past, as long as they are no longer occurring, and appears most often with events that occurred in the relatively distant past. This use can involve the Dynamic marker (examples 69-70), but its appearance in a verb-final clause with the Declarative *-Vh* is more common, as in (71).

- (69) *ɽɰn-ǎn yú-d=mæh d'oŕ-nɔŕ-ŕy, candádia d'oŕ-nɔŕ-ŕy,*
 1pl-OBJ clothes=DIM take-give-DYNM sandals take-give-DYNM
 'They gave us some clothes, gave us sandals,
- ni-ŕeŕ-y pǎd ɽɰn-ǎn, yí-d'ɰh-ɰh*
 be-PERF-DYNM DIST 1pl-OBJ that.ITG-PL-DECL
 they used to do this for us.' (but no longer) (P.B.8)
- (70) *hicocó ɽɰn ní-íh; ni-ŕeŕ-y j'ám ɽǎh-ǎh*
 happy 1pl be-DECL be-PERF-DYNM DIST.CNTR 1sg-DECL
 'We were happy; I used to be happy in those days.' (LG-O.40)

- (71) *ʔāh yamhidɔʔ-g'oʔ-ʔeʔ-h*
 1sg sing-go.about-PERF-DECL
 'I used to go around singing (at drinking parties).' (when I was young) (MM.2)

In a sentence like (72), choice of the Perfective implies that the sleeping event was in some way temporary—e.g. the sleeper was a traveler and slept there only one night before moving on:

- (72) *j'ám tih ʔəh-ʔeʔ-h*
 yesterday 3sg sleep-PERF-DECL
 'He slept (here) last night.' (e.g. was just passing through) (RU)

In (73-74), the Perfective occurs in relative clauses in reference to past events:

- (73) *mih ʔān nɔʔ-ʔe-p*
 (name) 1sg.OBJ give-PERF-DEP
 'It was given to me by Mih.' (some time ago) (OS)
- (74) *təg ʔam huñ-ʔay-ʔe-p b'ɔ-ɔ*
 wood 2sg carry-VENT-PERF-DEP roça-OBL
 'The roça from which you carried wood' (some time ago) (OS)

The temporal frame of reference may also be the context of a narrative, rather than the speech event itself:

- (75) *ya ʔám... wɔy-pɛd-ih, tih-ăn kəwəg d'oʔ-tuʔ-ʔe-ew-ăn-áh*
 jaguar love-DIST-DECL 3sg-OBJ eye take-dunk-PERF-FLR-OBJ-DECL
 'The jaguar... loves (him), the one who had put his eyes in for him.' (H-CO.5)
- (76) *yúp tih=ʔāy, hup=ʔāy g'əh-ʔe-yəh-əp mɛʔ, ba ʔih' tih ni-g'əh-ɔy=nih*
 that 3sg=FEM person=FEM be2-PERF-FRUST-DEP UNDER spirit 3sg be-be2-DYNN=EMPH.CO
 'This woman, though she had been human, she was (now) an evil spirit.'
 (D-BWB.4)
- (77) *yúp ba ʔih' g'əh-pog-ʔe-ew-ăn hid wəd-yiʔ kəd-hám-áy=mah*
 that spirit be2-EMPH-PERF-FLR-OBJ 3pl eat-TEL pass-go-DYNN=REP
 'Then that spirit that she really had become, they ate (her) up.' (D-BWB.7)

The Perfective marker also occurs in reference to future events, usually with the Future suffixes *-teg* / *-te-* (and in this context it takes the unreduced form *-ʔe ʔ-* because it is not followed by a vowel-initial suffix). The use of the Perfective in (78a) draws attention to the fact that the event is expected to be of limited or brief duration (compare the lack of the Perfective in (78b)). In the contexts of requests, as in (79), the Perfective's focus on the short-term can serve the pragmatic function of downplaying the imposition on the other person (as with imperatives; see below).

- (78) a) *tɪh tuh-ʔe ʔ-tég=mah*
 3sg stay-PERF-FUT=REP
 'He'll stay, it's said.' (for a short time) (EL)
- b) *tɪh tuh-yíʔ-tég=mah*
 3sg stay-TEL-FUT=REP
 'He'll stay, its said.' (maybe long-term) (EL)
- (79) *nɪŋ tɔn-ʔay-kǎm, ʔǎh pɪnɪŋ-ʔe ʔ-té-t, núp wá-ǎn*
 2pl hold-VENT-IMP2 1sg tell.story-PERF-FUT-OBL this old/respect.FEM-OBJ
 'You all come hold (the baby) while I tell a story to this one.' (I-HM.1)

Other examples of the Perfective (in its unreduced form *-ʔe ʔ-*) are given below:

- (80) *yɪnɪy, g'ǎg-tǎh=d'ǎh nɪ-ní-h,*
 that.ITG.be.like.DYNM bone-son=PL be-INFR2-DECL
 'So, the gods did thus;
- póh, dǎh=teg cɪy-ʔe ʔ-ní-h*
 high water=tree poke-PERF-INFR2-DECL
 high up, they poked into the water-tree.' (LG-C.1)
- (81) *ʔǎh j'ɔm-ʔe ʔ-mɪʔ, tɪh yú-úh*
 1sg bathe-PERF-UNDER 3sg wait-DECL
 'While I was taking a bath, he waited.' (EL)

Use of the Perfective in imperative mood tends to create a kinder or more polite imperative form, as in examples (82-83) (see §17.5.1). Nevertheless, it is in general only used where a Perfective meaning is possible in the first place, and not for commands of open-ended duration (such as in inviting someone to take something that they would keep indefinitely). The unreduced form *-ʔeʔ* is always used in the imperative mood because it lacks a following vowel-initial suffix.

- (82) *n'i-cóʔ way-ʔeʔ!*
 there-LOC go.out-PERF.IMP
 ‘Go on outside for a while!’ (telling a child to leave the house) (OS)

- (83) *j'áʔ ʔań nɔʔ-ʔeʔ!*
 buriti 1sg.OBJ give-PERF.IMP
 ‘Give me a buriti palm fruit, please!’ (OS)

There are certain restrictions on the use of the Perfective aspect marker in Hup: it cannot occur in negative clauses, and does not combine with the Habitual *bɨg / -bɨ-* (which is by definition not temporally bounded, see §12.8), or with the Completive aspect marker *-cɨw- / -cɨp-* (presumably because this marker already encodes perfectivity, see §12.5). In combination with certain verbs and adjectives, the Perfective may be ungrammatical or restricted to a very specific interpretation. For example, it is not acceptable with the verb *naʔ-* ‘die, lose consciousness’ when this refers to actual death (presumably because death as a transition is inherently perfective, and the resulting state by definition lacks an endpoint); the Perfective is only grammatical with this verb when it has the sense ‘lose consciousness’:

- (84) *tɨh na ʔ-yiʔ-ʔe-y*
 3sg lose.consciousness-TEL-PERF-DYNM
 ‘He lost consciousness (but has woken up again).’ (RU)

In addition to its use as an Inner Suffix with verbs, the Perfective marker can also occur with predicate nominals (always in its unreduced form -*ʔe ʔ*, and with the formal qualities of an enclitic, specifically lack of stress).¹⁴⁶ The occurrence of Perfective -*ʔe ʔ* with predicate nominals is fully productive, and involves both prototypical nouns (as in examples 85-86) and nominalizations (example 87). In most cases, the perfective meaning has to do with a previous identity of the referent, which no longer holds true. Note that an alternative way to express the same information involves a copula with a Perfective (verbal) Inner Suffix and following Boundary Suffix (86b) (see §17.3.4).

- (85) a) *tɨh=tæh tɨh=cɔw=ʔe ʔ*
 3sg=son 3sg=shaman=PERF
 ‘His son used to be/ was a shaman.’ (but is no longer)
- b) *tɨh=tæh tɨh=cɔw*
 3sg=son 3sg=shaman
 ‘His son is a shaman.’ (EL)
- (86) a) *ʔedía kapitãw=ʔe ʔ*
 Elias capitão=PERF
 ‘He used to be the village leader (*capitão*).’ (but gave up his post) (EL)
- b) *ʔedía kapitãw ni-ʔe-h*
 Elias capitão be-PERF-DECL
 ‘Elias used to be *capitão*.’ (EL)

¹⁴⁶ Pronounced [w’eʔ] in the Tat Deh dialect area; the [w] may be related to the ‘Filler’ form -Vw- (see §15.2.4), or may be epenthetic.

- (87) *j'ám=yíʔ yúp, dú=teg=ʔeʔ=cud-uh*
 yesterday=TEL that barter=THING=PERF=INFR-DECL
 'A long time ago, it apparently used to be something that one could sell.' (H.17)
 (referring to little ucuqui-seed flutes; once there was a Brazilian river-
 merchant who bought them.)

Adjectives can take either the nominal or the verbal form of the Perfective, depending on their identity as predicates or as nominal modifiers (see §17.2.3.2):

- (88) a) *tíh=tǎh [náv]-ʔeʔ-h*
 3sg=son good-PERF-DECL
 'His son used to be good.'
- b) *[tíh=tǎh náv]=ʔeʔ*
 3sg=son good=PERF
 '(He) used to be his good son.' (EL)

Perfective -*ʔeʔ* also occurs with certain parts of speech that are not typical nouns

(although they may share certain features of nouns); these include the 'what' question word, as in (89), and the nominal 'Negative Existence' form *pǎ* (example 90):

- (89) *hǎn'íh-ʔeʔ yúʔ*
 Q-NMZ-PERF that
 'What (thing) was that?' (child asking about food scrapings on a plate) (OS)
- (90) *pǎ-ʔeʔ j'ám yúw-úh*
 NEG:EX DIST.CNTR that-DECL
 'At one time they did not exist.' (H.txt)

12.5. Completive -*cǎp-* / -*cǎw-*

The verbal Inner Suffix -*cǎp-* and its phonologically reduced variant -*cǎw-* indicate completive aspect, and signal that an event is over or no longer in progress. They are typically indicated in translation by 'already' or 'finish'.

Other formatives in Hup that have phonologically reduced variants (such as Perfective *-ɽe ɽ-/ -ɽe-*) have reduced a CVC morpheme to CV in the presence of vowel-initial Boundary Suffixes generally (as discussed in §3.6). In the case of the Completive suffix, however, the reduced form *-cɽw-* involves a stop → glide (/p/ → /w/) change, rather than the complete loss of the final consonant. Moreover, this phonological reduction is restricted to contexts in which Dynamic *-V́y* follows the Completive marker,¹⁴⁷ whereas the unreduced form *-cɽp-* normally occurs when any other Boundary Suffix follows. The Completive is probably a case in which the grammaticalization of the reduced variant from the full form is still in a relatively early stage; it has occurred in the context of the Boundary Suffix that it most frequently precedes (*-V́y*), but has not yet spread to other Boundary Suffix environments.

The Completive marker is very common in spontaneous speech, but is relatively rare in narrative (with the exception of quoted speech). In narrative, the function of the Completive marker is in most cases superseded by that of the Sequential marker *-yóɽ* (see §18.2.6.3), which links events together in a sequence—although Completive *-cɽp-* / *-cɽw-* can still be used to emphasize the actual completion of the event.

Examples of the Completive form *-cɽw-*, followed by the Dynamic, are given in (91-95):

- (91) *biɽ-key-cɽw-ɽ́y* *yúw-ǎn, ɽǎh-ǎh*
 work-see-COMPL-DYNM that-OBJ 1sg-DECL
 ‘I’ve already tried that work.’ (P.Sp.110)

¹⁴⁷ This form *-cɽw-ɽ́y* is often pronounced *-cɽ́y* in the Tat Deh dialect area.

- (92) *ʔidia hipāh-cʔw-ʔy ʔūhníy*
 Elias know-COMPL-DYNM maybe
 ‘Elias already knows, maybe.’ (P.Sp.110)
- (93) “*b’ōy=deh tih=pōg=d’əh wæd-d’oʔ-næn-cʔw-ʔy*” *nʃ-ʃy=mah*
 traia-PL 3sg=big=PL eat-take-come-COMPL-DYNM say-DYNM=REP
 ‘The big traia (fish sp.) have already come to eat (the bait), he said.’ (I-M.23)
- (94) *key-cʔw-ʔy, cecí... ʔin key-cʔw-ʔy píd!*
 see-COMPL-DYNM Ceci 1pl see-COMPL-DYNM DIST
 ‘Ceci’s already seen it (a village)... we’ve see it too.’ (B-Cv.3.129)
- (95) *ʔəh-yiʔ-cʔw-ʔy híd, ʔin=təh=d’əh ?*
 sleep-TEL-COMPL-DYNM 3pl 1pl=child=PL
 ‘Have they already gone to sleep, our children?’ (I-M.11)

Other formatives frequently occur between the verb stem and the Completive suffix. For example, where *wæd-cʔw-ʔy* (eat-COMPL-DYNM) means ‘already ate, finished eating’, the addition of the Telic Inner Suffix -*yiʔ*- (see §12.6) yields *wæd-yiʔ-cʔw-ʔy* (eat-TEL-COMPL-DYNM) ‘already ate all of something’ (see also 194 above); similarly, the Ventive Inner Suffix -*ʔay* (see §12.7) produces *wæd-ʔay-cʔw-ʔy* (eat-VENT-COMPL-DYNM) ‘already went somewhere, ate there, and returned’.

The semantics of the Completive form can be contrasted with those of other Hup forms that convey some sense of termination, namely the the Perfective marker -*ʔeʔ*- / -*ʔe*- (§12.4) and the Telic marker -*yiʔ*- (§12.6). Whereas the Perfective indicates that the event has a final endpoint and that it or its outcome is in some way temporary or of brief duration, the focus of the Completive is on the actual *completion* of the activity, as example (96) illustrates. The Completive form, on the other hand, can be understood to

be inherently perfective (i.e. the completion of an activity assumes that it has been brought to an end); it is probably because of this semantic overlap that the Perfective and Completive do not co-occur within the verb word.

- (96) a) *ʔāh j' ɔm-ʔe ʔ-té-h*
 1sg bathe-PERF-FUT-DECL
 'I'll go have a bath (and will be back soon).'
- b) *ʔāh j' ɔm-hi-c̣ʔ-té-h*
 1sg bathe-FACT-COMPL-FUT-DECL
 'I'll finish bathing.' (EL)

The focus of the Telic marker is also distinct from that of the Completive. While the Telic relates specifically to a *goal* that brings an activity to an end, and/or to the full involvement and affectedness of the participants in the activity, the Completive is neutral regarding these concerns. The contrast between the Telic and the Completive is pursued in more detail in §12.6 below.

In addition to these other aspect-related formatives, the Completive suffix may be preceded by either of the valency-adjusting forms *hup-* (Reflexive, see §11.1) and *hi-* (Factitive, see §11.4), as in *wæd-hup-c̣ʔ-* (eat-RFLX-COMPL-) and *wæd-hi-c̣ʔ-* (eat-FACT-COMPL-). Consultants claim that there is no difference in meaning among these latter two forms and the simple (stem-COMPL-) form, and it is not clear what function these valency-adjusting prefixes have here. A likely possibility is that they are held over from an earlier, more verb-like form of the Completive marker, which may have at one time required some valency-adjusting mechanism that is now becoming lost.

This hypothesis is supported by a number of considerations. First, use of *hi-* and *hup-* with the Completive marker appears to vary considerably among dialects¹⁴⁸ and among speakers, suggesting a transitional stage. They are also very often present when the unreduced variant *-cṣp-* occurs, but appear considerably less often with the reduced form *-cṣw-*. Furthermore, the Factitive *hi-* prefix can co-occur with the Completive marker when the latter is in its unreduced form *cṣp-*, to form an independent verb stem (i.e. *not* a bound formative) meaning ‘finish’. Like any other verb, this stem can combine with other stems in the middle of a longer compound (example 97), and can stand on its own, as in (98):

- (97) *ṣapṣḍ nutkán puhu-hi-cṣp-kəd-cak-yṣṣ-ṣy=mah*
 right.away to.here swell-FACT-COMPL-pass-climb-TEL-DYNM=REP
 [swell-FINISH-climb.quickly-TEL-DYNM=REP]
 ‘Right away it had already swelled up and spread quickly up to here (on her leg).’
 (M-KTW.109)

- (98) *ṣecáp ṣm hi-cṣp-té-h*
 tomorrow 1pl FACT-COMPL-FUT-DECL
 ‘Tomorrow we’re going to finish.’ (EL)

Finally, there is evidence that quite a few of Hup’s Inner Suffixes began as compound-internal verb roots and passed through an auxiliary stage before becoming what are essentially bound formatives (see §9.4.3), and it is very likely that this was the case with the Completive marker. The most straightforward candidate for a verbal source is the (formally identical) verb root *cṣp-*, which is used to mean ‘finish off a basket’ (specifically by binding the rim; compare the form *j’ṣp-* ‘tie, wrap around’). Presumably,

the grammaticalization of this verb to an aspect marker would have entailed its semantic generalization; at the same time, however, the semantics of the surviving verb root may have grown more specific over time.

The following examples provide further illustration of the use of the Completive suffix, this time in its unreduced form *-cḥp*—followed by some other Inner or Boundary Suffix than the Dynamic—and in several cases preceded by one of the valency prefixes. Note that the Completive is *followed* by the Telic suffix in example (102), just as any normal verb stem would be—in contrast to examples such as *wæd-yiʔ-cḥw-ḥy* (eat-TEL-COMPL-DYNM) ‘already ate all of something’ mentioned above, in which the Telic Inner Suffix *precedes* the Completive. This is further evidence to support the claim that the variant *-cḥw-* is more grammaticalized as an Inner Suffix, whereas in other contexts the Completive marker retains a more verb-like identity.

- (99) *nī bīʔ biʔ-hup-cḥp-ʔě-y*
 1sg.POSS work work-RFLX-COMPL-PERF-DYNM
 ‘I’m going to finish my work.’ (EL)
- (100) *tedé=d’əh-ə tih biʔ-ni-cḥp-ḥh*
 three=PL-OBL 3sg work-be-COMPL-DECL
 ‘He’s already worked with three (of them).’ (P.Sp.110)
- (101) *yinḥ-yóʔ ʔəg-hi-cḥp-yóʔ pəʔ-hi-cḥp-yóʔ ní-ty...*
 that.ITG.be.like-SEQ drink-FACT-COMPL-SEQ dabacuri-FACT-COMPL-SEQ be-DYNM
 ‘So, having finished drinking, having finished the dabacuri (ritual presentation).’
 (tell our helper to go get wood, he said) (M-KTW.106)
- (102) *hīd yinḥ-mīʔ mōy hat-hup-cḥp-yiʔ-ḥy=cud=mah hīd-iw-ḥh*
 3pl that.ITG.be.like-UNDER hole dig-RFLX-COMPL-TEL-DYNM=INFR=REP 3pl-FLR-DECL
 ‘Meanwhile they had already dug their holes.’ (I-M.18)

¹⁴⁸ The *hi-* Completive form is most common in the Barreira dialect; the *hup-* form is more often encountered in the Tat Deh area, where it is often reduced to *hū-* (undergoing consonant loss and nasal spreading from the following Completive form).

As discussed in §10.2, verbs can occasionally appear in the clause without a Boundary Suffix, forming an adverbial phrase. There are a few examples in my text corpus in which a verb involving the Completive form, preceded by one of the valency markers, occurs in this function:

- (103) *ʔɔ-hi-cʔp, tih d'ob-yiʔ-ay-áh*
 cry-FACT-COMPL 3sg go.to.river-TEL-INCH-DECL
 ‘After she had finished crying, she went to the river.’ (P-B.1)
- (104) *yin ih-yóʔ=mah yúp tih ʔəg-ay-áh yúw-ǎñ, wæd-hup-cʔp,*
 that.ITG.be.like-SEQ=REP that 3sg drink-INCH-DECL that-OBJ eat-RFLX-COMPL
 ‘So he drank it, upon finishing eating,
- yúp hid g'o ʔwow'-tu ʔ-y'æt-yiʔ-pog-ʔé-w-ǎñ-áh*
 that 3pl squeeze-dunk-leave-TEL-EMPH1-PERF-FLR-OBJ-DECL
 that which they had squeezed, dunked and left.’
 (fish-poison vine in his drink) (I-M.11)

12.6. Telic -yiʔ-

The verbal Inner Suffix -yiʔ- serves a basic function of telicity. A ‘telic’ situation is defined as “one that involves a process that leads up to a well-defined terminal point, beyond which the process cannot continue” (Comrie 1976: 45), and as “an action viewed from its endpoint” (Hopper and Thompson 1980: 252). In Hup, the Telic marker relates to a goal which necessarily brings the activity to an end, such as that conveyed by telic ‘eat up’ (vs. eat) in English. In particular, the Hup Telic form signals that a participant is completely involved in or affected by the event.

Like most Inner Suffixes generally in Hup, the Telic suffix is most frequently followed by the Dynamic suffix -Vý; the resulting combination (*yiʔ-ý*) typically indicates

a *current state* of having attained the goal relating to the event, by which a participant is now completely affected. The frequency of the Telic + Dynamic combination is reflected in its phonologically reduced pronunciation in the Tat Deh/Vaupés dialect, where it appears as [yɣy], without the glottal stop (compare the similar reduction of the Completive marker in the context of the Dynamic (-cɰw-) in §12.5 above). That this form is coming to be seen as a non-decomposable unit in its own right in this region is suggested by the inability of some speakers to separate the Telic and Dynamic markers in slow speech.

In combination with intransitive verb stems, the Telic suffix typically indicates a state that is fully attained by the subject, thus resulting in a perfective or completive sense. Examples include *həb-yɰʔ* ‘dry out’, *hɔ-yɰʔ* ‘burn up’, *pu-yɰʔ* ‘all wet, soaked’, *naɰ-yɰʔ* ‘die/ be dead, lose consciousness’, and (105-6):

- (105) *ɰáh ɰəg-na ɰ-yɰʔ-ɰy*
 1sg drink-lose.consciousness-TEL-DYNM
 ‘I’m fully drunk/ have reached a state of full drunkenness.’ (OS)

- (106) *tiyɰʔ naw-yɰʔ-ɰy tãɰáy-áɰ*
 man good-TEL-DYNM woman-OBL
 ‘The man got well/ became fully good in the company of the woman.’ (EL)

Similar uses of -yɰʔ often involve the Inchoative suffix -ay, which indicates the subject’s transition to a state of being completely involved in or affected by the event (see examples 36-37 above).

With transitive clauses, the Telic suffix indicates that the *object* of the verb is fully affected by the event:

- (107) *tih ʔəg-yɪʔ-ɸy*
 3sg drink-TEL-DYNM
 ‘He’s drunk (it) all up.’ (OS)
- (108) *tih d’o ʔcij-yɪʔ-ɸw-ay*
 3sg take-scatter-TEL-FLR-INCH
 ‘He took (the pieces) and scattered them.’ (A-WT.57)

Although it conveys a sense of completion, the Telic marker is distinct from the Completive (see §12.5 above), as can be seen in the following comparison of their uses. Whereas the Completive marker indicates that the actor has finished performing the activity, the Telic signals the completion of the activity vis-à-vis a goal—especially an involved object—as example (109a-b) illustrates. Note that the Telic and Completive markers can co-occur, as in (109c).

- (109) a) *húptok ʔāh g’ɔp-yɪʔ-ɸy*
 caxiri 1sg serve-TEL-DYNM
 ‘I served all the caxiri (i.e. it is all gone).’
- b) *húptok ʔāh g’ɔp-cɸw-ɸy*
 caxiri 1sg serve-COMPL-DYNM
 ‘I’ve already served caxiri (i.e. I am done serving, but there may still be some left).’
- c) *húptok ʔāh g’ɔp-(hũʔ)-yɪʔ-cɸw-ɸy*
 caxiri 1sg serve-(finish)-TEL-COMPL-DYNM
 ‘I already served all the caxiri (i.e. I have finished serving and there is none left).’ (EL)

Accordingly, in certain situations the Completive marker is grammatical where the Telic marker is not. The ungrammatical example (110a), for example, would imply absurdly that all the rain was used up (whereas everybody knows that it will rain again before long); (110b), on the other hand, simply states that the current rain has passed. On the other hand, the combination of Telic and (‘long-term’) Inchoative in (110c) is

grammatical, and indicates a transition from a long dry spell to another rainy period—

this is said, for example, when a sudden rain puts a stop to plans to fish with timbó (fish-poison vine), which must be done during periods of low water in the creeks.

- (110) a) **děh d'oj-yí?-íy*
 water rain-TEL-DYNM
- b) *děh d'oj-cí?-íy*
 water rain-COMPL-DYNM
 'It rained (and has stopped).' (i.e. it has finished raining for the time being)
- c) *děh d'oj-yí?-íw-ay*
 water rain-TEL-FLR-INCH
 'It's started raining again (after a long dry period).' (EL)

Telicity in Hup is likewise distinct from the expression of Perfective aspect, since the temporary nature of an event or its resulting state is independent of whether the goal has been achieved and/or the participants fully affected. These forms are contrasted in (111a-b); their distinct semantics also allows them to co-occur (111c):

- (111) a) *tíh ham-yí?-íy*
 3sg go-TEL-DYNM
 'He went away.'
- b) *tíh ham-í?y*
 3sg go-PERF-DYNM
 'He's going (there) briefly/ temporarily.' (EL)
- c) *tíh na?-yí?-í?y*
 3sg lose.consciousness-TEL-PERF-DYNM
 'He lost consciousness (i.e. completely, but only temporarily).' (RU)

Like most aspectual markers in Hup, Telic -yí? is independent of tense. While most of the examples above are interpreted as referring to events that are completed and therefore in the past, Telic -yí? is also used in reference to present, habitual, and future

situations. These focus on an achieved goal or fully affected participant, without entailing the completion or ending of the activity itself.

Examples (112-14) illustrate currently on-going or habitual situations that are conceived as telic:

- (112) *pʰb hʰh-yʰʔ-ʰy*
 strong make.sound-TEL-DYNM
 ‘(The tape player) gives a loud sound.’ (B.Conv.2.6)
- (113) *ʔám ʔid-huʔ-yʰʔ-ʰy!*
 2sg speak-finish-TEL-DYNM
 ‘You speak (the Hup language) completely!’ ~ ‘You know how to say everything.’ (OS)
- (114) *ʔicabéw ʔəg-yʰʔ-ʰy bʰg*
 Isabel drink-TEL-DYNM HAB
 ‘Isabel always drinks (hot things) right up.’ (OS)

The following examples have future reference, conveyed via the Inchoative (115), the first person inclusive Declarative form (116), and the Future suffix *-te-* (117):

- (115) *ʔāh ham-yʰʔ-ʰw-ay*
 1sg go-TEL-FLR-INCH
 ‘I’m leaving for good.’ (said as a joke when going to roça) (OS)
- (116) *ʔm biʔ-yʰʔ-ʰh*
 1pl work-TEL-DECL
 ‘We’ll do the whole thing.’ (e.g. planting an entire roça) (P-EL)
- (117) *hʰ ʔāh pʰinʰ-yʰhəy-yʰʔ-té-h*
 just 1sg tell.story-search-TEL-FUT-DECL
 ‘I’m just going to tell the story as best I can.’ (D-BWB.3)

The Telic function of *-yʰʔ*—in relation to an object or goal of the activity—is also clearly illustrated in imperative clauses. For example, the simple imperative form of the verb ‘weave basket’ (*gʰúd*) is used to tell someone to weave a little bit, but the telic

imperative *g'ud-yíʔ* means 'finish weaving it; weave entire indicated amount'.

Similarly, the intransitive *ham-yíʔ* (go-TEL.IMP) means 'go away!', as opposed to *hám*

'go!'. Further examples are given in (118-20):

(118) *wæd-yíʔ!*

eat-TEL.IMP

'Eat (it) up!' (OS)

(119) *núw-ǎn g'ɔʔ-yíʔ!*

this-OBJ pull.up-TEL.IMP

'Pull that one up (manioc).' (OS)

(120) *ʔǎn hi-yíʔ-kǎm, ya ʔám !*

1sg.OBJ descend-TEL-IMP2 jaguar

'Jump down on me, jaguar!' (H-CO.3)

The form *yíʔ* performs other functions in addition to indicating telic aspect on verbs, and in fact is near-ubiquitous in Hup. It attaches to nouns as a contrastive emphasis particle, with the function of setting the referent apart from other possible referents, as in *ʔám=yíʔ* 'it's you (and no other)' (see §7.1.2), and it cliticizes to nouns, adjectives, subordinated verbs, and even whole clauses as a kind of adverbializer (see §10.2). While it is probable that all of these uses of *yíʔ* represent polysemy rather than homonymy, the relationships between their uses are at present speculative.

12.7. Ventive -*ʔay-*

Whereas the aspectual markers that are the focus of this chapter locate an event in time, the Ventive Inner Suffix -*ʔay-* indicates that the activity involves a change of *spatial*

location. Its functional and formal similarity to the markers of temporal aspect leads it to be considered here.

The default use of the Ventive suffix involves movement toward the speaker. In most uses, such as with the Dynamic suffix *-V́y*, the Ventive marker indicates a full circuit—the actor has gone somewhere, performed the activity, and returned. Note that, in keeping with this sense, it would be ungrammatical for a speaker at point B to use the *-ʔay-* form in reference to an activity which an addressee who began at point A has performed en route to B. For example, one conventionally uses the question *ham-ʔáy-áy ʔám?* (go-VENT-DYNM 2sg) ‘have you gone and come back?’ to greet a member of one’s own village who has returned after an absence (i.e. who has gone from B to A and back to B), but not to greet a visitor from another village (who has only gone from A to B).

Examples of the ‘full circuit’ use of *-ʔay-* are given in the following examples:

- (121) *j'əm-ʔáy-áy ʔǎh-ǎh*
 bathe-VENT-DYNM 1sg-DECL
 ‘I’ve gone to bathe (and returned).’ (OS)
- (122) *hǎt híd mǎh-ʔay-yóʔ, híd wǎd-ǎy*
 alligator 3pl kill-VENT-SEQ 3pl eat-DYNM
 ‘Having gone and killed alligator (and returned), they would eat.’ (LG-O.7)
- (123) *mɔwaʔap g'í ʔín ham-ʔay-ʔě-h*
 three year 1pl go-VENT-PERF-DECL
 ‘Three years (i.e. once each year) we went (and returned home).’ (B.Cv.3.129)

While *-ʔay-* is grammatical in combination with all or most tense and aspect markers, events referred to by verbs inflected with *-ʔay-* are not conceived as currently on-going;

they may, however, be completed (as in 121-23 above), future, habitual, or negative (unrealized):

- (124) *tóg=mæh máh-an... ʔǎh ham-ʔáy-té-h*
 daughter=DIM near-DIR 1sg go-VENT-FUT-DECL
 ‘I’m going to visit my daughter (and will return afterwards).’ (A.Int.51)
- (125) *ʔǎh j’om-ʔáy-áy bǝg*
 1sg bathe-VENT-DYNM HAB
 ‘I always go bathe (and come back).’ (EL)
- (126) *j’om-ʔáy-nǝh tǝ*
 bathe-VENT-NEG YET
 ‘I haven’t yet gone to bathe.’ (OS)

As opposed to the ‘full-circuit’ movement (going and returning) signaled by the Ventive form in indicative mode, imperative use of *-ʔáy*-¹⁴⁹ involves a distinct speaker-centered movement that is only one-way. The addressee may be summoned to come and perform the activity at the location of the speaker (regardless of whether the addressee’s original origin is in the speaker’s location or elsewhere):

- (127) *kɔw wǝd-ʔáy!*
 pepper-broth eat-VENT.IMP
 ‘Come eat pepper-broth (and bread)!’ (call/invitation to eat) (OS)
- (128) *hú yǝʔ-ʔáy!*
 game.animal singe-VENT.IMP
 ‘Come and singe the game animal.’ (D-BWB.3)

¹⁴⁹ Note that the combination of the Ventive (*-ʔáy*) + Dynamic (*-Vy*) markers (*-ʔáy-áy*; example a), happens to be formally identical to the combined Ventive (*-ʔáy*) + Inchoative (*-áy*) + imperative forms (*-ʔáy-áy*; example b):

a)	<i>ʔǎh wǝd-ʔáy-áy</i>	b)	<i>wǝd-ʔáy-áy !</i>
	1sg eat-VENT-DYNM		eat-VENT-INCH.IMP
	‘I went to eat and returned.’		‘Go on over there and eat!’

Both combinations occur frequently, but are easily differentiated by their difference in mood (indicative vs. imperative).

Alternatively, imperative *-ʔay-* can indicate dislocation away from the speaker.

This interpretation usually involves the addition of the imperative form of the verb *ham-* ‘go’ to the [verb stem + Ventive] form, producing a command to go and perform an activity in a different location from that of the speech act participants (with no particular implication to return). Here, the orientation away from the speaker is effectively communicated by *hám* ‘go’, and Ventive *-ʔay-* appears to be redundant or semantically empty; nevertheless, speakers never drop the Ventive marker, whereas they *do* occasionally drop *hám* ‘go’ (example 132 below). Formally, also, this construction is peculiar in that it appears to involve *two* imperative predicates, since the Ventive Inner Suffix is not followed by the (otherwise obligatory) Boundary Suffix.

This form of the Ventive imperative is illustrated in examples (129-131). Note that the verb *ham-* ‘go’ occurs twice in (131), suggesting that the grammatical contribution of imperative *hám* in this construction is distinct from that of the main verb itself.

- (129) *nɔʔ-ʔáy* *hám!*
 give-VENT.IMP go.IMP
 ‘Go give (it)!’ (to someone else, in other location) (OS)
 [Compare *nɔʔ-ʔáy* ‘come give (it)’ (to me or to someone with me)]

- (130) *j’ɔm-ʔáy* *hám!*
 bathe-VENT.IMP go.IMP
 ‘Go bathe!’ (OS)

- (131) *ham-ʔáy* *hám!*
 go-VENT.IMP go.IMP
 ‘Go!’ (do something) (OS)

Example (132) illustrates that imperative *hám* ‘go!’ may be dropped in certain cases

where the direction is clear from the context (although Ventic -*ʔay*- may not be

dropped):

- (132) “*níŋ j’om-ʔáy táh*” *nɔ-d’əh-d’ob-yíʔ-píd-ɦ*
 2pl bathe-VENT.IMP child say-send-go.to.river-TEL-DIST-DECL
 ‘(She) always sent (the children) to the river, saying “you all go bathe, children”.’
 (I-M.5)

Comparative Note:

Directional-type formatives are fairly common in South American languages, and have been reported for Quechua, Yagua (T. Payne 1997), Pilaga (Vidal 2001), Mosetén (Sakel 2002), and Tariana (Aikhenvald 2003), to name just a few languages. Tukano (Ramirez 1997: 160) marks direction both toward and away from the speaker; the semantic similarity between the Tukano and Hup ventic markers may be yet another result of the contact between these two languages.

12.8. Habitual *bíŋ* / *-bí*

The form *bíŋ* and its phonologically reduced variant *-bí* indicate habitual aspect. They refer specifically to habitual or customary events that hold true within the time frame of the utterance; in this, they differ from many of the aspectual markers discussed in this chapter, which are flexible with regard to reference point.

The unreduced Habitual marker *bíŋ* is identified as a particle, since it follows the verbal core when Dynamic *-V́y* is present (as well as a few other forms, such as the

Negative suffix *-n̄h*), and takes independent stress (high/falling tone). It occurs in indicative, negative, and interrogative clauses alike to express a habitual activity:

- (133) *ʔicabél ʔəg-yʔ-ḥ b̄ḡ*
 Isabel drink-TEL-DYNM HAB
 ‘Isabel always drinks (hot things) right up.’ (OS)
- (134) *pæʃ wæd-æy b̄ḡ ʔám?*
 umari.fruit eat-DYNM HAB 2sg
 ‘Do you eat umari?’ (i.e. do you like it/ are you in the habit of eating it?) (OS)
- (135) *ʔám-ǎn m’æ-n̄h b̄ḡ t̄h?*
 2sg-OBJ cool-NEG HAB 3sg
 ‘Doesn’t it (hammock) always make you cold?’ (OS)

Like most particles in Hup, *b̄ḡ* appears as an Inner Suffix—drawn into the verb core—when the verb is marked by vowel-initial Boundary Suffixes other than the Dynamic (most commonly Declarative *-V̄h*), as in the following examples.¹⁵⁰ Note also that Habitual *b̄ḡ* can follow the interrogative pronominal form ‘what’ (example 138)—as can other verbal formatives such as the Frustrative—although it is otherwise limited primarily to verbs.

- (136) *tedé ʔóda h̄id w̄id-hí-b̄ḡ-mah-áh*
 three hour 3pl arrive-descend-HAB-REP-DECL
 ‘They always arrive by 3:00, they say.’ (OS)
- (137) *ʔayũp=ʔh, key-g’āʔ-b̄ḡ-íp=ʔh=yíʔ p̄d key-g’āʔ-āb’ay*
 one=MSC see-be.suspended-HAB-DEP=MSC=TEL DIST see-be.suspended-AGAIN
 ‘One boy, the one who always lay watching, lay watching again.’ (I-M.11)

¹⁵⁰ The fact that particles like *b̄ḡ* (themselves morphosyntactically bound formatives) are so frequently phonologically bound to the verb calls into question the characterization of Hup given in Payne (1990: 220) (based on work by Moore and Franklin 1980). Payne presents Hup as an isolating language that expresses aspect, mood, etc. by means of independent words, and she illustrates this claim with examples of the Habitual marker *b̄ḡ* as an independent form. Note, however, that its true use as an independent lexeme is functionally and semantically distinct from its use as a Habitual marker (see below).

- (138) *hĩ-n'ĩh bĩg yǎh yǎ? b'ĩt wĩd-yé-ep*
 Q-NMZ HAB FRUST Mom roça return-enter-DEP
 'Why the heck, when Mom comes back from the manioc field,
yĩkán kəkəy-nĩh=yĩ? kəd-cak-wog-bĩg-yǎh-ǎw-áh yǎ?
 over.there interrupt-NEG=TEL pass-climb-EMPH1-HAB-FRUST-FLR-FOC TAG1
 does she always climb up there without fail?' (I-M.15)

The Habitual marker's phonologically reduced variant *-bĩ* occurs exclusively as an Inner Suffix followed by a vowel-initial Boundary Suffix, as is the case for all such reduced (CV) formative variants (but note that the unreduced variant can occur optionally in this environment as well, as in (137) above) (see §3.6). Semantically, the two variants are essentially interchangeable (compare example 143), although *bĩg* is sometimes preferred in more forceful, emphatic utterances.

- (139) *pĩj dēh-an b'ĩyĩ? ǐāh ham-bĩh*
 cabari (fruit sp.) water-DIR only 1sg go-HAB-DECL
 'I always go only to Cabari (village).' (int.txt)
- (140) *cecídiya páh tǎĩnəhə-dəb-pog-bĩh!*
 Cecilia PRX.CNTR laugh-much-EMPH1-HAB-DECL
 'It's Cecilia who's always laughing a lot.' (B.Cv)
- (141) *tĩh=tǎh=d'əh j'ám wĩd-næn-kəcət-bĩp, nɔ́-ɔ́y=mah*
 3sg=little=PL DIST.CNTR arrive-come-ahead-HAB-DEP say-DYNM=REP
 'The little ones always arrive first, he said.' (I-M.22)
- (142) *"tĩh=hup-hipǎh=d'əh-ay yúw-úh," ǐĩn-ǎn nɔ́-bĩay hɔ́?*
 3sg=RFLX-think=PL-INCH that-DECL 1pl-OBJ say-HAB-INCH TAG2
 '(You have) sense now (i.e. have become 'civilized'), they always tell us now.'
 (P-B.7)

- (143) *wəʃh=d' əh ʔǎn híd ʔǐd-ʃ ʔǎh ʔíd-bʃh;*
 River.Indian=PL 1sg.OBJ 3pl speak-OBL 1sg speak-HAB-DECL
 'When the River Indians speak with me, I always speak (Tukano);

húp= ʔǎy=d' əh ʔǎn wəʃh híd ʔǐd-tǎn=hín, ʔǐd-ʃ bʃg
 Hup=FEM=PL 1sg.OBJ River.Indian 3pl speak-COND=also speak-DYNM HAB
 also if Hup women speak Tukano with me, I always speak (it with them).'
 (Int.txt.114)

In keeping with its restriction to a time frame concurrent with the speech moment, the distribution of Habitual *bʃg* / *-bʃ* is limited. In particular, it is generally not found with past tense statements that have a defined endpoint, and is therefore ungrammatical in combination with the Perfective aspect marker *-ʔe ʔ / -ʔe-*. To express a habitual event that once held true but no longer does, the Perfective alone may be used:

- (144) *nə ʔeʃh*
 say-PERF-DECL
 '(I) used to say (it, in my childhood).' (Int.txt)

The Distributive marker *pʃd* may also express habitual aspect in combination with the Perfective (see §12.9.1 below).

Habitual *bʃg* / *-bʃ* is likewise ungrammatical in future-tense expressions, in which habitual meaning may be conveyed through use of the future/contrast marker *tán* (§13.4.3), or via lexical strategies such as *kəkəy-nʃh* (interrupt-NEG) 'without fail' and *wág kəd-nʃh* (day pass-NEG) 'every day'. Lexical means are also the only available strategy for expressing habitual aspect in imperative clauses:

- (145) *kəkəy-nʃh, yʃh ʔəg!*
 interrupt-NEG medicine drink.IMP
 'Without fail, take your medicine.' (EL)

- (146) *wág kəd-nh, yǎh ʔəg!*
 day pass-NEG medicine drink.IMP
 ‘Take your medicine every day!’ (EL)

In addition to its use as a Habitual marker, the form *bǝg* also occurs as a free lexeme in Hup. Used as an adjective, *bǝg* means ‘old’ (i.e. ‘existing for a long time’), and is used in reference to inanimate entities and most animals (although not humans):

- (147) *tǝw bǝg yúw-úh!*
 path old that-DECL
 ‘That’s an old path!’ (OS)

The free lexeme *bǝg* (and its inchoative variant *bǝg-ay*) is also used as an adverbial to express durativity, ‘for a long time’:

- (148) *yǝkan bǝg ʔǎh ní-an-ay*
 over.there long.time 1sg be-DIR-INCH
 ‘During the long time I stayed there...’ (T-PC.1)
- (149) *cet-ham-tubud-yǝʔ-ǝy, húp=ʔǎy-ǎn, bǝg!!*
 carry.on.back-go-INTS3-TEL-DYNM Hup-FEM-OBJ long.time
 ‘He carried the girl a long way off, for a long time!’ (TY.79)
- (150) *bǝg-nh=yǝʔ b’uy-d’ǝh-yǝʔ*
 long.time-NEG=TEL throw-send.away-TEL.IMP
 ‘Throw it out right away (lit. ‘in a not-long time’).’ (EL)

Historical Note

Despite the differences between the various realizations of the form *bǝg*, we can with high probability posit a historical relationship between them. Just as the Inner Suffix *-bǝ-* is a grammaticalized form of *bǝg* (which acts as both a particle and Inner Suffix), the Habitual marker in turn probably derives from the free lexeme *bǝg*. As an independent word, *bǝg* must have developed two related meanings and functions: the

adjective ‘old’ (i.e. ‘existing for a long time’) and the adverbial ‘for a long time’

(although it is not clear which one of these was prior). Semantically, the sense of doing something or existing over a long period of time is not far removed from the idea of doing that thing over and over during an unbounded period of time—i.e. habitually (cf. §3.7).

Additional evidence for the polysemy of the Habitual marker and the free lexeme ‘old; for a long time’ comes from semi-ambiguous contexts of use. For example, (151) is from the story of how the Pleiades constellation came to be: a group of brothers were seduced and tricked one by one by the Rattlesnake’s daughter into being bitten by her father, and were later sent up to the sky. The free form *bǵ* is used here to indicate that ‘(the snake bit all the men) over the course of a long time’; but if it were cliticized to the preceding verb word (*g’əç-huʔ-yiʔ-ǵ bǵ [=mah]*) it would mean ‘(the snake) habitually bit them’. The semantic difference is not very great.

- (151) *yup tǵhǵ=mah g’əç-huʔ-yiʔ-ǵ=mah, bǵ g’əç-huʔ-yóʔ-ay...*
 that rattlesnake=REP bite-finish-TEL-DYNM=REP long.time bite-finish-SEQ-INCH
 ‘The rattlesnake bit all of them; after having bit them all (each one who arrived) over the course of a long period of time...

póh híd cak-té-aw-ay
 high 3pl climb-FUT-FLR-INCH
 they would climb up high (to form the Pleiades).’ (A-WT.1)

12.9. Iterativity

Hup has several morphological means of indicating iterativity, which correspond to different strategies for conceptualizing the repetition of events. The Distributive form

pʰɪl (with free and bound variants) indicates one to multiple repetitions of an event, and can also signal the durativity or continuity of a given event or state over time. Root reduplication marks events that are conceived as intrinsically characterized by multiple repetitions or realizations of a semantically salient feature, and the enclitic *=bʰay* indicates a single repetition of an event, of some aspect of that event, or of its resulting state.

12.9.1. Distributive *pʰɪl*

The Distributive marker *pʰɪl* refers to a series of one or more repeated instances of an event, typically within a bounded time frame, and it can have secondary functions of marking durativity or habituality. The marker *pʰɪl* is highly flexible, occurring with (and having scope over) various parts of speech, including nominal arguments of a clause, where it functions as a quantifier (see §6.5.2). This section focuses on its occurrence with verbal predicates, where its primary function is to mark iterative aspect.

In combination with verbs, *pʰɪl* is realized both as a particle (especially when preceded by the Dynamic marker) and—like most peripheral formatives—as an Inner Suffix (especially when followed by the Declarative suffix or vowel-initial suffixes other than the Dynamic). However, whereas most formatives of this type contribute the same semantics to the verb regardless of their realization as particle or as Inner Suffix, the default interpretation of the Distributive tends to differ depending on its placement—although there is significant semantic overlap between these and the form’s semantics are generally quite vague to begin with. As a particle, *-pʰɪl-* typically signals a repetition of

the event, performed by a different agent; as an Inner Suffix, it is more likely to be interpreted as more directly aspectual, typically relating to the repetition or duration of an action performed by a single agent. The pronunciation of *-pɨd-* as an Inner Suffix is also somewhat distinct; it appears as [pəd] for some speakers, and occasionally is even pronounced as [pə]—probably illustrating the initial stages of the same phonological reduction (CVC → CV) that so many other Hup formatives have undergone in this morphosyntactic (Inner Suffix) environment.

The following examples (152-54) illustrate the uses of *pɨd* as a particle in combination with predicates. Its default interpretation in this context of is of at least one repetition of the event, performed by or with respect to *different* actors (subjects). Verbal predicates followed by *pɨd* are frequently marked with the Dynamic suffix, as well as with other Boundary Suffixes such as the Future and clausal Negative markers.

- (152) *j'əb-tæ-yi? wɔŋ' ɽāh ɽəg-ɔy pɨd*
 night-YET-TEL mingau 1sg drink-DYNM DIST
 'I too drink mingau in the morning.' (EL)

- (153) *tɨh ham-tég pɨd=mah*
 3sg go-FUT DIST=REP
 'He'll go too (he says).' (RU)

- (154) *ɽāh hipāh-nɨh pɨd*
 1sg know-NEG DIST
 'I don't know either.' (OS)

In addition to verbal constructions, Distributive *pɨd* occurs freely with non-verbal predicates, such as the predicate adjectives and nominals in examples (155-57). As in the examples above, these also involve a repeated instance with a different actor or subject.

- (155) *ʔám=hin náy pǎl-i?*
 2sg=also good DIST-INT
 ‘Are you well also?’ (OS)

- (156) *madía pǎl*
 Maria DIST
 ‘(I’m) Maria also.’ (the second response when two women named Maria were asked their names) (OS)

- (157) *cǎp ʔid pǎl yúw-úh*
 other speech DIST that-DECL
 ‘That’s another story.’ (H.25)

While the examples in (152-54) demonstrate the default interpretation of the free form *pǎl* in verbal constructions—that a different subject is involved in the repetition of the event—the semantics of this form is vague, and other interpretations are common. Distributive *pǎl* may mark a successive string of different events performed by the same actor (example 158), or a repetitive or continuous event carried out by the same actor(s) (example 159). It may also signal that multiple participants did the same thing, at more or less the same time (160), or even a general iterativity or habituality of the event (161).

- (158) *hæŋ-nǎh-áh ʔǎh-ǎp, ʔǎh b’aʔ-ʔeʔ-yoʔ pǎl,*
 fast-NEG-FOC 1sg-DECL 1sg make.bread-PERF-SEQ DIST
 ‘I won’t be quick, I have to make manioc bread,

ʔǎh wən’-ʔeʔ-yoʔ pǎl; hæŋ wid-way-nǎh tán b’ǎ-an ʔǎh-ǎh
 1sg make.mingau-PERF-SEQ DIST fast arrive-go.out-NEG FUT.CNTR roça-DIR 1sg-DECL
 and I have to make mingau; I won’t get to the roça very soon.’
 (woman listing things she has to do) (RU)

- (159) *yíkán-ay yúp, póh cák-áy=cud, yohɔy-ɔy pǎl=cud,*
 over.there-INCH that high climb-DECL=INFR search-DYNM DIST=INFR
 ‘Now there, climbing up high, still searching,

yohɔy-ɔy=cud núw-úh, tǎh-ǎn=yíʔ pǎl, yohɔy-yíʔ-pǎl tíh!
 search-DYNM=INFR this-DECL 3sg-OBJ=TEL DIST search-TEL-DIST EMPH2
 that one is searching, for him still, still searching!’ (A.FS.6)

- (160) *tɪh=dóʔ=mæh ʔɔh-wób-óy=mah; tɪnɪh ya ʔamboʔ-ót=yiʔ,*
 3sg=child=DIM sleep-rest.on.surface-DYNM=REP 3sg.POSS dog-OBL=TEL
 ‘The little child went to sleep (on the bed); with his dog,

ʔæyæʔ=yiʔ, key-ʔé=d'əh ʔɔh-wób-óy pɬ
 together=TEL see-PERF=PL sleep-rest.on.surface-DYNM DIST
 together, the ones who had been looking both went to sleep (on the bed).’
 (A.FS.1)

- (161) *ʔāh hipāh-nɪh=n'ɪh, ʔāh ʔih-kéy-mɪʔ pɬ*
 1sg know-NEG=NMZ 1sg ask-see-UNDER DIST
 ‘When I don’t know, I ask (sometimes/usually).’ (RU)

Distributive *pɬ* is not usually used in imperative clauses (speakers prefer other markers of repetition such as ‘Repeated instance’ = *b'ay* (§12.9.2) and ‘Related instance’ *táʔ* (§7.6) in this context), but there are examples of its use in imperatives:

- (162) *bɪg-nɪh=mæh=yiʔ pɬ=mah, ʔān d'əh-d'əh-wáy pɬ! tɪh nɔʔɔh*
 long.time-NEG=DIM=TEL DIST=REP 1sg.OBJ send-send-go.out.IMP DIST 3sg say-DECL
 ‘Quickly, again, send another one out for me! he said.’ (M.NS.66)

The uses of *pɬ* in the examples above—as a particle that signals the repetition of the predication—are very similar to its uses with nominal arguments, where *pɬ* functions as a quantifier (see §6.5.2). With nominals, Distributive *pɬ* occurs as a free particle, and typically signals a repetition of the entity vis-à-vis the event:

- (163) *pɪhɪ ʔayup=táɪ pɬ tɪh nɔʔɔh, tã ʔāy=n'ān*
 banana one=fruit DIST 3sg give-DECL woman=PL.OBJ
 ‘He gave a banana to each of the women.’ (EL)

Its use with adverbial clauses such as those relating to a location may be very similar:

- (164) *tɪh ʔɔh-ʔé-t pɪd, tɪh wæd-ʔé-t pɪd=ma-ám tɪh ʔih-key-hám-mah*
 3sg sleep-PERF-OBL DIST 3sg eat-PERF-OBL DIST=REP-PST.CNTR 3sg ask-see-go-REP
 ‘He (turtle) went asking at each place he (tapir) had slept, at each place he’d
 eaten.’ (J-AJ.3)

Repetition of the entity relative to the event typically entails multiple performances of the event itself. Furthermore, when an object is not explicitly stated—as in the imperative example in (162) above—the *placement* of *pɪd* in the clause may be predicative, but its interpretation may be similar to that of a quantifier.

When it appears as an Inner Suffix, the function of *pɪd* overlaps with its function as a particle (and to some degree as a nominal quantifier), but it also tends to have a more directly aspectual interpretation vis-à-vis the verb. In other words, its tighter formal integration with the verb is realized as a somewhat tighter functional integration as well. In general, when Distributive *-pɪd-* appears as an Inner Suffix, the subject or actor of the clause is usually understood to be the same as that which is topical in the discourse, whereas the free particle *pɪd* is more likely to involve a change in subject (although by no means invariably, as illustrated in 158-61 above). The exact way in which Inner Suffix *-pɪd-* indicates the repetition of the event may vary considerably depending on the context.

Where the temporal frame of the event is relatively broad, *-pɪd-* may express habituality (note that a connection between iterativity and habituality is common among aspectual systems; see Comrie 1976: 27-31). Distributive *-pɪd-* may be used to express habitual events that are contained within a bounded time frame, having a defined endpoint—as opposed to the Habitual marker *bɪg / -bɪ-* (see §12.8), which is essentially

Dynamic and refers only to habitual events that hold true with respect to the speech moment. Thus *-pid-* is often used to mark a *past* habitual event in the context of narrative, and is acceptable in combination with Perfective aspect (whereas *bĩg* / *-bĩ-* is ungrammatical):

- (165) *j'ám=yiʔ tĩh yam-ʔe ʔ-pĩd-ĩh*
 DST.CNTR=TEL 3sg sing-PERF-DIST-DECL
 'He used to always sing kapiwaya.' (EL)
- (166) *yĩn-i-mĩʔ=mah tĩh "nĩŋ j'əm-ʔáy tæh" nɔ-d'əh-d'ob-yiʔ-pĩd-ĩh*
 thus-UNDER=REP 3sg 2pl bathe-VENT.IMP child say-send-go.to.river-TEL-DIST-DECL
 'While [the husband went out] she would always send the children to the river, saying "you all go bathe, children".' (I-M.5)
- (167) *kɔw wæd-yóʔ, tĩh=ʔəgtú hĩd y'æt-pĩd-ĩh*
 pepper.broth eat-SEQ 3sg=drink.down 3pl lay.down-DIST-DECL
 'Having eaten pepper-broth (and bread), they would always set down the drink (lit. the drink-deep?) (for the visitors).' (H.19)

Note that Distributive *-pid-* (in its habitual or loosely iterative use) can co-occur with the 'Repeated instance' marker *=b'ay* (§12.9.2). In example (168), *=b'ay* indicates '(he left) again'; i.e. a return to the state of being away that characterized the husband during the day (but whether the return to this state is single or multiple is irrelevant). Distributive *-pid-*, on the other hand, focuses attention on the *multiple repetitions* of the woman's husband's departure each morning, i.e. '(he) always (left)'.

- (168) *carakǎʔ ʔɔh-cəwəʔ-kamí tĩh way-yiʔ-ay-pĩd-íp=b'ay*
 chicken sleep-awake-moment.of 3sg go.out-TEL-INCH-DIST-DEP=AGAIN
 'By the time the rooster crowed he had always left again.' (I-M.4)

When the time frame in which the event series takes place is narrowed, *-pid-* takes on a more basic iterative function relating to a repeated event; a habitual sense is no longer relevant:

- (169) *tɪh papad-pɪd-ɪh*
 3sg moan-DIST-DECL
 ‘She kept moaning with pain.’ (D-BWB.4)
- (170) *tɪh-ǎn tɪh təw-pɪd-ɪh; tɪh g’aw-wawat-pɪd-ay-áh...*
 3sg-OBJ 3sg scold-DIST-DECL 3sg scream-walk.around-DIST-INCH-DECL
 ‘She was scolding him; she kept screaming and walking back and forth.’
 (D.BWB)
- (171) “*nutkán póh, nuh-ũy cúm-an,*
 here.OBJ high head-DYNM beginning-DIR
 ‘“Up here, on your necks,
- ɔǎn níŋ hi-toy’-d’ó?!” tɪh nɔ-pɪd-ɪh*
 1sg.OBJ 2pl FACT-carry.on.head-take.IMP 3sg say-DIST-DECL
 you all carry me thus!” he was saying.’ (H.107)

With a plural subject, this iterative use of *-pid-* can indicate multiple repetitions of an event as carried out by individual members of the collective whole, as in (172). Note the similarity between this use and the use of *pid* as a quantifier (‘each’) with nouns, as well as with the various (semantically vague) uses of the particle *pid* in examples (158-61) above.

- (172) *hɪd wɪd-ham-pɪd-ɪh... “ʔəg níŋ bɪʔ!” hɪd nɔ-pɪd-ɪh*
 3pl arrive-go-DIST-DECL drink 2pl make.IMP 3pl say-DIST-DECL
 ‘They all arrived... “Make drink (caxiri)!” they were all saying.’ (H.73)

The iterative function of *-pid-* blends smoothly into one of durativity, in which *-pid-* marks a single continuous, long-term event:

- (173) *póg! (tíh) bí?píł-íh, hčhtěg-éh*
 big 3sg make-DIST-DECL canoe-DECL
 ‘(It was) big! he was building it for a long time, the canoe.’ (M-DT.81)

- (174) *tíh g’et-píł-íh, bíg!*
 3sg stand-DIST-DECL long.time
 ‘He stayed there, for a *long* time.’ (M-DT.78)

Inner Suffix *-píł-* is also commonly used to indicate one or more repetitions of an event, in which each repetition involves a different *object*. This function of *-píł-* thus differs from that of its realization as a particle, where it typically signals that the repetitions of the event involve different *subjects*. Example (175a-b) provides a comparison between an iterative event involving multiple objects, and a unitary event with a single object. Note that the iterative aspect marker on the verb in (175a) is the only indication that multiple objects are involved; the noun itself is not marked for number. This use of *-píł-* is further illustrated in examples (175-78).

- (175) a) *yúp, cəd, tíh yčj-nč?píł-ay-áh, ya řám-ăn-áh*
 that fruit.sp. 3sg peel-give-DIST-INCH-DECL jaguar-OBJ-DECL
 ‘Those *cəd* fruits, he peeled and gave some to the jaguar.’ (CO.77)

- b) *řayůp=yí? tíh yčj-nč?-áh*
 one=TEL 3sg peel-give-DECL
 ‘He peeled and gave just one.’ (EL)

- (176) *bođ=řáy cog-wəd-yí?iy-píł-íh*
 elope=FEM collect-eat-TEL.DYNM-DIST-DECL¹⁵¹
 ‘The eloping woman gathered and ate (the fruits as they fell down).’ (CO)

- (177) *tíh d’o?d’ob-píł-íw-ay*
 3sg take-go.to.river-DIST-FLR-INCH
 ‘She took him, in turn, down to the river’ (as she had taken his brothers one by one before him). (WT)

¹⁵¹ This example comes from the Tat Deh dialect, which has developed a fusion of the Telic and Dynamic suffixes (see §12.6); the Dynamic would normally not be followed by the Declarative in the same word.

- (178) *tɪh kəwəʒ d'oʔ-tuʔ-pɪd-ɦ, g'áj-áh*
 3sg eye take-immersed-DIST-DECL cutivara-DECL
 'He put in (the jaguar's) eyes, (i.e. one at a time), did the cutivara.' (CO.79)

A general comparison of some of the functions of Distributive *pɪd*, in its various morphosyntactic realizations and in combination with both predicates and with nominal arguments (as a quantifier; see §6.5.2), is given in the elicited paradigm in examples (179a-e). Note that the vague semantics of *pɪd* allows for multiple interpretations of many of these forms.

- (179) a) *ʔɦn-ahn ʔayup=taɪ pɪd tɪh nɔʔ-ɦ*
 1pl-OBJ one=fruit DIST 3sg give-DECL
 'He gave one fruit to each of us.'
- b) *ʔɦn-ahn pɪd ʔayup=taɪ tɪh nɔʔ-ɦ*
 1pl-OBJ DIST one= fruit 3sg give-DECL
 'He gave one fruit to us too (i.e. as well as one to another group).'
- c) *ʔayup=taɪ ʔɦn-ahn tɪh nɔʔ-ɦ pɪd*
 one= fruit 1pl-OBJ 3sg give-DYNM DIST
 'He too gave one fruit to us.'
 'He gave one fruit to us again.'
- d) *ʔayup=taɪ ʔɦn-ahn tɪh nɔʔ-pɪd-ɦ*
 one= fruit 1pl-OBJ 3sg give-DIST-DECL
 'He gave one fruit repeatedly to us.'
 'He always gave one fruit to us.'
 'He gave one fruit to us too.'
- e) *ʔayup=taɪ pɪd ʔɦn-ahn tɪh nɔʔ-pɪd-ɦ*
 one= fruit DIST 1pl-OBJ 3sg give-DIST-DECL
 'He repeatedly gave/ always gave one fruit to each of us.'

Finally, the following elicited paradigm further clarifies the differences between the usual interpretations of Distributive *-pɪd-*, the Habitual marker *bɪg / -bɪ* (§12.8), and the 'Repeated instance' marker *=b'ay* (§12.9.2):

- (180) a) *hɪd næn-pɪl-ɪh*
 3pl come-DIST-DECL
 ‘They always, repeatedly came.’ (within a given period of time)
 ‘They were coming for a long time.’
 ‘They all came.’
- b) *hɪd næn-æy pɪl*
 3pl come-DYNM DIST
 ‘They also came/ are coming.’ (subjects compared)
- c) *hɪd næn-bɪh*
 3pl come-HAB-DECL
 ‘They habitually come.’
- d) *hɪd næn-æy bɪg*
 3pl come-DYNM HAB
 ‘They always, frequently come.’
- e) *hɪd næn-æy=b’ay*
 3pl come-DYNM=AGAIN
 ‘They’ve come/ are coming back.’
 ‘They’ve come/ are coming again.’

12.9.2. ‘Repeated instance’ =*b’ay*

In combination with verbs, the form =*b’ay* indicates a single repetition of either an actual event, or some aspect of the event or a resulting state. It bears some resemblance to ‘again’ in English, which also has a corresponding restitutive use (e.g. “he went back again”, when the actual act of returning has only occurred once and has not been repeated at all).¹⁵²

The ‘Repeated instance’ marker =*b’ay* appears as a verbal enclitic (following Dynamic -*Vy*, Dependent marker -*Vp*, Interrogative -*V?*, and various other Boundary

¹⁵² This ability to combine repetitive and restitutive functions in a single morphological form is shared by many languages; see Wälchli (2003).

Suffixes), but—like most other verbal peripheral formatives—it also appears as an

Inner Suffix (particularly when followed by Declarative *-Vh*). The following examples

illustrate the occurrence of encliticized *=b'ay*, where it signals a straightforward single repetition of the event.

- (181) *tih d'ɔk-yiʔ-cɰw-ɰy=b'ay*
 3sg go.out-TEL-COMPL-DYNM=AGAIN
 'It (the fire) has already gone out again.' (OS)

- (182) *yúp=ɰáy-ǎñ ɰǎh b'uy-d'ɔh-yiʔ-íp=b'ay*
 that=FEM-OBJ 1sg throw-send-TEL-DEP=AGAIN
 'That woman I got rid of too (after having gotten rid of the previous woman).' (JM-PN.59)

- (183) *ɰayúʔ=ɰh, key-g'ǎʔ-bɰg-íp=ɰh=yiʔ pɰd key-g'ǎʔ-ǎp=b'ay*
 one=MSC see-be.suspended-HAB-DEP=MSC=TEL DIST see-be.suspended-DEP=AGAIN
 'One boy, the one who always lay watching, lay watching again.' (I-M.11)

Enclitic *=b'ay* is common in imperative clauses:¹⁵³

- (184) *yam-kǎm=b'ay*
 sing-IMP=AGAIN
 'Sing again!' (OS)
- (185) *ɰǎn d'oʔ-key-ɰěʔ=b'ay !*
 1sg.OBJ take-see-PERF.IMP=AGAIN
 'Take my picture again!' (OS)

And it can appear in interrogatives, following the *-Vʔ* Interrogative Boundary Suffix:

- (186) *hɰ tih nɔ-d'oʔ-nih-tǎʔ-ǎʔ=b'ay ?*
 how 3sg say-take-be.like-CNTRFCT-INT=AGAIN
 'How could she respond?' (TD.Cv.104)

Other uses of *=b'ay* involve the repetition of some aspect of the event or state, rather than of the event itself. In (187), for example, the practice of exploiting forest *cipó*

¹⁵³ Note that *=b'ay* remains unstressed in the imperative, which is not typical of bound verbal forms in imperative constructions.

vines for sale has gone from one realization (that of being performed by the Tukanos) to another (that of being carried out by the Hupd'əh alone). Similarly, the crab's descent from the tree in (188) has put him on the ground again, after having left it for a time, and in (189) the event of one student's going to school is contrasted with the state of another student, who plays hookey.

- (187) *wəh-d'əh... bɪʔ-ni-ʔə-y huŋʔah, hi-kəd-ní-íy=b'ay yəh ʔm-ih*
 River.Indian-PL work-be-PERF-DYNM after FACT-pass-be-DYNM=AGAIN FRUST 1pl-DECL
 'The Tukanos...after they did this work (in the past), we've taken their place.'
 (P.13)

- (188) *hi-yóʔ=b'ay, "ya ʔəp ʔəh d'əh-d'əh-hí-íy"...*
 descend-SEQ=AGAIN this.many 1sg send-send-descend-DYNM
 'Having come down again, "this many I've thrown down" (the crab said)...'
 (H-CO.1)

- (189) *yɪ=yiʔ g'et-pæm-yiʔ-ɪ, cəp=ʔh ye-miʔ=b'ay*
 thus=TEL stand-sit-TEL-DYNM another=MSC enter-UNDER=AGAIN
 'While they stay thus sitting around, another one goes (to school).'

The 'Repeated instance' form *b'ay* is most likely to appear in Inner Suffix position (although it remains unstressed) in narrative past tense, when followed by the Declarative marker in the verb word. As an Inner Suffix, it functions in much the same way as it does as an enclitic; it signals the single repetition of an event or return to a state. In examples (190-91), *-b'ay* indicates such a return to an earlier state—that of returning home after traveling, and of being on the ground after climbing:¹⁵⁴

¹⁵⁴ Note the additional uses of *b'ay* in these examples as an independent verb stem 'return' and as a nominal enclitic indicating a switch of topic; these functions will be addressed below.

- (190) *ʔm-ʔ=yiʔ ʔam wɪd-b'ay-yiʔ-b'ay-áh,*
 1pl-OBL=TEL 2sg arrive-return-TEL-AGAIN-DECL
 'You came back again with us,

náw ʔam wɪd-b'ay-yiʔ-ʔh
 good 2sg arrive-return-TEL-DECL
 you came back in a good way.' (I.82)

- (191) *yúp=mah tʔh hí-b'ay-áh, cɔhɔ=b'ay-áh*
 that=REP 3sg descend-DYNM=AGAIN-DECL crab=AGAIN-DECL
 'Then he came down again, (did) that crab.' (CO.1)

In the following examples, *-b'ay-* signals the repetition of an event, which may involve a different subject or object (as in 192-93), or a different location (194):

- (192) *yʔnʔy=mah, cɔkw'ʔ=ʔh... ʔm kótʔah cóʔ nɔh-túʔ-b'ay-áh*
 that.be.like.DYNM=REP River.Indian=MSC 1pl ahead LOC fall-dunk-AGAIN-DECL
 'Then the River Indian jumped/ fell in in front of us' (following the non-Indian, who had already jumped). (LG-C.31)

- (193) *núp cǎp ʔʔd cak-tég-b'ay-áh*
 this another speech climb-FUT-AGAIN-DECL
 'Here another story is coming up.' (I.M.63)

- (194) *ʔm-ǎn tʔh nɔɔy key-yóʔ "nu-cóʔ nǎn", tʔh d'oʔ-yé-b'ay-áh*
 1pl-OBJ 3sg say-DYNM see-SEQ here-LOC come.IMP 3sg take-enter-AGAIN-DECL
 'By saying, "come to this place", he brought us there.'
 (after having originally brought us to another place) (P-B.5)

The sense of 'repetition' signaled by the second occurrence of *-b'ay-* in (195) is primarily discourse-related, since no event or state is actually repeated. Here *-b'ay-* apparently functions to relate the action of the boy to that of the dog, as simultaneous events (with a common goal) performed by different agents.

- (195) *yúp tɪh key-d'əh-cak-g'et-pɪd-ɪh...*
 that 3sg see-send-stand-DIST-DECL
 'So he (the dog) is standing (with his forelegs) up against the tree, looking...

núp=b'ay hođ-an tɪh waŋ-yæt-ní-b'ay-áh
 this=AGAIN hole-DIR 3sg spy-lie-be-AGAIN-DECL
 as for this one (the boy), he's lying down spying into a hole.' (A.FS.5)

In contrast to its verbal or predicative realizations, the first occurrence of *=b'ay* in (195) (following a demonstrative) illustrates the additional realization of this form as an enclitic with nominal arguments. In this context, it acts as a topic-switch marker, as discussed in detail in §7.1.3. Note that this ability of a formative that is otherwise verbal (or at least predicative) to occur with nominal arguments—with which it serves a somewhat distinct function, often relating to discourse-marking—is typical of many of the aspectual markers discussed in this chapter, and is common among formatives in Hup generally. In fact, the topic-switch and 'repeated instance' functions of *=b'ay* may not be as distinct as they seem at first glance; examples like (195) above (where verbal *-b'ay-* relates the actions of one participant to those of another) illustrate that there is a degree of overlap between these uses, which can in certain cases be relatively independent of the part of speech with which they occur (see also the discussion in §7.1.3).

Historical Note

The bound form *=b'ay* is formally identical to the verb *b'ay-* 'return, go back', and this verb is a plausible source for the aspect marker, via the processes of grammaticalization outlined in §3.4. Support for this hypothesis includes the semantic relationship between 'repeat' and 'go back', as well as the fact that a historical transition

from a verb root within a compound to a verbal Inner Suffix and/or peripheral formative has been shown to be a common development for a variety of Hup forms (see §3.7 and §9.4.3).

12.9.3. Reduplication¹⁵⁵

Reduplication of verb roots in Hup typically has an aspectual function related to iterativity, whereby an event is characterized by a quick succession of rapid movements, or by the simultaneous existence of multiple realizations. Reduplication is a marginally productive process in Hup for verbs, whereas it is unproductive for nouns (see below and §4.5). Even in the case of verbs, however, reduplicated forms for the most part have an identity as distinct lexemes, and cases in which both reduplicated and non-reduplicated forms of the same root co-exist are relatively rare.

Examples of productive reduplicated and non-reduplicated verb pairs are listed in (196) (see also 197-99), and illustrate the aspectual function that reduplication serves.

- | | | | | |
|-------|---------------|--|-------------|--|
| (196) | <i>wāwaj-</i> | ‘head lolling around’ | <i>waj-</i> | ‘crane neck’ |
| | <i>kokot-</i> | ‘move or go in circles or a circle’ | <i>kot-</i> | ‘go in an arc’ |
| | <i>wawat-</i> | ‘walk around, back and forth
in village or field’ | <i>wat-</i> | ‘pass through,
visit in village’ |
| | <i>ʔiʔid-</i> | ‘mumble to oneself’ | <i>ʔid-</i> | ‘speak’ |
| | <i>tātāw-</i> | ‘hit with a stick repeatedly, esp.
with multiple light repetitions’ | <i>tāw-</i> | ‘hit with stick’ |
| | <i>tətəd-</i> | ‘beat timbó, with multiple quick,
light repetitions’ | <i>təd-</i> | ‘beat timbó
with slow, forceful hits’ |
| | <i>hihit-</i> | ‘cut or scratch with multiple repetitions’ | <i>hit-</i> | ‘scratch or cut’ |
- (197) *tih ʔiʔid-c ɔp-ay-áh*
 3sg speak(RED)-go.up.from.water-INCH-DECL
 ‘She went up the bank mumbling to herself.’ (D.BW.41)

¹⁵⁵ See §2.6 for a discussion of the phonology of reduplication in Hup.

- (198) *d'ũç hid tətəd-d'óʔ-óy=mah*
 timbó 3pl beat.timbó(RED)-take-DYNM=REP
 'They beat timbó (rapidly).' (I.M.52)
- (199) *d'ũç tĩh təd-əh, yúp d'ũç tĩh təd-g'ét-ét=mah...*
 timbó 3sg beat.timbó that timbó 3sg beat.timbó-stand-OBL=REP
 'He beat timbó (forcefully); as he stood beating the timbó (a jaguar came down to the water).' (CO.77)

A near-comprehensive list of reduplicated verb forms from the present corpus of Hup data is given below (200a-c), together with the meanings of the non-reduplicated variants where they exist. The set of reduplicated forms in (200a) has to do with actions that intrinsically involve a series of repeated movements, typically in rapid succession; note that the forms given in (196) above are also part of this set.

- (200) a)
- | | |
|-------------------|--|
| <i>w'ãʔw'ãʔ-</i> | 'stammer' |
| <i>hũhũc-</i> | 'go backwards' |
| <i>hũc-</i> | 'pull or move back' |
| <i>yɔyɔp-</i> | 'knead beer mash or leaves (to extract juice)' |
| <i>y'ũy'ũy'-</i> | 'shake something with up and down motion' |
| <i>y'ũy'-</i> | 'shake once or twice' |
| <i>nuh yĩyĩŋ-</i> | 'shake head from side to side' |
| <i>wĩʔwĩʔ-</i> | 'tremble' |
| <i>ʔoʔok-</i> | 'mess with or wiggle a placed thing or a person (side to side motion)' |
| <i>peʔpeʔ-</i> | 'grope around' |
| <i>ʔid-cəcəʔ-</i> | 'speak a language with errors, stumbling' |
| <i>nɔnɔy-</i> | 'swing back and forth' |
| <i>papad-</i> | 'moan continuously in pain' |
| <i>tætæp-</i> | 'shake body (dog or animal)' |
| <i>kækæg-</i> | 'have legs apart, esp. while walking' |
| <i>yoyo-</i> | 'swing while suspended from above' |
| <i>yo-</i> | 'dangle' (carrying from hand) |
| <i>kikid-</i> | 'tickle' |
| <i>cicid-</i> | 'scratch scalp, cause to scratch' |
| <i>mamap-</i> | 'erode, develop a crevice' |
| <i>hohot-</i> | 'cough' |

In (200b), the reduplicated forms all have to do with a state or event that involves many simultaneous realizations of a core attribute.

- b)
- | | |
|--------------------|---|
| <i>b'eb'ej-</i> | 'swarm' |
| <i>pipiw'-</i> | 'crowding (people, fruit on tree, etc.)' |
| <i>maman'-</i> | 'roll up around something else' (multiple rolls) |
| <i>man'-</i> | 'roll around something else once' (e.g. paper around tobacco) |
| <i>bubud'-</i> | 'roll up in a coil' |
| <i>bud'-</i> | 'roll into a circle' |
| <i>bubud-</i> | 'covered with sores from insect bites' |
| (<i>bud</i> | 'body odor') |
| <i>d'id'ib-</i> | 'curly' (multiple curls, e.g. curly hair) |
| <i>d'ib-</i> | 'curled' (individual thing) |
| <i>dædæp-</i> | 'spotted all over' |
| <i>yayag-</i> | 'full of small holes; covered with small spots' |
| (<i>yág</i> | 'hammock') |
| <i>cæcæg-</i> | 'full of small holes' |
| (verb) <i>cæg-</i> | 'use small net' |
| (noun) <i>cæǵ</i> | 'small net' |
| <i>tæĩæn-</i> | 'grouped together' (esp. trees or manioc plants) |
| <i>cecew-</i> | 'fruits turning dark when ripe' |
| <i>kækəy-</i> | 'have gaps in a series' |
| <i>tətək-</i> | 'be side by side in a row' |
| (<i>hi-tək-</i> | 'be stacked up'; <i>hi-</i> Factitive) |
| <i>popop-</i> | 'moldy, splotchy' |
| <i>wiwi-</i> | 'tangled up' (vine, string, hair, etc.) ¹⁵⁶ |

Finally, the reduplicated forms in set (200c) are semantically less homogenous. For the most part, they relate to states that are in some way characterized by intensity, continuity, or repetitive characteristics:

- c)
- | | |
|------------------|---|
| <i>w'aʎw'aʎ-</i> | 'be poking up out of a pot or basket (e.g. bones, manioc tubers)' |
| <i>d'od'ok-</i> | 'be bent' |
| <i>d'ok-</i> | 'be bent' |
| <i>wāwāw-</i> | 'reeling' |

¹⁵⁶ Note that a few of these verbs have non-reduplicated forms that appear to have nothing to do semantically with the reduplicated forms; they are probably simply homonymous and are therefore not listed here. Examples are *wi-* 'give back' (*wiwi-* 'tangled up') and *peʔ-* 'be sick' (*pepeʔ-* 'grope around').

<i>wãw-</i>	‘follow a windy path’ (e.g. a wire)
<i>kãkã-</i>	‘spiral or half-circle’
<i>pɔpɔ-</i>	‘circular, encircle something’
<i>m’æm’æm’-</i>	‘limp’
<i>b’ab’ag-</i>	‘bright’
<i>b’ág</i>	‘light’
<i>titij-</i>	‘leaf/leaves turned over in forest’
<i>tij-</i>	‘fruit husk coming open’
<i>hicoco-</i>	‘be happy’ (<i>hi-</i> Factitive)
<i>co-</i>	‘rest’

Reduplication in nouns is not a productive process (and all reduplicated noun stems are fully lexicalized); nevertheless, it contributes an aspectual quality akin to its occurrence in verbs. Most reduplicated nouns are the names of small animals and insects that typically make quick, darting, repetitive motions. Examples include *b’eb’ěp* ‘butterfly’, *j’j’j’b* ‘small fruitfly sp.’, *bobób* ‘ant sp.’, and *b’ib’ib* ‘small squirrel sp.’ (see §4.5).

Note that the productive use of reduplication in verb stems may have a parallel elsewhere in Hup on a periphrastic level. A common discourse strategy involves repeating the uninflected verb root—with or without its nominal arguments—multiple times, followed by the inflected verb *ni-* ‘be’ at the end of the clause (see §18.2.2). This functions to signal multiple immediate repetitions of the event (example 201). The same strategy (without the ‘summarizing’ verb *ni-*) can also be used for other parts of speech, as in (202). Although this is a syntactic strategy, rather than a lexical one, its function is similar to that of reduplication in verb stems. It may even be the historical source for many reduplicated stems—their frequent repetition in this syntactically reduplicated form could have led to their lexicalization as reduplicated stems.

- (201) *nút d'oʔ-cud-yóʔ, núp pʂ bíʔ-yóʔ, j'ḥ j'ḥ j'ḥ ní-ty*
 here take-be.inside-SEQ this circle make-SEQ tie tie tie be-DYNM
 'Having put (the cord) in here, having made this (string) circle, with a wrap-wrap-

híd d'əh-d'əh-hám-b'ay-áh
 3pl send-send-go-AGAIN-DECL
 wrap they would send off (the toy top).' (H.txt.18)

- (202) *yúp ʔǎy-g'od ʔǎy-g'od ʔǎy-g'od ʔǎy-g'od=mah,*
 that.ITG together-inside together-inside together-inside together-inside=REP
 'One inside the other,

kotów=tég, tih cud-cák-áh
 dance.staff=STICK 3sg be.inside-climb-DECL
 they had stacked their dance-staffs.' (H.YP.73)

12.10. Verbal 'diminutives'

Hup speakers make use of several means to express 'do Verb a little bit'. The first is the native Hup form *díʔ*, which follows the verb as a particle (and also appears in the verbal form *díʔ-mǎh-ǎy* [VDIM-DIM-DYNM]), as in (203). The form *díʔ* is almost certainly derived from the verb *díʔ* 'remain, be not yet completed or exhausted'.

- (203) *lám-ap péʔ-míʔ, wǎd-ǎy díʔ lám-aw-áh*
 2sg-DEP sick-UNDER eat-DYNM VDIM2 2sg-FLR-DECL
 'Even though you're sick, you're eating a little.' (EL)

The second form *-kodé* is borrowed directly from Tukano (and is recognized by most speakers as a borrowed form). It appears to be in general use, although whether or not all speakers use it regularly is not known. Like its Tukano counterpart *kure* (cf. Ramirez 1997b: 87), it is used to mean 'do something just/ at least a little', and combines directly with verb stems (as a consonant-initial Boundary Suffix):

- (204) *ʔǎd tən-kodé... pǎ-ay-áh*
 speak hold-VDIM NEG:EX-INCH-DECL
 ‘We had just a little language...(it was) almost gone.’ (LG-O.32)
- (205) *ʔám-ap péʔ-míʔ, wæd-kodé*
 2sg-DEP be.sick-UNDER eat-VDIM.(IMP)
 ‘Even though you’re sick, eat a little.’ (EL)
 [compare Tukano: *ba’a kure* ‘eat at least a little’ (Ramirez 1997b: 87)]

The borrowed form *-kodé* frequently co-occurs with the Hup form *díʔ*, to form the expression *díʔ-kodé* ‘just a little more’; e.g. *náw díʔ-kodé* ‘somewhat better, more or less good’ (compare to Tukano *āyu kure* (good-) ‘get a little better’; Ramirez 1997b: 87):

- (206) *yuduŋ yúp, nɔg’od pɔg díʔ-kodé ní-iw-íh*
 fish.sp. that mouth big remain-VDIM be-DYNM-DECL
 ‘That jacundá fish has a somewhat big mouth (relative to other fish).’ (P.F.126)

Note that Hup speakers also use the Diminutive Intensifier *=mæh* in Inner Suffix position to express the same concept of ‘do Verb a little bit’ (see §15.1.4). The adverbial expression *cípmæh=yíʔ* (small=TEL) is used for this function as well; e.g. *cípmæh=yíʔ wæd-æy* (small=TEL eat-DYNM) ‘eating just a little’.

12.11. ‘Ongoing event’ *tæ*

The ‘ongoing event’ marker *tæ* indicates that the activity is still in progress. It normally appears as a particle (but—unlike many peripheral forms—does not have an alternate realization as an Inner Suffix). In affirmative clauses *tæ* indicates ‘still doing Verb’:

- (207) *dóʔ=d’æh b’óy-óy tæ*
 child=PL study-DYNM YET
 ‘The children are still studying/ at school.’ (OS)

- (208) *ʔāh biʔ-ʔē-y tæ*
 1sg work-PERF-DYNM YET
 ‘I’m still working (and will be for a little while).’ (EL)

In negative clauses, it indicates ‘has not done Verb yet’ (i.e. ‘is still in a state of not doing Verb’):

- (209) *b’oy-nih tæ*
 study-NEG YET
 ‘(He’s) not studying yet’ ~ ‘hasn’t gone to school yet.’ (OS)

- (210) *húʔ biyiw ʔāh j’id-nih-íp tæ*
 pium blood 1sg wash-NEG-DEP YET
 ‘I haven’t yet washed off the pium (biting fly sp.) blood.’ (OS)

The form *tæ* also occurs with predicate adjectives, as in *naw-nih tæ* ‘not well yet’ and example (211):

- (211) *pīb tæ ʔāh-āh*
 strong YET 1sg-DECL
 ‘I’m still strong.’ (T-PN.6)

In adverbial clauses, *tæ* forms a unit directly with the verb stem, unless the Negative suffix comes between them:

- (212) *tih biʔ-tæ=yiʔ, teghɕ=d’əh widnæn-æh*
 3sg work-YET=TEL non-Indian=PL arrive-DECL
 ‘While he was working, non-Indian people arrived.’ (EL)

- (213) *tih ʔəg-nih tæ=yiʔ, wiʔwiʔ-ty=mah*
 3sg drink-NEG YET=TEL tremble-DYNM=REP
 ‘When he hasn’t drunk yet, he trembles.’ (B-Conv.2.4)

Finally, *tæ* occurs with a few predicate nominals, particularly those ‘verby’ nouns that relate to periods of time (cf. §4.1.3), e.g. *j’æb tæ* (night YET) ‘still night/dark’ (compare the adverbial expression *j’æb-tæ-yi?* ‘dawn’), *wág tæ* (day YET) ‘still day/light’, and *tih=pæcæw=d’æh tæ* (3sg=adolescent.boy=PL YET) ‘still young (boys)’. Consultants judged *tæ* ungrammatical in combination with other nominals (e.g. **wæð tæ* [intended meaning: ‘still have food’]), preferring the verbal form (N) *ni-iy tæ* ‘N still exists, is here’. However, the following nominal use with ‘paper’ was considered grammatical, in the context of a situation in which someone is going through a stack of papers to find something at the bottom:

- (214) *cug’æt tæ yúw-úh*
 leaf/paper YET that.ITG-DECL
 ‘It’s still paper.’ (EL)

13. Tense and related forms

While aspect indicates the internal temporal consistency of a given situation, tense relates to the place of the event within the larger context of other events. That is, “tense is grammaticalised expression of location in time” Comrie (1985: 9). In Hup, aspect plays a much larger role than tense as a formal grammatical category; tense distinctions are more often simply inferred from the aspectual distinctions and the context, rather than being formally marked (see §12.2 and §17.3.2). This is not uncommon cross-linguistically; some languages, such as Burmese (Comrie 1985: 50), do not have a grammaticalized system of tense at all.

The main tense distinction in Hup is non-future vs. future, which is most commonly expressed via the variants *-teg* /*-te-* (note that *-teg* also encodes purpose), discussed in §13.1. Hup also has two additional morphological strategies for indicating a future event, although they are not restricted to this function (§13.2-3). In addition, the language has a system of semi-grammaticalized, largely optional contrast particles that encode distant past, temporal proximity to the speech event (usually recent past), and future tense specifications; these are treated in §13.4.

The Hup tense-related morphemes and their slot classes are summarized in Table 13.1:

Table 13.1. Tense-related morphemes in Hup

Form	Slot class (formative type)	Identity / word-class of host	Function	Other relevant functions of same form
<i>-téǵ</i>	Boundary Suffix, Inner Suffix	Verbs	Future (main clauses) Purpose (subordinate clauses)	Generic ‘thing’ bound noun = <i>teg</i> ; noun <i>těǵ</i> ‘stick, wood’
<i>-te-</i>	Inner Suffix	Verbs	Future	
<i>-tuk-</i> <i>-tu-</i>	Inner Suffix	Verbs	Volition, proximate (imminent future)	Verb <i>tuk-</i> ‘want’
<i>-Vh</i>	Boundary Suffix	Verbs	1 st person plural inclusive future	Declarative suffix
<i>páh</i>	Particle	Various hosts, predicates	Contrast: temporally proximate	
<i>j’ám</i> <i>j’áh</i>	Particle	Various hosts, predicates	Contrast: distant past	Adverb <i>j’ám</i> ‘yesterday’

13.1. Future *-teg* / *-te-*

The future is the only tense distinction in Hup that usually requires an overt marker, and the Future marker *-teg* and its phonologically reduced variant *-te-* are the only grammatical forms that have a primary function of indicating the location of an event in time. Thus the distinction between future and non-future is more salient in Hup than is the distinction between past and non-past. This is not unusual cross-linguistically.

The forms *-teg* / *-te-* are in fact markers of relative future, in that they are used to relate a given event to a reference point, regardless of whether that reference point is concurrent with the speech act itself, or occurs at some other time. The suffix *-teg* has the additional function of expressing purpose semantics, which intersects closely with its function as an indicator of relative future. Comrie (1976: 2) notes that future is as much a mode as a tense in many languages, and this purposive function of the Hup future tense marker illustrates that this is indeed the case for Hup.

The phonologically unreduced form *-teg* is unusual in that it appears as a Boundary Suffix in certain environments, and as an Inner Suffix in others. As a Boundary Suffix, it is usually not found in clause-final position in declarative clauses (but see exceptions below). It may be followed in the clause by a nominal argument, as in example (1), or by consonant-initial verbal formatives, like the ‘Repeated instance’ enclitic in (2) or the discourse tag in (3).

- (1) *píníh-tég* *ʔǎh=hín-ih*
 tell.story-FUT 1sg=also-DECL
 ‘I’ll tell a story too!’ (cv.txt)
- (2) *ham-tég ʔǎh-ǎp, nú-ay ʔǎh ham-tég=b’ay. té yawadaté ʔǎh ham-té-h*
 go-FUT 1sg-DEP this-INCH 1sg go-FUT=AGAIN until Yawaraté 1sg go-FUT-DECL
 ‘I’m going to go, I’ll go this way again. As far as Yawaraté I’ll go.
- g’et-g’óʔ-óy, cegundaféda=kamí ʔǎh way-té-h, nút-úh*
 stand-go.about-DYNM Monday(Pt)=time.of 1sg go.out-FUT-DECL here-DECL
 On foot, I’ll leave on Monday, from here.’ (A.Int.51).
- (3) *tínñh pǎt cóʔ-óy ʔín hæy’-hũʔ-yiʔ-tég=həʔ,*
 3pl.POSS hair LOC-DYNM 1pl cut-follow-TEL-FUT=TAG2
 ‘We’ll cut off her hair;
- yíní-yóʔ ʔín hi-ciʔ-wob-té-h!*
 that.ITG.be.like-SEQ 1pl FACT-stick-rest.on-FUT-DECL
 then we’ll stick her hair onto our heads.’ (B-Cv1.80)
 (girls joking about ways they could acquire long hair)

Non-reduced *-teg* is encountered clause-finally in interrogatives:

- (4) *ʔúy ham-tég ?*
 who go-FUT
 ‘Who will go?’ (OS)

The reduced variant *-te-*, like all other phonologically reduced suffix variants in Hup (see §3.6), occurs only as an Inner Suffix followed by a vowel-initial Boundary

Suffix. It is most common in clause-final position, followed by Declarative *-Vh*, as in examples (2-3) above. It also occurs in combination with the Dependent marker *-Vp* (example 5), the Oblique case marker *-Vi* (example 8 below) and Inchoative *-ay*, among other vowel-initial Boundary Suffixes. The combined Inchoative and Declarative form *-ay-áh* (see §12.3) is of very common occurrence with *-te-*, and contributes an additional prospective or initiated sense to the future statement, much like that conveyed by English ‘going to’ as opposed to ‘will’, as in examples (6-7). Note that the semantic and pragmatic difference between the simple future form *-té-h* and the progressive future *-té-ay-áh* is minimal; for example, the same speaker who uttered the sentence in (3) above repeated her statement almost word-for-word immediately afterward, but substituted the progressive form for the simple future that she had used in the first instance (example 7).

- (5) *nĩŋ-ǎñ tĩh tɔn-ham-pog-té-ep, cún’! ham-pog-tég nĩŋ-áh?!*
 2pl-OBJ 3sg take-go-EMPH1-FUT-DEP INTERJ go-EMPH1-FUT 2pl-FOC
 ‘She’s really going to take you all away, hey! Would/will you all really go?!’
 (B.Cv1.81)
- (6) *hĩd ɹũh kɔwɔg wɔĩ-té-ay-áh*
 3pl RECP eye pull.out-FUT-INCH-DECL
 ‘One is going to pull out the other’s eyes.’ (H-CO.2)
- (7) ... *ɹĩn hi-ciʔ-wob-té-ay-áh!*
 1pl FACT-stick.on-rest.on-FUT-INCH-DECL
 ‘(We’ll just cut it all our own hair), and then we’re going to stick (her hair) on!’
 (B.Cv1.80)

As with other such pairs of reduced and non-reduced formative variants in Hup, the reduced form *-te-* is strictly limited to environments preceding a vowel-initial Boundary Suffix, whereas *-teg* is much more flexible. Consultants accept the non-reduced form *-teg* in the place of *-te-* even in the context of a following vowel-initial

suffix, particularly in emphatic contexts such as (8) (girls joking about acquiring long hair) and in (9), which would be uttered when one is trying to go to sleep and is telling noisy people to be quiet (in contrast, the reduced future form *-té-ay-áh* would simply be an announcement of intention to sleep).

- (8) *nĩŋ mæh-yĩʔ, tĩnĩh pãt ʔĩn d'o ʔ-té-t tíh,*
 2pl kill-TEL.IMP 3sg.POSS hair 1pl take-FUT-OBL EMPH2
 'You all kill her! so that we can take her hair,

yĩ-áh ʔĩn j' ʔp-d'ak-tég-ay-ti ʔ
 thus-FOC 1pl tie-stick.against-FUT-INCH-EMPH.TAG
 and then we'll attach it (to our heads).' (B-Cv.1.1)

- (9) *ʔãh ʔʒh-tég-ay-áh*
 1sg sleep-FUT-INCH-DECL
 'I'm going to sleep!' (forceful; e.g. 'so stop making noise!') (RU)

In exclamatory or emphatic utterances, non-reduced *-teg* even occurs without the Declarative marker (i.e. as a Boundary Suffix) clause-finally in non-interrogative mood, a context in which *-te-h* (Future + Declarative) would ordinarily be expected:

- (10) *hĩd nɔg'od j'á pæm-hi-ham-tég!*
 2pl mouth black sit-descend-go-FUT
 'They're going to be sitting around with black mouths!' (from eating coca)
 (B.Cv.1.7)

- (11) *téwma b'uy-d' ʒh-ham-yiʔ-tég!*
 Thelma throw-send-go-TEL-FUT
 'Thelma's going to throw it out!' (B.Cv.136)

The Future marker *-teg / -te-* is idiosyncrasic in that it is ungrammatical in imperative and in negative clauses. Future tense can only be specified in the imperative by means of the Future Contrast particle *tán* (see §13.4 below); a negative future construction can also be with formed with *tán*, or expressed as Inchoative aspect (see

§12.3). The ungrammaticality of the Future suffix in negative clauses is an irregularity that has no clear precedent elsewhere in Hup; by analogy with forms such as Habitual *bíg* / *-bí-*, one would expect the construction [Vstem-*nih-teg*] to be possible (involving the Clausal negator *-nih*). In fact, small children do make exactly this analogy, as illustrated by the following utterance by a three-year-old boy (example 12). The unexpected ungrammaticality of this form probably has a historical explanation, which is discussed below.

- (12) *ham-nih-tég* (Child language, ungrammatical)
 go-NEG-FUT
 ‘(I’m) not going.’ (OS)

13.1.1. Purposive function of *-teg*

The full form *-teg* has an additional function, distinct from the marking of future, which it does *not* share with its reduced variant *-te-*. This is the expression of purpose. In signaling purpose, the verb marked with *-teg* typically heads an adverbial clause, which often relates directly to a nominal referent in the main clause, as in examples (13-16). Note that in this context, the declarative form of *-teg* (*-teg-eh*) occurs clause-finally; whereas in a typical (non-emphatic) future-tense construction *-te-h* would be preferred in this context, *-te-* is now ungrammatical.

- (13) *tínih pǎb, tǎh wáy-át pǎd, tǎh wæd-tég-éh*
 3sg.POSS food.supply 3sg emerge-OBL DIST 3sg eat-FUT/PURP-DECL
 ‘His food supplies, in order for him to eat when he emerged again.’ (M-DT.80)

- (14) *g'æŋ=tæh ʔh-ǎn y'æt-yiʔ-ay-áh, j'ũg cóʔ;*
 bone=son 1pl-OBJ leave-TEL-INCH-DECL forest LOC
 'Bone-Son left us, in the forest (regions);

núp=yiʔ ʔin ni-n'ih-tég-éh
 this=TEL 1pl be-NMZ-FUT/PURP-DECL
 this is where/how we are supposed to live.' (H.34)

- (15) *yh way-g'ǎʔ-yóʔ, té cǎp hayám, hǎt ni-tég-n'ih*
 thus go.out-be.suspended-SEQ until other town name be-FUT/PURP-NMZ
 'So having gone out by canoe, (they would go on) to the next town, which would thus get a name.' (H.29) (from an account of the Ancestors' original journey)

- (16) *...hǎwíg biʔid=d'əh hid d'óʔ-óh, biʔid-iw-ih*
 heart bless=PL 3pl take-DECL spell-FLR-DECL
 'The heart-blessers take (i.e. use) it, the blessing.

dóʔ=d'əh hid pəhɔ-tég, ham-ní-h yúw-úh
 child=PL 3pl grow.plump-FUT/PURP go-be-INFR2-DECL that-DECL
 In order for the children to grow plump; that's how it (the blessing) went.'
 (H.32)

Note that, interestingly, Purposive *-teg* may be grammatical in a negative adverbial clause, unlike Future *-teg* (see above):

- (17) *tih way-nih-tég tih-ǎn ʔǎh ʔih-ʔih-té-h*
 3sg go.out-NEG-FUT/PURP 3sg-OBJ 1sg ask-APPLIC-FUT-DECL
 'I'm going to ask him that he not go out.' (EL)

As a marker of purpose, adverbial *-teg* is not required to refer anaphorically to an antecedent in the same sentence. Instead, it may simply refer back to the discourse context in general; for example, (18) was uttered during a conversation about a kind of flute that was made in the old days, in response to my question "why did they make the flutes?":

- (18) *hid hicoco-tég! hid pəʔ=wag hid hicoco-tég!*
 3pl happy-FUT/PURP 3pl dabacuri=day 3pl happy-FUT/PURP
 'In order to be happy! In order to be happy on dabacuri days!' (H.txt)

‘Purposive’ *-teg* may also refer directly to the pragmatic speech context, and often relates to a physical object that is at hand. For example, (19a) might be uttered in reference to a particular hammock (compare (19b), which could only be interpreted as a general statement of a future activity). Similarly, example (20) was uttered by my consultant, who was examining a small plastic animal that I had brought as an elicitation prop; since he was fully aware that the animal was going to stay in my possession, his statement could not be interpreted as referring to a future event of playing, only to the identity of the object.

- (19) a) *tán tĩh ʔʃh-tég*
 later 3sg sleep-FUT/PURP
 ‘Later he will sleep (with this).’ (indicating a hammock). (EL)
- b) *tán tĩh ʔʃh-té-h*
 later 3sg sleep-FUT-DECL
 ‘Later he will sleep.’ (indefinite) (EL)
- (20) *dóʔ=d’əh muħũʔ-tég*
 child=PL play-FUT/PURP
 ‘(It’s) for kids to play with.’ (OS)

The function of *-teg* to express purpose is closely related to its use as a future marker. For an event concurrent with the temporal reference point to have an expressed purpose, that purpose necessarily involves another event that is anticipated, and which will occur in the future relative to that reference point. When this temporal reference point is not concurrent with the speech moment itself, then this ‘future’ is strictly relative, rather than absolute; the event referred to with *-teg* may have already occurred prior to the speech event itself, as in example (15) above, or it may be occurring at the moment of the speech event, as in example (21), in which *-teg* expresses both relative future and purpose/result. On the other hand, expression of purpose or future relative to a *future*

reference point (as opposed to a past or present reference point) can avoid ambiguity

by use of the Sequential marker *-yóʔ* (see §18.2.6.3), as in example (3) above (i.e. “we’ll

do X; after having done X, we’ll do Y”).

- (21) *hǎn’ǎh-ʔě-y* *ʔám*, *ʔám-ǎn* *híd* *təw-tégʔ*
 Q-NMZ-PERF-DYNM 2sg 2sg-OBJ 3pl scold-FUT/PURP
 ‘What did you do [past], for them to be yelling at you [present]?’ (EL)

13.1.2. Other uses of *teg*

The form *teg* is not only a verbal suffix in Hup; it has other, quite distinct functions as well. It occurs as a free lexeme *tég* meaning ‘stick(s), firewood’, and as a bound noun in nominal compounds (e.g. *pǎhǎ=teg* ‘banana tree’; see §5.4.3). As discussed in §5.6, *=teg* as a bound noun also combines with verb stems as a generic instrument or object nominalizer, meaning simply ‘thing’ (i.e. ‘thing for doing V’, ‘thing that does V’); e.g. *hǎʔ=teg* (write=THING) ‘pencil; stick for writing’; *pəpəd=teg* (roll=THING) ‘car, tractor’ (i.e. ‘rolling thing’); etc.

Historical Note

Despite the profoundly different functions of the form *teg* as future suffix, purpose marker, bound noun, and lexeme meaning ‘firewood, stick’, a historical connection almost certainly exists between them. The various uses of *teg* are a case of (diachronic) polysemy, rather than homonymy—Hup has in fact developed a future

particle from the typologically unlikely source of a noun meaning ‘stick, wood’. The steps of this grammaticalization scenario are laid out here (cf. §3.7).

The first stage of the metamorphosis of the form *teg* would have involved as its starting point the noun ‘wood, shaft of tree’, which combined with other nouns to produce nominal compounds, such as names of trees. This then led to the ability of =*teg* to combine productively with verb stems as a nominalizer, eventually becoming Hup’s generic nominalizer (see §5.6).

The next step involved the reanalysis of the generic =*teg* nominalization as a verbal construction. Purpose adverbial constructions like those in the examples above plausibly provided the primary bridging context for this to occur; that is, they were potentially ambiguous as to whether the [Verb + *teg*] forms were functioning as nouns or verbs. As the =*teg* nominalization took on an identity as a verbal form, it adopted a suffixal stress pattern (Verb-*tég*) by analogy with other verbal constructions involving consonant-initial Boundary Suffixes in Hup (see §3.4.1.2). This new verbal form also retained an element of concreteness, as we see in examples like (19-20) above, in which the future/purpose use of the verbal -*teg* construction refers to a physical object in the discourse or at hand. Note that while the development of a future gram from a noun like ‘wood, stick’ is typologically extraordinary, a shift from a nominal to a verbal construction is common; in fact, in the Khoisan language Sandawe (Elderkin 1991: 109-11) such a shift has even resulted in future semantics. Furthermore, expressions of purpose—the bridging context between noun and verb for Hup *teg*—are a cross-linguistically common source of future grams via grammaticalization (Bybee et al 1991, Bybee et al 1994).

Once it had taken on future semantics, the verbal suffix *-teg* continued to grammaticalize, producing the phonologically reduced variant *-te-*; with this step, the ‘purpose’ semantics was largely left behind, and *-te-* took on the primary function of a future gram. Finally, in the Hup spoken today, all these manifestations of *teg* coexist: a free lexeme ‘wood, stick’, a bound noun and nominalizer, and a pair of verbal suffixes indicating purpose and future tense.

This historical scenario is supported by a number of ambiguous contexts involving *teg* that currently exist in Hup, such as the purpose clauses given above (e.g. example 20). Moreover, certain irregular occurrences of the form *teg* can be explained in light of its history as a nominal form. Questions involving identity and purpose are one such example of an irregular—and potentially ambiguous—use of *teg*. The question “what kind of tree/thing is that?” is formally and pragmatically similar to the question “what will you do with that/ what is that for?” in example (22) (stress denoted by underlining):

- (22) (a) *hɪ́n'ɪ́h teg yúp=b'ay?*
 Q-NMZ thing that=AGAIN
 ‘What kind of tree/thing is that?’ (OS/EL)
- (b) *hɪ́n'ɪ́h tég yúp=b'ay?*
 Q-NMZ FUT that=AGAIN
 ‘What will you do with that (thing)? / What is that for?’ (OS/EL)

Note that (22a), “what kind of tree/thing is that?”, is a normal nominal identity question, in which *teg* follows the same stress pattern as any other noun, as we can see in comparison with example (23).

- (23) *hɨ-n'ɨh hɨp yúp=b'ay?*
 Q-NMZ fish that=AGAIN
 'What kind of fish is that?' (OS)

However, (22b) is crucially a verbal construction, and its form is irregular in comparison to other questions involving verbs because it involves only a verbal suffix, without a verb stem, as comparison with example (24) shows¹⁵⁷.

- (24) *hɨ-n'ɨh ɨam biʔ-tég?*
 Q-NMZ 2sg make-FUT
 'What are you going to make?' (OS/EL)

In the purpose question in (22b), the mere presence of stress on *-teg* is arguably enough to give it a verbal identity; in addition, the semantics of purpose correspond to the semantics of future.

Moreover, the two very similar questions in (22) could have equally similar responses, since subjects are typically dropped in Hup when responding to questions. Like the corresponding questions, responses like those in (25) are likely to be pragmatically equivalent, and are formally differentiated only by stress.

- (25) (a) *hɨʔ=teg*
 write=thing/shaft
 '(It's) a pencil.'
- (b) *hɨʔ-tég*
 write-FUT
 '(I'm) going to write.'

The semi-nominal identity of Future *-teg* / *-te-* in Hup may also explain its ungrammaticality in negative clauses. Since Hup uses a different strategy for negating nominal entities than for negating verbal clauses (see chapter 16), it is in fact predictable

that an intermediate form like *teg* would pattern irregularly in negated contexts. This is supported by the fact that it is not only the verbal form of *teg* that is irregular when negated, but the nominal form as well. On the one hand, a possessed nominalization with *=teg* undergoes normal existential negation just like any other noun:

- (26) $[[n\check{\text{ř}} \quad p\check{\text{æ}}m\text{-}teg] \quad p\check{\text{ă}}]$
 1sg.POSS sit=thing NEG:EX
 ‘My seat (log for sitting) is not here/ does not exist.’ (EL)

- (27) $[[n\check{\text{ř}} \quad h\check{\text{ǵ}}p] \quad p\check{\text{ă}}]$
 1sg.POSS fish NEG:EX
 ‘My fish is not here/ does not exist.’ (EL)

However, while most nouns can also appear with existential negation in predicate nominal clauses with no overt copula, as in (28), nominal constructions with *=teg* are *ungrammatical* when they appear with a nominative pronoun in the same type of construction, as illustrated in (29); compare (29) to (26) above, where the only surface difference is the form of the pronoun.

- (28) $\text{ǵăh} \quad [[h\check{\text{ǵ}}p] \quad p\check{\text{ă}}]$
 1sg fish NEG:EX
 ‘I am without fish.’ (EL)
- (29) $*\text{ǵăh} \quad [[p\check{\text{æ}}m\text{-}teg] \quad p\check{\text{ă}}]$
 1sg sit=thing NEG:EX
 ‘I am without a sitting-thing.’ (EL)

Instead, the only grammatical form of this expression requires a *verbal* stress pattern, in combination with a constituent negator, as in example (30). A verbal clause has been produced from a copula-less predicate nominal clause—but it is a peculiar verbal clause,

¹⁵⁷ Note, however, that the Perfective aspect and other markers can also attach directly to the question word ‘what’, so this form with *teg* is not completely irregular vis-à-vis other verbal suffixes in Hup.

since the Existence Negator *pǎ̃* is usually ungrammatical with verbs. Moreover, the interpretation of (30) is as ambiguous between noun and verb as is its form, since ‘I have nothing to sit on’ is pragmatically equivalent to ‘I will sit on nothing’.

- (30) [ʔāh pǝm-tég] pǎ̃
 1sg sit-thing/FUT? NEG:EX
 ‘I have nothing to sit on.’ (EL)

The historical scenario discussed here is also supported by comparative evidence, since cognates for the lexeme ‘wood, stick’ can be identified in at least two other Nadahup languages (Yuhup *tég* and Nadeb *təg*; cf. Ospina 2002 and Weir 1984), but no similar future marker appears to exist. Moreover, a bound form *-teg* exists in Yuhup as purpose marker (Ospina, p.c.). Finally, a likely motivating force for the development of the future gram in Hup comes from Tukano, which not only has an explicit future tense, but has been shown to have motivated the development of future marking in the neighboring Arawak language Tariana (Aikhenvald 2002).

13.2. Proximative *-tuk-* / *-tu-*

As discussed in §9.4.2.4b, the compounded, auxiliary-like verb stem *-tuk-* ‘want’—and particularly its phonologically reduced variant *-tu*—are sometimes used to indicate an imminent future event in Hup. This proximative use is most easily distinguished from the volitional when it occurs with an inanimate subject, as in examples (32-33), or in reference to a negatively construed event like dying, as in (34). When the context permits (i.e. a vowel-copying suffix follows), speakers choose the more reduced form *-tu-* over the less grammaticalized *-tuk-* to indicate the proximative. Note that the

proximative use of this form is limited to future events, whereas Counterfactual *-tæʔ-*

is used in reference to closely avoided past events (see §14.2.2). The grammaticalization of volition to future is a cross-linguistically common path (see Bybee et al 1994: 254)—for example, compare English ‘will’.

- (31) *dəh d’oj-tú-y*
 water rain-WANT-DYNM
 ‘It’s about to rain.’ (OS)
- (32) *cé ʔóda cuʔ-tú-ay*
 six hour grab-WANT-INCH
 ‘It’s almost 6:00.’ (OS)
- (33) *tɪh g’et-g’oʔ-tú-ay*
 3sg stand-go.about-WANT-INCH
 ‘She’s about to start walking.’ (baby) (OS)
- (34) *ʔam=báb’=d’əh b’ɪyiʔ tɔhɔ-tuk-hɔ̃h*
 2sg=relative=PL only end-WANT-NONVIS-DECL
 ‘Your relatives will soon all die, I feel.’ (H.71)

13.3. First person plural inclusive future

An additional, idiosyncratic future construction involves the Declarative suffix *-Vh̃* (see §17.3.2). In general, the main function of Declarative *-Vh̃* is to mark the endpoint of a declarative clause, and when no other tense-aspect markers are present the default interpretation is usually that the event occurred in the past. However, the [verb.stem-*Vh̃*] construction (with no additional tense-aspect markers present) can also occur with a first person plural subject in order to express a *future* event, typically in combination with a future adverbial such as ‘tomorrow’ or ‘later’ (examples 35-36). In this Declarative

future expression, the first person plural is always understood as *inclusive*—that is, the future event will necessarily involve both the speaker and the addressee. Yet there is no morphological inclusive-exclusive distinction in Hup; the first person plural pronoun is semantically neutral as to inclusivity/exclusivity in all other contexts, and the same expression is likely to be interpreted as a simple past tense (and as either inclusive or non-inclusive first person) when the future reference is not made clear by an adverbial or the pragmatic context. Note that the [verb.stem-*Vh*] form is ungrammatical with expressions of future tense for subjects of any other person/number (example 37).

- (35) *cǎ-wag* *ʔin* *hám-áh!*
 other-day 1pl go-DECL
 ‘Someday we’ll go!’ (B.Cv130)

- (36) *ʔicáp* *ʔin* *ʔэг-áh!*
 tomorrow 1pl drink-DECL
 ‘Tomorrow we’ll drink!’ (OS)

- (37) **ʔicáp* *ʔāh/ ʔam/ tih/ niy/ hid* *ʔэг-áh*
 tomorrow 1sg/ 2sg/ 3sg/ 2pl/ 3pl drink

This idiosyncratic future construction may in fact have cross-linguistic parallels.

The Declarative marker is not itself a marker of past tense, but verb-final declarative constructions are nevertheless often identified with the past, and the use of a past tense to indicate an imminent future event is found in several languages, including Russian (Comrie 1985: 20). In Hebrew (Orin Gensler, p.c.), this use of the past tense is in fact limited to the first person plural, as it is in Hup, although its use is more directly hortative.

13.4. Fused contrast/tense particles

While the Future marker *-teg / -te-* represents the primary morphological means for indicating tense in Hup, there is also a set of contrast particles that express tense-related distinctions. These three forms are *páh* ‘temporally proximate contrast’, *j’ám* (*j’ǎh* in the Tat Deh dialect) ‘distant past contrast’ (also used as an independent adverbial: ‘yesterday’), and *tán* ‘future contrast’ (also used as an independent adverbial: ‘later’). These forms stand in paradigmatic relationship to each other, and differ primarily according to temporal reference. They are largely optional, and as a group they function to indicate contrast, either between entities associated with the reported event or between temporal periods relevant to the event.¹⁵⁸ The tense distinctions they encode serve to define the scope of the time period in which the contrast is cast; as such, they differ from more ‘conventional’ tense markers in that they do not necessarily locate the event itself in time, although this function is within the scope of their use.

Formally, the contrast-tense markers are particles. They follow any focused element of the clause (including both predicates and nominal arguments), but are limited to one occurrence per clause (although the contrast enclitics may co-occur with their semantically related independent lexical variants within a single clause). In the following sections, the three particles will be discussed one by one and compared; finally, some additional uses of the Future Contrast marker *tán* to mark future tense will be considered.

¹⁵⁸ They can also serve a focus function, particularly when they occur on nominal constituents of the clause, and as such are in some cases interchangeable with the Focus marker *-áh* (see §15.2.3).

13.4.1. Temporally Proximate contrast *páh*

The ‘temporally proximate’ contrast marker *páh* emphasizes the relevance of the contrast in relation to the time immediately surrounding the speech moment—the recent past, the present, and the immediate future. Crucially, *páh* cannot be used in reference to the more distant past or future. This ‘temporal proximity’ usually corresponds to the same day as the speech event, but it is a relative measure and is flexible depending on the context.

The particle *páh* typically signals a contrast between entities and/or between events or states, within the proximate temporal context. When the contrast is between an event that recently took place and the present moment, *páh* closely resembles a tense marker:

- (38) *děh d’oj-ǝ-y páh-áh*
 water rain-PERF-DYNM PRX.CNTR-DECL
 ‘It was raining (a little while ago, but has since stopped).’ (EL)
- (39) *wæd-ǝ-y páh nǝŋ-ǝh!*
 eat-PERF-DYNM PRX.CNTR 2pl-DECL
 ‘You’ve just eaten!’ (e.g. said to begging children) (RU)

Partly because of its optional status, the contrast-marking function of *páh* often contributes to the overall emphasis of the utterance. In (40), for example, the speaker is referring to his attempt an hour or so earlier to buy sugar from a river-merchant (the Hupd’əh typically add sugar to manioc beer to make it stronger; the river merchant apparently felt like discouraging this use and refused to sell the sugar.) The first use of *páh* in this example is as a temporal demonstrative (see discussion below); the second and third are both emphatic and tense-related (as in 41-42 as well).

- (40) *pahá-wəd-ǎn* *n'úh,* *páy=pog* *páh* *yú-wəd-ǎh,*
 PRX.CNTR.DEM-RESP-OBJ CNTR bad=big PRX.CNTR that-RESP-DECL
 ‘As for that old guy, he was such a jerk just now,
“húptok ‘estragá’-áy’ yúw-úh, ʔacúka,” nɔ́ɔ́y páh yú-wəd-ǎh
 caxiri go.bad(Pt.)-DYNM that-DECL sugar say-DYNM PRX.CNTR that-RESP-DECL
 “sugar makes caxiri bad,” he just said, that old guy.’ (B-Conv.2.7)

- (41) *kəwǎǵ* *ni-nǎh* *páh* *ʔǎh* *b’ák-áh...*
 eye be-NEG PRX.CNTR 1sg beat.timbó-DECL
 ‘Even without eyes I am able to beat timbó...’

wəd-yíʔ-ǎy *páh* *ʔǎh-ǎh*
 eat-TEL-DYNM PRX.CNTR 1sg-DECL
 I recently ate them (my eyes).’ (H-CO.2)

- (42) *ʔúy* *cáp* *ʔúh* *ʔǎn* *hǎp* *kək-wob-pǎ-ǎ?* *páh?*
 who INTS1 EPIST 1sg.OBJ fish pull-set.on-go.upstream-INT PRX.CNTR
 ‘Who in the world could have caught and set out these fish for me just now?’
 (I-M.1)

The ‘proximate contrast’ particle can also be used in habitual expressions, in reference to a recent event that re-occurs often. Here, the focus of the contrast is in reference to something that has just taken place. In (43), the speaker is excusing herself after a fit of giggles, and (44) was uttered at a drinking party in reference to someone’s botched attempt at dancing.

- (43) *cecidíya* *páh* *tǎʔ-nǎhɔ-dǎb-pog-bǎh!*
 Cecilia PRX.CNTR laugh-much-EMPH1-HAB-DECL
 ‘It’s Cecilia (i.e. not me) who’s always laughing a lot!’ (B.Cv)
- (44) *yam-hipǎh-nǎh* *bǎǵ* *páh* *yúw-úh*
 dance-know-NEG HAB PRX.CNTR that-DECL
 ‘That one never knows how to dance.’ (OS)

While the above examples have to do with an event that has just occurred, *páh* can also be used to contrast an event that is concurrent with the speech moment to some previous (recent) event or state. For example, Pedro told me that (45) was uttered on the

tragic occasion of a Hup man's murder (by a Tukano from a nearby village); soon after finding him dead, they found his companion lying drunk on a sandbar. Example (46) might be uttered by someone who wants to sell a pineapple, after another pineapple-seller has already been approached. Finally, example (47) was in reference to a fire that had just gone out, and (48) was spoken by someone who was feeling better after a mild illness.

- (45) *ʔib'-ʔẽ-y* *páh-áh*
 be.alive-PERF-DYNM PRX.CNTR-DECL
 'He's still alive!' (RU)
- (46) *canã* *ní-íy* *páh* *ʔǎn=hín-íh*
 pineapple be-DYNM PRX.CNTR 1sg.OBJ-ALSO-DECL
 'I too have pineapple.' (RU)
- (47) *hɛ̃-nɪh* *páh* *yúw-úh*
 burn-NEG PRX.CNTR that-DECL
 'It's not burning anymore.' (OS)
- (48) *náw* *páh* *yúw-úh*
 good PRX.CNTR that-DECL
 'It's (going) better.' (OS)

The Proximate particle *páh* can even have reference to a proximate future situation. For example, since the verb *hɛ̃* means both 'burn' and 'be ripe' in Hup, the statement in (47) above can also mean 'they're not quite ripe yet' (e.g. in reference to bananas)—but *páh* must be replaced with the Future Contrast form *tán* (see example 59, §13.4.3 below) if the bananas are very green (i.e. not expected to ripen for some time). Similarly, one might say (49) when one is setting some fish aside for the next day, but only *tán* would be appropriate if the food item were being saved for a longer time.

- (49) *ʔícáp* *ʔǎh* *wæd-tég* *páh* *núw-úh*
 tomorrow 1sg eat-FUT PRX.CNTR this-DECL
 'Tomorrow I'll eat this.' (RU)

On the other hand, when it occurs with a future event and the Reportive evidential, the interpretation of *páh* may involve the recent-past time in which the original statement (now being reported via the evidential) was made:

- (50) *núp=ǎh ham-tég=mah páh-áh*
 this=MSC go-FUT=REP PRX.CNTR-DECL
 ‘This guy will go, (it was recently said).’ (EL)

The Proximate Contrast form *páh* also occurs in two morphologically complex lexical constructions (although it has no independent meaning as a free form). These are the temporal adverbial *páh-yí?* (PRX.CNTR-TEL) ‘earlier today’ (example 51), and the demonstrative form *pah-áp* (PRX.CNTR-DEP) ‘that recent one’ (*pahá-* with a bound noun; see (40) above), which concerns a recently relevant referent, as in (52).

- (51) *ǎh-yí?-cǎw-ǎy yí-d’ǎh-ǎh, páh-yí? híd ǎh-yí?-ǎh*
 sleep-TEL-COMPL-DYNM that-PL-DECL PRX.CNTR-TEL 3pl sleep-TEL-DECL
 ‘they’re already asleep; just a little while ago they went to sleep’ (I-M.11)

- (52) *pah-áp wædhɔɔm’ǎh tod pínǎh tǎh nǎw-ay*
 PRX.CNTR-DEP star hole story 3sg say-FLR-INCH
 ‘This is that Star-Hole story that she just mentioned.’ (A-WT.4)

13.4.2. Distant Past Contrast *j’ám* / *j’ǎh*

Whereas *páh* signals a temporally proximate contrast, the form *j’ám* (phonologically reduced to *j’ǎh* in the Tat Deh/Eastern dialect) indicates a distant past contrast. It is often used in reference to a relatively distant past event, which is contrasted with the present:

- (53) *hicocó ʔín ní-íh, ní-ʔé-y j'ám ʔááh-ááh*
 happy 1pl be-DECL be-PERF-DYNM DST.CNTR 1sg-DECL
 'We were happy, I was happy in those days.' (when my wife was alive)
 (LG-O.40)
- (54) *ʔááh n'uñ naw-ʔé ʔ-mí? j'am, páy-áh*
 1sg CNTR good-PERF-UNDER DST.CNTR bad-DECL
 'Although I was once good, I now am bad.' (LG-O.47)

It can also be used to focus on a present situation or event and to contrast this with one in the relatively distant past; as such, it looks less like a conventional tense marker. In (55-56), for example, the speakers have forgotten something that had been told them in the past or that they had previously known:

- (55) *hí-n'ñ ʔam=tæh ʔp nñ háh j'am?*
 Q-NMZ 2sg=child.father POSS name DST.CNTR
 'What's your husband's name again?' (OS)
- (56) *yúp=yíʔ=mah j'ááh tñ, tóg?*
 that=TEL=REP DST.CNTR 3sg daughter
 'Was that the one, Daughter?' (D-BWB.2)

The Distant Past Contrast particle is common in narrative, and often occurs together with the Reportive evidential =*mah*, as in example (57)¹⁵⁹. (This combined form occurs as -*maám* or -*ma-y'ám* in the Umari Norte dialect area; see §14.9.4 for more discussion.) In some of these cases, the contrast-tense marker appears to refer to the time when the storyteller heard the story told, rather than to the events themselves (as in 56 above; likewise with *páh* in example 50). However, in narrative the contrast-tense marker usually refers primarily to the distant past time of the events per se (note that the order of the Reportive evidential and the contrast particles is fixed, and cannot be switched). Evidence for this includes the fact that the co-occurrence of these two forms

is for the most part confined to narratives concerning mythical or distant past events, whereas the Reportive marker alone is used to describe mythical knowledge that pertains to everyday life (for example, concerning the malignant being embodied by the rainbow), even though the speaker presumably heard this from his elders no more recently than he heard the tales. Also, a firsthand narrative of events that the speaker him/herself experienced long ago may make use of the contrast particle, but does not involve the Reportive evidential, as in (58).

- (57) *nút pũṛṛk d'ák-áy=nih=mah j'ám tñh-ǎñ hǎ?*
 here coca stick.against-DYNM-EMPH.CO=REP DST.CNTR 3sg-OBJ TAG2
 'Here (in his cheek) he had (a wad of) coca.' (lit. 'it was sticking there for him')
 (M.KT108)

- (58) *mɔy pǒǵ j'ám yúp mɔy ni-ní-h; yúp mǎy-ǎ j'ám*
 house big DST.CNTR that house be-INFR-DECL that house-OBL DST.CNTR
 'That house (that was here) was a big one; to that house
ʔñ wid-d'ób-óh, mǎy m'æc-yǐʔ-ǎ j'ám ʔñ-ñ
 1pl arrive-go.to.water house stuff-TEL-DYNM DST.CNTR 1pl-DECL
 we came down river-wards, and crammed into it.' (P.B10)

In addition to its use as a contrast particle, the form *j'ám* also appears in the lexical adverbial expressions *j'ám* 'yesterday' and *j'ám-yǐʔ* (DST.CNTR-TEL) 'a long time ago; sometime before yesterday'. Like the Proximate Contrast particle *páh*, it also has a demonstrative form *j'am-áp* (DST.CNTR-DEP) 'that (distant past) one'. Thus *j'am-áp tiyǐʔ* 'that man' (who passed yesterday or before) can be contrasted with *pah-áp tiyǐʔ* 'that man' (who passed earlier today).

¹⁵⁹ This is subject to personal variation among story-tellers.

13.4.3. Future Contrast *tán*

The particle *tán* also indicates contrast, with a temporal scope relating to the relatively distant future. It necessarily contrasts the future with ‘now’, the moment of speech:

- (59) *h ɣ-nĩh tán yúw-úh*
 burn-NEG FUT.CNTR that-DECL
 ‘They’re not ripe yet (and won’t be ripe for some time).’ (EL)

Future Contrast *tán* functions much like Proximate *páh* and Distant Past *j’ám*; however, it is more likely than these to refer directly to the time of the focal event, rather than to contrast a focal event occurring in the present with some situation or event that occurred at another time (accordingly, it is somewhat more tense-like). The relationship between *tán* and the other two contrast-tense particles is illustrated in the following elicited paradigms:

- (60) a) *núp páh yúw-úh*
 this PRX.CNTR that-DECL
 ‘Here it is.’ (e.g. giving back something recently borrowed)
- b) *núp j’ám yúw-úh*
 this DST.CNTR that-DECL
 ‘Here it is.’ (e.g. giving back something that was borrowed several months earlier)
- c) *nút tán yúw-úh*
 here FUT.CNTR that-DECL
 ‘This is where it will be.’ (e.g. showing where a house will be built; not yet begun)
- (61) a) *tĩh b’ay-nĩh-ay páh-áh*
 3sg return-NEG-INCH PRX.CNTR-DECL
 ‘He won’t come back.’ (said by a person who met him on the path earlier the same day)
- b) *tĩh b’ay-nĩh-ay j’ám-áh*
 3sg return-NEG-INCH DST.CNTR-DECL
 ‘He won’t come back.’ (said by a person who met him a week or so back)

- c) *tɪh* *b'ay-nɪh-ay* *tán-áh*
 3sg return-NEG-INCH FUT.CNTR-DECL
 'He won't come back (in the relatively distant future).'

In addition, like the Distant Past particle *j'ám*, Future Contrast *tán* occurs as an independent adverbial, meaning 'later today'. It also appears in the adverbial expression *tán-an-ay tán* 'in the relatively distant future' (note *tán* appears twice!), which can occur together with the Future marker *-teg / -te-*:

- (62) *tán-an-ay* *tán* *yúp* *mɔy-ʔ* *híd* *ni-té-h*
 later-OBJ-INCH FUT.CNTR that.ITG house-OBL 3pl be-FUT-DECL
 'In the future/ someday they will live in that house.' (EL)

The functional range of *tán* includes additional grammatical tasks that set it apart from the other two contrast-tense particles. In particular, *tán* acts primarily as a future tense marker (as opposed to a contrast particle) in environments where the Future marker *-teg / -te-* is ungrammatical, including imperative, negative, and apprehensive modes, and in habitual and some conditional expressions. Unlike expression of past tense, overt marking of future is required in some contexts in Hup, and *tán* often fills in where *-teg / -te-* is not appropriate. Thus *tán* is the only contrast-tense particle that may occasionally be grammatically required, whereas the others are optional.

The use of *tán* in distant future imperatives is illustrated in (63) (said to me when I left the Hupd'əh to return to the US). Note that the simple imperative (without future specification) would imply a more immediate expectation or command (see also §17.5). The imperative use of *tán* can be contrasted with its lexical use, which simply means 'later today', as in (64).

- (63) *nǎn tán!*
 come FUT.CNTR
 ‘Come back (in the future)!’ (OS)

- (64) *tán nǎn!*
 later come.IMP
 ‘Come back later today!’ (an invitation) (OS)

Future *tán* is also common in negative future constructions (in which *-teg / -te-* is ungrammatical), as in (65-66). Example (65) was uttered by a teenage boy who was sticking the cigarette lighter I had just given him into the thatch of the house for safe-keeping, in response to my comment “someone else might take it!” Note that the adverbial and the Future contrast uses of *tán* may co-occur in a single clause (66).

- (65) *tǐh key-nǐh tán yúw-úh*
 3sg see-NEG FUT.CNTR that-DECL
 ‘He (generic) won’t see it!’ (OS)

- (66) *tán ǎh ham-nǐh tán-áh*
 later 1sg go-NEG FUT.CNTR-DECL
 ‘I’m not going to go, later.’ (EL)

Finally, *tán* may be used in Apprehensive mode (see §14.6) to indicate a potential or hypothetical future, as in (67-69); *-teg / -te-* are ungrammatical here because they imply a more definite future event.

- (67) *ǎn hǐd d’ó? tán-áh*
 1sg.OBJ 3pl take.APPR FUT.CNTR-DECL
 ‘They (boys) would get me.’ (B.Cv.131)
 (girl explaining why she did not intend to visit another town)

- (68) *cak-níníh, ǎm nǎh tán-áh!*
 climb-NEG.be.IMP 2sg fall.APPR FUT.CNTR-DECL
 ‘Don’t climb, you’ll fall!’ (EL)

- (69) “*ǎm-ǎn ǎh yǎmǎy yók tán-áh!*” *tǐh nǎh*
 2sg-OBJ 1sg anus stab.APPR FUT.CONTR-DECL 3sg say-DECL
 ‘“I’ll stab you in the anus!” she said.’ (H.TY.79)

In addition to acting as the sole indicator of future tense where *-teg* / *-te-* is ungrammatical, *tán* can also appear together with *-teg* / *-te-* as a contrast particle. In (70), for example, the present state of the fire's burning is contrasted with the predicted future state of its going out (the Perfective signals the endpoint of the burning):

- (70) *núp-mæh-yǎʔ-íp* *těg* *hʃ ʔe ʔ-tég* *tán-áh*
 this-DIM-TEL-DEP wood burn-PERF-FUT FUT.CNTR-DECL
 'This fire will keep burning for the moment (but will soon go out).' (EL)

14. Modality and evidentiality

This chapter deals with the set of formatives in Hup that mark modality and evidentiality, and associate primarily (but not always exclusively) with the verb. Hup has grammatical means of indicating conditionality and counterfactuality, as well as frustrative, cooperative, apprehensive, optative, and epistemic modes. Of these, the Conditional, Cooperative, and Optative markers are realized as Boundary Suffixes (and the Apprehensive as the absence of a Boundary Suffix), and can be understood as encoding specific clause types. They are thus formally and functionally akin to the more frequent markers of clause type that also relate to modality, particularly those that indicate the declarative, interrogative, and imperative moods, which are treated in the discussion of basic clause types in chapter 17 and elsewhere in this grammar. In addition to the modal markers discussed here, Hup has a well-developed system of evidentiality with as many as five distinctions, covered at the end of this chapter.

The forms, slot classes, and functions of the formatives discussed in this chapter are summarized in Table 14.1:

Table 14.1. Markers of modality and evidentiality in Hup

Form	Slot class (formative type)	Identity/ word-class of host	Function	Other relevant functions of same form
-tǎñ	Boundary Suffix	Verbs	Conditional	Enclitic (w/ nouns) indicating comparison
-tǎñʔ	Inner Suffix	Verbs	Counterfactual, avertive	Cf. verbs <i>hitǎñʔ</i> ‘imitate’; <i>tǎñʔ-key</i> ‘weigh’, etc.
=tǐh	Enclitic	Verbs	Counterfactual	
yǎñh	Particle	Verbs, predicate nominals	Frustrative mood	Verb root yǎñh- ‘request, order’
-yǎñh-	Inner Suffix	Verbs		
-nǐŋ	Boundary Suffix	Verbs	Cooperative	2pl pronoun <i>nǐŋ</i> Verbal form <i>nǐŋ-</i> ‘expect someone’
-Ø	Absence of Boundary Suffix	Verbs	Apprehensive mood	Compare imperative: -Ø and high tone on verb stem
-ŋǎh	Boundary Suffix	Verbs	Optative mood	Noun ‘opposite-sex sibling’
ŋǎh	Particle	Various hosts	Epistemic modality	Reciprocal (prefix w/ verbs) Applicative (Inner Suffix w/ verbs)
=hǫ -hǫ-	Enclitic (Inner Suffix)	Predicates Verbs	Evidential: nonvisual	Cf. verb <i>hǫh-</i> ‘make noise’
=cud -cud-	Enclitic (Inner Suffix)	Predicates Verbs	Evidential: inferred	‘Deceased referent’ marker (enclitic w/ nouns) Verb root <i>sud-</i> ‘be inside’
=mah -mah-	Enclitic (Inner Suffix)	Various hosts Verbs	Evidential: reported	
-ni-	Inner Suffix	Verbs	Evidential: inferred	Verb <i>ni-</i> ‘be, exist’

14.1. Conditional -tǎñ

The verbal suffix -tǎñ marks a condition. It normally occurs in the first clause of a biclausal construction, which is made up of a protasis (‘if’ clause), followed by an apodosis (‘then’ or consequent clause); however, the order of these clauses is flexible, and either may be dropped if recoverable from the discourse. Conditional -tǎñ is a Boundary Suffix, but it is non-canonical for the consonant-initial subset of these suffixes in that both it and the stem receive stress (see §3.4.1.2).

Conditional *-tǎñ* is used with both ‘real’ conditionals (i.e. those that refer to events that are expected to occur and/or are known to occur regularly) and ‘unreal’ conditionals (i.e. events that are hypothetical). The difference is typically registered in the apodosis by the presence or absence of the Counterfactual suffix *-tǎñ?* (see §14.2 below) or a related marker. Examples (1-4) illustrate ‘real’ conditional statements:

- (1) *nĩ-nĩh-ĩy bĩg j’ǎñ b’oy ǎñ cúh-tǎñ-ǎñ*
 this-be.like-DYNM HAB DST.CNTR traira 1sg string-COND-DECL
 ‘I always do like this if/when I string traira fish.’ (I-M.24)
- (2) *yág nɔ-tǎñ tá?*
 hammock say-COND REL.INST
 ‘What if you say ‘hammock’?’ (i.e. ‘what’s hammock in your language?’) (OS)
- (3) *húp pǎ-tǎñ, nukán tĩh hi-yǎt-yĩ?ay-áh*
 person NEG:EX-COND over.here 3sg FACT-lie-TEL-INCH-DECL
 ‘When no one is there, (the bones) descend to here.’ (H.21)
- (4) *deh=mí hɔp-hí-tǎñ, ǎm b’ák-áh*
 water=river dry-descend-COND 1pl beat.timbo-DECL
 ‘When the stream (level) goes down, we’ll fish with timbó.’ (RU)

Examples (5-6) illustrate ‘unreal’ or hypothetical conditionals. These are signaled by the presence of Counterfactual *-tǎñ?* or *=tih* (§14.3) in the apodosis, and/or with the Frustrative *yǎñ* (§14.4). In (5), the statement is hypothetical because the speaker knows that no manioc beer—the necessary ingredient for producing a proper song—is available that day.

- (5) *deh b’ɔ? ǎm d’o?nǎñ-tǎñ, ǎñ ǎg-d’ó?tǎñ, hǎñ-ǎy=tih ǎñnĩy*
 water cuia 2sg take-come-COND 1sg drink-take-COND make.sound=CNTRFCT2 maybe
 ‘If you brought me a cuia, and if I drank, maybe the song would come.’ (G.Sg)

- (6) *ʔəg-ná ʔ-áy=tih=cud, j'ám-ap, hiyǎw' ni-ʔé ʔ-tǎñ-ǎw-ǎp !*
 drink-lose.consciousness=CNTRFCT2=INFR yesterday-DEP strong.beer be-PERF-COND-FLR-DEP
 'We would have gotten drunk the other day, if there had been really strong beer !'
 (TD.Cv.99)

In (7), the Conditional occurs in a negative predicate, where it follows the Negative suffix *-nǎh*:

- (7) *nǎ-nǎh-ip bǐg yǎñ j'ǎñ ʔǎñ-ǎñ, ʔǎh pe ʔ-nǎ-nǎh-tǎñ-ǎñ!*
 this-be.like-DEP HAB FRUST DST.CNTR 1sg-DECL 1sg be.sick-be-NEG-COND-DECL
 'I'd always do like that too, if I weren't sick!' (TD.Cv)

The Conditional also occurs with predicate adjectives (including those used in adverbial phrases), as is consistent with their verbal identity (see §10.1):

- (8) *g'ǎ-tǎñ=yǎʔ tǎh nǎw-ǎh*
 hot-COND=TEL 3sg good-DECL
 'When it's hot, it's nice.' (EL)

Conditional *-tǎñ* is itself ungrammatical in imperative and interrogative clauses, or in combination with future tense morphemes (*-teg / -te-*, *tán*); however, it can appear in a protasis while imperative, interrogative, or future tense is expressed in the accompanying apodosis:

- (9) *tǎw-tég ʔám, tǎh bǐʔ-nǎh-tǎñ?*
 scold-FUT 2sg 3sg work-NEG-COND
 'Will you scold, if he doesn't work?' (EL)

In addition to its use as a conditional marker, the form *tǎñ* appears elsewhere in Hup and performs a distinct function: it marks an equative comparative construction, where it indicates 'same amount as, same way as' (see §10.2.2.1).¹⁶⁰ The functional

¹⁶⁰ Whether these two uses represent homonymy or polysemy of *-tǎñ* is unclear; see discussion in §10.2.2.1.

difference between this manifestation of *=tæn* and its realization as a conditional marker corresponds to their formal distinction: as a marker of equative comparison, *=tæn* is unstressed (unless preceded by Factitive *hi-* in a verbal construction, see example 11), it combines with nouns as well as verb roots, and its comparative use does not in general involve a biclausal construction. This comparative use of *=tæn* is illustrated in (10-11):

- (10) *ʔamɪh b'ɔɔk=tæn tɪh ní-íy*
 2sg.POSS ear=MEAS2 3sg be-DYNM
 'She comes up to your ear.' (OS) (i.e. 'as if she were your ear, she is')
- (11) *ʔin yám-hi-tæn=yiʔ ʔam yám-áy*
 1pl dance-FACT-MEAS2=TEL 2sg dance-DYNM
 'You dance the way we do/ in our way.' (i.e. 'as we would if we were dancing, you dance') (EL)

14.2. Counterfactual *-tæʔ*

The morpheme *-tæʔ*, labeled 'Counterfactual', encodes a type of irrealis. It has two main functions, that of marking the unrealized or unrealizable status of an event in conditional expressions, and that of marking a narrowly averted event. The form *-tæʔ* usually appears in the Inner Suffix position on verb stems.

14.2.1. Counterfactual in conditional expressions

Counterfactual *-tæʔ* typically occurs in the apodosis ('then' or consequent clause) of a biclausal construction encoding an 'if-then' relationship. The protasis, marked with Conditional *-tæn*, usually precedes it, although this order is flexible (see §14.1). The Counterfactual expresses the unrealized or unrealizable status of the condition, and is

preferred in explicitly hypothetical situations, where the condition cannot be met or is not expected to be met within the relevant time frame:

- (12) *ʔam=báb' dɔb-tǎñ, dɔb dɪʔ=mæh ʔam d'oʔ-ye-tǎʔ-n'ih*
 2sg=sibling much-COND much remain=DIM 2sg take-enter-CNTRFCT-NMZ
 'If you had many siblings, you would bring in a lot (of fruit)!' (C-Daba)
- (13) *nĩ tǎñ-ǎñ mæh-yĩʔ-tǎñ... ʔǎh d'oʔ-d'ɔh-yĩʔ-tǎʔ-ǎy ʔũhnĩy*
 1sg.POSS son-OBJ kill-TEL-COND 1sg take-rot-TEL-CNTRFCT-DYNM maybe
 'If they killed my son, I would maybe make things bad (for them).' (LG-C.41)

When the condition is recoverable from the discourse context, the Counterfactual-marked clause may occur alone, without an associated Conditional clause (just as a Conditional clause can itself appear alone):

- (14) *yĩnĩ nĩ tǎñ biʔ-tǎʔ-ǎp, yǎhǎʔ-yĩʔ-ih...*
 that.ITG.be.like.DYNM 1sg.POSS son work-CNTRFCT-DEP stop-TEL-DECL
 'Thus my son would have worked (had my wife been alive), but he stopped.'
 (LG-O.12)

Counterfactual marking is typically absent where the condition is expected to be or is regularly met (see §14.1 above), but it is required when the conditional situation is obviously hypothetical. Thus (15), with an unmarked second clause, is inappropriate:

- (15) *? hũtǎñ ʔǎh ní-tǎñ, ʔǎh way-d'óʔ-óh*
 bird 1sg be-COND 1sg leave-take-DECL
 ? ~ 'If I were a bird, I'll fly.' (EL)

The Frustrative marker *yǎñ* (§14.4), which signals that an intended or anticipated outcome is not realized, is extremely common (but not in general obligatory) in co-occurrence with the Counterfactual in conditional expressions:

- (16) *huĩtǎh ʔāh ní-tǎh, ʔāh way-d'óʔ-tǎh-ǎy yǎh*
 bird 1sg be-COND 1sg leave-take-CNTRFCT-DYNM FRUST
 'If I were a bird, I would fly.' (EL)

The Inferential Evidential forms =*cud* and *-ni-* (§14.9) also often co-occur (optionally) with the Counterfactual, although less frequently than the Frustrative:

- (17) *ʔāh cǎh-nǎh-tǎh, ham-tǎh-ǎy=cud yǎh páh ʔāh=tiʔ*
 1sg tired-NEG-COND go-CNTRFCT-DYNM=INFR FRUST PRX.CNTR 1sg=EMPH.TAG
 'If I had not been tired, I would have gone.' (EL)
- (18) *...yág ʔāh d'óʔ-óy, ʔāh g'et-ni-tǎh-ní-h...*
 hammock 1sg take-DYNM 1sg stand-be-CNTRFCT-INFR2-DECL
 '...I took (was given) a hammock, I would have stayed there (but these days it's impossible).' (LG-O.10)

Counterfactual *-tǎh-* never occurs in predicates marked with the Negative suffix *-nǎh*. Rather, the Counterfactual itself is to be interpreted as inherently negative or at least neutral regarding negation (see §16.4 and below). Clauses expressing conditional, hypothetical negative events (e.g. 'she wouldn't speak your language') are phrased exactly like those expressing positive events (e.g. 'she would speak your language'), and the negative/positive reading (i.e. whether or not the activity would be expected to take place if the hypothetical condition were realized) must be taken from the context:

- (19) *yíkán niŋǎh ʔǎd ʔǎd-tǎh-ay ʔúhníy*
 over.there 2pl.POSS speech speak-CNTRFCT-INCH maybe
 'Maybe she wouldn't speak your language there (if you went there with her).'

Accordingly, while the best translation of (19) is negative, the appropriate positive response would also use the Counterfactual: *ʔǎd-tǎh-ǎy!* (speak-CNTRFCT-DYNM) 'I would speak (it)!'

While Counterfactual *-tæʔ-* patterns like a typical Inner Suffix in combination with verbal predicates, it can also occur with predicate nominals. In this environment, the copula *ni-* is an option:

- (20) *núp=ʔh b'óy-op=ʔh ni-tæʔ-æʔ yæh*
 this=MSC teach-DEP=MSC be-CNTRFCT-DYNM FRUST
 'This man would have been/ was almost a teacher.' (EL)

However, a verbal construction is not required for expressing counterfactuality; instead, *-tæʔ-* (followed by Frustrative *yæh*) may directly follow the noun, without a copula.

Furthermore, in this case *-tæʔ* may appear without the Boundary Suffix that is obligatory in its verbal realization (the Dynamic is ungrammatical):

- (21) *núp=ʔh b'óy-op=ʔh tæʔ yæh(-æh) (*tæʔ-æʔ yæh)*
 this=MSC teach-DEP=MSC CNTRFCT FRUST(-DECL) (*CNTRFCT-DYNM FRUST)
 'This man would have been/ was almost a teacher.' (EL)

For predicate adjectives, either a copula construction with *ni-* or the nominalized form (*tih* + adjective, resulting in a predicate nominal; see §6.6) is preferred, as in (22).

In this context, a verbal construction with the predicate adjective itself acting as a verb root is judged only marginally possible.

- (22) *tih=báb' tih=páy tæʔ yæh (? pay-tæʔ-æʔ yæh)*
 3sg=sibling 3sg=bad CNTRFCT FRUST bad-CNTRFCT-DYNM FRUST
 'His brother would have been an ugly/bad one.' (EL)

14.2.2. ‘Avertive’ function of *-tæʔ*

In addition to its use in a conditional expression, which usually involves a biclausal construction, Counterfactual *-tæʔ* may be used in an independent clause to signal an event that has been narrowly averted or is on the verge of occurring:

- (23) *ʔam nɔh-tæʔ-æý!*
 2sg fall-CNTRFCT-DYNM
 ‘You almost fell!’ (OS)
- (24) *ʔid-tæʔ-æý ʔám?*
 speak-CNTRFCT-DYNM 2sg
 ‘You were about to say something?’ (EL)
- (25) *peyǎw cǎw-tæʔ-ǎp hi-kéd, ʔadócu ʔín cǎw-ǎh*
 beans cook-CNTRFCT-DEP FACT-pass rice 1pl cook-DECL
 ‘Instead of cooking beans, we cooked rice.’ (EL)
- (26) *tǎh yǎh=d’ɔh mæh-yiʔ-tæʔ-æý=mah*
 3sg in.law=PL kill-TEL-CNTRFCT-DYNM=REP
 ‘His in-laws nearly killed him.’ (P-BWB.5)

Note that *-tæʔ* may precede Frustrative *yǎh* (as in the conditional expressions in §14.2.1):

- (27) *ʔǎn híd dóh-op ʔǎh nɔh-yæt-yiʔ-tæʔ-yǎh-ǎh!*
 1sg.OBJ 3pl curse-DEP 1sg fall-lie-TEL-CNTRFCT-FRUST-DECL
 ‘I almost died from their cursing me!’ (LG.O.38)

This ‘avertive’ function of Counterfactual *-tæʔ* is reminiscent of that of an ‘avertive’ gram, as defined cross-linguistically by Kuteva (1998, 2001). However, the morpheme *-tæʔ* cannot in general be considered an ‘avertive’ gram according to Kuteva’s definition (2001: 84), which stresses three ‘essential’ characteristics:

counterfactuality, imminence, and past-tense reference. While Hup *-tǣʔ* shares the feature of counterfactuality with avertive constructions in other languages, its use in conditional expressions does not always meet the criterion of imminence, and it is not in general restricted to past events—whereas Kuteva stresses that “the avertive structure is restricted to past contexts only”. Cases of Counterfactual *-tǣʔ* in reference to non-past events are common, both in clearly conditional expressions like (12-14) above, and in more ‘avertive’ examples like (28-30):

- (28) *tih nɔh-yiʔ-tǣʔ-ǣw-ay*
 3sg fall-TEL-CNTRFCT-FLR-INCH
 ‘It’s just about to fall.’ (OS)
- (29) *doh-nih tih ni-tǣʔ-ǣp=b’ay*
 curse-NEG 3sg be-CNTRFCT-DEP=AGAIN
 ‘He’s on the verge of cursing them again.’ (B-Cv.2.9)
- (30) *ɣũ yúp ní-íy, tók hɛy-tǣʔ-ǣʔ, nɔh-hə!*
 who thus be-DYNM belly wide-CNTRFCT-DECL say-TAG2
 ‘Who is thus, (who) could have a belly that wide (to contain all that beer), say!’
 (TD.Cv.101)

Hup *-tǣʔ* is therefore best considered not an ‘avertive’ gram per se, but rather a counterfactual irrealis gram that has developed an avertive-type extended function. This development has undoubtedly come about through the ability of either of the two linked clauses in a conditional construction to appear by itself, while its companion may be left unstated when it can be recovered from the discourse. In most of the ‘avertive’ examples of the Counterfactual’s use above, in fact, a conditional clause (as protasis) and counterfactual translation could easily be supplied, such as (example 23): ‘you almost fell’ ~ ‘you would have fallen (if you had not caught yourself)’. Both the ‘avertive’ use and the more straightforward counterfactual use of *-tǣʔ* share the interpretation that an

event in the past was not realized at all (because some necessary condition was not met), or that a non-past event is judged to be unlikely or impossible.

A final observation regarding the ‘avertive’ function of *-tæʔ* involves its behavior in negative contexts, which follows the same rules as its conditional/counterfactual realization (§14.2.1 above). Because *-tæʔ* cannot co-occur with the verbal Negative suffix *-nɪh*, an averted *negative* event can only be expressed with Frustrative *yæʃh*:

- (31) *ʔāh widham-nɪh yæʃh; g'im-tæʔ-æʃy yæʃh*
 1sg arrive.go-NEG FRUST capsize-CNTRFCT-DYMN FRUST
 ‘I almost didn’t arrive; I almost capsized/ drowned.’ (EL)

As noted in §16.4, *-tæʔ* can occur with the reinforcing negative particle *næ*, which otherwise is restricted to contexts in which an explicitly negative morpheme is present (example 32). This is additional evidence that Counterfactual *-tæʔ* (at least in its ‘avertive’ function) is itself inherently negative (see §14.2.1 above), which makes sense given its irrealis function.

- (32) *nihuʔ næ núp j'áh cóʔ ni-tæʔ-ní-h !*
 all NEG:R this land LOC be-CNTRFCT-INFR2-DECL
 ‘All of these (evil beings) were almost/would have been in our land!’ (H.33)

A few frozen lexical expressions involving *tæʔ* as a root form suggest that the Counterfactual marker may have grammaticalized from what was historically a verb root. These include the Factitive form *hi-tæʔ* (often realized together with the Frustrative as

hi-tǣʔ-ǣỹ yǣh̃ ‘imitate, copy, do as if’, as in (33); this form also appears in the verb compound *ʔid-hi-tǣʔ-* (speak-FACT-CNTRFCT-) ‘imitate speech or sound’.

- (33) *mǎh-ǎn=mah cǎp̃ tih hitǣʔ-ǣh̃, doh ʔǎỹ-ǎh̃*
 inambu-OBJ=REP other 3sg imitate-DECL Curupira-DECL
 ‘The inambu is another that he imitates, (does) Curupira.’

Other such lexicalized forms are *tǣm̃h̃h̃* (variant *tǣm̃h̃*) ‘laugh’, which possibly involves the root *ñh̃* ‘say’, and *tǣʔ-key-* ‘measure’, from *key-* ‘see’. At least in the case of ‘imitate’ and ‘measure’, the lexicalized forms have in common with the Counterfactual gram a semantics of hypothetical likeness; of fulfilling some, but not all, of the criteria necessary for having a particular identity. Just as ‘imitate’ could be translated ‘do as if’ (i.e. be like the real thing, but not the same), ‘measure’ could be translated ‘see as if’, since in Hup culture measuring something usually involves suggesting a hypothetical replacement for the actual entity (e.g. ‘the length of my arm’; ‘from here to that tree’, etc.). Even ‘laugh’ could perhaps be interpreted similarly, i.e. ‘like speaking, but different’.

14.3. Alternative Counterfactual form =*tih*

In addition to *-tǣʔ-*, Hup has an alternative Counterfactual form =*tih*, illustrated in examples (34-36) (see also 5-6 above). This form occurs exclusively in conditional expressions, but is less common than *-tǣʔ-*, with which it appears to be freely interchangeable; the two can also co-occur (example 36). The factors governing the choice between these two counterfactual markers are not yet well understood; however, Counterfactual =*tih* tends to be followed by the Inferential evidential =*cud* (although this

is not required for grammaticality), while *-tæʔ-* is much more rarely followed by evidentials. Note that the form of Counterfactual *=tih* resembles the clause-final emphasis marker *tíh* (see §15.3.1.3), but unlike the emphasis marker it is an unstressed enclitic, which tends to be followed by other enclitics.

- (34) *ʔín cóʔ-óy=b'ay deħ-ét b'íyíʔ ʔín ní-tæñ, yñ ham-nñh=tih=cud=mah*
 1pl LOC-DYNM=AGAIN water-OBL only 1pl be-COND thus go-NEG=CNTRFCT2=INFR=REP
 'If we lived only by the river, things would not go well for us, they say.' (H.33)
- (35) *hám-áy=tih=cud ʔāñ-āñ, deħ d'oj-óy keyóʔ, ʔāh ham-nñh-ñh*
 go-DYNM=CNTRFCT2=INFR 1sg-DECL water rain-DYNM CAUSE 1sg go-NEG-DECL
 'I would have gone, but since it rained, I did not go.' (EL)
- (36) *ham-tæʔ-æý=tih=cud yæñ ʔāñ-āñ*
 go-CNTRFCT-DYNM=CNTRFCT2 FRUST 1sg-DECL
 'I would have gone' (EL)

14.4. Frustrative *yæñ*

The Frustrative marker has a range of possible interpretations: it can indicate that the intended or anticipated goal of an action is unrealized, the action itself did not reach completion, it occurred but was ineffectual, its resulting (intended) state did not last, or that its eventual outcome is in doubt. Unlike Counterfactual *-tæʔ-*, *yæñ* does not entail that the event does not or will not take place; rather, it has to do primarily with intentions or expectations relating to the event. Frustrative *yæñ* is a particle, which—like many other peripheral formatives in Hup—can appear inside the verb core as an Inner Suffix when followed by certain Boundary Suffixes (particularly the Declarative; see §3.5).

Examples of Frustrative *yǎh* are given in (37-38); here the event in question

did take place, but the intended goal was not realized. In (37), for example, the jaguar has been tricked by the crab, who has robbed him of his eyes; the jaguar's attempts to rectify the situation are of no avail. In (38), the speaker had strung her beads on a long string to wear around her neck, but they were subsequently lost or stolen.

- (37) “*ʔǎn kəwǎg d’o ʔ-tu ʔ-ʔáy!*” *tɪh nɔ-yǎh-ǎh...* *tɪh pe ʔpe ʔ-yǎh-ǎh*
 1sg.OBJ eye take-immense-VENT.IMP 3sg say-FRUST-DECL 3sg grope-FRUST-DECL
 ‘Put my eyes back in! he said (in vain)...he groped around (in vain)...’ (H-CO.3)

- (38) *tɪt w’ǎt-ǎt ʔǎh cuh-ʔe ʔ-yǎh-ǎh*
 string long-OBL 1sg string-PERF-FRUST-DECL
 ‘I strung (the beads) on a long string (in vain).’ (I-Mon.4)

In a compound verb, the ‘in vain’ sense of the Frustrative applies to the compound as a whole. This may mean that all the sub-events (as represented by the verb roots within the compound) are carried out while the goal of the overall event remains unrealized, as in (39) (in which the teaching was begun but not continued). It may also mean that only some of the sub-events actually took place, to the effect that the goal still is unrealized, as in (40) (where the speaker wants to converse in Portuguese, but is unable to do so).

- (39) *teghɕ=ʔǎy=wa j’ám ʔh-ǎn b’oy-cum-ni-yǎh-ǎh*
 Non.Indian=FEM=old.woman DST.CNTR 1pl-OBJ teach-beginning-be-FRUST-DECL
 ‘A Non-Indian woman (long ago) began to teach us (in vain).’ (she was ordered to leave by the Tukanos). (P-B.1)

- (40) *nɪŋ=d’əh wid-nǎh-tǎh=hin, ʔǎh ʔid-tuk-yǎh-ǎh*
 2pl=PL arrive-come-COND=also 1sg speak-want-FRUST-DECL
 ‘When you types (Non-Indian people) come here, I’d like (in vain) to talk with you.’ (but can’t speak Portuguese) (T-PN.5)

Frustrative *yǎh* often occurs following evidentials and other formatives (41-

43), including the Intensifier suffix *-(V)cáp* (example 43; see §15.1.1):

- (41) *tĩh wǎd tĩh w'ob-ǎ-y=cud yǎh-ǎh*
 3sg.POSS food 3sg set-PERF-DYNM=INFR FRUST-DECL
 'She put her food up, apparently (in vain).' (some things were nevertheless stolen)
 (P-B.8)

- (42) *ǎh j'ǎm-tú-y=hǎ yǎh*
 1sg bathe-want-DYNM=NONVIS FRUST
 'I'd like to take a bath...(in vain).' (I won't because it is too cold)

- (43) *tĩh-ǎh ǎh key-tuk-ucáp yǎh-ǎh*
 3sg-OBJ 1sg see-want-INTS1 FRUST-DECL
 'I'd really like to see him (in vain).' (because he is not able to come) (OS)

Used in a negative predicate, *yǎh* indicates that a negative event has impeded a desired outcome or situation (i.e. 'did not do (verb), to our disappointment'), as in (44). As discussed above (§14.2.2), the same construction can indicate that a negative event has been narrowly averted (i.e. 'almost did not do Verb'); these interpretations are dependent on context.

- (44) *núp=b'ay katánya-át-ǎy=ǎh ǎh-ǎh huǎ w'ob-nĩh yǎh=nih tí*
 this=AGAIN Castanha-OBL-who=MSC 1pl-OBJ tobacco set-NEG FRUST=EMPH.CO EMPH.DEP
 'As for this one from the Rio Castanha, (he) doesn't set any tobacco out for us'
 (as a contribution to the drinking party). (P.Sp.)

Frustrative *yǎh* is common in exclamations of doubt (often phrased as exclamatory/ rhetorical questions), in which it expresses uncertainty about the outcome of the event in question—usually vis-à-vis the intentions or hopes of the speaker—as opposed to the actual failure of the event or its goal (examples 45-49). Note that *yǎh* can

encliticize to interrogative pronominal forms such as *hĩcóp?* ‘where’ and *hĩn’ĩh* ‘what’

and can occur more than once in the clause (45, 47).

- (45) *hĩcóp? yǎh tĩh ham-yǎh-ǎh? tĩ*
 Q-LOC FRUST 3sg go-FRUST-INT EMPH.INT
 ‘Where could he have gone to (he was just here)?’ (T-C.4)
- (46) *hĩn’ĩh-ĩ yǎh tĩh tĩ?! dɔʔkey yǎh tĩh tĩ?!*
 Q-be.like-DYNM FRUST 3sg EMPH.INT right FRUST 3sg EMPH.INT
 ‘How can it be? Wasn’t it right?!’ (H-CO.1)
- (47) *hĩn’ĩh bĩg yǎh j’ǎh yǎʔ...kǎdcak-wog bĩg yǎh-ǎw-ah yǎ?!*
 Q-NMZ HAB FRUST DST.CNTR mom pass.climb-EMPH1 HAB FRUST-FLR-FOC TAG1
 ‘Why in the world does Mom always climb up there (when she comes back from the roça)?’ (I-M.15)
- (48) *ʔamĩh hĩp d’ĩh-ĩw-ay yǎh tí!*
 2sg.POSS fish rot-FLR-INCH FRUST EMPH.DEP
 ‘Your fish is probably already spoiling!’ (T-C.6)
- (49) *ʔĩn-ĩp yĩn’ĩh=n’ǎn hipǎh-nĩh yǎh tí!*
 1pl-DEP that-NMZ=PL.OBJ know-NEG FRUST EMPH.DEP
 ‘We (humans) wouldn’t know about these things!’ (I-M.24)

As noted above (§14.2), one of the most common uses of the Frustrative is in combination with the Counterfactual marker *-tǎʔ-*, especially in conditional constructions regarding events that did not or definitely will not occur (examples 50-51). This use is clearly compatible with the ‘in vain’ function of the Frustrative; because the event itself was averted or unrealized, so was any outcome from it that might have been anticipated.

- (50) “*nĩŋ nɔh-túʔ!*” *nɔ-ɔy yǎh=mah; ʔĩn nɔh-túʔ-tǎh,*
 2pl fall-immense.IMP say-DYMN FRUST=REP 1pl fall-immense-COND
 ‘“You all jump in!” he said (in vain); had we jumped in,

ʔĩn=mah teghɔ̃=d’əh ni-tǎʔ-yǎh-ǎh
 1pl=REP Non.Indian=PL be-CNTRFCT-FRUST-DECL
 we would have been Non-Indian people, it’s said.’ (LG-C.29).

- (51) *tĩh ye-tǎʔ-ǎy yǎh!*
 3sg enter-CNTRFCT-DYMN FRUST
 ‘It (the ball) almost went in (to the goal)!’ (OS)

Occasionally, a speaker may even leave out Counterfactual *-tǎʔ-* and use only *yǎh* to indicate an attempted or desired activity event that fails to occur (not the normal function of the Frustrative):

- (52) *tĩh d’óʔ-óy yǎh=mah yúp, tǎ ʔǎy-ǎw-ǎp*
 3sg take-DYMN FRUST=REP that.ITG woman-FLR-DEP
 ‘She would have taken him (as her husband), the woman.’ (H.84)

Example (53) amply illustrates the related (but usually distinct) uses of Frustrative *yǎh* and Counterfactual *-tǎʔ-*. This passage comes from a text describing the creation of humans by Bone-Son, the Hup creator or culture hero. Bone-Son tries out and discards various physical attributes in his creation efforts, each of which would have been a human characteristic had he decided to keep them.

- (53) *yúw-ay=mah, tĩh=wəd bíʔ-yǎh-ay-áh, wəd-nǎw’*
 that.ITG-INCH=REP 3sg=old.man work-FRUST-INCH-DECL food-crop
 ‘Thus it was, that he did (in vain); he put a

tĩh w’ob-yǎh-mah-áh, d’oʔ-yíʔ-ǎy=mah, kən-nĩh=mah.
 3sg set-FRUST-REP-DECL take-TEL-DYMN=REP like-NEG=REP
 bird’s crop (on the humans, in vain), then he took it off, he didn’t like it.

wəd-nǎw’ paw’-pog-tǎʔ-ǎy=mah ʔĩn-ĩh
 food-crop swell-EMPH1-CNTRFCT-DYMN=REP 1pl-DECL
 We would have had a bulging bird’s crop.

d'úb=mah tih d'o ʔ-g'et-yǎh-ǎh, d'ub-ni-tǎʔ-ǎy yǎh=mah,
 tail=REP 3sg take-stand-FRUST-DECL tail-be-CNTRFCT-DYNM FRUST=REP
 Then he stuck a tail on (in vain); we would have had a tail;

ʔin-ih, kɔn-nih=mah, d'o ʔ-yiʔ-ǎy=mah
 1pl-DECL like-NEG=REP take-TEL-DYNM=REP
 but he didn't like it and took it off.' (LG-C.20)

A final verbal use of Frustrative *yǎh* is in the idiomatic expression of regretted failure, *nɔ-cud-yǎh-ǎh* 'should, should have' (examples 54-55). This is a frozen, idiosyncratic construction,¹⁶¹ which attaches as a suffix-like unit to the preceding verb form (as evidenced by the verb stem's lack of primary stress, lack of its own Boundary Suffix, and the inability of a subject to come between the two). A first person subject is ungrammatical with this expression, and the final Declarative marker cannot be replaced by the Dynamic suffix or other inflectional form.

(54) *ʔapɪd-yiʔ tih d'o ʔ-cɔp-yiʔ-nɔ-cud-yǎh-ǎh*
 immediate-TEL 3sg take-go.from.river-TEL-say-be.inside-FRUST-DECL
 'He should have brought it up right away.' (B.Conv.2.8)

(55) *ʔam pɛ-nɔ-cud-yǎh-ǎh*
 1sg go.upriver-say-be.inside-FRUST-DECL
 'I should have gone upriver.' (EL)

Like certain other verbal formatives (but by no means all), the Frustrative can attach directly to predicate nominals without a copula verb (cf. §17.3.4). As such, it attaches to the entire predicate nominal phrase as an enclitic. Its frustrative function here is similar to its function with verbal predicates; for example, (56) was uttered in joking reference to a piece of my hair, and (57) comes from a story in which a man fishing with

a spirit companion finds that the spirit's 'fish' (which the man is expected to catch) appear to humans as jaguars—making them quite difficult to pull in, string up, and carry home.

- (56) [hǝp tǎh̃ yǝ pay-ñh mún] **yǎh̃** yúw-úh
 fish small dangle bad-NEG INTS2 FRUST that.ITG-DECL
 'It would make a not-bad minnow-fishing-line (in vain).' (B.Conv.1.1)

- (57) yí-d'ǎh̃ [ya lám=d'ǎh̃] **yǎh̃**=mah ʔh̃-ǎh̃-ǎw-ǎh̃!
 that.ITG-PL jaguar=PL FRUST=REP 1pl-OBJ-FLR-DECL
 'They are jaguars for us (humans)' (but traíra fish for spirits).

- (58) [yǎh̃=yíʔ] **yǎh̃** yúw-up tí
 thus=TEL FRUST that.ITG-DEP EMPH.DEP
 'It should/could be like this (but generally isn't).' (P-Sp.2)

In example (59), the speaker uses the Frustrative and the Perfective to mark the name of a dead person, indicating—as does the past tense of the English translation ('that *was* her name')—that the link between the actual person and the use of the name has been severed by her death (even though, of course, the name can still be applied to the memory of the person). Because the use of the Frustrative in general implies that the event is contrary to expectation or desire (of the speaker or actor), it also functions here to convey a sense of the speaker's sorrow over her mother's death.

- (59) nǎh̃ ʔh̃n tǎh̃-yíʔ-ǎh̃...
 1sg.POSS mother finish-TEL-DECL
 'My mother died...

yowaǎna-ʔéʔ **yǎh̃**=mah yúw-úh, tǎh̃h̃ hǎh̃-áh̃
 Joanna-PERF FRUST=REP that.ITG-DECL 3sg.POSS name-DECL
 she was called Joanna, (that was) her name.' (A.int.118)

¹⁶¹ This form probably comes from the expression *nǎ-cud-* 'advise, persuade'. The most likely identity of the form *cud* here appears to be the verb 'be inside', rather than the (formally identical) Inferred evidential.

In addition to its use as a Frustrative marker, the form *yǎh* also occurs independently as a verb root (as do many other bound verbal formatives in Hup), meaning ‘order, compel, request’, as in (60) (here in its imperative form):

- (60) *kayak deḥ ʔəg-yǎh yú-wəd-ǎn;*
 manioc water drink-order.IMP that.ITG-old.man-OBJ
 ‘Tell that old fellow to drink manicuera;

kɔw yo ʔ-wəd-yǎh, yú-wəd-ǎn
 pimenta dip-eat-order.IMP that.ITG-OBJ
 tell that old fellow to dip out and eat pepper-broth.’ (B.Cv.1.8)

The verbal and Frustrative uses of *yǎh* can co-occur in the same verbal construction, illustrating that they are functionally and (at least in this context) formally distinct:

- (61) *deh-cǎy-ǎn tih hop-yǎh-ǎh, hop-yǎh-ǎy yǎh=mah*
 water-beetle-OBJ 3sg get.wet-request-DECL get.wet-request-DYNM FRUST=REP
 ‘He sent the water-beetle into the water, sent (him) into the water in vain.’
 (LG-O.13)
- (62) *ʔñ-ǎn b’ɣiʔ tih d’ob-yǎh-cud-yǎh-ǎh*
 1pl.OBJ only 3sg go.to.river-request-INFR-FRUST-DECL
 ‘He told only us to come down (in vain—others came as well).’ (P-B.4)

Historical Note

Despite their synchronic independence from each other, the verb root *yǎh*- ‘order, compel, request’ probably represents the historical source of the Frustrative morpheme, which would have developed from the compound-final verb root *yǎh*- via a process of grammaticalization (cf. §9.4.3). As discussed in §3.5, the ability of clitics to move in and out of the verb core (depending on the presence or absence of the Dynamic and other Boundary Suffixes) probably facilitates this transition from compound-internal verb stem

to grammaticalized enclitic, and provides a context in which the two constructions (yǎh- as verb stem and yǎh̃ as Frustrative marker) are still formally identical. While the semantic link between the two is not immediately obvious, it arguably lies in the fact that speakers are much more likely to bother with explicitly *stating* that they have ordered or compelled someone to do something if that person has not carried out the request. That is, in stating ‘I compel him’ or ‘I requested this to be done’, the speaker is usually implying some degree of frustration that the action has not yet been carried out.

14.5. Cooperative -nǎh̃

The verbal Boundary Suffix -nǎh̃ conveys a sense of cooperation. In its most frequent function, -nǎh̃ creates a type of hortative construction, which indicates that agents should carry out an activity *in cooperation*, involving a shared goal or object. As such, it usually occurs with a first person plural subject (which may be dropped, as in 64). The Cooperative construction is illustrated in (63-65):

- (63) b’oŷ ʔm̃ kək-ʔay-nǎh̃
 traira.fish 1pl pull-VENT-COOP
 ‘Let’s go fish for traira fish (together).’ (I-M.21)
- (64) hám-áy, y’æʔ-ʔay-nǎh̃
 go-INCH.IMP defecate-VENT-COOP
 ‘Come on, let’s go defecate (together).’ (grandmother to child) (OS)
- (65) bodáca d’oʔ-ʔáy hám, ʔm̃ wæd-nǎh̃!
 cookies take-VENT.IMP go.IMP 1pl eat-COOP
 ‘Go get some cookies, we’ll eat them (together)!’ (OS)

This hortative use of Cooperative *-nĩŋ* is similar to that of the inclusive first person plural future construction with Declarative *-Vh* (see §17.3.2), in which a sense of immediacy may be signaled by the Ventive and Perfective Aspect markers (example 66a). However, *-nĩŋ* places more focus on the *cooperative* interaction among the participants than does the Hortative Declarative construction, which simply entails the joint performance of the activity (66b).

- (66) a) *hám-áy, ʔín key-ʔay-ʔé-h !*
 go-INCH.IMP 1pl see-VENT-PERF-DECL
 ‘Come on, let’s go see (together)!’
 b) *hám-áy, ʔín key-nĩŋ !*
 go-INCH.IMP 1pl see-COOP
 ‘Come on, let’s go see (together)!’ (OS)

Cooperative *-nĩŋ* also occurs with other persons than the first person plural, although this is considerably less common. In these cases, *-nĩŋ* often signals the centrality of an *object* to the cooperative activity to be carried out. This object must be topical to the discourse, but need not be explicitly stated, as example (67a) illustrates. If there is no common object involved, the lexical form *ʔæyæŋ-yi?* ‘together’ is preferred, and the verb does not take *-nĩŋ* (example 67b).

- (67) a) *dóʔ=d’əh muhuʔ-nĩŋ*
 child=PL play-COOP
 ‘The children will play (with it).’ (i.e. together with a shared object such as a ball) (EL)
 b) *ʔæyæŋ-yi? dóʔ=d’əh muhũʔ-té-h*
 together-TEL child=PL play-FUT-DECL
 ‘The children will play together.’ (EL)

Use of *-niŋ* with a singular subject is also possible. In these cases, the focus is often on a cooperative or solicitous activity, such as the speaker's offer to delouse the addressee in (68):

- (68) *næm ʔám-ǎn ʔǎh key-niŋ*
 lice 2sg-OBJ 1sg see-COOP
 'How about I check you for lice.' (T-C.2)

In addition to the focus on a cooperative activity linking participants, use of *-niŋ* in singular-subject clauses—as in those with plural subjects like (67a) above—often highlights the role of some object that is required for the activity (i.e. *with* which the activity must be performed):

- (69) *ʔamŋ hɔhtég ʔǎn way-ʔéʔ hɔp ʔǎh kək-ʔay-niŋ*
 2sg.POSS canoe 1sg.OBJ go.out-PERF.IMP fish 1sg pull-VENT-COOP
 'Lend me your canoe, I'll go fishing (with it).' ~ 'it will allow me to fish' (EL)

- (70) “*ʔǎn niŋ d'oʔ-næn, mæh!*” *nɔɔy, “ʔǎh ʔəg-niŋ!”*
 1sg.OBJ 2pl take-come.IMP younger.sister say-DYNM 1sg drink-COOP
 'Bring me some, sister!' (I) said, 'I'll drink some!' (TD.Cv.103)

- (71) *tih yɔh d'óʔ-op yæh=mah tih ham-yæh-æh,*
 3sg medicine get-DEP FRUST=REP 3sg go-FRUST-DECL
 'He went to get medicine (in vain);

tā ʔǎy=n'ǎn tih yɔh-ni-niŋ
 woman=PL.OBJ 3sg medicine-be-COOP
 he would medicate/enchant the women (with it).'
 ~ 'which would allow him to medicate/enchant the women' (LG-C.16)

In addition to its use with both singular and plural forms of first and third person subjects, Cooperative *-niŋ* may be used with a singular second person subject:

- (72) *ʔám ʔəh-nĩŋ*
 2sg sleep-COOP
 ‘You can sleep with it.’ (handing someone a hammock) (EL)

However, the use of the *-nĩŋ* verbal marker is ungrammatical with the second person plural pronoun, creating a gap in the paradigm. The only readily apparent motivation for this is that the second person plural pronoun *nĩŋ* is essentially identical to the Cooperative suffix. Their incompatibility may be a clue to a diachronic relationship between these two forms; alternatively, it could possibly be motivated by a desire to avoid repetitive forms, especially since pronominal *nĩŋ* is extremely common in Hup discourse.

The form *nĩŋ* plays another role in Hup grammar, in addition to its use as second person plural pronoun and verbal suffix. It acts as a verb root relating to a personal association between human participants, meaning roughly ‘expect someone, await someone’s arrival’, as in (73):

- (73) *cāp=ĩh-ǎn tĩh nĩŋ-íp tĩh !*
 other=MSC-OBJ 3sg expect.someone-DEP EMPH2
 ‘He was expecting a different person!’ (P.DP.84)

It frequently occurs together with the frustrative marker in the expression *nĩŋ-yǎh-ǎh* ‘hope for, expect someone (in vain)’, typically used in situations where the speaker had thought someone was coming but was mistaken. People in the village reportedly said (74) when they were expecting me and heard another boat pass by on the river.

- (74) *páti-ǎn páh ʔín nĩŋ-yǎh-ǎh*
 Pattie-OBJ PRX.CNTR 1pl nĩŋ-FRUST-DECL
 ‘We thought/hoped it was Pattie!’ (EL)

The verb *níŋ-* also appears in the form *hup-hi-níŋ-* ‘await someone’s expected arrival’, which involves the Reflexive form *hup-* together with the Factitive *hi-* (example 75)—and is semantically quite similar to the other uses of *níŋ-*.

- (75) *tíh-ǎn=yí?* *páh* *ǎh* ***hup-hi-níŋ-ǎ***
 3sg-OBJ=TEL PRX.CNTR 1sg RFLX-FACT-níŋ-DYNM
 ‘I’m waiting for him to arrive.’ (EL)

The focus on interaction or association between two human participants conveyed by *níŋ-* as a verb is strikingly similar to the cooperative function of the *-níŋ* verbal suffix. Especially in light of the fact that many Hup grammatical particles have likely historical sources in compounded verb roots, a relationship between these two forms is quite plausible. Whether these forms are in fact related to each other or to the second person plural pronoun will have to await future investigation.

14.6. Apprehensive mood

The Apprehensive mood is used to deliver a warning to the addressee about a possible event. It is expressed as a main clause in which the predicate is the simple verb stem, free of the verbal Boundary Suffixes that are obligatory in all other moods except the imperative (cf. §13.4). In other words, the Apprehensive can be understood as represented by a zero morpheme (although this is not indicated in the gloss line in the examples here), ‘substituting’ for a concrete Boundary Suffix that would otherwise be present.

The Apprehensive construction is formally very similar to the imperative, which is likewise indicated by a bare verb stem lacking a Boundary Suffix. Their primary

difference is that all imperative forms receive an obligatory high tone (on the last syllable of the stem), whereas tone on Apprehensive roots varies (see discussion below). Further distinguishing features are the fact that the second person addressee in the Apprehensive mood is always explicitly stated, whereas in the imperative a singular (although not a plural) second person subject is almost always dropped. Also, the subject of an apprehensive clause may be first, second, or third person, whereas the subject of an imperative can only be second person; however, the second-person addressee must be explicitly stated in the Apprehensive clause as either the subject or the object of the verb.

Despite their relatively subtle differences, the formal similarity between the Apprehensive and imperative modes in Hup is an intriguing puzzle. This similarity may be due to a functional and/or historical link between the two constructions, since the Apprehensive mode can be understood as involving an implied imperative. In the examples below, an Apprehensive statement such as ‘you’ll fall!’ is typically an indirect speech act meaning ‘stop doing that!’—but one that leaves the addressee room to make the decision for him/herself.

Examples of the Apprehensive mood are given below, including a reflexive verb form (example 79):

- (76) *ʔam nʔh!*
 2sg fall.APPR
 ‘(Watch out,) you’ll fall!’ (OS)
- (77) *ʔam tʔh!*
 2sg break.APPR
 ‘(Watch out,) you’ll break (yourself)!’ (OS)
- (78) *ʔám-ǎn tɪh g’ǣ!*
 2sg-OBJ 3sg bite.APPR
 ‘(Watch out,) he’ll bite you!’ (OS)

- (79) *náw=yi? dí? mĩ? bí?, ʔám hup=h ʃk!*
 good=TEL VDIM UNDER work.IMP 2sg RFLX=sawing.motion.APPR
 ‘Go a bit more carefully on that last bit, you’ll cut yourself!’ (B.Cv.96)

A warning can be intended as a threat, as in example (80), in which a mother is telling her son to obey lest his father punish him. A threat is also the default interpretation when the subject is in the first person (example 81).

- (80) *ʔám-ǎn cé mǎh! d’oʔ-kədnǎn! kow’-nínih-hə!*
 2sg-OBJ Moises beat.APPR take-pass.come.IMP peel-NEG.IMP-TAG2
 ‘Moisés will beat you! Bring it here! Don’t peel it!’ (B.Cv.137)
- (81) *ʔám-ǎn ʔǎh yɔʔmǎy yók tán-áh!*
 2sg-OBJ 1sg anus stab.APPR FUT.CONTR-DECL
 ‘I’ll stab you in the anus!’ (H.TY.79)

Note, however, that the Apprehensive mood is not the only strategy available for delivering a threat; future-tense declarative clauses are also an option:

- (82) *ʔám-ǎn mǎnǎy=yi? ʔǎh mǎh-yiʔ-té-h!*
 2sg-OBJ straight=TEL 1sg beat-TEL-FUT-DECL
 ‘I’ll kill you directly!’ (JA.71)

While warning the addressee is by far the most common function of the Apprehensive mood, a speaker can also use an Apprehensive form to refer to a possible threat to his/her own safety:

- (83) *ʔǎn híd d’óʔ tán-áh*
 1sg.OBJ 3pl take.APPR FUT.CNTR-DECL
 ‘They (boys) would get me.’ (B.Cv.131)
 (girl explaining why she did not intend to visit another town)

Of Hup’s several evidential specifications (see §14.9 below), only the Reportive is grammatical in apprehensive clauses:

- (84) *ʔám-ǎn tǎh mǎh=mah!*
 2sg-OBJ 3sg beat.APPR=REP
 ‘He’ll beat you, it’s said!’ (EL)

The Apprehensive mood can occur with compound verbal constructions, involving multiple stems, emphasis markers, and aspect-related Inner Suffixes.¹⁶²

- (85) *náw=yiʔ tok-póg=hə cǎc, ʔam tok-pǎʔ-yǎ-yiʔ=pǒǵ!*
 good=TEL pound-EMPH1.IMP=TAG2 INTERJ 2sg pound-spill-lie-TEL.APPR=EMPH1
 ‘Pound (the coca) carefully, darn it! You’ll spill it all out!’ (B.Cv.89)

In keeping with Hup’s ‘possessor raising’ strategy (see §5.3.1)—by which human ‘possessors’ of body parts are preferred as the primary arguments of a clause, rather than the body part itself—the human ‘possessor’ may become the subject of an apprehensive clause. This is illustrated in example (86) (an admonition not to point at the rainbow, for fear that the malignant Rainbow Spirit might eat away one’s finger), and it results in an interpretation akin to a passive. The status of the ‘possessed’ body part in the clause is not completely clear, but it appears to be treated as an object or may possibly be incorporated into the verbal construction.

- (86) *cob-nínih! nǐŋ d’apúh tǎǵ!*
 point-NEG.IMP 2pl hand eat.away.APPR
 ‘Don’t point! Your finger will get eaten away!’ (OS)

One of the more intriguing aspects of the Apprehensive mood is the phonology of Apprehensive verb forms. As discussed above, both imperative and Apprehensive moods allow the verb stem to stand alone, without additional inflection; thus in the majority of cases the entire verb word is a single syllable, which receives its own primary stress. In

¹⁶² In an Apprehensive clause, stress may optionally apply equally to every syllable in the verb word.

the imperative mood, this is obligatorily realized as high tone, and in general vowel-final stems also take a (presumably epenthetic) final [h] in the imperative. For the Apprehensive forms, on the other hand, there is no final [h] on CV stems, and there is no single tonal value associated with this mode. Rather, the tone assignment varies from stem to stem. This does not appear to be either phonologically conditioned or random, but purely lexical; consultants are quite definite about which tone value is acceptable and which is not, even for elicited verb stems that would be expected to occur extremely rarely—if ever—in the Apprehensive mode in actual discourse.

As discussed in §2.3.2.2 (see also §3.1), it is not yet completely clear what the underlying tonal assignment is for verbs in general in Hup. Most Hup verbs do not appear to be contrastive for tone, and many verbal environments withhold primary stress from stems and assign it to suffixes, thereby creating a situation in which the Hup pitch-accent-based tone system cannot be realized on verb stems at all. However, the fact that verbs in apprehensive mood appear to have distinct tonal values suggests that Hup verbs in general actually do have underlying tones. This is supported by the fact that in the very few cases where there does appear to be a tonal contrast distinguishing verb stems, the contrast applies consistently in the Apprehensive mode:

- (87) *ʔám-ǎñ tɪh túk!*
 2sg-OBJ 3sg want.APPR
 ‘He’ll want/desire you!’ (warning a girl to watch out for a man) (EL)

- (88) *ʔám-ǎñ tɪh tuḱ!*
 2sg-OBJ 3sg sting.APPR
 ‘It will sting you!’ (warning someone to watch out for a tocandira ant) (EL)

14.7. Optative - *hũh*

The optative mood, an expression of “realizable wishes or hopes” (cf. Trask 1993: 195), is expressed in Hup by the verbal Boundary Suffix -*hũh*—which, according to the definition of a Boundary Suffix, does not require following inflectional material. In Hup, the optative mood is restricted to third person subjects (both singular and plural). It is illustrated in examples (89-92):

- (89) *hũh-way-nĩh-yi? nĩh, tĩh=hup tĩh way-hũh*
 carry-go.out-NEG-TEL be.IMP 3sg=RFLX 3sg go.out-OPT
 ‘Don’t carry him out (of the house), let him go out by himself.’ (OS)
- (90) *tĩh m’æ-hũh*
 3sg cool-OPT
 ‘Let it cool off’ (then I’ll drink the coffee). (OS)
- (91) *hĩd naw-hũh*
 3pl good-OPT
 ‘May they be well.’ (OS)
 (conventional expression for sending one’s good wishes via a traveler)
- (92) *hũy=d’əh b’f̥yi? bi?-hũh-ay, niŋ nɔʔh*
 woman=PL only work-OPT-INCH 2pl say-DECL
 ‘Let the women work by themselves, you all say.’ (P.Sp.101)

In a few cases, the optative has a ‘noncurative’ function—that is, it expresses a lack of control or lack of concern on the part of the speaker, rather than an actual desire.¹⁶³ For example, (93) was reported to have been uttered by a frustrated woman upon hearing that her husband had been dancing with other women at a drinking party:

- (93) *tĩh yam-hũh*
 3sg dance-OPT
 ‘Let him dance!’ (RU)

¹⁶³ This ‘noncurative’ extension of the optative is also attested in other languages, such as Russian (cf. Dobrushina 2003).

- (94) *tɪh d'oj-ɹũh, mɔ̃y mɪʔ ʔɪn-ɦ!*
 3sg rain-OPT house UNDER 1pl-DECL
 'Let it rain, we're in ('under') a house!' (RU)

As discussed in chapter 11, *ɹũh* is a highly promiscuous form in Hup. In addition to its occurrence as a prefix indicating reciprocity or interactive pluractionality and as a free lexeme 'sibling of opposite sex' (§11.2), it has three distinct realizations in suffix or post-stem position. In addition to its optative function as a Boundary Suffix, it occurs as a verbal Inner Suffix to form an applicative construction (§11.3), and as a particle associating with both nouns and verbs to signal epistemic modality (§14.8 below). Optative -*ɹũh* is formally and functionally distinct from these other post-stem realizations of -*ɹũh*, but it is nevertheless mutually exclusive with both of them—the Optative cannot occur with either the Applicative or the Epistemic Modality marker.

Historical Note

The formal resemblance between the Hup Optative and Applicative constructions is probably no accident; rather, it is very likely that the Optative construction derives historically from the Applicative.

As noted above, both the Applicative and the Optative markers are exclusively verbal suffixes, their main formal difference being that the Applicative is an Inner Suffix (requiring a following Boundary Suffix, usually either the Dynamic or Declarative suffixes), whereas the Optative is itself a Boundary Suffix. However, the imperative form of the Applicative has exactly the same form as the Optative construction—*ɹũh*

receives primary stress, and is not followed by additional suffix material, as is typical of the imperative construction generally in Hup (see §17.5):

- (95) *ʔǎn tɛg huḥ-ǎḥ !*
 1sg.OBJ wood carry-APPL.IMP
 ‘Go carry some wood for me! (OS)
- (96) *ʔám cóʔ-óy ʔǎn wɛt-ǎḥ !*
 2sg LOC-DYNM 1sg.OBJ pull.out-APPL.IMP
 ‘You pull (my eyes) out for me!’ (H.txt.77)

In addition to their identical formal realizations, the applicative imperative and the optative constructions occur in complementary distribution. The applicative imperative is used exclusively with second person subjects,¹⁶⁴ while the optative is used exclusively with third person subjects. Otherwise, in their expression of a desired future event (the most common function of both imperatives and optatives), the two are functionally very similar, as the following examples illustrate. The optative expression in (97) was uttered in reference to a piece of food that Fatima’s little brother had left uneaten, while the applicative imperative in (98) is an expression of permission or intention that the addressee eat something that the speaker does not want.

- (97) *tán pátima wæd-ǎḥ*
 later Fatima eat-OPT
 ‘Later Fatima can eat (it).’ (OS)
- (98) *ʔám wæd-ǎḥ*
 2sg eat-APPL.IMP (-Ø)
 ‘You eat (it for me).’ (EL)

¹⁶⁴ A hortative-type applicative construction with the first person plural can be formed with the Declarative suffix (see §13.3), as in the following example:

ʔin wæd-ǎḥ-úḥ!
 1pl eat-APPL-DECL
 ‘Let’s eat (his food)!’ (i.e. he has left it behind and apparently does not want it) (EL)

A historical progression from applicative imperative to optative mood would reflect a cross-linguistically common polyfunctionality between imperative and optative moods (encountered in Nepali (Indo-European, Bickel 1999), Russian (Indo-European, Dobrushina 2003), Buriat (Altaic, Dobrushina 2003), etc.). But why should this development in Hup have focused on the *applicative* construction, as opposed to any other imperative form? I argue that the choice of the applicative imperative is in fact motivated, and that this progression is indeed functionally plausible. Just as the applicative—by definition—adds a participant, which is typically a beneficiary (and, in Hup, is frequently not explicitly stated), so does an imperative construction also involve an implicit benefactive, since the speaker is necessarily a beneficiary of any carried-out command; minimally, his/her wish is gratified. Over time, the use of the Applicative marker in imperative constructions in Hup became understood as a general feature of imperative use, relating specifically to the explicit expression of wishes or hopes. This led to the reanalysis of the imperative applicative construction as a general expression of the hopes and wishes of the speaker, vis-à-vis their potential realization by some other person. This may also explain why this form did not develop into a strategy for expressing a first-person hortative, since the speaker is relatively in control of a first-person situation. In cases where this other person was a third party, as opposed to an addressee, the imperative applicative became reinterpreted as an optative construction.

14.8. Epistemic modality *ǎǎ*

The particle *ǎǎ* functions as a marker of epistemic modality, and signals both possibility and probability. Formally, the only features distinguishing it from Applicative -*ǎǎ*- and Optative -*ǎǎ* are its identity as a particle rather than a suffix, and its association with a wider range of clausal constituents. In particular, Epistemic *ǎǎ* attaches to and has scope over an entire predicate, including predicate nominals as well as verbal predicates, whereas the Optative and Applicative markers are strictly verbal. As noted above, none of these three distinct manifestations of postverbal *ǎǎ* can co-occur.

The following examples illustrate the association of Epistemic *ǎǎ* with a predicate nominal, indicating conjecture or possibility:

- (99) *hǎp yǎǎ=d'ǎh ǎǎ !*
 fish roast=PL EPIST
 'Maybe it's people cooking fish.' (discussing a smell) (OS)
- (100) *nǎǎ=tǎǎ=d'ǎh nǎǎ mǎǎ ǎǎ yúw-úh!*
 2pl=offspring=PL POSS payment EPIST that-DECL
 'This must be to pay back for (my killing) your children!' (P.BY.91)

The particle *ǎǎ* is common in rhetorical questions and equivocal statements.

Examples (101-102) are additional cases of its use with predicate nominals, while in (103-105) it associates with verbal predicates:

- (101) *ǎǎ cáp ǎǎ ǎǎ hǎp kǎk-w'ob-pǎǎ? páh ?*
 who INTS1 EPIST 1sg.OBJ fish pull-put-go.upstream-INT PRX.CNTR
 'Who could it be who is catching fish and setting them out for me?' (I-M1)
- (102) *húp=mǎh ǎǎ núp=ti?*
 person=DIM EPIST this=EMPH.TAG
 'Could this be a little person?' (M-DT79)

- (103) *hĩ□ nɔ-wo-y ʒĩh=mah j'ãh yúw-úh*
 Q say-EMPH-DYNM EPIST=REP PST.CNTR that-DECL
 'How the heck does this (story) go here?' (I-M11)
- (104) *hipãh-ãý ʒĩh ʒám hɔʔ, nuh-kəbɔk=d'əh?*
 know-DYNM EPIST 2sg TAG2 head-break=PL
 'You must know (them), right, sauva (lit. head-breaker) ants?' (P.BY.87)
- (105) *ham-tég ʒãh tĩ, ʒó ham-nĩh-ay ʒĩh ʒãh ni-tég=ti?*
 go-FUT 1sg EMPH.INT or go-NEG-INCH EPIST 1sg be-FUT=EMPH.TAG
 'Maybe I'll go, or maybe I shouldn't.' (deciding) (EL)

Epistemic *ʒĩh* is an obligatory part of a very common formulaic emphatic or rhetorical construction that expresses doubt or conjecture. In this semi-idiomatic construction, *ʒĩh* follows the predicate (whether nominal or verbal), while the clause-final (pronominal or demonstrative) subject takes the emphasis marker = *ʒĩh* (elsewhere 'masculine'; see §15.2.2):

- (106) *húp=pog ʒĩh tĩh=ʒĩh*
 person=EMPH1 EPIST 3sg=MSC
 'Could that be a person?!' (LG.txt)
- (107) *d'oʔ-kənɛn-kɛm báʔ, nĩ ʒĩh yúp=ʒĩh, ʒãh key-nĩŋ*
 take-quick.come-IMP2 PROTST 1sg.POSS EPIST that-MSC 1sg see-COOP
 'Bring it here quick, it might be mine, I'll have a look.' (when someone finds something) (EL)

The epistemic use of *ʒĩh* has given rise to the form *ʒĩhníy* 'maybe', which probably derives from Epistemic *ʒĩh* + *ni-iy* (be-DYNM). This derived form is typically used to mark epistemic modality (doubt or possibility) with verbal predicates, whereas *ʒĩh* by itself is more common with predicate nominals. Like other particles (including *ʒĩh*), *ʒĩhníy* is morphosyntactically bound to its host; it is unable to occur utterance-

initially, although the preceding form may be as minimal as *həʔ* ‘yeah’ (example 84).

Examples of the use of *ʔiħnáy* are given in (108-110).

- (108) *b'əkkáb=hin wɪdnæn-tég ʔiħnáy*
griddle=also arrive.come-FUT maybe
‘Griddles may also arrive.’ (P.Sp.106)

- (109) *“tɪħ-añ b'ɣiʔ pay-nɪħ mún tɪħ bɪʔ-ɪħ,” nɔʔɔy ʔiħnáy ʔañ, nɪɣ-ɪħ*
3sg-OBJ only bad-NEG INTS2 3sg work-DECL say-DYMN maybe 1sg.OBJ 2pl-DECL
‘“Only for him is she doing good things,” you all might be saying about me.’
(P.Sp.110)

- (110) *həʔ ʔiħnáy*
yes maybe
‘Yeah, maybe.’ (OS)

Another common form derived from Epistemic *ʔiħ* is the fused form *=cud ʔiħ*

[sũʔn'úh] ‘probably, apparently’, which derives from the Inferred evidential *=cud*

(§14.9.3) plus *ʔiħ*. The co-occurrence of *ʔiħ* with the Nonvisual evidential *=həʔ* (see §14.9.2) is also possible, but is much less common (and is not phonologically fused); see example (131) below. Other evidentials are not known to combine with Epistemic *ʔiħ* at all. The combination of the Epistemic modality marker and the Nonvisual evidential is used to express conjecture, especially where little observable evidence is available by which other observers could arrive at a similar conclusion:

- (111) *húp kəwəg=pog=cud ʔiħ !*
person eye=EMPH1=INFR.EPIST
‘It must have been a *person*’s eye (I saw)’ (txt)

- (112) *pěd d'ób-óy=cud ʔiħ*
PED go.to.river-DYMN=INFR.EPIST
‘Ped has gone down to the river (apparently).’ (OS)

The fused form =*cud* *ɺɺh* patterns much like Epistemic *ɺɺh*; it commonly occurs with predicate nominals, and appears in the formulaic rhetorical *ɺɺh... ɺh* expression (example 113), and together with the *ɺɺhníy* form (example 114).

- (113) *póg=cud ɺɺh* *yúp=ɺh*, *deh=teg=ɺh*
 big=INFR.EPIST that=MSC water=tree=MSC
 ‘It was really big, that water-tree.’ (M-DT77)

- (114) *wɺh=ɺh=cud ɺɺhníy*
 River.Indian=MSC=INFR.maybe
 ‘I guess he was Tukano.’ (I.M.46)

Historical Note

It is likely that the formal resemblance of all three suffixing or post-stem forms of *ɺɺh* (Applicative, Optative, and Epistemic modality markers) is due to historical polysemy, rather than chance homonymy. In fact, these three forms probably represent a grammaticalization chain, by which the Applicative developed into the Optative (as argued above), and then the Optative into the Epistemic modality marker.

The transition from Optative to Epistemic marker in Hup is functionally plausible. The primary role of the optative mood is the expression of the speaker’s attitude toward a future event, and particularly his/her wishes and hopes regarding a probable outcome. This is essentially an expression of deontic modality, which necessarily highlights a sense of uncertainty vis-à-vis the anticipated event. Foregrounding this uncertainty has arguably allowed Optative - *ɺɺh* to be reanalyzed as a marker of epistemic modality.

There is substantial cross-linguistic precedent for such a transition. An association between an optative/ noncurative function and the expression of probability is

found in numerous languages, such as Khakas (Turkic), Hindi, and Lavukaleve (Papuan) (cf. Dobrushina 2003). Similarly, a historic association between deontic and epistemic modality is also widely attested (cf. Palmer 2001: 87-89).

Formally, the transition from verbal suffix to predicative particle is also plausible for Hup, in light of the grammaticalization processes present in the language generally—although at face value an affix-to-clitic transition would appear typologically unlikely. In Hup, as the discussion in §3.7 illustrates, verb roots in compound-final position may take on auxiliary-like functions and grammaticalize into Inner Suffix forms, which come between verb stems and the obligatory Boundary Suffixes. From there, they may migrate out of the verb core to become peripheral formatives (enclitics and particles), a process that is facilitated by the flexibility of these peripheral forms to move in and out of the verb core, depending on the presence of the Declarative (and other) Boundary Suffixes:

V1 – V2 – Bdry → V1 – Core – Bdry → V1 – Bdry – Peripheral.form

Having developed into a peripheral formative, and having thereby lost some of the closeness of its association with the verbal host, the grammaticalized form develops the ability to associate with non-verbal predicates as well. Such a transition from verb stem to Inner Suffix to peripheral formative was part of the historical development of many Hup morphemes, such as the Nonvisual and Inferential evidential markers (§14.9 and §3.7), the Frustrative *yæh* (§14.4), etc.¹⁶⁵

¹⁶⁵ As discussed in §3.7, this historical trajectory from more bound → less bound is typologically exceptional from the point of view of grammaticalization theory.

Finally, it is also probable that these post-stem realizations of *ʔiħ* are historically related not only to each other, but also to the Reciprocal prefix and the free lexeme ‘sibling of opposite sex’, as argued in §11.2.

14.9. Evidentiality

From a typological perspective, Hup has a remarkably complex system of evidentiality, with as many as five distinctions conveyed by four different grammatical markers.

Evidentiality is here defined as a *grammaticalized* system for indicating the source of the information presented in a clause (cf. Aikhenvald 2003b); it is therefore understood as more than the capability—which is presumably common to all languages—to express information source by periphrastic means (cf. Chafe and Nichols 1986). It is not considered to be an expression of modality per se, since designation of information source may be (and often is) independent of speakers’ attitudes toward that information.

Hup formally marks evidential distinctions relating to information that is acquired nonvisually (but firsthand), by inference, and by report from another person. Visually acquired information can be understood to form a fourth evidential category, which is zero-marked and hence overlaps with the environments in which evidentiality is not specified at all. The Nonvisual, Inferred, and Reportive evidential markers are enclitics that modify the entire predicate or clause, and occasionally appear in Inner Suffix position when certain Boundary Suffixes (usually Declarative *-Vħ*) are present on the verb. Of these three evidential enclitics, the Nonvisual and Inferred markers represent a formal subsystem of their own in that they pattern in the same way, while the Reportive

marker is distinct. In addition to these encliticized forms, Hup has a second inferred evidential marker that occurs exclusively as a verbal Inner Suffix, and patterns quite differently from the other evidentials. These evidentials are summarized in Table 14.2:

Table 14.2. Evidentials in Hup

Default (includes visual)	Unmarked (-Ø)
Nonvisual	= <i>hɔ̃</i> (- <i>hɔ̃</i> -)
Inferred	= <i>cud</i> (- <i>cud</i> -)
Reportive	= <i>mah</i> (- <i>mah</i> -)
Inferred 2	- <i>ni</i> -

Important features of evidentiality in Hup include the fact that—unlike many other languages with systems of grammaticalized markers (including Hup’s neighbors Tukano and Tariana)—the specification of evidentiality is grammatically optional in Hup. Also, the information source encoded in Hup evidentials is understood as a rule to be that of the speaker, although in interrogative clauses it may be understood to be that of the addressee. Such skewed occurrence of evidential specifications with first-person referents is found in many evidential systems cross-linguistically (Curnow 2001).

The three evidential enclitics can occur in various clause types—declarative, interrogative, and exclamatory—and they occur independently of the time frame in which the event takes place (past, present, or future). However, there are some general restrictions on their distribution among clause types: only the Reportive evidential is grammatical in imperative clauses, and evidential markers do not occur at all in apprehensive or optative moods. Use of the additional inferred evidential is much more restricted.

This section introduces each of the Hup evidential specifications in turn, and discusses their functions, morphosyntactic patterning, and possible etymological sources. It also argues—particularly in the final Comparative Note—for the strong effect of areal influence from neighboring Tukanoan languages on the development of the Hup system.

14.9.1. Visual evidential ‘category’

Because evidential markers are to some degree optional in Hup even where they are appropriate, and because there are environments (such as apprehensive and optative moods) that seem to exclude the specification of evidentiality altogether, the lack of any evidential marker cannot easily be interpreted as signaling a distinct evidential ‘category’ of its own. Yet, to the extent that the expression of information source can be understood to conform to a coherent system in Hup, subject to pragmatic Gricean norms of truthfulness and informativeness, this absence of marking is to some degree consistent with a particular type of information: that which has been acquired visually by the speaker, or is generally considered common knowledge. Thus this kind of information can be understood to form a zero-marked core category of evidentiality, whereas in other cases the absence of marking may be due simply to the non-specification of evidentiality.

The use of minimal or zero marking to indicate visually acquired information is in fact typical of evidential systems cross-linguistically. This follows from a common hierarchy of evidential specifications, by which visual perception takes precedence over other kinds of perception or inference when selecting an evidential specification—typically followed in the hierarchy by other kinds of first-hand perception (cf. Aikhenvald 2003a: 22), as is the case in Hup. In Hup, speech genres dedicated to

visually acquired and/or common-knowledge information may be almost totally lacking in evidentiality marking.

Examples (115-16) illustrate Hup's zero-coding of information that was experienced visually by the speaker:

- (115) *ʔok-nɪh key-ham-g'et-yɪʔ-ay=Ø tɪh=ʔǎy-áh!*
 move-NEG see-go-stand-TEL-INCH=VIS 3sg=FEM-DECL
 'She was just standing there looking, without moving!' (speaker witnessed event).
 (TDcv.txt)

- (116) *mangǎ hǎd-ǎn təw-nɪh=Ø káh*
 Margarita 3pl-OBJ yell.at-NEG=VIS ADVR
 'Margarita didn't yell at them, actually.' (speaker was there) (TDcv.txt)

Clauses referring to generally known facts are likewise understood to be zero-marked for evidentiality, as in example (117).¹⁶⁶ These include descriptive discourse involving how some activity is typically carried out (assuming the speaker has participated in the activity him/herself; i.e. has witnessed it visually), as in (118), a description of how to prepare curare.

- (117) *tɪhǎy cǎh=deh tɪh ham-kamí=b'ay=Ø,*
 snake flood=rain 3sg go-moment.of=again=VIS
 'When the Snake-Rain (and its constellation) comes around,

núp j'ah cóʔ=b'ay tɪhǎy=d'əh ní-íy=b'ay=Ø
 this earth LOC=again snake=PL exist-DYNM=again=VIS
 here on earth there are (many) snakes.' (H.txt)

¹⁶⁶ Reference to on-going events that are not accessible to direct experience, such as habits of peoples in other lands, usually involves the reported evidential.

- (118) *hĩ hĩd hǽw-Ø-ǽh; nūt hǽw-yóʔ...*
 only 3pl scrape-VIS-DECL here scrape-SEQ
 ‘They just scrape it;

hĩd cǎn’ bĩʔ-d’óʔ-Ø-óh
 3pl leaf-cone make-take-VIS-DECL
 having scraped this much, they make a leaf-cone.’ (M.C)

Similarly, narratives of personal experience tend to be zero-marked for evidentiality:

- (119) *ʔǎh=tǽh ʔp ʔǎn tĩh d’oʔ-ʔĩh-Ø-uĩh, yěw*
 1sg=child.father 1sg.OBJ 3sg take-APPL-VIS-DECL armadillo
 ‘My husband used to catch armadillos for me.’ (MM.PN)

In other types of Hup discourse, however, the absence of an overt evidential marker is probably best understood as a lack of any evidentiality specification at all. As noted above, the expression of evidentiality in Hup is to some degree optional, and it is guided more by Gricean-type pragmatic principles of informativeness rather than by any grammatical rule. Thus evidential markers are sometimes left off in situations where the information source is already made obvious by the discourse context or is otherwise seen as relatively non-salient. For example, the Reportive marker typically does not appear on *every* clause in a narrative (although it is present on most), and the evidential =*hĩ* (which marks nonvisual, firsthand information) is common but not obligatory in expressions of personal thought processes and emotions. Compare (120a) (unmarked) and (b) (marked):

- (120) a) *ʔǎh-ǎp nĩŋ-ǎn=hĩn, yĩ-n’ĩh ʔĩd-hipǎh-nĩh...*
 1sg-DEP 2pl-OBJ=also that.ITG-NMZ speak-know-NEG
 ‘As for me, I don’t know how to say this to you all ...

nĩŋ-ǎn yĩ-n’ĩh ʔĩd-tuk-nĩh ʔǎh-ǎh
 2pl-OBJ that.ITG-NMZ speak-want-NEG 1sg-DECL
 I don’t want to say this to you all.’ (P.Sp)

- b) *ʔāh hipāh-nʔ=hɔ*
 1sg know-NEG=NONVIS
 ‘I don’t know.’ (OS)

The degree to which the absence of evidential marking should be considered a distinct ‘visual’ category may be partially a matter of perspective. As argued below (Comparative Note) and in Epps (in press), Hup has developed its evidential system to conform to a Tukanoan model (i.e. from a one-marker system specifying only reported information to a four-marker system specifying reported, nonvisual, and two types of inferred information). Three evidential markers have thus emerged through a multi-stage process of grammaticalization. These markers (as their putative sources suggest) underwent semantic extension during their development into evidentials, until they had expanded to cover large domains of meaning (e.g. extension from ‘heard’ information to all nonvisually acquired information, see §14.9.2 below). Accordingly, the unmarked domain of evidentiality in Hup shrank as the marked domains expanded. From a language-internal point of view, the absence of evidential marking is therefore not a coherent category in its own right, but simply what is left of the original domain of Hup grammar that had no specification for evidentiality at all; this interpretation is further supported by the grammatically optional quality of evidential-marking generally in Hup. On the other hand, this unspecified domain has gradually been shrinking down to fit a distinct model category, the ‘visual’ evidential specification of Tukanoan. Thus from the language-external or areal point of view, the ‘visual’ core of the unmarked domain in Hup has an underlying categorial reality of its own. Because both of these perspectives were available to Hup speakers as the language changed—and their general bilingualism in Tukano ensured the co-existing everyday reality of both systems within the Hup

speech community—the unmarked evidential specification in Hup is arguably understood by speakers as having a pragmatic identity *both* as a visual category and as an absence of evidentiality, depending primarily on the context. However, because they are formally indistinguishable, I will henceforth treat the default/visual evidential category as formally unmarked.

14.9.2. Nonvisual evidential =*hɔ̃*

Hup marks information that is acquired firsthand but nonvisually (i.e. sensorily) with the enclitic =*hɔ̃*. The most common source for the information is hearing, but can also be smell, taste, or touch:¹⁶⁷

- (121) *náciya pæ-cʰw-ɣ̃y=hɔ̃*
 boat go.upriver-COMPL-DYNM=NONVIS
 ‘The boat already went upriver.’ (speaker heard but did not see it) (OS)
- (122) *pæɣ̃=hɔ̃*
 umari=NONVIS
 ‘It’s umari fruit.’ (smelling mess on baby’s foot) (OS)
- (123) *g’əh náw=hɔ̃!*
 sweet good=NONVIS
 ‘It’s nice and sweet!’ (tasting something) (OS)
- (124) *húʔ=d’əh ní-icáp=hɔ̃*
 pium=PL exist-INTS1=NONVIS
 ‘There are a lot of piums (small biting insects)!’ (feeling their bites) (OS)

¹⁶⁷ Such an extension from the purely auditory domain to include non-auditory functions such as smell, touch, and thought has precedent elsewhere in Hup; in particular, the verb *wíʔ* is used to express both ‘hear’ and ‘understand’, and together with the incorporated noun ‘smell’ forms the compound *cĩh-wíʔ* (smell-hear) ‘smell’—while the distinct verb form *key-* ‘see, look’ normally refers to visual perception.

The Nonvisual evidential is also used to express one's own personal state.

This includes both physical sensation—sickness, a heavy burden, heat or cold, etc.

(examples 124-26)—and mental states such as emotion and desire (examples 127-28).

- (125) *ʔãh pɛʔ-éy=hɔ̃*
 1sg sick-DYNM=NONVIS
 'I'm sick.' (OS)

- (126) *g'i-nɪh=hɔ̃ yúw-úh*
 hot-NEG=NONVIS that.ITG-DECL
 'It's not hot.' (B.Cv.83)

- (127) *cadakaʔ yám ʔãh wiʔ-tú-y=hɔ̃*
 chicken song 1sg hear-want-DYNM=NONVIS
 'I'd like to hear the "Chicken Song".' (OS)

- (128) *tuk-nɪh=hɔ̃*
 want-NEG=NONVIS
 '(I) don't want to.' (OS)

The Nonvisual evidential in Hup can also be used to emphasize a personal opinion or thought, as in example (129), and can even serve to moderate a statement to make it more polite; for example, (130) was uttered by someone who had requested some cooking oil from me and was not pleased with the amount he was given, but hesitated to ask directly for more. These are among the most creative and pragmatically optional extensions of the Nonvisual evidential's use, and would seem to reflect an understanding or folk belief that visually acquired information is the most definite or objective type, while nonvisually acquired information is less objective and can therefore be expressed less directly.¹⁶⁸

¹⁶⁸ Thanks to Orin Gensler for suggesting this interpretation.

- (129) *j'ub tóg=d'əh n'uħ wɪdb'áy-áy=hɔ̃ hɪd=b'ay*
 J'ub daughter=PL CNTR arrive.return-DYNM=NONVIS 3pl=AGAIN
 'I'm thinking of J'ub's daughters who left and never came back.' (cv.txt)

- (130) *cípm'æh=hɔ̃*
 little=NONVIS
 'It seems very little.' (OS)

This expression of personal opinion with Nonvisual =*hɔ̃* can be further moderated with the addition of the Epistemic modality particle, to express uncertainty:

- (131) *tɪh-ɪy=hɔ̃ ɹuħ tɪh=ɹɪh*
 lie-DYNM=NONVIS EPIST 3sg=MSC
 'He's probably a liar, I think.' (RU)

Use of the Nonvisual evidential is largely limited to sensations that are experienced by the speaker. However, it can also reference those experienced by the addressee when used in interrogative clauses, as in example (132). Otherwise, non-first-person expressions of personal states usually require a Reportive marker or Epistemic modality marker (which often co-occurs with the Inferred evidential =*cud*).

- (132) *yɪh-i? nɪŋ hipãh-nɪh-hɔ̃ ɔ̃?*
 thus-INT 2pl know-NEG-NONVIS-INT
 'Don't you all know that it is thus?' (P.Sp)

The Nonvisual evidential cannot occur in imperative clauses, but it is grammatical in interrogative (132) and negative clauses (128 above), as well as in exclamatory clauses:

- (133) *g'ɪ-ícáp=hɔ̃!*
 hot-INTS1=NONVIS
 'It's really hot!' (OS)

As the examples in this section illustrate, the Nonvisual marker =*hɔ̃* usually occurs as an enclitic, following a verbal, nominal, or adjective predicate. As such, it typically follows all other enclitics:

- (134) a) *ʔãh tút-úy=b'ay=hɔ̃*
 1sg cold-DYNM=AGAIN=NONVIS
 'I'm cold again' (OS)
- b) **ʔãh tút-úy=hɔ̃=b'ay*
 1sg cold-DYNM=NONVIS=AGAIN

Nevertheless, it is possible for =*hɔ̃* to occur in an Inner Suffix position, as is the case with many peripheral formatives in Hup. As an Inner Suffix, it is most frequently followed by the Declarative Boundary Suffix (135-36), but it may also take the Dependent marker -*Vp* or the Directional oblique marker -*an* in an adverbial clause relating to location (examples 137-38) (and may take another Inner Suffix formative in between, as in 136).

- (135) *ʔám=báb'=d'əh b'ɣiʔ tɔhɔ-tuk-hɔ̃h*
 2sg=sibling=PL only finish-want-NONVIS-DECL
 'Your relatives will soon all die, I feel.' (H.71)
- (136) *yúp huỹʔah ʔãh yú-wəd yɛ nɔ-hɔ̃b'ay-áh*
 that.ITG after 1sg.OBJ that.ITG-old.man that.ITG say-NONVIS-AGAIN-DECL
 'After this, that (respected) one said to me (I heard)...' (P.Sp.107)
- (137) *ʔícána má-át ni-hɔ̃ɔp=ʔh*
 Içana river-OBL be-NONVIS-DEP=MSC
 'The person that I believe/hear is living on the river Içana.' (H.txt)
- (138) *himuñ=hɔ̃b d'oʔ-d'əh-ʔáy hám, yúp nɔh-kəd-hi-hɔ̃ǎñ*
 paxiuba.tree=hollow take-send-VENT.IMP go.IMP that fall-pass-descend-NONVIS-OBJ
 'Go fetch a paxiuba-tree-hollow, over there where (I heard) that noise of something falling.' (M.KTW)

Historical Note

The most likely source candidate for the Nonvisual evidential marker is the verb stem *hɔ̃h*- ‘produce sound’. The grammaticalization of verb stem to enclitic probably came about via verb compounding, in which the final verb of the compound lost its final tense-aspect-mode suffix morphology and took on clitic status. Aikhenvald (2002: 127) proposes a similar auditory source (from a compounded verb root ‘hear, perceive’) for the nonvisual marker in Tariana, and observes that the grammaticalization of a compounded verb is a typical process among Eastern Tukanoan languages—as it seems to be in Hup (see §9.4.3).

As outlined in detail in §3.7, the first stage of this transition probably involved use of the verb *hɔ̃h*- ‘produce sound’ as a compound-final form meaning ‘do (verb) and produce noise’, which would have developed the more modal meaning, ‘produce noise in doing (verb)’. Through frequent use, this compound-final verb would have taken on an increasingly secondary status to the preceding stem until it had become an auxiliary, losing in the process its final *-h* (*hɔ̃h* → *hɔ̃*). As discussed in §3.5-7, such a stem-to-auxiliary transition accompanied by phonological reduction has considerable precedent elsewhere in Hup.

At this stage in its existence, the verb stem ‘produce sound’ would have had two distinct realizations—one primarily lexical (as an independent verb root), and the other primarily grammatical (as a evidential-like formative). However, these would have occurred in formally identical constructions—i.e. as the final stem in a verb compound. Possibly in response to a need to differentiate these uses, the next stage would have

involved the more grammaticalized form of the verb detaching itself from the core of the verbal construction (as defined by placement of the Boundary Suffix), and moving to the periphery as an enclitic—the present-day state of affairs. At this point, the verb stem and the evidential formative have become formally distinct, although the evidential can still occasionally appear as an Inner Suffix, as illustrated in example (135-38) above.

14.9.3. Inferred evidential =*cud*

The Inferred marker =*cud* patterns formally like the Nonvisual marker in that it generally cliticizes to predicates, which may be nouns or adjectives when no verb is present. Hup speakers use =*cud* to designate an inference, usually based on some form of tangible proof. This proof is often, although not necessarily, visual evidence. In (139), for example, the husband infers from a sore on his wife's head, as well as from her illness and her story of what had happened during the day, that the malignant forest being Curupira has sucked out her brain; similarly, the speaker of (140) makes the observation while watching the man's bumbling:

- (139) *ʔám-ǎn doh ʔǎy ʔun'-yǐʔ-ǎy=cud*
 2sg-OBJ Curupira suck-TEL-DYNM=INFR
 'Curupira has sucked you (your brain), apparently.' (T.C)

- (140) *b'öy yo-hipǎh-nǐh=cud ʔám-áh*
 traira.fish dangle-know-NEG=INFR 2sg-DECL
 'It looks like you don't know how to carry traira fish.' (watching his bumbling)
 (I.BF)

However, the evidence for the inference need not always be tangible:

- (141) *ʔǎh him ǐh ǐn-yǐʔ-ǎy=cud*
 1sg forget-TEL-DYNM=INFR
 'I forgot it, apparently.' (e.g. looking for something) (OS)

- (142) *j'ám ʔāh cʔh-ní-íy=cud yæ̃h, hipāh-n̄h=h̄ɔ*
 yesterday 1sg dream-be-DYNM=INFR FRUST know-NEG=NONVIS
 'I must have dreamed last night, I don't know.' (i.e. I can't remember the dreams)
 (EL)

The Inferred evidential is often used to comment on an observable state. For example, (143) was uttered by a child who was pointing out a folded-over corner of one of my notebook pages, and another child said (144) to tease me, comparing a cartoon picture of an ugly person in a book to my husband.

- (143) *núp páy=cud!*
 this bad=INFR
 'This looks bad/wrong!' (OS)

- (144) *núp=cud páti=tæ̃h ʔp*
 this=INFR Pattie=child.father
 'This one looks like Pattie's husband!' OR 'This one, apparently, is Pattie's husband!' (OS)

In a similar use, the Inferred evidential can express a creative visual comparison.¹⁶⁹ For example, the speaker of (145) was observing a plastic hairbrush, whose shape reminded her of an alligator's backbone and ribs. While this statement is intended to mean '...but I know that it isn't', it could also mean '...it must be; I think that it actually is'—e.g. if one had found an unidentified bone in the forest. In other words, whether the item has or does not have the identity of the stated entity is irrelevant to the meaning of =*cud* per se, and is only an implicature in the context.

- (145) *hãt g'æ̃g=cud*
 alligator bone=INFR
 'It looks like an alligator bone.' (OS)

¹⁶⁹ A similar use of the Inferred evidential is reported for Hup's neighbor Tariana (Alexandra Aikhenvald, p.c.).

In another related use, the Inferred evidential is common in describing others' internal states (while the Nonvisual is preferred for one's own internal state; see §14.9.2 above):

- (146) *ʔəg-na ʔ-pó-y=cud* *ʔám-áp!*
 drink-lose.consciousness-EMPH1-DYNM=INFR 2sg-DEP
 'You're drunk!' (B.Cv.90)

The Inferred evidential marker frequently co-occurs with the Epistemic modality marker *ʔũh* in the partially fused form *=cud ʔũh* (see §14.8); this form is preferred for expressions of inference or speculation when no evidence is on hand, or when the evidence is too vague to be very conclusive. However, as discussed above (§14.9.1), the Epistemic modality particle *ʔũh* (often in its 'maybe' form *ʔũhníy*) can also be used by itself, without the Inferred evidential, in reference to situations where some inference is involved—for example, when remarking on the weight of a burden we see someone else carrying. While evidential *=cud* (or the fused form *=cud ʔũh*) is also an option in such cases, it is preferred over simple Epistemic *ʔũh* when the event is inferred by evidence alone, without any direct observation of its actual occurrence:

- (147) *yíwík=cud*
 heavy=INFR
 'It must have been heavy.' (coming across someone's bundle dropped beside the path) (EL)

Like the Nonvisual evidential, the Inferred specification can occur in negative (140 above) and exclamatory clauses (146 above), but is ungrammatical in the imperative mood. It also occurs in interrogative clauses, where it typically encodes the information source of the addressee rather than the speaker:

- (148) *hĩn'ĩh mĩh=cud yúp?*
 Q-NMZ turtle=INFR that.ITG
 'What kind of turtle does that seem to you to be?' (OS)

Also like the Nonvisual evidential, the Inferred specification usually appears as an enclitic, but may occur in the Inner Suffix slot in the verb word when followed by an appropriate Boundary Suffix (example 149). This results in a blurred distinction between its identity as an evidential marker and as a verb stem, since a verbal form *cud-* ('be inside') also exists as an independent stem in Hup (see below).

- (149) *tĩn'ĩh ya ʔamboʔ yúp náw yɔhɔy-cud-yǎh-ǎw-ǎh*
 3sg.POSS dog that.ITG good search-INFR-FRUST-FLR-DECL
 'His dog was searching hard, apparently.' (FS.3)

The Inferred evidential is not the only realization of a grammaticalized form *=cud* in Hup. As an enclitic on nominal arguments of the clause, *=cud* has the distinct function of marking a referent as deceased (see §7.3). As discussed in the Historical Note below, this use of *=cud* arguably is historically linked to the Inferred evidential. Such an extension of an evidential marker is functionally unusual and is extremely rare in the evidential systems of other languages around the world. However (as mentioned in §7.3), it is not without precedent in Amazonian languages: in Andoke (an unclassified Colombian language), the predicative reportive evidential marker *-há* acts as a deceased marker when it attaches to personal names (Jon Landaburu, personal communication).

Historical Note

The best source candidate for the Inferred evidential is clearly the verb stem *cud-*, 'be located inside something else'. This verb is used for animals in underground burrows

or hollow trees, people in their clothes, objects inside boxes, bags, or folders, items wrapped up in something else, and so on. Crucially, it implies that the object in question is not available for direct inspection. From a formal perspective, the grammaticalization of this form from verb stem to enclitic probably followed a path similar to that proposed above for the Nonvisual marker.

From a functional perspective, however, the conceptual link between the three manifestations of the form *cud*—the verb ‘be inside’, the Inferred evidential, and the Deceased marker—is not nearly as obvious as that between the verb ‘produce sound’ and the Nonvisual evidential. However, all three realizations of the form *cud*, in spite of their different functions, share a core semantic and pragmatic feature: they are all concerned with a referent that is believed to have an actual existence in some alternative ‘location’—physical, temporal, or epistemological—but that is not currently accessible to direct experience. As a verb stem, *cud* expresses physical presence which (because it is typically not visible) is often in a sense intangible, and thus not completely certain—this would be especially frequent, for example, in commentary about fleeing game animals (a common topic in Hup life), who typically take refuge in holes, hollow trees, or thick brush. It would be a relatively short conceptual step from this use to the Inferred marker, which denotes an alternative epistemological world, a possible state or event. Moreover, a locational source for an inferred evidential has precedent in at least one other language, Wasco-Wishram (although it relates to location generally, rather than to interiority; Silverstein 1978).

From this point, it is not a huge leap to the Deceased marker, which places its referent in an alternative temporal and metaphysical world (that of memory). These

conceptual jumps are in keeping with the cross-linguistic tendency “to use vocabulary from the external (sociophysical) domain in speaking of the internal (emotional and psychological) domain,” including expressions of modality (Sweetser 1997: 49).

Moreover, there is precedent for such equations of physical and metaphysical concepts elsewhere in Hup; for example, the form *mi?* can be used spatially to mean ‘under’, temporally as ‘at the same time as’, and modally as ‘in spite of’ (see §18.2.6.4), and the form *bi?* can be used as the adjective ‘old (thing)’ (i.e. thing that has been used or experienced over and over) and as a verbal marker of habitual aspect (§3.7 and §12.8).

14.9.4. Reportive evidential =*mah*

Hup marks secondhand information that is reported (i.e. was originally uttered by another speaker) with the enclitic =*mah*:

- (150) *tʰh ham-tég=mah*
 3sg go-FUT=REP
 ‘He’ll go (he or another said so).’ (OS)

- (151) *bĩg nɔ-nʰh=mah tʰh ye-yĩʔ-ay-áh*
 long.time say-NEG=REP 3sg enter-TEL-INCH-DECL
 ‘It was not very long before he came in, it’s said.’ (I.M.45)

- (152) *péʔ=mah! péʔ cɔɔw-ʃh!*
 power=REP power rainbow-FLR-DECL
 ‘(He has) evil power, they say! Evil power, that rainbow (spirit)!’ (H.txt)

- (153) “*titiʔ yúw-úh!*” *nɔɔy=mah*
 dirty that-DECL say-DYNM=REP
 ‘‘That one is dirty!’’ he said, they say.’ (M.KTW)

The Reportive is used when inquiring about or quoting someone else’s speech:

- (154) *hĩ-n'ĩh=mah?*
 Q-NMZ=REP
 'What did he say?' (OS)

Similarly, it is used to 'interpret' sounds made by an individual who is incapable of speaking, such as a dog or an infant; (155), for example, was said in reference to a crying baby:

- (155) *ʔám-ʔy=mah*
 fear-DYNM=REP
 '(He's) scared, he says.' (OS)

It is also common when giving a personal name, including one's own:

- (156) *húy=mah ʔǎh-ǎh*
 (name)=REP 1sg-DECL
 'I am (called) Huy.' (int.txt)

The Reportive evidential is the default evidential specification in non-firsthand narrative genre. Even when a consultant was asked to tell a story from pictures—resulting in a narrative that was not first-hand but also not verbally re-transmitted—he used the Reportative more frequently than the Inferred evidential =*cud*, which would normally be used for interpreting pictures or photographs:

- (157) *yĩkán=mah tĩnĩh ya ʔambó ʔ-ǎn huĩh-d'o ʔ-yó ʔ=mah...*
 over.there=REP 3sg.POSS dog-OBJ carry-take-SEQ=REP
 'There, it's said, (he was) carrying his dog...

tĩh-ǎn dɔwʔh-ʔ n'æm'-g'ét-éy=cud
 3sg-OBJ cheek-OBL lick-stand-DYNM=INFR
 (the dog) licked him on the face, apparently!' (FS.4)

In general, however, culturally new information sources have been fitted neatly into the Hup evidential system—although most Hupd'əh still have very limited access to

these sources. The Reportive evidential =*mah* is used for information obtained through reading, since this is secondhand, verbally acquired information. Inferred =*cud* is used in reference to events that are *pictured* on television, but Reportive =*mah* is used for information that is verbally reported on the television or radio. Nonvisual =*hō* is appropriate only when referring to the actual sound; speakers do occasionally use *nō* *ōy=hō* (say-DYNM=NONVIS) ‘I hear them saying’ to introduce quoted speech, emphasizing that they have just overheard it (either from a radio or from an actual person nearby), but Reportive =*mah* is more common.

Like the Nonvisual and Inferred enclitics, the Reportive is used in negative (151), exclamatory (152), and interrogative clauses (154). However, the Reportive is the only evidential in Hup that can also occur in imperative clauses, as a type of quotative:

- (158) *nāñ=mah!*
 come=REP
 ‘Come here, she said!’ (OS)

This quotative use need not entail a *direct* quote; for example, when one person repeats a command given by another person, the repeated command often differs from the original in its directional semantics (i.e. it is the content, not the form, of the speech that is stressed). On several occasions I heard one speaker say to a small child *nāñ!* ‘come!’, whereupon another speaker who was in the vicinity of the child repeated the command as *hām=mah!* (go=REP) ‘go, (they said)!’.

In addition to its use in imperative clauses, the Reportive marker differs significantly from the Nonvisual and Inferred evidential markers in its positioning and

distribution. First, unlike the other two forms, it does not occur inside subordinate clauses. Furthermore, it can cliticize to any focused constituent of a clause, whereas the other two evidential markers cliticize only to predicates. In narrative, the Reportive marker is much more likely to occur in second position in the clause than on the verb, as in example (159). In general, *=mah* can appear either on the subject or on the predicate, but not on both; in (157) above, however, it occurs twice within the same clause (once on the directional adverbial, once on the predicate). These differences in positioning set the Reportive evidential off from the other two evidentials as a distinct one-member subsystem.

- (159) *nuh-kəbək=n'ǎn=mah híd pəʔ-əh, dəb!*
 head-break=PL.OBJ=REP 3pl ritually.present-DECL many
 'They gave a dabacuri of sauva (lit. 'head-breaker') ants, they say, lots of them!' (M.KTW)

The Reportive almost invariably appears as an enclitic in the Barreira and Tat Deh area dialects, but—like the other evidential enclitics in Hup—it occasionally appears as an Inner Suffix, followed by a Boundary Suffix (example 160). However, whereas the Nonvisual and Inferred markers in this position usually take the primary stress of the verb word and are therefore indistinguishable from compounded verb roots, *=mah* (like some other peripheral formatives in Hup that appear in Inner Suffix position) as a rule remains unstressed.

- (160) *hayám bíʔ-wíd-næn-píd-mah-áh, hib'ǎh=təh=ʔh-íh*
 town make-arrive-come-DIST-REP-DECL create=clan=MSC-DECL
 'The Ancestor(s) arrived and built a town' (LG.OS.51)

This pattern is subject to significant dialectal variation. In the Umari Norte dialect, occurrence of Reportive =*mah* in the Inner Suffix position, rather than as an enclitic (particularly in narrative), is much more common than in the Hup spoken in Tat Deh and Barreira. In Umari Norte, when the otherwise unstressed evidential =*mah* occurs as an Inner Suffix, it receives the primary stress in the verb word:

- (161) *tʰh-ǎn tʰh wɔn-máh-ah*
 3sg-OBJ 3sg follow-REP-DECL
 ‘He followed him’ (AJ.71)

The Reportive marker =*mah* often precedes one of two optional contrast particles, especially in narrative: one is specified for recent past (*páh*; example 162), the other for distant past (*j’ám*; or *j’ǎh* in the Tat Deh dialect area, example 163) (see §13.4). The order of evidential + contrast/tense marker is fixed, and the tense semantics can refer *either* to the time of the report, or to the time of the event. In the Umari Norte dialect, the forms =*mah* + *j’ám* have become phonologically merged to create the form =*maám* (or =*ma-y’ám*), as we see in (164). This may reflect an incipient tense-evidential fusion in Hup, possibly motivated by the system of fused tense-evidential forms that is present in Tukano.

- (162) *nǝ=mah páh yúw-úh!*
 1sg.POSS=REP PRX.CNTR that-DECL
 ‘It was mine, (someone just said)!’ (txt)

- (163) *yǝnǝ=mah j’ám tʰh bǝʔ-ǝh, húp=n’ǎn tʰh bǝʔ-ǝh*
 so=REP DST.CNTR 3sg make-DECL person=PL.OBJ 3sg make-DECL
 ‘Thus (long ago, they say) he made (them), he made people.’ (txt)

(164) Umari Norte dialect:

j'ũğ-út=maám *tĩh* *wən-kot=máh-ah*
 forest-OBL=REP.DST.CNTR 3sg follow-go.in.circles=REP-DECL
 'In the forest, (long ago, they say), he wandered following (the tapir).' (txt)

14.9.5. Co-occurrence of evidential enclitics

The various evidential enclitics in Hup can co-occur, although with certain restrictions.

For example, co-occurrence of the Inferred and Nonvisual forms is apparently limited to cases where the Nonvisual relates to the speaker's opinion; here the Nonvisual must follow the Inferred, since the inference is within the scope of the opinion. This is illustrated by (165), which might be said about someone who has announced the day of his arrival but then does not come:

(165) *tĩh* *póg=cud=hĩ*
 liar big=INFR=NONVIS
 'He seems to be a liar, I think.' (RU)

The Reportive occurs more freely with the other two evidentials, but must appear last; the inference or perception is therefore within the scope of the report (and not the other way round). (167), for example, was a report about a young woman from Barreira who went on a visit to the neighboring village of Nova Fundação with her parents, but stayed behind with a boyfriend when they returned home.

(166) *hup* *pã=cud=mah*
 person NEG:EX=INFR=REP
 'There was apparently nobody there, it's said.' (C.4)

(167) *tĩh* *tãhĩĩp* *ni-túk-uw-áy=nih=cud=mah*
 3sg child.father be-want-FLR-INCH=EMPH.CO=INFR=REP
 'It looks like she (has come to the stage of) wanting a husband, it's said.' (RU)

- (168) *tɪh péʔ-éy=h ʒ=maɦ*
 3sg sick-DYNM=NONVIS=REP
 ‘She’s feeling sick, she says.’ (EL)

14.9.6. Additional Inferred evidential *-ni-*

Hup has developed a second evidential relating to inference, in addition to *=cud*. This is the form *-ni-*, which is strikingly different formally from the other evidentials in Hup. Instead of functioning primarily as an enclitic, Inferred *-ni-* occurs only as a verbal Inner Suffix, combining directly and exclusively with verb stems. Its morphosyntactic distribution is highly restricted in comparison with that of the enclitics: it must occur on a clause-final predicate—even in an interrogative clause (making it ungrammatical in polar interrogatives using a word order inversion strategy, see §17.4.2). It does not occur at all in negative clauses, cannot appear together with other evidentials in the same verb word, and is used exclusively in reference to a past event.

Despite their significant formal differences, the two inferential forms *-ni-* and *=cud* are functionally similar. Like *=cud*, *-ni-* is used for an inference relating to an event which the speaker did not actually witness, as in (169), where the speaker is describing how some children sneaked into the house to steal his fish. As with *=cud*, the inference may be based on tangible evidence; in (170), for example, the speaker sees the empty pot from which the mingau has been drunk. In many cases the two inferentials *=cud* and *-ni-* are judged by speakers to be interchangeable, and in (170) they occur in successive clauses referring to the same event. However, use of *-ni* tends to place less emphasis on the actual act of inferring, and is preferred when there is no actual evidence available, whereas *=cud* appears to be more restricted to situations where tangible

evidence is at hand. This may explain why Hup strongly favors the use of *-ni-* over *=cud* in narrative, as in example (171) (from a story about the mythical Water-Tree, which is said to have created the Amazonian river system when it fell).

- (169) *yúp hɔ́ʔah=mah híd ye-ní-ip=b'ay-áh*
 that other.side=REP 3pl enter-INFR2-DEP=AGAIN-DECL
 'There on the other side of it (they say) they apparently got in again.' (B.Sp)
- (170) *ʔəg-huʔ-yiʔ-ɣ̃=cud, dɪʔ pǎ tɪh ʔəg-yiʔ-ní-h*
 drink-finish-TEL-DYNM=INFR remain NEG.EX 3sg drink-TEL-INFR2-DECL
 'He drank it all up; he drank it up and left none.' (T.Sg)
- (171) *póh, dəh=teg g'et-ʔe ʔ-ní-h*
 high water=tree stand-PERF-INFR2-DECL
 'Really high, the water-tree stood.' (M.DT)

When used with a first person subject, *-ni-* can only be used in reference to actions that the speaker has no memory of performing—usually because he or she was too young to remember, or was drunk or asleep:

- (172) *n'ikán ʔǎh maca-ní-h*
 over.there 1sg be.born-INFR2-DECL
 'I was born over there.' (P.Int.132)

Inferential *-ni-* appears to be grammatical in imperatives, although in this context it is not always clear whether this form is actually the evidential or is the imperative form of the compounded verb root *ni-* 'be', to which it is identical.¹⁷⁰ Semantically, however, it resembles an evidential; consultants say that it has the same meaning as the Reportive in the imperative—but they also report that imperative *-ni-* is only grammatical with a second person *plural* addressee, for reasons which remain opaque. The command in (173), for example, is said to be acceptable only in cases where the speaker is repeating

another person's command, and is interchangeable with Reportive *nĩŋ hám=mah* (2pl go.IMP=REP) 'you all go!'

- (173) *nĩŋ hám-nĩh*
 2pl go-INFR2.IMP
 'You all go, they said!' (EL)

The formal features of Inferred *-ni-* give it a much more verb-like character than the other evidential markers, which (unlike *-ni-*) can cliticize to nominal constituents, usually are preceded by a Boundary Suffix when associating with a verb, and are unstressed. There is little doubt that the *-ni-* evidential is related to the verb stem *ni-* 'be, exist' (see Historical and Comparative Note below), which can itself occur as a verbal auxiliary (i.e. as the final—fully verbal—constituent in verb compounds; see §9.4.2.4). The restricted distribution and different patterning of *-ni-* relative to the other evidentials suggest that its use as an evidential has developed fairly recently.

Historical and Comparative Note: Inferred -ni-

As an areal feature, the *-ni-* evidential is truly remarkable. Not only a similar evidential specification, but in fact an almost identical form, exists in many other Vaupés languages, including Tukano, Tariana, Desano (Miller 1999: 64), and Wanano (Malone 1988: 135) (see discussion in Aikhenvald 2002: 123). It also exists in Hup's closest relative Yuhup (Ospina 2002: 181).

In Tukanoan languages, this inferred evidential reading is produced by a construction involving a nominalized form of the main verb plus the auxiliary verb *nĩ*

¹⁷⁰ And to which it may be historically related, as argued below.

‘be’. This verb is virtually identical in form and meaning to Hup *ni*- ‘be, have’, which is itself an areal feature, existing in various Vaupés languages of the East Tukanoan and Nadahup families, as well as Tariana (see the discussion in §8.4). Tariana has developed a similar evidential form, not from its version of the verb *ni* (which may or may not be borrowed from the neighboring languages), but through the reanalysis of the anterior aspect marker *-nhi* (in combination with past visual evidential forms) to create an inferred evidential (*-nhina*, *-nihka*) that closely resembles (both formally and functionally) the one found in the Tukanoan languages (Aikhenvald 2002: 123).

It is likely that the Hup inferred *-ni*- evidential construction is the calqued equivalent of the Tukano construction, which is built according to the following schema (Ramirez 1997: 140):

verb.stem + nominalizer ‘be’ + [visual evidential-tense-person.number.gender]

This construction is illustrated in the following example:

(174) Tukano:

<i>yaa</i>	<i>wecé</i>	<i>ma’a</i>	<i>wi’ô-’karã</i>	<i>nii-áma</i>
POSS	field	path	obstruct-NMZ.PL.PERF	be-REC.PAST/VIS/3PL

‘They’ve blocked the path to my manioc field.’ (proof: logs across the path)
(Ramirez 1997:140)

Nominalized forms of verbs in Hup can be derived by simply stripping the otherwise obligatory aspect suffixes from the verb stem, and as we have seen the visual evidential specification is likewise unmarked in Hup. Thus, just as the Hup form is the semantic parallel of its Tukano counterpart, it can also be seen as its formal equivalent: [verb.stem + \emptyset + ‘be’ + \emptyset], with a reduced form of the verb ‘be’.

Comparative Note: Hup evidentials as an areal feature

Despite previous characterizations of areal diffusion into the Nadahup languages as “superficial” in contrast to the diffusion between the Tukanoan and Tariana systems (e.g. Aikhenvald and Dixon 1998b: 250; Aikhenvald 1999b: 394), there is considerable evidence that this characterization does not hold for the Nadahup languages within the Vaupés region proper. As I have argued in more detail elsewhere (Epps, in press), comparison with Dâw and Nadëb suggests that an optional reportive evidential distinction can be reconstructed for the Nadahup family, but that the remaining distinctions in Hup (and probably also in Yuhup) were developed relatively recently, and that areal contact with Tukanoan languages (primarily Tukano) was the catalyst. As Table 14.3 illustrates, Hup distinguishes the same four basic evidentiality choices as do its Vaupés neighbors (note that the Visual category in Hup is confounded by its unmarked status, but the notion of a visual evidential is nevertheless appropriate, as discussed in §14.9.1 above). The visual specification in Tariana is also minimally marked in comparison to the Tukanoan forms. Note that Tukano and Tuyuca (like other East Tukanoan languages), as well as Tariana, indicate evidentiality by means of portmanteau morphemes that fuse evidentiality, tense, person, and number; therefore each slot of the table below is in fact represented by a paradigm.

Table 14.3. Evidentiality in Vaupés languages

Languages of the Vaupés region					Nadahup languages outside the Vaupés
	Tukano (among other E. Tuk. lgs) (<i>East Tukanoan</i>)	Tuyuca (evid.-person-tense-number)	Tariana (<i>Ara-wakan</i>)	Hup Yuhup (<i>Nadahup</i>)	Dâw Nadëb
Visual	paradigm (evid.-person-tense-number)	paradigm (evid.-person-tense-number)	paradigm (evid.-tense)		
Nonvisual	paradigm (evid.-person-tense-number)	paradigm (evid.- person-tense-number)	paradigm (evid.-tense)	= <i>hɔ̃</i> = <i>hɔ̃</i>	
Inferred	paradigm (evid.-person-tense-number)	paradigm (evid.-person-tense-number)	paradigm (evid.-tense)	= <i>cud</i>	
Inferred2	- <i>nii</i> construction	paradigm (evid.-person-tense-number)	- <i>nhina</i> , - <i>nihka</i>	- <i>ni</i> constr. - <i>ni</i> constr. ¹⁷¹	
Reportive	paradigm (evid.-person-tense-number)	paradigm (evid.-person-tense-number)	paradigm (evid.-tense)	= <i>mah</i> = <i>mah</i>	= <i>mah</i> <i>mih</i>

Sources: Tukano: Ramirez 1997; Tuyuca: Barnes 1990; Tariana: Aikhenvald 2003a, etc.; Yuhup: Ospina 2002: 181; Dâw: S. Martins 1994: 106; Nadëb: Weir 1984: 254.

These categorial parallels are strong evidence that language contact with Tukano motivated the elaboration of Hup's evidential system. There is also considerable evidence that Hup's system is relatively young—particularly the fact that lexical sources can be identified for all three new formatives (= *hɔ̃*, = *cud*, and -*ni*-). Moreover, while its categories parallel those of Tukano closely, Hup does not integrate evidentiality into its grammar as tightly as do Tukano and Tariana—suggesting that the influence of Tukano on Hup, while parallel to that of Tukano on Tariana, has been relatively less profound (although far from “superficial”). Most importantly, evidentials are required on most clauses in Tukanoan and Tariana, but are largely optional in Hup. Finally, Hup is more

¹⁷¹ A laryngealized morpheme.

permissive than its neighbors in its distribution of evidential markers across clause types and tense-aspect-mode distinctions. For example, Hup interrogative clauses can accommodate all evidential specifications, whereas in interrogatives Tukano and Tariana reduce their system to three (minus reportive). Evidentials are also reported as absent from exclamatory clauses in Tukano and Tariana (cf. Aikhenvald 2002: 126), but are grammatical in Hup.

Hup is similarly more flexible than its neighbors regarding tense distinctions and evidentiality. All evidential specifications can co-occur with the future suffix in Hup (example 175), as well as with the tense-contrast particles (162-64 above) and in clauses lacking any overt tense marking (the most common type).

- (175) *nút-áh tán ʔāh hup-yəd-tég=cud*
 here-FOC FUT.CNTR 1sg RFLX-hide-FUT=INFR
 'It looks like I can hide here!' (P.CR)

Tukano and Tariana, on the other hand, fuse tense and evidentiality specifications, but are reported as not distinguishing evidentiality in the future tense at all (Aikhenvald 2002: 126; 2003: 122, etc.)—although the Tariana nonvisual marker does co-occur with the future marker in some constructions (Aikhenvald 2002: 126), and Tukano and Tariana use suffixes combining evidentiality and present or past tense to form certain expressions of future (Ramirez 1997: 136, 166; Aikhenvald 2002: 123). Also unlike Tukano and Tariana, Hup makes an inferred distinction in the present tense. Finally, both Hup and Tariana, but not Tukano, make a reportive specification in present-tense statements. Table 14.4 summarizes the distribution of evidential specifications among the representatives of the three language families in the Vaupés.

Table 14.4. Distribution of evidential marking across Tukano, Tariana, and Hup clause types and tense distinctions (V visual, N nonvisual, I inferred, and R reported).

	Tukano	Tariana	Hup
Declarative	V, N, I, R	V, N, I, R	N, I, R
Imperative	R; N (if action is to be performed at a distance)	R	R
Interrogative	V, N, I	V, N, I	N, I, R
Exclamatory	No evidential marking	No evidential marking	N, I, R
Negative	V, N, I, R	V, N, I, R	N, I, R
Evid. + past tense markers	V, N, I, R (portmanteau forms)	V, N, I, R (portmanteau forms)	N, I, R (tense marking optional)
Evid. + present tense markers	V, N (portmanteau forms)	V, N, R (portmanteau forms)	N, I, R (tense unmarked)
Evid + future tense markers	No evidential marking	N	N, I, R

(Information on Tukano and Tariana from Aikhenvald 2002, 2003b, 2005; Ramirez 1997.)

15. Sentence-level affect marking

Hup has a rich repertoire of discourse-related formatives that serve the function of marking affect, and indicate intensification, emphasis, focus, and other related features. This chapter focuses on those markers that occur primarily on the level of the clause or even of the entire sentence; many associate with predicates, and many are limited exclusively to clause-final position. Formally, these markers are a heterogeneous lot, ranging from verbal Inner Suffixes to enclitics and particles; note that they are organized here according to their semantics and function, not their form class. In addition to these forms, Hup has other affect- and discourse-marking formatives that associate primarily with nominal constituents of the clause; these are discussed in chapter 7.

The first section of this chapter deals with degree markers, which tend to associate primarily with verbal and adjectival predicates. The following sections cover the group of ‘promiscuous’ focus and emphasis markers that associate with predicates and other clausal constituents alike, and the set of affect markers that occur more or less exclusively in sentence-final position. The final sections of this chapter cover interjections and ideophones.

The grammatical formatives associated with sentence-level affect marking are summarized in Table 15.1:

Table 15.1. Sentence-level affect markers in Hup

Form	Slot class (formative type)	Identity / word- class of host	Function	Other relevant functions of same form
<i>cáp</i>	Particle	Various hosts	Intensifier	Noun <i>cáp</i> ‘body’
<i>-Vcáp</i>	Boundary Suffix	Verbs		
<i>mún</i> <i>muhún</i>	Particle	Negated verbs Adjectives	Intensifier	
<i>-tubud-</i>	Verbal auxiliary	Verb compounds	Intensifier	
<i>-kəd-</i>	Inner Suffix	Verbs	Elative (comparative and superlative)	Verb <i>kəd-</i> ‘pass’
<i>-kəd</i>	Suffix	Adjectives		
<i>=mæh</i>	Enclitic	Various hosts	Diminutive intensifier: (unimportance, smallness, closeness)	Noun <i>mæh</i> ‘younger sister’
<i>-mæh-</i>	Inner Suffix	Verbs		
<i>=pog</i>	Enclitic	Various hosts	Emphasis	Adjective <i>póg</i> ‘big’
<i>-pog-</i> <i>-po-</i> <i>-wo-</i>	Inner Suffix	Verbs		
<i>=ʔh</i>	Enclitic	Various hosts	Emphasis	Masculine / gender- neutral bound noun
<i>-Vʔh</i>	Boundary Suffix	Verbs		
<i>-áh</i>	Boundary Suffix	Various hosts	Focus	
<i>-Vw-</i>	Inner Suffix	Various hosts	Emphasis	Clause-combining
<i>tĩ</i>	Particle	Interrogative clauses	Interrogative emphasis	
<i>tí</i>	Particle	Subordinate clauses	Emphasis	
<i>tíh</i>	Particle	Clauses	Emphasis	
<i>=ti?</i>	Enclitic	Nouns	Emphatic tag	
<i>-Vti?</i>	Boundary Suffix	Verbs		
<i>yǎ</i>	Particle	Interrogative clauses	Interactive tag	
<i>yá</i>	Particle	Affirmative clauses		
<i>-Vyá</i>	Boundary Suffix	Verbs in affirmative clauses		
<i>-Vhə?</i>	Boundary Suffix	Verbs	Interactive tag	Affirmative word <i>hə?</i> ‘yes, all right’
<i>=hə?</i>	Enclitic	Various hosts		
<i>=hə</i>	Enclitic	Imperative verbs		
<i>bá?</i>	Particle	Clauses	Protestive	
<i>-Vyǵ</i>	Boundary Suffix	Clause-final constituents, esp. verbs	Exclusive (relates to one participant alone)	
<i>-ké?</i>	Boundary Suffix	Verbs	‘Acting alone’ marker	
<i>-d’ǵh</i>	Boundary Suffix	Verbs	‘Acting alone’ marker	
<i>bé</i>	Particle	Clauses (?)	Acquiescence	

15.1. Degree markers

Hup has a large and heterogeneous set of markers that act as intensifiers and function to modify the degree of the assertion. Most associate with both verbal and adjectival predicates, and several can also occur with nominal constituents. The intensifier particles are functionally akin to many of the markers of focus and emphasis (see §15.2 and §15.3 below).

15.1.1. Intensifier *-(V)cáp*

Perhaps the most ubiquitous of Hup's intensifiers is the form *-(V)cáp* (glossed INTS1). This morpheme associates primarily with verbs and adjectives, although it is not limited to these, and is translated as 'very, a lot'. Formally, Intensifier *-(V)cáp* is best classed as an 'internally complex' Boundary Suffix (see §3.4.1.2), which frequently involves vowel copying. However, its formal realization is subject to considerable variation, both across speakers and across dialect regions. In Tat Deh, it is commonly pronounced *-icáp*, but some speakers also use *-V́ycáp* (apparently formed with the Dynamic Boundary Suffix *-V́y*) and *-yíʔ-cáp* (with the Telic Inner Suffix *-yíʔ*); it is possible that the *-icáp* form is a phonologically reduced version of one of these alternative forms, or could possibly be derived from *hi-cap* (involving the Factitive prefix). In Barrera, speakers prefer the vowel-copying variant *-Vcáp* (which occurs in most of the examples here).

Examples of the use of Intensifier *-(V)cáp* with verbal predicates are given in (1-2). Note that as a predicative intensifier, it can occur in the same clause as the nominal quantifier *dəb* 'a lot' (example 2).

- (1) *ʔāh túk-ucáp*
 1sg want-INTS1
 ‘I really want (it).’ (OS)
- (2) *húʔ-d’əh dəb ní-icáp*
 pium-PL many be-INTS1
 ‘There are really a lot of piums!’ (OS)

Examples of *-(V)cáp* with adjectives are such common expressions as *titíʔ-icáp* ‘really dirty’, *náw-acáp* ‘very good’, and example (3). Adjectives modified by *-(V)cáp* may be either predicates or modifiers.

- (3) *wædhɔ̌ g’í-icáp=hɔ̌*
 sun hot-INTS1=NONVIS
 ‘The sun is really hot.’ (OS)

Verbal tense-aspect-mode specifications are very restricted with this intensifier, and in general do not come between it and the stem. In (4), the Perfective aspect marker *-ʔeʔ*—which is normally obligatorily followed by a Boundary Suffix—must *follow* the Intensifier, and as such takes the form of an enclitic rather than an Inner Suffix:

- (4) *[hɔ̌p ní-icáp]=ʔeʔ núp=máʔ*
 fish be-INTS1=PERF this=river
 ‘There used to be a lot of fish in this river.’ (H.38)

Similarly, if *-(V)cáp* modifies a negative predicate (which it rarely does), the Verbal Negator *-nɪh* (itself normally a Boundary Suffix) follows the Intensifier:

- (5) *dapúh ní-icáp-nɪh mɪʔ, ʔān d’oʔ-ʔɔm-kéy ʔám=nih, bɪg!*
 hand be-INTS1-NEG UNDER 1sg.OBJ take-fear-see 2sg=EMPH.CO anteater
 ‘Even though you have no hands at all, you’re scaring me, anteater!’ (T.txt)

As a type of Boundary Suffix itself, Intensifier *-(V)cáp* is incompatible with most other Boundary Suffixes (with some exceptions). It also is not in general used to intensify smallness or diminution, and cannot occur with the irregular adjective *cípm'æh* 'small'.

While Intensifier *-(V)cáp* usually occurs as a verbal/adjectival formative in main clauses, as in the examples above, it occasionally does combine with other parts of speech. In these cases, its function is primarily one of emphasis. Its form is also distinct: it usually appears without the preceding copied vowel (or *-i-*, etc.), and has the phonologically independent form of a particle. In (6), for example, *cáp* combines with adverbial clauses marked with Oblique *-Vt* (here a Boundary Suffix which functions as a nominalizer, see §18.2.6.2):

- (6) *tĩh kədham-ah, té húp=pog g'et-pó-t cáp, wāʔ tĩh g'ét-ét cáp-ay*
 3sg pass.go-DECL until person=EMPH1 stand-EMPH1-OBL INTS1 vulture 3sg stand-OBL INTS1-INCH
 'She went quickly, until (she reached) the place where someone really was standing, where Vulture really was standing!' (M.KTW)

Likewise, the intensifying function of *cáp* blurs with that of emphasis when it occurs with nominal forms, such as interrogative pronouns (example 7), pronouns (8), demonstratives (9), numerals, and other nouns:

- (7) *hĩn'ĩh cáp lam peʔ-ni-yæh-æʔ tĩʔ*
 Q-NMZ INTS1 2sg sick-be-FRUST-INT EMPH.INT
 'What in the world is the matter with you?' (T-C.7)
- (8) *ĩáh-āp=yĩʔ cáp-ay=nih=cud kaħ*
 1sg-DEP=TEL INTS1-INCH=EMPH.CO=INFR ADVR
 'But for me it's just the same, apparently!' (B.Cv.1.2)

- (9) *nú-ũw-ũt cáp tíh cəc, hóm cáp!*
 this-FLR-OBL INTS1 EMPH2 INTERJ sore INTS1
 ‘Right here, it’s this darn sore!’ (i.e. it really hurts) (B.Cv.2.10)

- (10) *tĩh=cúm cáp ʔám-ǎn ʔǎh ʔid-té-h*
 3sg=beginning INTS1 2sg-OBJ 1sg speak-FUT-DECL
 ‘I’ll tell you (the story) from the very beginning.’ (H.28)

The form *cap* occurs elsewhere in Hup as the alienably possessed noun *cáp* ‘body’, and as the verb *cap-* ‘grow’. Example (11) illustrates a likely semantic and functional overlap between ‘body’ and the Intensifier form:

- (11) *báb’=hin pǎ-ay ʔǎh-ǎp tí, ʔayup cáp ʔǎh ni-nĩh-ĩh*
 sibling=also NEG:EX-INCH 1sg-DEP EMPH.DEP one INTS1 1sg be-be.like-DECL
 ‘I have no siblings left; it’s as though I were all alone (i.e. one body).’ (T-PN8)

The form *cáp* also occurs in the several dialectal variants of ‘tomorrow’: *ĩcáp*, *ʔecáp*, and *tecáp*. Future research will help to determine whether a historical connection exists among the various manifestations of this form.

15.1.2. Intensifiers *mún* / *muhún*

This intensifier, a particle, occurs with predicate adjectives, adverbials, and verbs, although in the case of verbs it is restricted to *negative* constructions involving the Verbal Negative suffix *-nĩh* (see also §16.1.6). The form of this intensifier is also subject to variation. Speakers in the Tat Deh dialect area pronounce it as *mún* in both positive (adjectival) and negative (verbal and adjectival) expressions. In Barreira, however, a formal distinction is maintained between the positive form, pronounced *muhún*, and the verbal negative *mún*. It is more likely that *muhún* is the older form and that *mún* is a

reduced variant, particularly since such phonological reduction of forms is more typical of the Tat Deh dialect.

Examples of *muhún* / *mún* (glossed INTS2) with adjectives are expressions like *náw muhún* ‘really good’, *tití? muhún* ‘really dirty’, and example (12). Note that *muhún* / *mún* can co-occur with Intensifier *-(V)cáp* to create an even stronger statement:

- (12) *cǎp yǐ?-ǎn=b’ay ʔam háy’-tǎǎ, yúp tǎh=páy muhún cáp-áh!*
 other man-OBJ=AGAIN 2sg mess.with-COND that.ITG 3sg=bad INTS2 INTS1-DECL
 ‘If you mess around with another man, that’s really really bad!’ (H.txt.60)

It can also take the Dependent marker *-Vp* and appear in relative clauses:

- (13) *páy mún-up=ʔǎy mǐ?...*
 bad INTS2-DEP=FEM UNDER
 ‘Even though (I am) an ugly woman...’ (Song.24)

The use of Intensifier *muhún* / *mún* is independent of whether the degree is seen as augmentative or diminutive (unlike *-(V)cáp*, which is restricted to augmentatives).

Thus *cípm’ǎh muhún* ‘really small’ is just as grammatical as *póg muhún* ‘really big’.

In addition to adjectives, *muhún* / *mún* can modify adverbial expressions, such as *j’ám-yǐ? muhún* ‘a really long time ago’, and even the predicative Existential Negative particle *pǎ̃ muhún* ‘none at all’ (see §16.2). It is not generally used with nouns, but it can appear with adjectives nominalized by preceding *tǎh=* (as in example 12 above), and also occurs with a few of the so-called ‘verby’ nouns that are perceived as processual, such as ‘child’ or ‘old man’: *tǎh=wǎhǎd muhún* (3sg=old.man INTS2) ‘a very old (man)’ (see §4.1.3). It also appears with nominals in a few emphatic comparative expressions:

- (14) *ya ʔamhoʔ **muhún** ʔam páy-áh!*
 dog INTS2 2sg bad-DECL
 ‘You’re as bad as a dog!’ (RU)

Negative intensifier expressions, which are indicated by *mún* regardless of dialect area, can involve either verbs or adjectives. Examples include *pay-nʔh mún* (bad-NEG INTS2) ‘not bad at all’, and (15); see also §16.1.6 for more examples and discussion.

- (15) *ʔāh hipāh-nʔh **mún***
 1sg know-NEG INTS2
 ‘I don’t know at all.’ (OS)

There is at least one exception to the rule limiting the verbal use of this intensifier form to negative expressions. This is the idiomatic construction *hĩ-ni-muhún-up* = *ʔh* / = *ʔāy* ‘worthless man/woman, good-for-nothing’ (a relativized form of the clause *hĩ-ni-muhún* or *hĩ-ni-mún* ‘really only existing’; example 16). Note that this expression is semantically (though not syntactically) a negative evaluative term.

- (16) *hĩ-ni-**mún**=d’ əh nĩŋ-ʔh, hipāh-nʔh nĩŋ-ʔh!*
 only-be-INTS2=PL 2pl-DECL know-NEG 2pl-DECL
 ‘You all are worthless people, you don’t know (anything)!’ (RU)

15.1.3. Other intensifiers

While *-(V)cáp* and *muhún* / *mún* are the most commonly used intensifiers in Hup, there are a variety of other strategies for marking intensification that are less common or occur in more limited contexts.

15.1.3.1. Verbal auxiliary *-tubud-*

The form *-tubud-* (glossed INTS3) is an erstwhile compounded verb root that has taken on auxiliary-like properties of intensification (see also §9.4.2.4b for more examples and discussion of this form). It occurs only with verbs, and its formal status is somewhere in between an Inner Suffix and a compounded verb root. Examples of its use as an intensifier are given in (17-19):

- (17) *hup-hipāh-nīh ʔāh ní-mīʔ-ay, wəhəd=d'əh ʔūh-məh-tubud-ní-h!*
 RFLX-know-NEG 1sg be-UNDER-INCH old.man=PL RECP-kill-INTS3-INFR2-DECL
 ‘While I was unconscious (drunk), the old men really fought!’ (LG.O.37)
- (18) *ʔin təh=məh-and'əh hup=d'o ʔ-tubúd-úh!*
 1pl son=DIM-ASSOC.PL RFLX=take-INTS3-DECL
 ‘My son and I were given a *lot* (of beer)!’ (TD.Cv.103)
- (19) *ʔam ʔəh-tubud-yíʔ-ǵy!*
 2sg sleep-INTS3-TEL-DYNM
 ‘You were completely asleep!’ (when I overslept one morning) (OS)

In the Umari Norte dialect, *-tubud-* as an intensifier has undergone a degree of phonological reduction, resulting in the loss of the medial consonant in the speech of at least a few speakers:

- (20) *ham-túúd ! w'əh=mah j'ám tīh hám-ayīk!*
 go-INTS3 long=REP DST.CNTR 3sg go-EXCL
 ‘He went on and on! He went for a *long* way!’ (JA.65)

Consultants observe that it is possible to use *tubud-* as an independent verb meaning ‘die, lose consciousness’ (example 21); however, this use is not common, and is not attested in my text corpus.

- (21) *ʔāh=ʔin tubud-yíʔ-ǵy*
 1sg=mother lose.consciousness-TEL-DYNM
 ‘My mother lost consciousness/ died.’ (EL)

15.1.3.2. Adverbial intensifier *pʰb* ‘strong’

The form *pʰb* is usually used as an adjective meaning ‘fast, strong’, but it can also appear as an adverb and act as an intensifier (cf. §10.2):

- (22) *pʰb ʔin hicocó-óh*
 strong 1pl happy-DECL
 ‘We’re really happy.’ (I-Mon.2)

- (23) *hʔd=b’ay kʰdnæn-yóʔ, pʰb péʔ=n’ǎn d’oʔ-yʔʔ-ay-áh*
 3pl=AGAIN pass.go-SEQ strong sick=OBJ.PL take-TEL-INCH-DECL
 ‘Having quickly come, they took those who were very sick.’ (I-Mon.3)

15.1.3.3. Elative *-kʰd*

The form *-kʰd* is used as an elative marker in Hup, indicating ‘more than’ or ‘most’ (see §10.2.2.2). In some expressions—especially when it occurs with adjectives—it has the related function of a generic intensifier. Examples of this use include *naw-kʰd* ‘really good, the best’, *pay-kʰd* ‘really bad, the worst’. The form *-kʰd* is almost certainly historically derived from the verb *kʰd*- ‘pass’, a cross-linguistically common source of an elative marker.

In an interesting case of calquing between Hup and Tukano, a speaker used Tukano *-kumú* in place of the Hup Elative *-kʰd*:¹⁷²

- (24) *nút=tat-n’ʔh péʔ-kumú yǎh kʰw-ɔp tí!*
 here=fruit-NMZ power-kumu FRUST pimenta-DEP EMPH.DEP
 ‘It was a really strong hot pepper, this big!’ (H.TY.80)

¹⁷² It is not clear whether this was a purely idiosyncratic case of code-switching on the part of this speaker, or whether this use is marginally conventionalized. While indiscriminate code-switching and borrowing of Tukano forms is not generally condoned among Hup speakers (see §1.5), some does take place; this may be an example.

However, *kumu* in Tukano is not reported by Ramirez (1997b) to be either an intensifier or an elative gram, or even a verb meaning ‘pass’.¹⁷³ Instead, it is a noun, meaning both ‘bench’ and ‘blesser, spell-maker’ (a person with low-level shamanic abilities). In Hup, the form *kǎd* also has both of these nominal functions, in addition to its uses as a verb and as an elative/ intensifier. It is not clear whether a historical link exists among the nominal and other forms of *kǎd* in Hup.¹⁷⁴ It is also not clear whether the speaker who used the Tukano word for ‘bench’ or ‘blesser’ in place of the Hup Elative *-kǎd* in (24) was aware of the homonymy or polysemy among the various Hup forms, or assumed that his listeners would be similarly aware of it, but this example appears to provide a clue to the way that cross-linguistic heterosemy can arise.

15.1.4. Diminutive Intensifier =*mæh*

The Diminutive Intensifier =*mæh* emphasizes smallness or closeness (spatial or temporal), as well as unimportance or endearment (cf. §7.2). Its use with nouns, however, is rarely that of simply indicating unusual smallness. For this reason, it is not considered a diminutive in the more conventional sense of the word, but rather a type of

¹⁷³ But note that Aikhenvald (2003: 439) reports that the serialized verb ‘pass’ acts as a superlative in Tariana; whether this common feature of Tariana and Hup is due to independent parallel developments or to areal diffusion of some kind is unclear.

¹⁷⁴ The Hup form *kǎd*=*ǎh* ‘blesser, spell-maker’ (= *ǎh*: bound masculine noun) could be interpreted as ‘one who sits on a special bench’ (from *kǎd* ‘bench’). It is likely that the same interpretation motivates the identical form of ‘bench’ and ‘blesser’ in Tukano and is consistent with Tukanoan cultural practices, in which beautifully decorated benches are used by important individuals and in rituals. On the other hand, the Hup form could also be interpreted as ‘one who is more than others’ (from *kǎd* ‘Elative’ or ‘pass’), i.e. more educated or more powerful. The dual meaning of the Hup form ‘bench / blesser’ was almost certainly motivated by calquing from Tukano.

intensifier that attaches to a variety of parts of speech, focusing attention on the smallness or closeness that is already lexically signaled by other means (for example, by the adjective *tæh* ‘small’). This discourse-related function of signaling unimportance or endearment is typical of diminutives cross-linguistically. Diminutive =*mæh* is an enclitic and is accordingly unstressed (although—unlike many clitics in Hup—it may be stressed when followed by another clitic). As is typical of Hup verbal clitics, it can also occur in Inner Suffix position in the verb.

The Diminutive Intensifier occurs in a few lexically frozen nominal and adjectival forms referring to smallness or small things.¹⁷⁵ These are: *cəpmæh* ‘narrow, thin’, *cípm’æh* ‘small’ (cf. Umari Norte *cípm’æh=mæh*), and *wædhɔm’æh* ‘star’ (from *wædhɔ* ‘moon, sun’); the latter two forms have undergone glottal insertion (and/or spreading) within the medial consonant cluster.

In all other cases, the use of =*mæh* is optional. It emphasizes smallness or closeness in adjectival and adverbial expressions such as those in (25-28). This may be either spatial or temporal; for example, ‘now’ in (26) is maximally temporally close to the speech moment.

(25)	<i>dəb-nih=mæh</i>	(many-NEG=DIM)	‘a few, not many’
	<i>layup=mæh=yf?</i>	(one=DIM=TEL)	‘just one’
	<i>tih=tæh=mæh</i>	(3sg=small=DIM)	‘a small one’
	<i>hi-ni=mæh=n’ih</i>	(no.reason-be=DIM=NMZ)	‘just a little something’
	<i>nup=mæh=yf?</i>	(this=DIM=TEL)	‘right away’

¹⁷⁵ The existence of these frozen forms may be evidence that =*mæh* was once a true diminutive, used primarily to indicate small size.

- (26) *nutǎñ=mǎh=yǐʔ ʔǎh wiʔ-tuk-hɔyǎh-ǎh, ʔǎh-ǎw-ǎh!*
 now=DIM=TEL 1sg hear-want-NONVIS-FRUST-DECL 1sg-FLR-DECL
 ‘I’d like to listen to it **right this minute!**’ (B.Cv.83)
- (27) *húp tǎghod mǎh=mǎh=yǐʔ g’ǎh-ǎy*
 person fireplace near=DIM=TEL warm-DYNM
 ‘The person is warming himself right next to the fire.’ (EL)
- (28) *tú=mǎh=yǐʔ ʔám-ǎp mǎyok ní-íp=mǎh yúw-úh,*
 low=DIM=TEL 2sg=father rafter be-DEP=DIM that.ITG-DECL
 ‘They are so low (i.e. close to the ground), the rafters of your father’s house,
- tǎh-ǎñ nǎy=mǎh yúw-úh*
 3sg-OBJ say-DYNM=REP that.ITG-DECL
 she said to him.’ (E-SB.2)

In the following examples, the Diminutive Intensifier occurs with nominal constituents to indicate endearment, as in (29) (where the speaker is referring to his grown-up daughter), or insignificance, as in (30-31).

- (29) *tóg=mǎh mǎh-an... ʔǎh ham-ʔay-té-h*
 daughter=DIM near-DIR 1sg go-VENT-FUT-DECL
 ‘I’m going to visit my daughter.’ (Alb.int)
- (30) *d’og=m’ǎh=tǎh=ʔǎh=mǎh... páy húp=ʔǎh=mǎh*
 vapisuna=snake=offspring=MSC=DIM bad person=MSC=DIM
 ‘(I’m) just a man from the Vapisuna-Snake clan...an ugly little man...’ (Song.G)
- (31) *ʔñ-ǎñ yúd=mǎh d’oʔ-nɔʔ-ǎy*
 1pl-OBJ clothes=DIM take-give-DYNM
 ‘(The Tukanos) gave us a few clothes.’ (P-B.2)

Examples (32-33) use the Diminutive Intensifier in nominal expressions relating to children, with the main rhetorical effect of emphasizing their weakness and vulnerability:

- (32) *cǎʔ-d’ǎh doʔ=mǎh=d’ǎh tǎw-ít=yǐʔ pǎd b’ay-yǐʔ-ni-h*
 other-PL child=DIM=PL path-OBL=TEL DIST return-TEL-INFR2-DECL
 ‘Other little children would return (home while still) in the path.’ (P-B.2)
- (33) *[ǎp pǎ]=mǎh=d’ǎh*
 father NEG:EX=DIM=PL
 ‘The little fatherless ones’ (I-M.3)

The Diminutive Intensifier can even occur with expressions of *large* size, in order to downplay the importance or amount. (34), for example, was spoken by a grandmother who was complaining about the disrespect shown her by the village children:

- (34) *ʔān n'uʔh, tɪh=wá-ān=yiʔ, “ʔám=wa=mæh,*
 1sg.OBJ CNTR 3sg=old.woman-OBJ=TEL 2sg=old.woman=DIM
 ‘To me, the old one, “you little old one,
póg=mæh ʔāh-tiʔ, nɔɔy ʔūhníy ʔám-áh,” nɔ-bɛh
 big=DIM 1sg-EMPH.TAG say-DYNM maybe 2sg-DECL say-HAB-DECL
 you probably think you’re big,” they always say.’ (B-Conv.2.6)

With verbs, =*mæh* (like most Hup enclitics) can move into the verb core, where it takes on an auxiliary-like function of indicating that the activity is performed only to a small degree (compare the ‘Verbal diminutives’, §12.10):

- (35) *teghɔ̃=nɔg'od ʔāh wiʔ-mæh-æh, cípm'æh=yiʔ*
 Non.Indian=mouth 1sg hear=DIM-DECL little=TEL
 ‘I understand just a little Portuguese.’ (A-Int. 1)

Use of =*mæh* as a verbal enclitic can also emphasize insignificance or vulnerability, as with the nominals in (34) above; for example, the speaker in (36) is talking about a young girl who has gotten married too young, and is looking poorly:

- (36) *næ nutæñ-æp kɔn-nɪh mún=mæh-ay kəh,*
 NEG:R today-DEP like-NEG INTS2=DIM-INCH ADVR
 ‘These days she doesn’t look good at all,
tɪnɪh dɔwɔh-ɔp tohó-dɪʔ=mæh-ay...
 3sg.POSS cheek-DEP white-remain=DIM-INCH
 her face is really pale...’ (TD.Cv.105)

15.2. Promiscuous focus and emphasis markers

This section deals with emphasis and focus markers that can attach to various parts of speech and occur in various places in the clause, but appear to have a comparable (though not always identical) function from one such realization to another; they can therefore properly be considered maximally ‘promiscuous’. These markers are in fact only a subset of the large and heterogeneous class of forms that relate to focus and emphasis in Hup, of which the other members pattern differently. Those that signal focus on nominal constituents but serve a different (predominantly aspect-marking) function with predicates are discussed together with nominal morphology in chapter 7; sentence-final discourse particles relating to emphasis are treated below in §15.3. In addition to these, there are various other encliticized forms whose semantics relate to tense, contrast, reportive evidentiality, etc, but which also mark the focused constituent of the clause (cf. §15.2.3).

15.2.1. Emphasis marker *-pog-* / *-po-* / *-wo-*

The most ubiquitous of the emphasis grams in Hup is the form *-pog-* (and its phonologically reduced Inner Suffix variants *-po-* and *-wo-*; cf. §7.2). This emphasis marker is common in both conversation and in narrative, unlike most other emphatic forms discussed in this and the following section (§15.3), which are rarely encountered in narrative outside of quoted speech. Its emphatic function is also extended to one of mirativity in expressions of surprise.

Formally, Emphasis *-pog* (glossed EMPH1) is extremely promiscuous. It attaches both to focused arguments and to predicates, and can occur multiple times in a single

clause. On predicates, *-pog-* occurs consistently in Inner Suffix position, while with other parts of speech it generally appears as an enclitic (*=pog*). It is clearly derived from the adjective *póg* ‘big’,¹⁷⁶ and the only formal difference between *pog* as adjectival modifier and as emphasis particle within a noun phrase is one of stress assignment—the adjective lexeme receives stress, while the encliticized emphasis particle does not.

Examples (37-39) illustrate the occurrence of *-pog-* on multiple constituents within the clause:

- (37) *tih pəpəd-hi-y’æt-yi?póg-ay-áh* *tih=təh ʔip=pog-ǎn*
 3sg roll.up-FACT-lay-TEL-EMPH1-INCH-DECL 3sg=child.father=EMPH1-OBJ
 ‘She rolled her husband right up (in the bark) and left him!’ (I-M.13)
- (38) *ʔám=pog páh, ʔǎn tǎmǎhǎ-hicé?pog-bǎh!*
 2sg=EMPH1 PRX.CNTR 1sg.OBJ laugh-induce-EMPH1-HAB-DECL
 ‘It’s *you* that always makes me laugh!’ (B-Cv.1.5)
- (39) *cǐ? w’aw’a?kǎdcak-yi?pó-ay, húp j’ib=pog*
 leg.calf stick.up-pass.climb-TEL-EMPH1-INCH person foot=EMPH1
 ‘A leg was sticking out (of the pot), a human foot!’ (P.YB.87)

Emphasis *-pog-* has the phonologically reduced variant *-po-*, which is limited to environments where a vowel-initial suffix form directly follows it. This suffix pair patterns just like the other such full/reduced pairs in Hup, such as Future *-teg / -te-*, Habitual *bíg / -bǎ-*, etc. (see §3.6). As with all of these pairs, the unreduced form *-pog-* is required when followed by a consonant-initial suffix:

- (40) *yúp ba ʔǎb’ g’ǎh-pog-ʔé-ew-ǎn hid wǎd-yi?kǎdhám-áy=mah*
 that.ITG spirit be-EMPH1-PERF-FLR-OBJ 3pl eat-TEL-pass.go-DYNM=REP
 ‘They came quickly to eat that one who really was a spirit.’ (D-BWB.7)

¹⁷⁶ The functional link between augmentation and emphasis is comparable to that between diminution and intensification in Hup; see *=məh* (§15.1.4).

- (41) *nĩŋ-ǎñ tĩh tɔn-ham-pog-té-p, cúñ? ham-pog-tég nĩŋ-áh?*
 2pl-OBJ 3sg hold-go-EMPH1-FUT-DEP INTERJ go-EMPH1-FUT 2pl-FOC
 ‘She’ll really take you away! Would you really go?!’ (B-Cv.1.3)

When a vowel-initial suffix follows, either of the two variants is possible, but speakers generally prefer *-po-*:

- (42) *hĩ-nĩh-pó-y=mah j’ám tĩh=b’ay?*
 Q-be.like-EMPH1-DYNM=REP DST.CNTR 3sg=AGAIN
 ‘How the heck does this (story) go?’ (A-WT)
- (43) *tĩh m’ǎ? cǵ d’ob-g’et-pó-ay-áh*
 3sg red.paint brilliant go.to.river-stand-EMPH1-INCH-DECL
 ‘He stood on the bank, really brilliant with red paint.’ (I-M.2)
- (44) *kaninĩ cɔp-ham-pó-h*
 sleepy(Tuk) go.from.river-go-EMPH1-DECL
 ‘Sleepyhead’s gone up away from the river!’ (B-Cv.3.135)
- (45) *ũy d’o ʔ-yĩʔ=pó-ʔ=b’ay?!*
 who take-TEL=EMPH1-INT=AGAIN
 ‘Who the heck took it?’ (B-Cv.92)

A still further reduced form *-wo-* also exists, although its use is much more limited (and is represented only in the speech of a few people from the Japu area), as in (46-47). This variant patterns like *-po-*; it is obligatorily followed by a member of the set of vowel-initial suffixes.

- (46) *key-g’ǎ ʔ-yóʔ=mah yúp “hĩ-nĩh-wó-y cáp bĩg yǎh=nih tĩh-áh?!”*
 see-be.suspended-SEQ=REP that.ITG Q-be.like-EMPH1-DYNM INTS1 HAB FRUST=EMPH.CO 3sg-FOC
 ‘Lying looking out of the hammock, “what the heck is she always doing?”’
 (I-M.8)
- (47) *tĩnĩh máj-wo-ót tɔh-cud-d’o ʔ-kɔdway-yĩʔ-ay-áh*
 3sg.POSS basket-EMPH1-OBL break-be.inside-take-pass.go.out-TEL-INCH-DECL
 ‘She broke it up and put it into her basket and went quickly out.’ (I-M.13)

Emphasis *-pog-* occurs in a wide variety of clause types, including imperative clauses. In imperatives it receives the primary stress of the verb word, which would normally fall on the (compound-final) verb root:

- (48) *huǎ̃ b'ɣiɪ d'oʔ-g'et-póg!*
 tobacco only take-stand.IMP-EMPH1
 'Just get tobacco!' (B.Cv.90)

In addition to its use with verbal and nominal constituents (including noun phrases involving adjective modifiers), *-pog-* cliticizes to predicate adjectives (example 49), and to the predicative negative particle *pǎ̃* (example 50):

- (49) *páy=pog páh yú-wəd-əh*
 bad=EMPH1 PRX.CNTR that.ITG-old.man-DECL
 'That old guy's really a jerk.' (P-B.Cv.2.7)

- (50) *pǎ̃=pog!*
 NEG:EX=EMPH1
 'None at all!' (OS)

When word-final, *-pog* is often replaced by the variant *-poʔ* (example 51-52). This word-final glottalization is an additional emphasis-marking strategy in Hup (see §15.3.2 below).

- (51) *tih=pǎ̃y=d'əh dɔwəh kubúk=d'əh b'ɣiɪ?ay=poʔ*
 3sg=bad=PL cheek crusty.paint=PL only-INCH=EMPH1
 'They are all ugly ones with crusty paint on their cheeks.' (LG-C.41)

- (52) *nú-m'æ̃=mæh=póʔ nǎm híd w'ób-op báʔ, nú-m'æ̃=mæh tíh!*
 this-amount=DIM=EMPH1 curare 3pl set-DEP PROTST this-MEAS=DIM EMPH2
 'They put just this little bit of poison (on their darts), just this little bit (is enough to kill)!' (MD-C.74)

Finally, the form *pog* has an additional, related function: it combines productively with verb roots, acting as a habitual nominalizer meaning 'one who always does (verb), is characterized by doing (verb)'. In this construction, *pog* takes the primary stress, but its

function is essentially that of an augmentative; compare English ‘a big eater’, ‘a big liar’. Examples are given in (53):

- (53) *ʔɔt-póg* (cry-BIG) ‘crybaby’
ʔɔh-póg (sleep-BIG) ‘sleepyhead’
tɪh-póg (lie-BIG) ‘big liar’

15.2.2. Emphasis marker = *ʔh*

The Emphasis marker = *ʔh* is a grammaticalized variant of the animate masculine (and gender-neutral) bound noun = *ʔh* (e.g. *yúp*=*ʔh* ‘that man’; see §5.4.2.2). It typically encliticizes to nominals (especially personal names and demonstratives)—but occurs with verbs as well—and functions to emphasize and single out a particular referent. Note that this use of = *ʔh* is in keeping with the individuating function of the bound construction in general, and it makes sense that = *ʔh*—the most frequent and generic (animate) bound noun—would be the bound noun to develop a more general, grammatical function. Use of Emphasis = *ʔh* is illustrated in examples (54-56), where it is in all cases grammatically optional:

- (54) *mánio*=*ʔh* *yúw-úh*, *ʔáh*=*ʔp* *g’ɔh-ɔp*=*ʔh* *yúw-úh*
 Mario=MSC that.ITG-DECL 1sg=father be2-DEP=MSC that.ITG-DECL
 ‘That’s Mario, that’s the one who’s my father!’ (B.Cv.84) (speaker is joking)
- (55) *yuhúm deh-áh* *cáɸ*=*ʔh*, *páti*
 avocado water-FOC other=MSC Pattie
 ‘Avocado Igarapé is another one (town in that direction), Pattie!’ (B-Cv.3.132)
- (56) *tɪh* *g’æɸ-tæh*=*ʔh* *ham-yɪʔ-ay*=*mah*, *g’æɸ-tæh-æh*
 3sg bone-son=MSC go-TEL-INCH=REP bone-son-DECL
 ‘(Having grown up) he went on to be Bone-Son/God himself, did Bone-Son.’
 (M-KTH.115)

Emphasis = *ǎh* can also convey a distinction in restrictiveness. In (57a-b), for example,

= *ǎh* indicates a selection among multiple jaguars:

- (57) a) *ya ǎm tǎh=pōǵ=mah húp=ǎh-ǎn wǎn-ǎh*
 jaguar 3sg=big=REP person=MSC-OBJ follow-DECL
 ‘A big jaguar, it’s said, followed the man.’ (non-restrictive; 1 jaguar)
- b) *ya ǎm tǎh=pōǵ=ǎh=mah húp=ǎh-ǎn wǎn-ǎh*
 jaguar 3sg=big=MSC=REP person=MSC-OBJ follow-DECL
 ‘The big jaguar, it’s said, followed the man.’ (restrictive; 2+ jaguars) (EL)

In addition to associating with nominals, the marker *ǎh* also occurs clause-finally in connection with a verb stem, usually taking the form of an ‘internally complex’

Boundary Suffix: *-Vǎh*. Note that the resulting construction is syntactically (as well as

semantically) distinct from a relative clause, which would take the form [Verb-DEP=*ǎh*]

‘one who does Verb’. This is illustrated in (58-61); note that here again *-(V)ǎh* is

optional, and can be substituted by Declarative *-Vǎh*.

- (58) *ǎm ǎǵ=wag b’ǵyǐ? yǎ tǎh hám-ǎǎh*
 1pl drink=day only thus 3sg go-(V)MSC
 ‘It’s only on days that we drink that (singing) goes on thus.’ (i.e. that we sing)
 (M-S.22)

- (59) *wǎd-yó?, ǎayǔp=ǎh=cud ǎh dǐ?-ǐǎh... dǐ?-yó?, tǎh ye-pǐd-ǐǎh*
 eat-SEQ one=MSC=INFR.EPIST remain-(V)MSC remain-SEQ 3sg enter-DIST-(V)MSC
 ‘(The snake) having eaten (them), there was one man apparently who was left; being left, it was he that entered (the house of the Snake’s daughter).’ (A-WT.2)

- (60) *nút wǎdhǵ ní-n’ǎh híd hám-ǎǎh*
 here sun be-NMZ 3pl go-(V)MSC
 ‘It was right when the sun was here that they started out.’ (M-KTW)

- (61) *núp ʔín kawa-tég-ay=ʔh*
 this 1sg divide-FUT-INCH=MSC
 ‘It was there that we were to split up.’ (A-Int.8)

There is some stylistic and dialectal variation in this use of Emphasis = *ʔh*. For example, one storyteller in Barriera uses the verbal construction *tʔh nɔɔʔh* (3sg say-V=MSC) very frequently when introducing quoted speech in narrative (example 62). Upon hearing the recording of his narratives, however, people of Tat Deh remarked on this use, and said that they prefer *nɔɔy=mah tʔh-ɪw-ʔh* (say-DYNM=REP 3sg-FLR-DECL).

- (62) “*ʔy=ʔh ʔam?*” *tʔh nɔɔʔh*
 who=MSC 2sg 3sg say-(V)MSC
 ‘“Who are you?” is what he said.’ (M.NS.65)

Emphasis = *ʔh* is especially common in expressions involving the Epistemological modality marker *ʔh* (see also §14.8). The resulting semi-idiomatic construction expresses an emphatic supposition:

- (63) *húp=pog ʔh tʔh=ʔh*
 person-EMPH1 EPIST 3sg=MSC
 ‘Could that be a person?!’ (LG.txt)
- (64) *yʔhɪy-key-yóʔ=cud ʔh* *híd d’ob-yʔʔ-ay=ʔh*
 that.ITG.be.like.DYNM-see-SEQ=INFR.EPIST 3pl go.to.river-TEL-INCH=MSC
 ‘So with this, apparently, they went down to the river.’ (I-M.12)
- (65) *j’ám=mah yú=wəd d’oʔ-widnæn-æh...*
 yesterday=REP that=RESP take-arrive.come-DECL...
 ‘Yesterday that one (boat captain) brought (cachaça);

yúw-út ʔh nutæn tʔh ʔɔc-pæm-æy=ʔh
 that-OBL EPIST today 3sg consume-sit-DYNM=MSC
 today that must be what he’s sitting drinking!’ (B.Cv.)

- (66) *póg=cud* *húh* *yúp=* *h**h*, *děh=teg=* *h**h*
 big=INFR.EPIST that-MSC water=tree=MSC
 ‘That thing was apparently really big, that water-tree!’ (M-DT77)

15.2.3. Focus *-áh*

The vowel-initial suffix *-áh* is best described as a focus marker. It occurs only once per clause, and varies in function slightly depending on the context. Clause-finally, it occurs primarily with interrogative clauses, where it signals an emphatic, rhetorical question (and is often followed by an emphatic interrogative tag). Clause-internally, *-áh* always occurs together with some other, clause-level discourse marker (see §15.3 below), and marks the constituent that is the focus of the assertion.

Focus *-áh* attaches to any clausal constituent—nominal, verbal, or other—as a vowel-initial Boundary Suffix. It is always constituent-final, like Declarative *-Vh* (although the latter is also clause-final, unlike the Focus marker); it follows nominal enclitics, and in the case of verbs requires peripheral formatives to occur in the Inner Suffix position. Like most of Hup’s affect markers, it is much more commonly used in conversation than in narrative (with the exception of quoted speech).

Hup has a number of peripheral formatives that share an intriguing resemblance to *-áh*, and all have a function relating to marking focus. These markers tend to have in common a phonological form ending in [ah]. Moreover, like Focus *-áh*, they tend to act as wandering clitic-like entities within the clause, attaching to whichever clausal constituent is in particular focus. Also, in the appropriate context, they are acceptable in place of Focus *-áh* when it would otherwise be required. While *-áh* itself can be

considered the ‘basic’ focus morpheme with no further semantic features, the others all combine a focus-marking function with some other semantic property—just as they appear formally to combine the phonological form *-ah* with additional consonantal material. The members of this set include the Contrast/tense particles *páh* and *j’ám/j’ǎh* (§13.4), the Adversative conjunction *kañ* (§18.1.4), and (more marginally) the Reportive evidential *=mah* (§14.9.4)¹⁷⁷ (see examples 70-72 below). It is not clear whether any historical relationship exists among these forms at all, but the fact that they share a formal and functional resemblance synchronically suggests that they may have some reality as a class.

Examples of the use of Focus *-áh* as a clause-final marker of rhetorical emphasis in interrogatives are given in (67-69).

- (67) *ʔám=yíʔ=mǎʔ=nih* *yúw-áh ?!*
 2sg=TEL=UNDER=EMPH.CO that.ITG-FOC
 ‘It really is you?!’ (M-KTW.106)
- (68) *hǎp=b’ay, hǎ key-nǎh-ǎy* *tǎh-áh?* *wæd díʔ-nǎh* *ʔám-áh?!*
 which=AGAIN Q see-be.like-DYNM 3sg-FOC food remain-NEG 2sg-FOC
 ‘What?! How can this be? You saved no food for me?!’ (H-CO.2)
- (69) *hǎn’ǎh yǎh* *yúw-áh,* *cǎc ?!*
 Q-NMZ FRUST that.ITG-FOC INTERJ
 ‘What the heck could this be?!’ (B.Cv.89)

The related use of the other *-áh* forms is illustrated in the following examples; the Distant Past contrast form occurs in (70), the Adversative conjunction in (71), and the Reportive evidential in (72):

¹⁷⁷ It is not clear at this point whether the Reportive *=mah* can be substituted for *-áh* in contexts where a focus marker is required.

- (70) *mɔy pɔŋ j'ám yúp mɔy ni-ní-h*
 house big DST.CNTR that house be-INFR-DECL
 'That house (that was here) was a big one...' (P.B10)
- (71) *póʔdah=cóʔ-óy=d'əh-əp cǎp=yiʔ kañ ʔid-íp*
 upriver=LOC-DYNM=PL-DEP other=TEL ADVR speech-DEP
 'As for the upriver folks, (it's) actually quite different, their speech.' (A-Int.3)
- (72) *nuh-kəbək=n'ǎn=mah hid pəʔ-əh, dəb!*
 head-break=PL.OBJ=REP 3pl ritually.present-DECL many
 'They gave a dabacuri of sauva (lit. 'head-breaker') ants, they say, lots of them!' (M.KTW)

In its rhetorical emphatic function in interrogatives, *-áh* can be followed by the clause-final interrogative emphasis marker *tĩ* (see §15.3.1.1). Examples (73a-b) illustrates how the use of optional *-áh* in this context indicates relative certainty regarding the event in question. Hup speakers might say either of these in the context of a village gathering, where anyone who has something to say may get up and make a speech to the assembled people. Use of (73a) would imply that they intend to speak, whereas (73b) would indicate that they probably do not—for example, if a Tukano asked them to give a speech in Portuguese.

- (73) a) *ʔid-tég ʔm-áh tĩ?*
 speak-FUT 1pl-FOC EMPH.INT
 'We'll speak, right?'
- b) *ʔid-tég ʔm tĩ?*
 speak-FUT 1pl EMPH.INT
 'Will we really speak?' (EL)

Focus *-áh* is not limited to nominal arguments, but can occur on predicates as well, such as when followed by the Interactive Tag *ya* (see §15.3.3) (with which it is

optional), as illustrated in example (74). (Note that here it takes the place of Interrogative -*Vʔ* on the verb).

- (74) *hɛn'ɪh bɪg yæh̃ yǎʔ b'ɔ̃ wɪd-yé-ep yɪkán*
 Q-NMZ HAB FRUST Mom roça arrive-enter-DEP over.there.ITG
 'Why the heck does Mom
- kəkəy-nɪh=yiʔ kədcak-wog-bɪg-yæh̃-æw-áh yáʔ*
 interrupted-NEG=TEL pass.climb-EMPH1-HAB-FRUST-FLR-FOC TAG1
 climb up there without fail when she comes back from the fields?'
 (I-M.15)

In its clause-internal realization, -*áh* always occurs together with a clause-final discourse marker, and typically marks the constituent that is the focus of the construction; this is usually a fronted nominal argument.

In co-occurrence with the 'Exclusive' form -*Vyɪk* (which singles out one participant as unique vis-à-vis the event; cf. §15.3.6), Focus -*áh* is obligatory, although it may be replaced by one of the comparable [-ah] focus markers discussed above. It must mark the entity that is the focus of the exclusive situation (see §15.3.6 for more examples and discussion):

- (75) *hɪd b'ɪyiʔ ɪh̃-áh, hɔhtɛg-ét g'ǎʔ-g'óʔ-oyɪk cɛc!*
 3pl only EPIST-FOC canoe-OBL be.suspended-go.about-EXCL INTERJ
 'It was **only they** who went out by canoe, hey!' (B-Conv.2)

Focus -*áh* likewise serves this function of marking a focused constituent in the presence of the clause-final tags *hɛʔ* (Interactive; see §15.3.4 below), as in (76), and *báʔ*

(Protestive; §15.3.5 below), as in (77) (where the speaker is responding to a listener's critical comment). However, -*áh* is optional in these contexts, whereas it is required with exclusive -*Vyɪk*.

- (76) *wəʃh=d'əh b'ɣiɣ-áh yúp dəb-əáp d'oɣ-g'ət-ehəʃ?*
 River.Indian=PL only-FOC that.ITG many-INTS1 take-stand-TAG2
 'Only the River Indians plant a lot, you know.' (P-Sp.7)
- (77) *náw=yiɣ-áh tɬh-ǎn dɔʔkáy ʔǎh ʔɬd-ɣy báʔ!*
 good=TEL-FOC 3sg-OBJ correct 1sg speak-DYNM PROTST
 'All right, I'm telling it to her *correctly*!' (in response to another's comment)
 (AL-PN.54)

Finally, Focus *-áh* occurs in one other context involving a clause-final affect marker, but here its distribution is somewhat different from the cases described above. In this construction, rather than marking a focused argument elsewhere in the clause, *-áh* always immediately *precedes* a clause-final nominal argument that is marked as a topic by the Dependent marker *-Vp* (cf. §7.1.5) (note *-Vp* also acts as a clausal subordinator; see §18.2.4.1). The Focus marker *-áh* usually falls on the immediately preceding predicate of the clause, and the resulting construction as a whole is relatively emphatic (see §7.1.5). Note that in a more neutral affirmation, subject-final constituent order in the clause typically requires the Declarative marker *-Vh* instead of the Dependent marker, and the preceding predicate has no special marking.

- (78) *nɨ-d'əh-ǎn, nɬ hup=cɛ=d'əh-áh núw-úp, tɬh nɣay=mah-áh*
 this-PL-OBJ 1sg.POSS RFLX=older.brother=PL-FOC this-DEP 3sg say-INCH=REP-DECL
 'To them, those who are my older brothers, he spoke.' (LG-C.34)
- (79) *páti-ǎn húp-út ʔǎh ʔɬd-ihɣʔ, ʔɬd-ɣy-áh ʔǎh-ǎw-ǎp*
 Pattie-OBJ Hup-OBL 1sg speak-TAG2 speak-DYNM-FOC 1sg-FILR-DEP
 'I speak Hup to Pattie, you know, I really speak (it)!' (P.Sp.)

In this context, as in those contexts discussed above, *-áh* may be replaced with another focus-type marker, such as the Distant Past contrast form *j'ám / j'ǎh*:

- (80) *yɬnɬh-pó-y j'ǎh ʔɬn-ɬp*
 that.ITG-be.like-EMPH1-DYNM DST.CNTR 1pl-DEP
 'That's just how it was for us!' (TD.Cv.98)

15.2.4. Filler form *-Vw-* as an emphasis marker

The so-called ‘Filler’ syllable *-Vw-* is perhaps the most neutral morpheme in Hup, in terms of carrying a particular semantics. It appears in a number of distinct contexts: it appears to play a role in clause linkage and subordination, as discussed in §18.1.2 and §18.2.3 (see also below); in other contexts the main role of *-Vw-* appears to be one of conveying emphasis, which corresponds to and is perhaps even iconically motivated by the phonological weight the Filler syllable adds to the word. The connection between these various uses, and the motivation for the Filler syllable in some of these contexts, is not yet fully understood; however, certain other mechanisms used in signaling clausal linkage—most notably the Dependent marker *-Vp* (see §7.1.5 and §18.2.4)—are also used as discourse-markers on main clauses, so this dual-duty is not unique to the Filler syllable. This section focuses on its use as an emphasis marker in main clauses.

Formally, Filler *-Vw-* is limited to contexts preceding a vowel-initial Boundary Suffix, and is the only case in Hup of a vowel-initial form that is not itself a Boundary Suffix. Its function is in many cases largely determined by that of the vowel-initial suffix that follows it. Filler *-Vw-* tends to occur on a clause-final constituent, but can appear both clause-internally and clause-finally in a single clause.

Filler *-Vw-* frequently occurs with clause-final nominal arguments (subjects or objects), followed by Declarative *-Vh* or the Dependent marker suffix *-Vp* (which here serves an emphasis-related function), or (particularly in the case of demonstrative pronouns) by a case-marker (Object *-ań* or Oblique *-Vt*). In this context, *-Vw*—which is purely optional—functions to place additional emphasis on the participant in question.

This participant may already be the topic of the discourse, as in (81) (from a conversation about a stolen fish net), or may be newly introduced, as in (82), where the speaker observes that what are fish to the spirit appear to humans as jaguars.

- (81) *páh-yi?* *tih y'æt-pog-?ě-y* *páh* *yúw-uw-úh,*
 PRX.CNTR-TEL 3sg lay-EMPH1-PERF-DYNM PRX.CNTR that.ITG-FLR-DECL
 'He left it there a little while ago,

cǎ, *tih=j'á-aw-áh*
 INTERJ 3sg=black-FLR-DECL
 hey, a black one.' (B.Cv.93)

- (82) *ya ?ám=d'əh=mah ?ñ-ǎñ-ǎw-ǎh*
 jaguar=PL=REP 1pl-OBJ-FLR-DECL
 'For us they are jaguars.' (I-M.24)

Further examples of Filler -Vw- with Declarative -Vh on nominals are given in (83-85).

In (83), the speaker is expressing his difficulty in answering my questions about Hup morphemes. (84) was one person's response to a question put to the group, 'Are you all going for a bath?', and (85) marked the end of one story, which led into another.

- (83) *?ǎh-ǎp* *"tíh=cúm palávara"* *nɔ-yí?-ǎy* *bǎg* *?ǎh-ǎw-ǎh*
 1sg-DEP 3sg=beginning word(Pt) say-TEL-DYNM HAB 1sg-FLR-DECL
 'As for me, "it's the beginning of the word," I always say.' (P.Sp.111)

- (84) *j'əm-níh* *?ǎh-ǎw-ǎh!*
 bathe-NEG 1sg-FLR-DECL
 'As for me, I'm not going for a bath!' (OS)

- (85) *ya ?ǎp-ay=nih* *j'ǎh* *yúp* *?ǎd-ǎw-ǎh*
 that.much-INCH=EMPH.CO DST.CNTR that.ITG speech-FLR-DECL
 '(As for) this story, it's over.' (I-M.20)

Example of Filler -Vw- with Dependent marker -Vp are given in (86-87). As discussed in §7.1.5, Dependent marker -Vp serves a topic-marking function when it appears on nominal arguments of the clause.

- (86) *ham-yĩʔ-ay bǝg-áh ʔǎn-ǎw-ǎp!*
 go-TEL-INCH HAB-FOC 1sg.OBJ-FLR-DEP
 ‘(After telling one story) another always comes to me.’ (I-M.21)
- (87) *hĩn’ǝh nǝ-tég-n’ǝh pǎ-áh, yú-uw-úp, mandukorí-ǎn-aw-ǎp!*
 Q-NMZ say-FUT-NMZ NEG:EX-FOC that.ITG-FLR-DEP Mandukori-OBJ-FLR-DEP
 ‘...Nothing like that (is said) to that one, to Mandukori!’ (P-Sp.3)

On verbal predicates, Filler -Vw- is usually followed by one of the vowel-initial Boundary Suffixes, -ay Inchoative, -Vh Declarative, or -Vʔ Interrogative. It cannot occur with Dynamic -Vý.

The combination of Filler -Vw- and Inchoative -ay usually indicates the initiation of a long-term or permanent situation (see §12.3 for more discussion):

- (88) “*n’í-cóʔ nĩŋ hám,*” *ʔm-ǎn híd nǝ-b’ay-áh,*
 that-LOC 2pl go.IMP 1pl-OBJ 3pl say-AGAIN-DECL
 “‘You all go there,’ they said to us,
- “núť tǎh=d’ǝh híd ni-tég-ew-ay-áh”*
 here tapir/cow=PL 3pl be-FUT-FLR-INCH-DECL
 “‘here cattle will live from now on.’” (P-B.5)

- (89) *ʔǎh ham-yĩʔ-ǎw-ay*
 1sg go-TEL-FLR-INCH
 ‘I’m going away (for good).’ (OS)

While the long-term event interpretation of this construction is the usual one, it is not the only one possible; the Filler + Inchoative forms on a verbal predicate can also have an emphatic, primarily stylistic function like that of the Filler with nominal arguments (see above). This is illustrated in (90), where the multiple occurrence of the Filler syllable (on various constituents of the clause) yields a highly emphatic utterance:

- (90) *hăy-ăñ key-d'óʔ-ow-ay ʔăh-ăw-ăh, nút tʃk j'óŋ! hi-yăi-əw-ay!*
 um-OBJ see-take-FLR-INCH 1sg-FLR-DECL here thigh punch descend-lie-FLR-INCH
 'I've seen/caught a glimpse of what's-his-name; he hits her in the leg and gets
 down from the hammock!' (B-Cv.2.3)

When combined with the Declarative suffix *-Vh* on predicates, Filler *-Vw-* appears to take on a distinct function relating to clause linkage, as in (91-93). Whereas the Filler + Inchoative suffix combination occurs freely on verbal predicates in isolated clauses (with the aspectual function described above), the Filler + Declarative combination is grammatical only when preceded by a linked clause (on which the Filler suffix cannot occur); the first clause makes a point, while the second provides more information about it. The Filler syllable appears to signal that the Declarative marker is here functioning non-canonically as a linker, and *-Vw-* is in fact required on the second clause of the pair in these examples. The use of this construction in clause linking almost certainly relates to the non-canonical combinations of Declarative *-Vh* with other Boundary Suffixes in some linking contexts (see §17.3.2 and §18.1.2).

- (91) **j'ám-yiʔ híd ní-iw-ih*
 DST.CNTR-TEL 3pl be-FLR-DECL
 (Intended meaning: 'A long time ago they lived.')
- (92) *j'ám-yiʔ híd ní-ní-h, nút híd ní-iw-ih*
 DST.CNTR-TEL 3pl be-INFR2-DECL here 3pl be-FLR-DECL
 'A long time ago they lived (there), (now) they live here.' (EL)
- (93) *yúp=mah yúw-úh, məhʒy hod híd nʒ-əw-əh*
 that.ITG=REP that.ITG-DECL deer hole 3pl say-FLR-DECL
 'So that was it, that which they should call the Deer's Tomb.' (I-M.14)

The Filler syllable has a similar linking-type function in combination with the Interrogative suffix *-Vʔ*. Filler *-Vw-* cannot occur in a normal information-soliciting

question, and is grammatical only in rhetorical or ‘backchanneling’ interrogatives that essentially respond to another’s statement by repeating this statement as a question; as such it apparently signals a link to preceding statement. In fact, in rhetorical constructions involving the repetition of the verbal predicate, such as (94) (uttered in response to the statement ‘your mother’s getting a bath’), the simple Interrogative suffix without the Filler is judged ungrammatical.

- (94) *j’ ʃm-ɔw-ʃʔ?*
 bathe-FLR-INT
 ‘Getting a bath, huh?’ (OS)

Relative clauses are yet another environment in which the Filler syllable appears. Filler -Vw- occurs in all cases, and only in those cases, in which a headless relative clause stands in for an object or oblique nominal argument of the verb, and is nominalized directly by a case marker (either Oblique -V́t or Object -áñ) (see §18.2.3). The case suffix attaches to the verb stem, separated from it only by the Filler syllable. This function may have some relationship to the clause-linking role of -Vw- (see above), but this is unclear. Note that in adverbial clauses, on the other hand, the oblique case-markers -an and -V́t attach directly to verb stems, with no intervening Filler syllable (see §18.2.6.2). The use of -Vw- in headless case-marked relative clauses is illustrated in (95) (Oblique case), and (96) (Object case). Example (96) also illustrates the common occurrence of the Filler syllable between a demonstrative stem and case marker, as mentioned above.

- (95) *tɪh=hipuđ [y’æt-yíʔ-ɪw-ɪ]* *hid* *kow’ow’-tuʔ-y’æt-yíʔ-ay-áh*
 3sg=mojeca lay-TEL-FLR-OBL 3pl squeeze-immersed-lay-TEL-INCH-DECL
 ‘They squeezed and dropped (the poison) into his mojeca, which had been set aside.’ (I-M.10)

- (96) *tih* *ʔəg-ay-áh,* *yú-uw-ǎñ...*
 3sg drink-INCH-DECL that.ITG-FLR-OBJ
 ‘He drank it...

 yúp [*hid* *kow’ow’-tu ʔ-y’æt-yiʔ-pog-ʔé-ew-ǎñ-áh*]
 that.ITG 3pl squeeze-immersed-lay-TEL-EMPH1-PERF-FLR-OBJ-DECL
 that into which they had squeezed and left timbó.’ (M11)

15.3. Sentence-final affect particles

This section is devoted to the large set of clause-final discourse markers in Hup. These formatives have a number of formal features in common: they are restricted to clause-final position, they can occur only once per clause, and most are free particles or—in a few cases—enclitics. They have scope over the clause as a whole and serve an affect-related function having to do with emphasis or encoding some aspect of social interaction (usually involving the addressee). They tend to be very common in conversation—especially highly animated conversation—but rarely occur in narrative. In general, most of those that are realized as peripheral formatives never appear in the Inner Suffix position in the verb. Several have formal variants according to the type of clause (interrogative, imperative, etc.) in which they appear, and in some cases these variants act as ‘internally complex’ Boundary Suffixes (see §3.4.1.2). The details of many of these formatives’ functions are still unclear, and must await future research.

15.3.1. Emphasis particles (*ti*)

One group of these discourse particles, considered here as a set, have almost identical forms: *tĩ*, *tiʔ*, *tí*, *tih*. To some degree, these forms associate with different clause types,

but perform similar emphasis-related functions. Given their close resemblance, it is very likely that a historical relationship—or even a relationship on the synchronic level, corresponding to differentiation according to clause type—exists among them (or some of them). At this point this is little more than speculation, but it is worth noting that some of the phonological variation among these forms corresponds to similar variation, also according to clause type, seen in other interactive tags (*yǎ*, see §15.3.3, and *hǎʔ*, §15.3.4). It is also worth noting the formal similarity of these emphatic *ti* forms to the Counterfactual marker =*tih* (§14.3), but the latter patterns differently in the clause and is functionally quite distinct.

15.3.1.1. Interrogative emphasis *tĩ*

The particle *tĩ* (glossed EMPH.INT) is a marker of interrogative emphasis, used in emphatic questions and expressions of doubt (examples 97-98). It is generally considered to be interchangeable with the functionally similar particle *yǎ* (which also has rising tone when used in interrogatives; see §15.3.3 below), although *tĩ* may indicate a slightly higher degree of doubt.

- (97) *hǎn'ĩh ʔĩn wǎd-ǎʔ tĩʔ*
 Q-NMZ 1pl eat-INT EMPH.INT
 ‘What the heck is this we’re eating?!’ (joking) (RU)

- (98) *hǎcǎʔ yǎh tĩh ham-yǎh-ǎʔ tĩʔ*
 Q-LOC FRUST 3sg go-FRUST-INT EMPH.INT
 ‘Where in the world has he gone?’ (T.C.4)

In polar questions, the Focus marker *-áh* (or a related form) often occurs on post-verbal subjects followed by clause-final *tĩ* (examples 99-100; see also §15.2.3 above). As illustrated by the comparison in (101), *tĩ* by itself adds emphasis to a question, and together with Focus *-áh* creates a more rhetorical question:

- (99) *ʔamħ máj ní-íy=mah tħ-áh tĩ?*
 2sg.POSS basket be-DYNM=REP 3sg-FOC EMPH.INT
 ‘You have your basket (as they said), right?’ (Paulo.1-2)
- (100) *yħ=yi? tħ j’áh tĩ?*
 thus=TEL 3sg DST.CNTR EMPH.INT
 ‘It (the story) went like that, didn’t it?’ (P-BWB.5)
- (101) a) *b’oy-tég ʔħ ?*
 study-FUT 1pl
 ‘Are we going to study?’ (neutral)
- b) *b’oy-tég ʔħ tĩ*
 study-FUT 1pl EMPH.INT
 ‘Are we *really* going to study?’ (doubting, emphatic)
- c) *b’oy-tég ʔħ-áh tĩ*
 study-FUT 1pl-FOC EMPH.INT
 ‘We’ll study, right?’ (relative certainty, emphatic) (EL)

15.3.1.2. Emphasis *tĩ*

Like Interrogative *tĩ*, the Emphasis marker *tĩ* (glossed EMPH.DEF) appears to associate primarily with a specific clause type: in most instances of its use, it occurs optionally in a main clause following Dependent marker *-Vp* (which in this context serves a topic-marking function, as discussed in §7.1.5 and in §18.2.4.2). It is the only clause-final emphasis marker possible in such subordinate-marked main clauses.

- (102) *kúb tñh naʔ-wób-op tí*
 starving 3sg lose.consciousness-rest.on-DEP EMPH.DEP
 ‘He was really hungry (up in the tree).’ (H-CO.5)
- (103) *ʔñ=ʔñ ʔǎp=nih-áh tñh-ǰp tí, g’ǎg-tǎh tíh*
 1pl=MSC NEG.ID=EMPH.CO-FOC 3sg-DEP EMPH.DEP Bone-Son EMPH2
 ‘He isn’t one of us, that Bone-Son.’ (LG-C.22)

While the Dependent marker *-Vp* usually occurs clause-finally, immediately preceding *tí* (suggesting that both may be functioning as clause-level markers), it occasionally appears instead on a nominal argument occurring earlier in the clause:

- (104) *ʔñ-ǰp yǎn’ñh=n’ǎñ hipǎh-nñh yǎh tí*
 1pl-DEP that.ITG-NMZ=OBJ.PL know-NEG FRUST EMPH.DEP
 ‘We (humans) don’t know about these things.’ (I-M.25)

The relationship between emphatic *tí* and interrogative *tĩ* is suggested by their apparently identical functions in their respective clause types, as illustrated by the following example:

- (105) *yǎ nǎ-ǎy tñh-ǎñ ʔñ-áh tĩ?*
 that.ITG say-DYNM 3sg-OBJ 1pl-FOC EMPH.INT
 ‘Did we say thus to her?’
- ʔñ nǎ-nñh yǎh ʔñ-ǰp tí!*
 1pl say-NEG FRUST 1pl-DEP EMPH.DEP
 As for us, we did not say (that) in vain!’ (P-Sp.7)

The general restriction of *tí* to main clauses involving a Dependent marker may be subject to some dialectal variation. For example, speakers in the Tat Deh dialect region accept *tí* directly following a noun, as in (106), while Barreira speakers accept only Emphasis *tíh* (see below) in this context. However, the similarity between these two forms creates confusion in elicitation sessions for speakers as well as for linguists, so this issue must await future resolution.

- (106) *məhǎy tí*
 deer EMPH.DEP
 ‘It’s a deer!’ (EL)

15.3.1.3. Emphasis *tíh*

The Emphasis marker *tíh* (glossed EMPH2) typically marks quite forceful, even angry expressions, and is clearly the strongest of the *ti* emphatic forms. It is always stressed, and occurs with a variety of clause types. Such clauses may involve a full predicate (example 107); they may also be composed of only a single nominal item (example 108), whereas normally an equated nominal subject and predicate are required to form a complete predicate nominal clause. Further examples are given in (109-10).

- (107) *wæd-d’oʔ-níh-ay tíh!*
 eat-take-NEG-INCH EMPH2
 ‘(They) didn’t get anything to eat!’ (P.C.7)
- (108) *j’ám-ap=pog tíh, dúdu, b’éj=pog tíh !*
 DST.CNTR-DEP=EMPH1 EMPH2 Pedro jandia.fish=EMPH1 EMPH2
 ‘It was that big one, Pedro, that big jandiá fish!’ (B.Cv.8)
- (109) *núp tíh !*
 this EMPH2
 ‘This one!’ (pointing out) (OS)
- (110) *búy=kamí tíh !*
 aru=time.of EMPH2
 ‘It was the time of the arú!’ (cold period) (TD.Cv.99)

Alternative ways to express example (110), using different *ti* particles, are

búy=kamí-ip tí (EMPH.DEP) and *búy=kamí-itiʔ* (EMPH.TAG, see below); consultants report little or no functional difference among these. Emphasis *tíh* can also apparently occur

interchangeably with *tí* in a main clause marked with the clausal Dependent marker; in this context, *tíh* is said to be more forcefully emphatic than *tí*:

- (111) *nǵáh* *yúw-up* *tíh* !
 1sg.POSS-FOC that.ITG-DEP EMPH2
 ‘It’s mine!’ (EL)

15.3.1.4. Emphatic tag *-(V)ti?*

The tag *-(V)ti?* (glossed EMPH.TAG) is formally somewhat distinct from the other members of this set. It is unstressed, ends in a glottal stop, and typically attaches directly to a verb stem as an ‘internally complex’ Boundary Suffix (cf. §3.4.1.2); with nominals, it appears without the copied vowel. Its function remains somewhat mysterious, but it does appear to have something to do with emphasis. Its use is illustrated in the following examples:

- (112) *ǵñ ǵǵy=dóǵ=d’ǵh* *yǵǵ=n’añ* *ǵñh-nǵh-d’ák-n’ñh* *ǵǵp*,
 1pl FEM=child=PL man=OBJ.PL RECP=fall-stick.against-NMZ NEG:ID
 ‘We as girls didn’t go running after men like that,
 yúp *tíh* *muññǵ-ní-iti?*!
 that.ITG 3sg play-be-EMPH.TAG
 (but) there she’s gone messing around (and gotten married too young)!’
 (TD.Cv.105)

- (113) *ní-n’ñh=nih* *j’ám*, *ǵañ* *ǵp* *ǵǵd-ñi?*
 this-NMZ=EMPH.CO DST.CNTR 1sg.OBJ father speak-EMPH.TAG
 ‘Thus Father told me (long ago).’ (T-PN.4)

- (114) *ǵñ-íp* *pík* *wǵǵd-ǵti?*
 1pl-DEP fruit.sp eat-EMPH.TAG
 ‘As for us, we ate *pík* fruit!’ (EL)

Following clause-final nominal arguments, *-(V)ti?* takes the place of the Boundary Suffix (usually *-Vh*) that is required on post-verbal subjects and on predicate nominals.

Here it appears without the copied vowel, and can be classified (on the basis of stress)

as an enclitic:

- (115) *núw-áh nř dápí=ti?*
 this-FOC 1sg.POSS pencil(Pt)=EMPH.TAG
 ‘This one is my pencil!’ (showing off a new possession) (EL)

- (116) *w’ěh-éy=řǎý j’ǎh řǎh=ti?*
 far-DYNM=FEM DST.CNTR 1sg=EMPH.TAG
 ‘I am a woman who comes from far away.’ (Songs)

Finally, *-(V)ti?* occurs together with the Epistemic modality particle *řǎh* in a

formulaic expression of doubt (cf. §14.8):

- (117) *canař řǎh řǎh yum-tég-ti?*
 pineapple EPIST 1sg plant-FUT-EMPH.TAG
 ‘Maybe I should plant pineapple.’ (P-Sp.3)

- (118) *húp=mæh řǎh núp=ti?*
 person=DIM EPIST this=EMPH.TAG
 ‘Perhaps this is a little person.’ (M-DT79)

15.3.2. Additional emphatic device: glottalization

Hup has an additional device for indicating emphasis, which—unlike the other forms discussed in this section—is not a formative per se, but a phonological process. This involves glottalizing the final segment of the final constituent of a clause, or of a word that occurs outside the main clause. If the morpheme ends in a vowel, a glottal stop is typically added to the word; if it ends in a voiceless consonant, this consonant is dropped and replaced by /ʔ/. A final voiced consonant typically becomes glottalized (C’).

This emphatic device is primarily stylistic; its use is common in narrative, particularly by older, experienced storytellers. These speakers use it most frequently—

often uttered sharply at a higher pitch—to embellish descriptive adverbial expressions; among the most common are *bĩg*’ [bĩk] ‘a *long* time’ (from *bĩg*), and *té* ‘until’, in expressions of traveling until a certain time or place is reached, as in example (119). Further examples are given in (120-22).

- (119) *deh-d’ó? có? tĩh d’ób-mĩ?... mmmm! té? !*
 water-take LOC 3sg go.to.river-UNDER IDEO until(EMPH)
 ‘While she went down to the water, (noise of going) until!’

deh=mí-an tĩh túh-úh
 water=stream-DIR 3sg pause-DECL
 he paused by the stream.’ (P.BWB.88)

- (120) *yĩkán mǎy híd bí?-pĩd-ĩh, póg’ !*
 over.there house 3pl make-DIST-DECL big(EMPH)
 ‘Out there they built a house, (it was) *big*!’ (H.68)

- (121) *nihũ? nǎ núp j’ah có? ni-tǎ?-ní? !*
 all NEG:R this land LOC be-CNRFCT-INFR2(EMPH)
 ‘All of these (evil beings) were almost in our land !’ (H.33)

- (122) *nĩŋ=tǎh ǎp=cud-ay yú? !*
 2pl=child.father=INFR-INCH that.ITG(EMPH)
 ‘It’s like he was your husband !’ (angrily responding to women who have given her a hard time about her husband) (TD.Cv.104)

15.3.3. Interactive tag *ya*

The clause-final particle *ya* (glossed TAG1) functions as an interactive tag. It has two realizations: it occurs with interrogative clauses, where it appears with rising tone (*yǎ*), and—more rarely—it appears on declarative clauses with high tone ((-V)*yá*), where it attaches to predicates as an ‘internally complex’ Boundary Suffix with a copied vowel. It is a stylistic device; in addition to being purely optional, it is subject to considerable

regional variation. Consultants say that speakers from the Japu/Vaupés area use it more often than those on the Tiquié River.

In its more common interrogative function, *yaʔ* acts as an emphatic tag. It is judged to be almost interchangeable with the interrogative emphasis particle *tĩ* (§15.3.1.1), although it is considered somewhat more emphatic. Interrogative *yaʔ* is especially common in rhetorical questions (asked not so much for information as for rhetorical effect), but it is also used when asking an information question emphatically. It follows a complete interrogative clause (whether a polar or a content question; see §17.4), and often co-occurs with other clause-internal emphasis markers (e.g. =*pog* in example 124). Examples of the interrogative use of *yaʔ* are provided in (123-27):

- (123) *hĩ-n'ĩh ʔám=ʔĩn ʔám-ǎñ g'et-wǎd-ǎʔ yaʔ ?!*
 Q-NMZ 2sg=mother 2sg-OBJ stand-eat-INT TAG1
 'What does your mother feed you?!' (seeing no food in house) (RU)
- (124) *hĩ-n'ĩh ʔāh wǎd-pog-tég yaʔ ?*
 Q-NMZ 1sg eat-EMPH1-FUT TAG1
 'What the heck will I eat?' (EL)
- (125) *hĩ-n'ĩh-tég ʔĩn yaʔ ? ...páy bĩʔ-ĩy=cud ʔĩn=ʔĩn ʔĩn-ǎñ-áh*
 Q-NMZ-FUT 1pl TAG1 bad work-DYNM=INFR 1pl=mother 1pl-OBJ-DECL
 'What are we going to do? Our mother has done badly by us, apparently.' (I-M.9)
- (126) *tód-ót=mah híd yók-oʔ j'ám yaʔ ?*
 hollow-OBL=REP 3pl poke-INT DST.CNTR TAG1
 'They poked around in the hole, right?' (A-WT)
- (127) *cecádio=wǎd-ǎʔ yíkán cuʔ-pog-pĩd-ĩʔ yaʔ, n'ikán?*
 Cesario=RESP-INT over.there.ITG grab-EMPH1-DIST-INT TAG1 over.there
 'Cesario always gets (the money) there, doesn't he, over there?' (B.Cv.87)

The Focus marker *-áh* sometimes occurs on a clause-final pronoun when followed by *yá* (example 128), and can also appear on a verbal predicate followed by *yá*, in place of the usual Interrogative marker *-V?* (example 129).

- (128) *páti ni-pó-y tñh-áh yá?*
 Pattie be-EMPH1-DYNM 3sg-FOC TAG1
 ‘Pattie’s here, right?’ (EL)

- (129) *hñn’ñh bñg yáñ yá? b’ñ wíd-yé-ep yñkán*
 Q-NMZ HAB FRUST Mom roça arrive-enter-DEP over.there.ITG
 ‘Why the heck does Mom

kəkəy-nñh=yi? kədcak-wog-bñg-yáñ-áñw-áh yá?
 interrupt-NEG=TEL pass.climb-EMPH1-HAB-FRUST-FLR-FOC TAG1
 climb up there without fail when she comes back from the fields?’
 (I-M.15)

Like most other clause-final particles, *yá* is morphosyntactically bound to the preceding predicate, and cannot be separated from it by an address term or other material:

- (130) a) *hñn’ñh wag ?ñn há-m-a? yá, páti*
 Q-NMZ day 1pl go-INT TAG1 Pattie
 ‘So which day will we go, Pattie?’
 b) **hñn’ñh wag ?ñn há-m-a? páti yá*
 Q-NMZ day 1pl go-INT Pattie TAG1
 ‘So which day will we go, Pattie?’ (EL)

The non-interrogative function of *(-V)yá* (high tone) as a rhetorical interactive tag is illustrated in examples (131-132). In these clauses, *(-V)yá* takes the place of the required suffix material (usually the Declarative marker *-Vñh*) on post-verbal subjects in affirmative clauses. It combines directly with verbs as an ‘internally complex’ Boundary Suffix, requiring a copied vowel to come between itself and the verb stem (example 132).

- (131) *nĩ kɔw hicóy'=hɔ yǎh yúp yá*
 1sg.POSS pimenta addition=NONVIS FRUST that.ITG TAG1
 ‘Hey, that sounds like something I can put in my quinhapira! (T.txt)
- (132) *n'í-có? pidadacú ni-yǎh-ǎyá*
 there-LOC piraracu.fish be-FRUST-TAG1
 ‘I guess that’s where the piraracu fish live, huh?’ (H.64)

It is likely that Hup *ya* is cognate with Dâw *-yam*, also a rhetorical interrogative tag (cf. S. Martins 1994: 172).

15.3.4. Interactive Tag *(-V)hɔ?*

The Interactive Tag *(-V)hɔ?* is used with statements to bid for attention and/or solicit a response from listener. It may be related to the affirmative particle *hɔ?* ‘yeah, OK’, used for affirmative answers to questions or acquiescence to requests.

Interactive *(-V)hɔ?* patterns in much the same way as do the other clause-final discourse particles like Emphasis *yǎ* and *tĩ*; it is an optional, stylistic device, its use is subject to variation among individual speakers, and it is almost completely absent from narrative—occurring only in quoted conversation or when a storyteller breaks out of the narrative mode to make a meta-comment about the tale. Also like the other discourse particles that are realized as ‘internally complex’ Boundary Suffixes (e.g. *-(V)ti?* and *-(V)yá*) in declarative clauses, it fills the required morphological slot (usually occupied by Declarative *-Vh*) following clause-final declarative subjects, and requires an intervening vowel-copy when attaching to verb stems.

Examples of the use of Interactive Tag *(-V)hɔ?* are given in (133-36):

- (133) *tính tñ hǝʔ, húp=d'əh b'ǝyi? nút ní-ihǝʔ*
 3sg.POSS string TAG2 Hup.person=PL only here be-TAG2
 'That was his line; just Hupd'əh will live here, you know?'¹⁷⁸ (P-Sp.1)
- (134) *cǎ-wag pǎd g'ǎʔ-ǎy j'am yǝn'ñ hǝp hǝʔ*
 other-day DIST be.suspended-DYNM DST.CNTR that.ITG-NMZ fish TAG2
 'The other day too some fish were in my net, you know.' (B-Cv.3)
- (135) *tñ hǎʔ-taʔ-pǎd-ñhǝʔ, nǝh!*
 3sg stick.in.hand-meet-DIST-TAG2 say
 'He too put his hands into the hollow (to catch the fish as they emerged), you know?' (A-WT.3)
- (136) *ʔínñ pǎt cóʔ-óy ʔín hǝy'-huʔ-yiʔ-tég-hǝʔ*
 1pl.POSS hair LOC-DYNM 1pl cut-finish-TEL-FUT-TAG2
 '(We'll stick her hair onto our heads) after we've cut off our own hair, you know?' (B-Cv.1.2)

Like several other clause-final discourse markers, *(-V)hǝʔ* frequently appears together with the Epistemic modality particle *ññh*, as in (137); note that this example also illustrates the use of *(-V)hǝʔ* with an interrogative clause.

- (137) *ham-pó-y ññh ʔám hǝʔ*
 go-EMPH1-DYNM EPIST 2sg TAG2
 'I guess you're really going, huh?' (EL)

Tag *(-V)hǝʔ* can also occur with the Focus marker *-áh*, which can result in a more emphatic statement, as in (138) or the response in (139):

- (138) *wǝh=d'əh b'ǝyiʔ-áh yúp dǝb-ǝáp d'oʔ-g'ét-ehǝʔ*
 River.Indian=PL only-FOC that.ITG many-INTS1 take-stand-TAG2
 'Only the Tukanos plant a lot, you know.' (P-Sp.7)

¹⁷⁸ This Hup idiom is much like that found in English, where 'line' (i.e. string) is used figuratively to mean 'something that one habitually says'.

- (139) A: *húʔ=d'əh dəb!*
 pium=PL many
 ‘There are a lot of piums!’

B: *dəb-áh yi-d'əh həʔ!*
 many-FOC that.ITG-PL TAG2
 ‘There sure are, huh!’

Hup also has a distinct form $=hə$, which serves much the same interactive, attention-getting function as $(-V)həʔ$ and is limited to imperative clauses. It lacks the final glottal stop of $(-V)həʔ$ and its lack of stress places it into the clitic class (whereas $(-V)həʔ$ is a Boundary Suffix), but is considered to be a variant of the latter form.

- (140) *ʔam hi-g'et-d'o-ʔúh-uỹ, kéy=hə nəh!*
 2sg FACT-stand-take-APPL-DYNM see.IMP=TAG2 say
 ‘You’re going to step on it (tape recorder), hey, look out! (B-June.Cv.136)

- (141) *d'oʔ-kədnəh! kow'-nínih=hə!*
 take-pass.come.IMP peel-NEG.IMP=TAG2
 ‘Bring it here! Hey, don’t peel it!’ (B-June.Cv.137)

- (142) *náw=yiʔ tok-póg=hə, cəc!*
 good=TEL pound-EMPH1=TAG2 INTERJ
 ‘Hey, pound (the coca) carefully!’ (B-Conv.2.4)

The fact that all three of the discourse tags discussed up to this point in §15.3 appear to have similar variants according to clause type argues (in each case) for their polysemy, rather than homonymy. The variants and their (partial) parallelism are summarized in the following table:

Table 15.2. Distribution of Hup tag variants

Clause type	Interactive marker		
	$(-V)həʔ$	$(-V)yá$	$(-V)tiʔ$
Declarative (with verbs)			
Interrogative		<i>yá</i>	<i>tĩ</i>
Subordinate			<i>tí</i>
Imperative	$=hə$		

15.3.5. Protestive *báʔ*

The Protestive particle *báʔ* signals a clash of interest between the speaker and another person. This is usually the addressee, but may also be a closely involved third party. Depending on the context, use of the Protestive can convey concession, protest, or even apology. Like most of Hup's other discourse markers, its use is primarily stylistic; it is common in songs, in keeping with the self-expressive traditional song style of the Hupd'əh. Formally, *báʔ* is a fully free particle, which—unlike the formatives defined as particles in Hup—occurs outside (and following) the clause boundary as defined by the presence of the Declarative marker. It does not occur in interrogative clauses—perhaps because it comments on an established fact, rather than one that is in doubt.

Use of Protestive *báʔ* to signal a concession, where the speaker allows another's desire to override his/her own, is illustrated below. A speaker would say (143) when, on the trail, he/she would like to continue on, but concedes to the others in the party who want to stop for the night. Example (144) was uttered by my Hup 'grandmother' on the first occasion that I offered to accompany her to work in the roça; she at first protested that I would fall off the log bridges over the streams, but then gave in.

- (143) *ʔm ʔʃh-ʔe ʔ-té-h báʔ*
 1pl sleep-PERF-FUT-DECL PROTST
 'All right, we'll sleep here.' (RU)

- (144) *hám-áy, báʔ*
 go-INCH.IMP PROTST
 'OK, come on then.' (OS)

The use of *báʔ* to indicate protest is illustrated in the following examples.

Example (145) is sometimes uttered by children who are refusing to go to school, and a woman who was telling a story of her experiences used the Protestive (example 146) in response to a listener's criticism.

- (145) *ham-n̄h-ay ʔǎh-ǎh báʔ*
 go-NEG-INCH 1sg-DECL PROTST
 'I won't go!' (RU)

- (146) *náw=yiʔ-áh, t̄h-ǎn dɔʔkéy ʔǎh ʔǎd-ǎy báʔ!*
 good=TEL-FOC 3sg-OBJ correct 1sg speak-DYNM PROTST
 'That's enough, I'm telling it to her correctly!' (AL-PN.54)

The Protestive can also occur in expressions of reproach or frustration:

- (147) *ʔǎh hutbí=h̄ ʔǎh báʔ*
 1sg feel.shame-NONVIS PROTST
 'I feel ashamed.' (A-S10)

- (148) *ʔám-ap ʔǎn ʔǎd-n̄h-ʔeʔ j'ám-yiʔ báʔ*
 2sg-DEP 1sg.OBJ speak-NEG-PERF yesterday-TEL PROTST
 'You never spoke with me in the past (though I wanted you to).' (RU)

It can also have an apologetic function, in cases where the speaker announces his intentions despite the knowledge that others—and even he himself—might prefer the situation to be otherwise:

- (149) *ʔin hám-áy yúw-úh báʔ*
 1pl go-DYNM that.ITG-DECL PROTST
 'Well, we're going (but you have to stay behind).' (EL)

- (150) *ʔin ʔǎh-ay-áh báʔ*
 1pl sleep-INCH-DECL PROTST
 'Well, we're going to sleep (although we'd like to stay up and talk).' (OS)

The use of Protestive *báʔ* in imperatives suggests a real or anticipated clash of interest between the speaker and the interlocutor, and may also register politeness (stemming from the awareness of the possible clash). In (151), for example, the singer of an improvised song is expressing his desire for manioc beer, although he knows that none is available. (152) would be said when the addressee has found something that the speaker thinks might belong to him, and I often hear children say (153) when trying to get my attention.

- (151) *nijĩh deĩh b'ɔʔ ʔaĩ nij be-key-kǎm báʔ*
 2pl.POSS water cuia 1sg.OBJ 2sg show-see-IMP2 PROTST
 'Show me your caxiri!' (G.Sg)

- (152) *d'o ʔ-kəd-nǎn-kǎm báʔ, nĩ ʔuĩ yúp=ʔĩh, ʔaĩ key-nĩĩ*
 take-quick.come-IMP2 PROTST 1sg.POSS EPIST that=MSC 1sg see-COOP
 'Bring it here, it might be mine, I'll have a look.' (RU)

- (153) *key-kǎm báʔ!*
 see-IMP2 PROTST
 'Look!' (OS)

Finally, the Protestive can be used as a type of interjection when one misspeaks, akin to English 'oops':

- (154) *mĩh, báʔ, pēd...*
 Mih PROTST Ped
 'Mih, I mean, Ped...' (called addressee by wrong name) (MM-PN5)

- (155) *ʔapáh! dadánya mǎy ʔid-nĩh=hɔ ʔaĩ-ǎh báʔ!*
 INTERJ orange payment speak-NEG=NONVIS 1sg-DECL PROTST
 'Oops! I guess I forgot to tell about the payment for the oranges!' (P.txt.94)

15.3.6. Exclusive -*Vy#k*

The use of this form indicates that an activity is being performed by or in relation to one participant *alone*, to the exclusion of other potential participants. When used in intransitive constructions, the subject is interpreted as acting by him/herself. In transitive or ditransitive clauses, any argument may be singled out as isolated vis-à-vis other referents. The constituent that is the focus of the exclusive construction is typically fronted and marked with the Focus morpheme -*áh* or comparable focus form (which is obligatory when -*Vy#k* is present; see §15.2.3).

Exclusive -*Vy#k* always follows the last constituent in a clause. It is an ‘internally complex’ Boundary Suffix, which is phonologically bound to its host and requires a copied vowel from the preceding stem. For -*Vy#k*, this vowel-copying is required in all contexts—even when the host is a noun—whereas the vowel-copying found with most other ‘internally complex’ Boundary Suffixes in Hup (such as the Emphasis marker -(*V*)*tiʔ* and Interactive (-*V*)*hɛʔ*, see above) is limited to contexts where these follow a verb stem.

Examples of the -*Vy#k* construction with intransitive clauses are given in (156-58). In these, the subject (marked with the focus particle) is singled out with respect to the predication, vis-à-vis other potential participants. Note that Focus -*áh* always attaches to the end of the focused constituent, following other morphemes (see §15.2.3 above). Example (158b) also illustrates a functionally similar (but not identical) periphrastic

strategy for indicating exclusivity, involving the quantifier *b'ǣiʔ* 'alone' (which can also co-occur with the Exclusive construction, as in (157)).

- (156) *nĩ huĩ-áh ní-iyǵ*
 1sg.POSS tobacco-FOC be-EXCL
 'My tobacco alone exists' (i.e. 'I alone have tobacco.') (EL)
- (157) *hĩd b'ǣiʔ ʔuĩ-áh, hǵhtěg-ét g'āʔ-g'óʔ-oyǵ!*
 3pl only EPIST-FOC canoe-OBL suspend-go.about-EXCL
 'It was probably just them, the only ones who went out by canoe.'
 (i.e. so they must be responsible for the theft) (B-Conv.2)
- (158) (a) *puh=mah-áh ʔəg-tég-eyǵ, ʔĩn=hin ham-tég,*
 Puh=REP-FOC drink-FUT-EXCL 1pl=also go-FUT
 'Puh's going to drink alone, they say; we'll go too,
tĩh máh ʔəg-ʔay-tég ʔĩn=hin-ih
 3sg near drink-VENT-FUT 1pl=also-DECL
 and drink with him.' (EL)
- (b) *puh b'ǣiʔ=mah ʔəg-té-h*
 Puh only=REP drink-FUT-DECL
 'Only Puh will drink, it's said.' (EL)

In transitive and ditransitive clauses, the singled-out participant—which is fronted and marked by the focus particle—may be the subject, object, or recipient, as illustrated by the elicited paradigms in (159-60).

- (159) a) *hĩd-áh b'ǣʔ wǣd-ǣyǵ*
 3pl-FOC beiju eat-EXCL
 'Only they ate manioc bread.' (i.e. No one else had any.)
- b) *b'ǣʔ-áh hĩd wǣd-ǣyǵ*
 beiju-FOC 3pl eat-EXCL
 'They ate **only manioc bread.**' (i.e. Nothing else.)
- (160) a) *cug'ǣt-áh tĩh-ǎn yũ bé-eyǵ*
 paper-FOC 3sg-OBJ John show-EXCL
 'John showed him **only the paper** (i.e. letter).'

- b) *tĩh-ǎn-áh* *cug'ǎt* *yũ* *bé-ey#*
 3sg-OBJ-FOC paper John show-EXCL
 'John showed **only him** the paper.'

It is also possible for the focused constituent to occur clause-finally, where it is itself marked with Exclusive -*Vy#*; in these cases the (obligatory) Focus marker typically occurs on the preceding predicate. In (161), for example, the speaker uses the Exclusive gram to contrast the difficult time he experienced after his wife's death with the time before; in (162), the speaker is emphasizing that he alone was singled out to bear the responsibility of house-sitting for the Tukano couple.

- (161) *tǎh ʔín* *pǎ,* *y#* *ham-n#* *j'ám* *t#h-ty#*
 child.mother NEG.EX thus go-NEG DST.CTST 3sg-EXCL
 'Without my wife, it (i.e. life) just doesn't go well anymore.' (LG.txt)
- (162) *ʔám-ǎn* *ʔǎh* *y'ǎt-tég-b'ay-áh,* *nɔ-ʔy-áh* *ʔǎn-ay#*
 2sg-OBJ 1sg lay-FUT-AGAIN-DECL say-DYNM-FOC 1sg.OBJ-EXCL
 'I'll leave you (to house-sit for me), (he) said (specifically) to me.' (B.Cv.95)
- (163) *y#n#h-pó-y* *pǎl* *j'ám* *y#n' h-ty#*!
 that.ITG-be.like-EMPH1-DYNM DIST DST.CNTR that.ITG-NMZ-EXCL
 'It's only this way that they always do it.' (B.Cv.87)

Exclusive -*Vy#* can focus on constituents other than nominal arguments, such as the adverbial expression 'all together' in example (164). A speaker would say this in response to someone's complaint that they did not get their share, with the implication that it was their own fault for not keeping up with the others in eating out of the communal pot; in other words, the act of all eating together is contrasted to other situations in which the participants might have eaten separately and so received different-sized portions.

- (164) *ʔæyæʔ=yiʔ-áh ʔin wæd-æyʔk*
 together=TEL-FOC 1pl eat-EXCL
 ‘It was *together* that we were all eating!’ (RU)

In examples such as (164), (165), and (161) above, -*Vyʔk* appears to function as much to encode contrast as exclusivity. (165) was reportedly uttered at a drinking party, when taunting a member of the host village who had thrown up from drinking too much beer; her point was that the women of her own village (in contrast to those of the host village) could hold their drink.

- (165) *yúp=nih-áh yú-uyʔk, nɔ-ɔy ʔáh-áh !*
 that.ITG=EMPH.CO-FOC that.ITG-EXCL say-DYNM 1sg-DECL
 ‘*That’s* how it is for you all (not for us), I said!’ (TD.Cv.101)

In Tat Deh, some speakers use the variant -*Ÿc* (glossed EXCL2) in place of -*Vyʔk*, as illustrated in example (166). Despite its formal difference, consultants have no difficulty identifying this as a functionally equivalent dialectal variant of Exclusive -*Vyʔk*.

- (166) *yɛ̃nɔ-ɔy=nih j’áh hɛ̃d-ɪw-ɛ̃c, hɛ̃d=d’əh nɪh tæh ʔip*
 that.ITG-say-DYNM=EMPH.CO DST.CNTR 3pl-FLR-EXCL2 3pl-PL POSS child.father
 ‘*They’ve* already talked like that to me;

ni-ʔéʔ=d’əh, ni-hɛ̃c, nɔ-ɔy ʔáh-áh
 be-PERF=PL be-NONVIS-EXCL2 say-DYNM 1sg-DECL
 I think it’s specifically because of those who used to be their husband(s),
 that they’re like that, I say!’ (TD.Cv.104)

15.3.7. ‘Acting alone’ markers -*kéʔ*, -*d’áh*

The two clause-final forms -*kéʔ* and -*d’áh* mark the speaker’s announcement of his/her intention or desire to carry out a prospective activity, *alone* and under his/her own motivation. In other words, they signal that the speaker is the unique agent, regardless of

what other participants might be otherwise involved. The use of these forms is highly restricted. They necessarily involve a first person singular subject, but this (i.e. the pronoun *ʔāh*) is obligatorily left unstated; it is understood from the use of the ‘Acting alone’ marker. These forms also can only have future reference (but do not involve a verbal future gram), and all the examples encountered so far involve the Perfective aspect marker (which is typically used for future events of anticipated short duration). Unlike the ‘Acting alone’ markers, Exclusive *-Vyʔ* has none of these restrictions and is of much more general use; these forms are contrasted in example (172) below.

These ‘Acting alone’ markers are relatively rare in discourse and are not yet well understood. They appear to be essentially interchangeable and functionally the same, although *-d’āh* may imply a more brief duration of the event. Examples of their use are given in (167-69). Note that the analogous expression if the speaker wishes to solicit company (rather than announcing that he/she will go alone) would involve the Cooperative suffix *-nīŋ* (167b; see §14.5).

- (167) a) *nī* *hōp* *cæŋ* *key-ʔay-ʔe ʔ-d’āh*
 1sg.POSS fish net see-VENT-PERF-D’AH
 ‘I’m off to check my fish net (alone).’ (B.Conv.1.3)
- b) *hōp* *cæŋ* *ʔm* *key-ʔay-ʔe ʔ-nīŋ*
 fish net 1pl see-VENT-PERF-COOP
 ‘Let’s go check the fish net (together).’ (EL)
- (168) *cā’wag*, *ʔāh* *ní-ít* *kæm*, *n’ikán* *b’ ʔ-an* *ham-ʔe ʔ-kéʔ*, *nɔ-ɔp* *ʔāp*
 other.day 1sg be-OBL IMP2 over.there roça-DIR go-PERF-KE? say-DEP NEG:ID
 ‘Look how I spend every day at home, never saying “I’m off (alone) to the roça”.’
 (T-PN.3)

- (169) *ʔāh b'oy-ʔeʔ-kéʔ*
 1sg study-PERF-KE?
 ‘I’m off to study (alone).’ (EL)

15.3.8. Acquiescence particle *bé*

This particle, like the two described above, is poorly understood. It occurs quite frequently in the expression *həʔ bé* ‘OK!’ where it marks acquiescence to an imperative (while affirmative *həʔ* by itself can signal either acquiescence or an affirmative answer to a question). This is illustrated by speaker B’s response to A’s imperative in example (170):

- (170) A: *níŋ píníŋ-d'əh-áy=mah, tñh-ǎn!*
 2pl tell.story-send-INCH.IMP=REP 3sg-OBJ
 ‘You all tell a story for her quick, she says!’ (B.Cv.83)
- B: *həʔ bé*
 yes ACQ
 ‘OK!’ (B.Cv.1.5)

The only other context in which the particle *bé* has been encountered is in co-occurrence with the ‘Acting alone’ marker *kéʔ*, as in (171). In this case, it may indicate acquiescence in the sense that the speaker has made up his mind to do something after some deliberation; however, this is as yet unclear. It is hoped that future investigation will shed more light on the functions of this and the two equally mysterious ‘Acting alone’ particles described above.

- (171) *yam-ʔeʔ-kéʔ bé*
 dance-PERF-KE? ACQ
 ‘OK, (I’m) off to dance.’ (EL)

15.4. Grammaticalized social connectedness

Quite a number of grammaticalized forms in Hup arguably have a primary—or at least a very frequently exploited—function of indicating social relationships among participants. This is loosely defined as ‘social connectedness’—the grammaticalized reference to social characteristics or relationships between participants or referents in a speech event.

The idea of grammaticalized ‘social connectedness’ relates to short-term social positioning emerging from the speech event. Where this relates to the expression of the speaker’s own role in the social situation, this may be termed ‘social deixis’ (cf. Levinson 1983, Duranti 1997); in Hup, however, the ‘social connectedness’ grams encode not only deixis, but also ways of talking referentially about other participants’ interactions.

Social deixis in language is often defined narrowly as involving “perduring social relationships” that transcend the moment of interaction (cf. Manning 2001). Such deictic forms include familiar and polite second-person pronouns and honorific terms of address, which are both ways of indexing relatively enduring, pre-established social relationships. Hup has two such honorific-like forms of address (also used for third-person reference): =wəd ‘old/respected person’ and =wa ‘old/respected woman’ (see §7.4).

In addition to this, languages may grammaticalize *situationally dependent* social connectedness or deixis, where the relationship is specific to the activity in question or is created in the context of the speech event itself (second-person pronouns and honorifics *can* have this ‘relatively creative’ function as well as their more common ‘presupposing’ one). In general, grammaticalized forms of specifically situationally dependent social connectedness do not seem to be particularly common cross-linguistically, or are at least

not well described. Some examples do exist, however; for instance, the Arawak language Tariana is reported to have ‘sociative’ serial verb constructions, in which the second stem in the serial construction is the verb ‘be together’ (Aikhenvald 2002). Also, in *Tukang Besi* (Indonesia), the ‘social activity prefix’ *hopo-* “implies that an action is done for a social or ceremonial function, and not just for purely personal goals” (Donahue 1999: 283), and *Tarahumara* (Mexico) is reported to have a co-ordinator which is used “when harmony and/or good fellowship are implied between the conjuncts” (Thord-Gray 1955: 516; J. Payne 1985b: 25).

Hup appears to have a relatively large repertoire of grammaticalized forms that relate to such situationally dependent social connectedness. Those forms that appear to have a primary function of indexing, creating, and referring to temporary relationships between human participants are the Cooperative verbal suffix *-nĩŋ* (joint performance of an activity towards a common goal; §14.5), the ‘Acting alone’ markers *-d’ǎh* and *-kéʔ* (speaker acts alone; §15.3.7), the inclusive first person plural future or hortative use of Declarative *-Vh̃* (§13.3), as well as the Associative Plural form *-and’əh* (a group of people associated with a particular participant; §4.4.6), and (more marginally) the ‘Following’ marker *hũỹ* (one person physically follows another, usually in the joint performance of an activity; §7.10). Other forms that typically encode social interactions among human participants, but also have a more general function with non-human referents, include the Contrastive *n’uñh* (contrast between the referent and other entities; §7.8), Exclusive *-Vy#k*, and even the Applicative suffix *-ñũh-* (§11.3).

The following elicited paradigm illustrates some of the range of information about social dynamics that can be implied or entailed by some of these constructions; the neutral, unmarked form is given in (172a):

- (172) a) *máudio b'ǎ bĩʔ-ǎ*
 Mario roça work-DYNM
 'Mario is clearing a roça.'
- b) *máudio-áh b'ǎ bĩʔ-ǎ*
 Mario-FOC roça work-EXCL
 'Mario alone is clearing a roça (and no one else is doing so).'
- c) *máudio n'uǎ b'ǎ bĩʔ-ǎ*
 Mario CNTR roça work-DYNM
 'Mario is clearing a roça (and we should follow suit and clear one for ourselves).'
- d) *máudio b'ǎ bĩʔ-ǎ-ú*
 Mario roça work-APPL-DYNM
 'Mario is clearing a roça (as a service to someone else).'
- e) *hám-áy, b'ǎ ʔm bĩʔ-nǎ!*
 go-INCH.IMP roça 1pl work-COOP
 'Let's go, we'll clear a roça together!'
- f) *b'ǎ ʔm bĩʔ-ǎ!*
 roça 1pl work-DECL
 'Let's clear a roça (together)!'
- g) *nǎ b'ǎ bĩʔ-ʔay-ʔe ʔ-d'ǎ!*
 1sg.POSS roça work-VENT-PERF-D'AH
 'I'm off to clear my roça (alone)!'

Arguably, Hup grammar places a high priority—from a cross-linguistic perspective—on the linguistic expression and creation of social relationships. The reasons for this may lie in the Hup cultural and social context. Just as the highly stratified societies in which Japanese and other East Asian languages are spoken have given rise to the development of a large number of honorific particles in these languages

(which index relatively *perduring* social relationships), the cooperative, egalitarian society of Hup speakers may well have contributed to the development of the grammaticalized expression of relatively *context-dependent* social relationships, which are created and maintained in the context of the activity and the speech event itself. In Hup society, the Western concept of the individual as an autonomous agent is relatively foreign; the individual is always conceptualized as part of a larger group. At the same time, there is relatively little centralized authority within this group. Thus it is noteworthy if someone is acting alone (~Exclusive -*Vyʃk*); solicitation and discussion of cooperation between individuals—especially involving the sharing of food or objects—is common (~Cooperative -*nʃʃ*; inclusive 1pl -*Vh*; Applicative -*ʃʃh*-); and individuals and family units are expected to act on their own initiative in order to maintain their place in a tightly knit and essentially communal larger group (~Contrastive *nʃʃh*; ‘Acting alone’ markers -*kéʔ*, -*dʃʃh*). On the other hand, while the structure of Hup society is consistent with Hup’s grammatical encoding of social connectedness, it is not clear why this language has developed these forms when so many other languages, spoken in similarly egalitarian societies, apparently have not. More cross-linguistic work must be done to establish how common such forms really are among the world’s languages, and what exactly may motivate their development.

15.5. ‘Whatchamacallit’ morpheme *hǎy*

The function of the ‘whatchamacallit’ form *hǎy* is to fill the space left by a mental block, maintaining the flow of speech and the conversational turn of the speaker; it is therefore

something like English ‘watchamacallit’ and ‘um’. Whatchamacallit *hǎy* can act as an interjection (allowing the speaker to hold the floor while searching for words), and it can also occur in place of a lexical item within the clause (but not a grammaticalized particle or bound morpheme), typically a noun or verb stem. In this case, *hǎy* itself takes the inflectional morphology of the replaced stem. Note that this ability of a single root to inflect as either a noun or a verb stem is not unique to *hǎy* (cf. §3.1), but *hǎy* is extreme in its flexibility.

The interjection-type use of *hǎy* is illustrated in (173), where the speaker uses it to correct himself when he absent-mindedly called someone by the wrong name. Note the similarity between this use and that of Protestive *báʔ* for self-correction (§15.3.5) in example (154) above.

- (173) *páti, hǎy, wáwdu*
 Pattie um Evaldo
 ‘Pattie, what’s-your-name, Evaldo!’ (OS)

In examples (174-76), Whatchamacallit *hǎy* fills in for a noun within the clause, and inflects for case and number just like a normal noun. Interestingly, the ability of *hǎy* to take object case and number marking is governed by the animacy of the referent, just as it is for any normal noun. This suggests that even though the speaker has a mental block on the word itself, information pertaining to the animacy and number of the referent is still available.¹⁷⁹

- (174) *hǎy-ǎt, tegcǎh-ǎt tǎh mǎnæ-yóʔ=mah*
 um-OBL wood.ash-OBL 3sg mix-SEQ=REP
 ‘Having mixed it with, um, with cinders, it’s said.’ (I.M.56)

¹⁷⁹ Cf. English ‘I’ll take some of those *whatchamacallits*’.

- (175) *hǎy-ǎn key-d'óʔ-ów-ay ʔǎh-ǎw-ǎh*
 um-OBJ see-take-FILR-INCH 1sg-FLR-DECL
 ‘I’ve caught a glimpse of what’s-his-name.’ (B.Cv2.89)
- (176) *núp hǎy=n’ǎn, cudádu=n’ǎn, hid ʔid-ʔay-pǐd-ay-áh*
 this um=PL.OBJ soldier(Pt)=PL.OBJ 3pl speak-VENT-DIST-INCH-DECL
 ‘They spoke to, um, to some soldiers.’ (H.Rad.108)

The Whatchamacallit form can also fill in for one member of a compound, or even for a bound noun:¹⁸⁰

- (177) *n’ikán=mah yúp hǎy mɔy, mɔytúð mɔy hid nɔʔw-ɔh*
 over.there=REP that.ITG um house mutum house 3sg say-FLR-DECL
 ‘Out there were the whatchamacallit burrows, the *mutum* burrows, as they call them.’ (I.M.60)
- (178) *pídiya pǒg-ót ʔǎh j’ám hǎy=hɔb-ɔ tǎʔ-yóʔ j’ám*
 battery(Pt) big-OBL EPIST DST.CNTR um=HOLLOW-OBL end.to.end-SEQ DST.CNTR
 ‘(He) had the batteries stacked end-to-end in a whatchamacallit hollow’ (replacing *j’ak* ‘buriti palm’; i.e. a hollowed-out buriti palm stick) (B.Cv2.91)

Whatchamacallit *hǎy* occurs most frequently in the place of a noun stem, but it can also take the place of a verb. As such, it takes the corresponding inflectional morphology, such as the Sequential suffix:

- (179) *yúp hǎy-yóʔ, yúp tǐh=kɔwǒg ní-íy*
 that.ITG um-SEQ that.ITG 3sg=eye be-DYNM
 ‘So after um (after verb-ing), thus he had eyes.’ (H.CO.79)

It can also appear in a compound verb, where it replaces one of the compound-internal stems. In (180), it is not clear what verb the speaker intended to put in the place of *hǎy*; in (181), the missing verb stem may be *hup-hipāh* ‘be conscious’, as in the second verb—if this is the case, then it is interesting that *hǎy* occurs first in the compound, rather

than in the actual position of the missing stem. Alternatively, however, the speaker could have had in mind the compound *ʔəh-cəwəʔ-* (sleep-wake) ‘awake from sleep’.

- (180) *céʔ=mæh* *tɪh g'ud-d'óʔ-óh...* *tɪh hāy-d'óʔ-óh...*
 leaf.basket=DIM 3sg weave-take-DECL 3sg um-take-DECL
 ‘He made a leaf-basket... he um, took...’ (H.CO.77)

- (181) *hāy-cəwəʔ-nɪh-ay=mah,* *cəwəʔ-hup-hipāh-nɪh*
 um-awake-NEG-INCH=REP awake-RFLX-know-NEG
 ‘He wouldn’t, um, awake; he did not awake and gain consciousness.’ (M.I.54)

15.6. Interjections

As a category, interjections in Hup are only one step removed from the set of clause-final discourse particles discussed in §15.3. Like many of the discourse particles, Hup interjections have a primarily affective and stylistic function, and are phonologically and morphosyntactically independent—but they are considerably more grammatically, semantically, and phonologically self-contained than the discourse markers. Two subtypes of interjection can be distinguished on formal grounds: those that are obligatorily associated with a preceding clause, and those that can stand alone as a free utterance.

15.6.1. Clause-bound interjections

This small set of interjections, which are ubiquitous in everyday conversation, bear the closest resemblance to the clause-level discourse particles discussed above. However, they are distinct in that they are completely free forms, having no morphosyntactic or

¹⁸⁰ This may be limited to the stressed (i.e. more variable) member of a ‘productive’ type compound, but this is not currently known.

phonological interaction with the rest of the clause, and no particular grammatical restrictions on their use; they are also semantically independent from the rest of the clause. The interjections of this type always follow a full clause, which may be of any kind (declarative, interrogative, imperative, etc.).

Hup speakers use the emphatic, exclamatory interjections *cɛ!* (men only) and *cún'!* (women only) very often in conversation. This is the only known form in the language for which there is a distinction between men's speech and women's speech. Its use is illustrated in (182-83); example (183) was uttered first by a young adolescent boy, then jokingly echoed by an adolescent girl, with the appropriate change of interjection.

- (182) *nĩŋ-añ tĩh tɔn-ham-pog-té-p, cún'!*
 2pl-OBJ 3sg hold-go-EMPH1-FUT-DEP INTERJ
 'Hey, she's going to take you all away!' (B.Cv1.81)

- (183) Boy:
hĩn'ĩh=pog yúp=b'ay, cɛ ?! (B.Cv1.83)
 Q-NMZ=EMPH1 that.ITG=AGAIN INTERJ
 'Hey, what the heck is that?!'

Girl (echoing him):
hĩn'ĩh=pog yúp=b'ay, cún' ?!
 Q-NMZ=EMPH1 that.ITG=AGAIN INTERJ
 'Hey, what the heck is that?!'

The interactive interjections *nɔh* and *nɔ-kǎm*—both imperative forms of 'say'—are also very common in Hup conversation. On one level, these forms are literal requests for the addressee to repeat the speaker's utterance back to him/her; this is often used as an effective way of saying something for another person—i.e. what one would like that person to say—while at the same time establishing the utterance as part of that person's conversational turn, which is thereby considered as not being usurped. It is also a

common way to include others in the conversation, even those who do not yet have full conversational competence, such as babies and linguists. In some cases, the addressee does indeed repeat the utterance. This kind of interchange is illustrated in the conversation in (184), in which a group of people were trying to coax someone to tell a story, and were trying to involve me in the coaxing:

(184) J: *pínĩŋ-poʔ-ʔéʔ!*
tell.story-EMPH1-PERF.IMP
'Please tell a story!'

G: *j'ám-ãw-ãñ-ap táʔ-ay, yãʔʔ?*
DST.CNTR-FLR-OBJ-DEP REL.INST-INCH Mom
'What about that one, Mom,

j'ám-ap tód-ót híđ bib'-g'et-yĩʔ-ĩw-ãñ?
DST.CNTR-DEP hollow.tree-OBL 3pl plug.up-stand-TEL-FLR-OBJ
that one about them plugging up the hollow tree?'

P: *yúw-ãñ ʔãh hipãh-nĩh-ay=hõ*
that.ITG-OBJ 1sg know-NEG-INCH=NONVIS
'I don't know that one.'

J: *dohʔãý pínĩŋ, yaʔám pínĩŋ... ʔám tãhʔp-ãñ ʔam pínĩŋ-tég, nʔh!*
Curupira story jaguar story 2sg child.father-OBJ 2sg tell.story-FUT say.IMP
'The Curupira story, the jaguar story... **you'll tell it to your husband, say!**' [to me]

M: *cãp táʔ, nʔ-kãñ páti!*
other REL.INST say-IMP2 Pattie
'Say "**another one!**" Pattie!'

Hup speakers use *nʔh* even more frequently as a simple interjection, with utterances that do not really represent a conversational turn on the part of the addressee, who is not expected to repeat them. Examples of this use are given in (185-86):

(185) *j'ãh deh b'ĩyĩʔ, nʔh!*
cara water only say
'It was all cará beer, say!' (TD.Cv.100)

- (186) *húp=d'əh pǎ, nʔh*
 person=PL NEG:EX say
 'There aren't any Hup people, say.' (B.Cv.131)

A related interjection is *nʔyhaʔ* (probably from *nʔ-ʔy=haʔ* (say-DYNM=ALT.INT),

see §17.4.4). It can be translated as something like 'I say,' and may convey slight uncertainty or self-correction:

- (187) *ʔin ni-hipǎh-ǎh, núp hayám-át-áh, núp mʔy-ʔt-ʔh, nʔyhaʔ*
 1pl be-know-DECL this town-OBL-DECL this house-OBL-DECL say.INT
 'We know how to live/behave ourselves, in this town, in this (community) building, I'd say.' (P.Sp.98)

15.6.2. Free interjections

The Hup forms classed as 'free' interjections are usually delivered as exclamations, and are complete grammatical utterances in their own right. They are usually pronounced with distinctively high pitch and intensity, and most involve a single, vowel-final syllable with a lengthened vowel. This phonological distinctiveness is a cross-linguistically common feature of interjections (cf. Schachter 1985: 53). Many free interjections are conventionalized forms, with semantically specific interpretations.

One such form is *cěěe* [ʃěěe] (pronounced with rising intonation), used in reference to large amounts of something. Speakers use this interjection to express their appreciative amazement when seeing a large school of minnows, a large group of butterflies, etc.—or even when referring to a surprisingly large quantity of diarrhea:

- (188) *tʔh-ǎn tʔh cuj-b'uy-d'əh-way-pó-ay-áh! cěěeʔ!*
 3sg-OBJ 3sg diarrhea-throw-send-go.out-EMPH1-INCH-DECL INTERJ(EMPH)
 'He shot out diarrhea and expelled (her arm)! Lots of it!' (H.81)

The free interjection *pĩĩĩ* or *pĩh*—typically pronounced with low pitch and rising intonation—is used in reference to something big, frightening, or intriguing, which may have possible serious consequences. One might use this interjection when noticing that a big rainstorm is approaching or when hearing that someone did something that might lead to trouble. For example, (189) was a response to another speaker’s account of a drinking party in which she surreptitiously (under cover of darkness) poured out the manioc beer served to her, which was not very tasty.

- (189) *pĩĩĩ... ba ʔúk-an-ay-áh?*
 INTERJ dark-OBJ-INCH-DECL
 ‘Oooo... it was already dark, huh?’ (TD.Cv.98)

The interjection *ʔakĩh* (and its variants *ʔakáh*, *ʔayáh*, and *ʔayĩh*) are expressions of pain (i.e. ‘ouch!’):

- (190) *ʔakĩh! nĩŋ=tǎh=d’ǎh nĩh mǎy ʔũh yúw-úh!*
 INTERJ 2pl=offspring=PL POSS payment EPIST that.ITG-DECL
 ‘Ow!! This must be to pay back for (my killing) your children!’ (P.BY.91)
- (191) *ʔayĩh! tĩh nǎǎh, tĩh papad-pĩd-ĩh...*
 INTERJ 3sg say-DECL 3sg moan-DIST-DECL
 ‘Ouch! she was saying, she was moaning continuously...’ (D.BWB.39)

Other conventionalized free interjections include *yǎh* ‘how pretty!’, *ʔacũh* ‘ouch, yikes, look out’ (when an accident befalls oneself or another person, such as tripping, singeing one’s hand in the fire, etc.), and *ʔapáh* ‘darn!’ (e.g. when one forgets something).¹⁸¹

Less conventionalized interjection-type noises are also fairly frequent in Hup discourse. An example is the exclamation of worry or remorse in (192), in which a

husband is running away from his wife, who has turned into an evil spirit; but as he does so, he begins to wonder if he is mistaken and she really is still a human being:

- (192) *ʔóoooo*, *hup=ʔǎy-ǎn=mɛʔ=nih-áh*, *ʔǎh=tǎh ʔn-ǎn ʔǎh yǎd-tɔʔh-ɔh!*
 INTERJ person=FEM-OBJ=UNDER=EMPH.CO-FOC 1sg=child.mother-OBJ 1sg hide-run-DECL
 ‘Ooooh, even though she (may be) a person, I am running away from my wife.’
 (D.BWB.40)

15.7. Ideophones

Like interjections, ideophones in Hup constitute a special word class that serves a discourse-marking function. Also like interjections, they are not morphosyntactically bound, but occur on the level of the sentence. They are considered in this chapter for these reasons.

As in perhaps all of the world’s languages, ideophones in Hup have “a special dramaturgic function that differs from [that of] other word classes... [and] simulate an event, an emotion, a perception through language” (Voeltz and Kilian-Hatz 2001:3). Described as “the closest substitute for a non-verbal physical act” (Kunene 2001), ideophones are peripheral to the lexicon, and fulfill a special performative function.

Like interjections, ideophones cross-linguistically tend to have distinctive phonology, involving special rules of length, tone, and stress (cf. Voeltz and Kilian-Hatz 2001). This is true of Hup ideophones, which often involve a multi-syllabic string made up of one repeated syllable (or bisyllabic form), or even a single prolonged vowel or sonorant segment. They are typically pronounced with a relatively high pitch and intensity, and stress tends to be more or less constant throughout.¹⁸² Nasalization, if

¹⁸¹ At least a few of these same interjections are also used by Tukanoans.

¹⁸² For the sake of simplicity, stress (encoding rising or falling tone/intonation) is marked only on the first vowel of a prolonged vocalic form.

present, applies throughout the form (as with Hup morphemes generally). Tone is not in general contrastive, but intonation may be rising or falling, depending on the ideophone. The number of repetitions of the base form depends a great deal on the type of sound or action the ideophone represents; five repetitions are common, but fewer also occur, and some ideophones are single syllables. The number of repetitions and whether the final syllable is closed or open varies across speakers.

Most ideophones in Hup represent sounds, and a few refer to motions. Like interjections, they are usually peripheral to a main clause; however, ideophones representing sounds are often—like quoted speech—introduced by the verb ‘say’. Hup speakers (both men and women) use ideophones very frequently in narrative, particularly when telling myths or other stories (but also including narrative within a conversational context); however, ideophones are less common in speeches, songs, and spells. Some ideophones are more conventionalized than others, both in form and in use.

Ideophones used to describe motions include the sound associated with traveling or going somewhere (example 193), and movement upwards or upstream (example 194; variants *díídídídí* and *wededede*).

- (193) *tíh túhūk-g'ét-mǐʔ, tíh-ǎn tíh ham-yǐʔ-ay-áh, mmmmm'!*
 3sg snore-stand-UNDER 3sg-OBJ 3sg go-TEL-INCH-DECL IDEO
 ‘While she was snoring, he went away.’ (D.BWB.40).

- (194) *wídídídí, pótʔah-an, kək-d'əh-hám-ap, wídídídí*
 IDEO upriver-DIR pull-send-go-DEP IDEO
 ‘(Pulling noise), upriver, (he) pulled them...’ (LG.C.11)

The sound and action of jumping or landing somewhere suddenly is a commonly used ideophone; the same ideophone is also used for an object hitting something (cf. 202 below):

- (195) *tĩh nɔh-wob-yĩʔ-ay-áh, póoo! tĩh wæd-ay-áh!*
 3sg fall-set-TEL-INCH-DECL INTERJ 3sg eat-INCH-DECL
 ‘He fell upon him, pow! He ate him!’ (H.CO.80)

Several Hup ideophones involve conventionalized human sound effects.

Examples of these are giggling (example 196), laughing loudly (197), snoring (198), and calling out to another person (199):

- (196) *ʔǎy=dəh tĩh-ǎn tæʔnɔhɔ-ay-áh, kút kút kút kút kút kút*
 FEM=PL 3sg-OBJ laugh-INCH-DECL IDEO
 ‘The women laughed at him, (giggling noise).’ (LG.O.17)

- (197) *hehéʔ nɔɔɔ híd=wá=d’əh, ʔǎn-áh*
 IDEO say-DYND 3pl=old.woman=PL 1sg.OBJ-DECL
 ‘Ha ha! went those old bags (women), to me’ (TD.Cv.102)

- (198) *kɔŋ, kɔŋ, kɔŋ nɔ-pæm-pó-y=mah yúp tañ-áh*
 IDEO say-sit-EMPH1-DYND=REP that.ITG tapir-DECL
 ‘(Snoring noise) he was saying, sitting, that Tapir!’ (JA.74)

- (199) *tĩh ʔey-wɔn-yĩʔ-ay-áh, ʔéééé! ʔǎn yu-ʔéʔ!*
 3sg call-follow-TEL-INCH-DECL IDEO 1sg.OBJ wait-PERF.IMP
 ‘She went calling after him, heeey! wait for me!’ (P.BWB.88)

Other conventionalized sound-related ideophones include the noise of falling into water (*tapúh!*), the sound of killing fish by breaking their necks (example 200), and of a large bird landing (201):

- (200) *yúp=mah tĩh=nuhũy tĩh təh-əp=mah, yúp kúnúnúnú tĩh nɔ-pǎd-ĩh*
 that.ITG=REP 3sg=neck 3sg break-DEP=REP that.ITG IDEO 3sg say-DIST-DECL
 ‘Then, it’s said, he broke (the fishes’) necks, *kunununu* it went.’ (M22)

- (201) *hohopóo!* *nɔ-yíʔ-ǵy=mah* *yúw-úh,* *wǎʔ tɪh kədɪ́-iw-ay-áh*
 IDEO say-TEL-DYNM=REP that.ITG-DECL vulture 3sg pass.descend-FLR-INCH-DECL
 ‘(Flapping, landing noise) it went, (it was) Vulture landing.’ (M.KTW.100)

They also include hitting noises, such as *tǎk!* (the noise of a machete hitting or cutting

something), *tǎn’ tǎn’ tǎn’ tǎn’ tǎn’* (the bones of a turtle-anklebone oracle knocking

against each other), and *dih!* (an object hitting against someone). Example (202)

illustrates a string of more marginally conventionalized sound effects related to a hitting event:

- (202) *tɪh cɪk-ih,* *wɪhɪp wɪhɪp póo! wɔkód!*
 3sg throw.stick-DECL IDEO IDEO IDEO
 ‘He threw (stick); (noise of flipping through air, hitting (pow!); hawk falling).’
 (M.KTW.103)

Still others are *túdúdúdúdú* (thunder rumbling), *cǎdǎdǎdǎdǎdǎdǎ* (a bird flying away),

the eating noise/action of fish (example 203), running (204), and rummaging through

things while searching (205):

- (203) *kóbokóbokóbo* *yúp* *baʔtɪb’* *g’ɪh-pog-ʔé-ew-ǎn* *hɪd wǎd-yíʔ-kədɪ́ám-ay-áh*
 IDEO that.ITG spirit be2-EMPH1-PERF-FLR-OBJ 3pl eat-TEL-pass.go-INCH-DECL
 ‘(Eating noise) they (fish) came quickly and ate up that one who had been a spirit.’ (D.BWB.42)

- (204) *tɪh tɔʔɪh-wɔn-næn-yíʔ-ay-áh,* *túktúktúktúktúk !*
 3sg run-follow-come-TEL-INCH-DECL IDEO
 ‘She came running after him, (sound of running)!’ (P.BWB.89)

- (205) *tɪh yɔhɔy-ɪh,* *kǎdɔw’ kǎdɔw’ kǎdɔw’*
 3sg search-DECL IDEO
 ‘He searched (noise of rummaging).’ (P-BT.95)

Hup speakers also use a variety of relatively non-conventionalized ideophone-like sound effects in narrative, which consultants say are not in common use and are probably

chosen ad hoc by the storyteller. Examples include *pəʔ* (a spirit falling out of tree), *təh, hə́...* (a severed head falling to the ground), and *cəw'! kǎy' kǎy'!* (a woodpecker pecking). Others are the sound/action of getting or grabbing something (example 206), various jumping and landing noises (207), and the banging noises made by the mythical tapir's attempts to beat off the turtle who had bitten onto his testicles (example 208).

- (206) *yñ teghǎ́ páʔ!*
 thus fire IDEO
 'Thus a gun, (grabbing noise)! (LG.31)

- (207) *tih cək-kədhám-áh, cəp! kədáw!*
 3sg jump-pass.go-DECL IDEO IDEO
 'He jumped quickly (jumping and landing noises).' (LG.O.12)

- (208) *pək, pək tih nə-d'ak-g'óʔ-mah-áh*
 IDEO 3sg say-stick.against-go.about-REP-DECL
 '(Bang, bang) he went knocking him about.' (JA.76)

Hup uses a few other types of sound symbolism in addition to ideophones.

Reduplication—both on the lexical level (see §4.5 and §12.9.3) and on the clausal level (§18.2.2)—is an iconic representation of a repetitive action. Also, a number of words in Hup are clearly of onomatopoeic origin, and in some cases probably continue to have an onomatopoeic association to the referent in the minds of speakers. Examples include verbs relating to noisy bodily functions, most notably *hatcĩh-* 'sneeze', for which there is a corresponding ideophone (*hatcĩh!*) that is identical to the verb stem. Some bird names are also onomatopoeic and are based on the bird's call, such as *wəhwəw* 'dove'.

16. Negation

Negation in Hup is relatively complex. Three distinct strategies for expressing negation are available, involving at least four different negative markers. These are all forms of clausal or ‘standard’ negation, which produces the opposite truth value in the clause (cf. J. Payne 1985, Miestamo 2003). The most common or basic form of negation in Hup involves a negative suffix (*-nɬ*) that is used exclusively with verbal predicates.

Another common strategy relies on a predicative particle (*pǎ̃*), which is used as an existential negator with noun phrases. Finally, the third negation strategy makes use of an ‘identity negator’ particle (*ɬǎp*) that can function both to contradict the entire clause and to negate an individual constituent within the clause—often relating specifically to the identity of a nominal entity. Because of this latter function of negating a constituent, the particle *ɬǎp* is not—unlike Hup’s other negative strategies—exclusively a clausal negator.

16.1. Verbal Negative *-nɬ*

Hup prefers a morphological strategy for the negation of clauses. In most cases, this involves a single negative marker *-nɬ* (although in special cases two negative markers can occur; see §16.1.7 below), which occurs as a suffix on the verb stem. Use of the form *-nɬ* is limited exclusively to negation of the verb phrase predicate (which may include predicate adjectives, but not predicate nominals).

Formally, *-nɪh* usually occurs as a verbal consonant-initial Boundary Suffix, which receives primary (word-level) stress within the verb word; however, it can be followed by some other Boundary Suffixes, in which context it is best considered an Inner Suffix. The final [h] of *-nɪh* is usually clearly audible (especially when followed by a vowel-initial Boundary Suffix), but is occasionally dropped in fast speech. Finally, Negative *-nɪh* is nearly identical to the Possessive marker *nɪh* (see §5.2), but confusion does not arise given their distinct tone values and their complementary distribution on verbs and nouns, respectively. It is also homonymous with the verb root *nɪh*- ‘be like’ (cf. §10.2.2.1), but because this verb—like all verb roots—is usually obligatorily followed by a Boundary Suffix, the chance of confusion is again minimized.¹⁸³

16.1.1.1. Verbal negation in main clauses

In declarative clauses, negation with *-nɪh* is a nearly symmetric strategy vis-à-vis the positive clause: in most cases, the negative clause is structurally almost identical to its positive counterpart, except that the negative marker usually takes the place of the (otherwise obligatory) Boundary Suffix on the verb stem in the affirmative clause. While not all Boundary Suffixes are incompatible with Negative *-nɪh* (in particular, the Dependent marker *-Vp* and the Interrogative *-V?* can follow *-nɪh*), the most common

¹⁸³ Like any verb stem, *nɪh*- ‘be like’ can be followed by the Negative suffix:

tɪh = ʔp = yɪʔ *tɪh bahad-nɪh-nɪh*
 3sg=father=TEL 3sg appear-be.like-NEG
 ‘He doesn’t look like his father.’ (EL)

suffixes in affirmative main clauses—Dynamic *-V̆y* and Declarative *-V̆h*, among others—are almost always replaced by *-n̆h* (cf. §16.1.5 below).

This near-symmetric pattern for declarative clauses is illustrated in examples (1a-b), which come from a conversation; the negative utterance of the first speaker was contradicted by the positive assertion of the second. Further examples of negative assertions are given in (2-3).

- (1) a) *mangǎ h̆d-ǎn t̆w-n̆h*
 Margarita 3pl-OBJ scold-NEG
 ‘Margarita didn’t yell at them.’ (TD.Cv.103)
- b) *mangǎ h̆d-ǎn t̆w-ay*
 Margarita 3pl-OBJ scold-INCH
 ‘Margarita was yelling at them.’ (TD.Cv.103)
- (2) *kayak=t̆g maca-n̆h p̆d; canǎ b’̆y̆i? macá-áh*
 manioc=stem grow-NEG DIST pineapple only grow-DECL
 ‘Manioc doesn’t grow either; only pineapples grow.’ (B.Cv.132)
- (3) *hup-hipāh-n̆h yúp pay c̆c!*
 REFL-know-NEG that.ITG bad INTERJ
 ‘That bad one has no sense!’ (B.Cv.2.91)

The same symmetric strategy also applies to negation in interrogative clauses, as illustrated in examples (4-5).

- (4) a) *tuk-n̆h ʔám?*
 want-NEG 2sg
 ‘Don’t you want (it)?’ (OS)
- b) *túk-úy ʔám?*
 want-DYNM 2sg
 ‘Do you want it?’ (OS)
- (5) *mangǎ táʔ-ay, h̆d-ǎn yamhidɔʔ-n̆h t̆h?*
 Margarita as.for-INCH 3pl-OBJ sing-NEG 3sg
 ‘What about Margarita, didn’t she sing to them?’ (TD.Cv.103)

Imperative clauses, on the other hand, have an asymmetric negation strategy—that is, the negative construction does not closely mirror its positive counterpart (compare examples 16a and b; see §17.5 for discussion of imperatives). This is consistent with the cross-linguistic tendency for imperative environments to often require special negative constructions (cf. Kahrel 1996, Miestamo 2003: 20). In Hup negative imperatives, the negated verb phrase acts structurally as an embedded adverbial clause (usually—though not obligatorily—marked with the adverbializing *=yiʔ* enclitic), while the main clause is the imperative form of the verb *ni-* ‘be’:

- (6) a) *tæʔmɔɔ-nɪh=yiʔ nɪh!*
 laugh-NEG=TEL be.IMP
 ‘Don’t laugh!’ (B.Cv2)

- b) *tæʔmɔɔ!*
 laugh.IMP
 ‘Laugh!’

- (7) *hũh-way-nɪh=yiʔ nɪh!*
 carry-go.out-NEG=TEL be.IMP
 ‘Don’t carry (him) out!’ (OS)

The sequence *nɪh=yiʔ nɪh* is often reduced—especially in fast speech—to the form

-nɪnɪh:

- (8) *kow’-nɪnɪh=hɔ!*
 peel-NEG.IMP=TAG2
 ‘Don’t peel (the fruit)!’ (B.Cv3.137)

16.1.2. Verbal negation in subordinate clauses

Relative clauses in Hup (see §18.2.3) undergo negation of the verb phrase just as main clauses do. The Negative suffix takes the Dependent marker *-Vp* (example 9) and other relative clause morphology (10).

- (9) *hi-yəd-nɪh-ɪp = ʔǎy j'ǎh*
 FACT-hide-NEG-DEP=FEM DST.CNTR
 ‘(I’m) not a woman who hides things.’ (lit. ‘I’m a not-hiding-things woman’)
 (Song)

- (10) *wəh ʔɪd hipāh-nɪh=d'əh*
 River.Indian speech know-NEG=PL
 ‘Those who don’t know any Tukano’ (int.)

That Negative *-nɪh* has only local scope over the verb phrase to which it attaches is illustrated by the fact that negation can occur independently in main and embedded relative clauses, as illustrated by the elicited examples in (11-12).

- (11) a) *ʔǎh hipāh-ǎy [yúp wɪd-ye-nɪh-ɪw-ǎn]*
 1sg know-DYNM that arrive-enter-NEG-FLR-OBJ
 ‘I know that one who did not arrive’
 b) *ʔǎh hipāh-nɪh [yúp wɪd-yé-ew-ǎn]*
 1sg know-NEG that arrive-enter-FLR-OBJ
 ‘I don’t know that one who arrived.’ (EL)
- (12) a) *tɪh b'ɔ̃-an hám-áy [bóda tɔc-nɪh=d'əh-ɔ̃]*
 3sg roça-DIR go-DYNM ball kick-NEG=PL-OBL
 ‘She’s going to the roça with those who didn’t play ball.’
 b) *tɪh b'ɔ̃-an ham-nɪh [bóda tɔc=d'əh-ɔ̃]*
 3sg roça-DIR go-NEG ball kick=PL-OBL
 ‘She’s not going to the roça with those who played ball.’ (EL)

For other types of subordination, a copula construction with the verb *ni-* ‘be, exist’ is an optional strategy for forming a negative, as in (13a). An alternative non-copula construction and corresponding affirmative form are given in (13b-c).

- (13) a) *ʔāh tʰ-āñ ʔh-ʔūh-té-h, way-nʰ tʰ ni-tég*
 1sg 3sg-OBJ ask-APPLIC-FUT-DECL go.out-NEG 3sg be-PURP
 ‘I’m going to ask him that he not go out.’
- b) *tʰ way-nʰ(-tég) tʰ-āñ ʔāh ʔh-ʔūh-té-h*
 3sg go.out-NEG(-FUT) 3sg-OBJ 1sg ask-APPLIC-FUT-DECL
 ‘I’m going to ask him that he not go out.’
- c) *tʰ way-tég tʰ-āñ ʔāh ʔh-ʔūh-té-h*
 3sg go.out-FUT 3sg-OBJ 1sg ask-APPLIC-FUT-DECL
 ‘I’m going to ask him to go out.’ (EL)

16.1.3. Verbal negation and scope within the verb compound and the verb phrase

As the examples above show, negation with *-nʰ* usually negates the entire verbal predicate. In the case of compound verbs, however, negating the compound assertions of the corresponding affirmative clause may require varying treatment of the compound depending on the level of semantic integration of its combined stems.

In the case of less-integrated compounds (see §9.4.1)—in which verb stems are strung together to encode a sequence or co-occurrence of relatively distinct events—the Verbal Negator *-nʰ* is usually understood to have scope over all preceding stems within the verb word. Thus the most likely interpretation of a negative compound such as *ʔid-wæd-ham-nʰ* (speak-eat-go-NEG) would be that none of these activities are taking place.

If one (or more) activity is occurring, the compound is broken up into two verbal

constructions, one negative and one affirmative, which function as two predicates (cf. §9.2); for example, *ʔid-nʔh (tʔh) wæd-hám-áy* (speak-NEG [3sg] eat-go-DYNM) ‘(he’s) going and eating (simultaneously) without speaking’, or *ʔid-wæd-nʔh (tʔh) hám-áy* (speak-eat-NEG [3sg] go-DYNM) ‘(he’s) going along without eating or speaking’. This co-presence of a negative and an affirmative verbal predicate—where the fully affirmative counterpart would be expressed by a single verb compound—is common in Hup (examples 14-16).

- (14) *ʔan-nʔh ʔāh g’āʔ-g’óʔ-óh*
 make.love-NEG 1sg be.suspended-go.about-DECL
 ‘Without making love, I’m there in the hammock.’ (B.Cv2.88)
- (15) *tínʔh ʔid wiʔ-nʔh g’et-g’oʔ-tú-ay=d’əh=nih*
 3sg.POSS speech hear-NEG stand-go.about-want-INCH=PL=EMPH.CO
 ‘And we’d go about without understanding her language.’ (B.Cv1.82)
- (16) *hɛn’ʔh-tég ʔñ, hup=ʔāy=d’əh, yum tɔn-nʔh ʔin ní-íʔ?*
 Q-be.like-FUT/PURP 1pl Hup=FEM=PL plant hold-NEG 1pl be-INT
 ‘Why is it that we, Hup women, are without anything to plant?’ (B.Cv.132)

In the case of more tightly integrated compounds (in which the final stem carries aspectual, modal, or other information; cf. §9.4.2), on the other hand, negating the assertion of the corresponding affirmative clause frequently does not require splitting up the compound, even though the negation may be more directly relevant to one component stem than another. Thus in example (17), the negative of ‘sing loudly’ or ‘make noise singing’ remains a verb compound, even though consultants judge it to be neutral as to whether the singing itself continues or not. Similarly, the negation in (18-19) has scope

over the entire compound (‘order/tell to do Verb’), regardless of whether the activity took place or not.¹⁸⁴

- (17) *yam-h ʃh-n ʃh=yiʔ níh!*
 sing-make.noise-NEG=TEL be.IMP
 ‘Don’t sing loudly!’ (EL)
- (18) *ʔāh dóʔ=n’ǎn hǎp wæd-yæh-n ʃh (ni-yiʔ-ǎy)*
 1sg child=PL.OBJ fish eat-order-NEG be-TEL-DYNM
 ‘I told the children not to eat the fish.’ (EL)
- (19) *nu-cóʔ hǎd-ǎn tʃh ye-yæh-n ʃh*
 this-LOC 3pl-OBJ 3sg enter-ask/order-NEG
 ‘He forbids them to come in here.’ (OS)

As noted above, the Negative suffix *-n ʃh* typically has scope only over the verb phrase in which it appears. However, when clause coordination involves a string of sequential activities (marked with the Sequential suffix *-yóʔ*, which is itself incompatible with *-n ʃh*; see §16.1.5 below), the interpretation of negative scope appears to be more flexible. Example (20) comes from a speech delivered to the community, and lists a series of activities that women are expected to do to carry out the planting of manioc; only the last verb carries the negation, but the utterance was interpreted to mean that women do *none* of these things (without some involvement on the part of their husbands). However—especially with a definite subject such as *yúp=ʔǎy* ‘that woman’—the interpretation that all the activities *were* carried out except the last, explicitly negative one is also possible.

¹⁸⁴ For discussion of causative compound constructions and their complex valency, see §9.4.1.2.

- (20) *tã ʔãý=d' əh kayak=tĩg d'o ʔ-yóʔ kayak=tĩg g'uk-yóʔ*
 woman=PL manioc=stem take-SEQ manioc=stem bundle-SEQ
 'Women, having (not) taken manioc plants, having (not) bundled manioc plants,
cet-d'o ʔ-kəðham-ni-yóʔ cĩý'-nñ ʔãý=d' əh-əh
 carry.on.back-take-go.quickly-be-SEQ poke-NEG woman=PL-DECL
 having (not) quickly carried (them), women don't plant (lit. 'poke in')
 them.' (P.Sp.)

One way of avoiding this scopal ambiguity involves setting the assertions apart from the negative clause with the auxiliary verb *ni-* and the Simultaneous or 'in spite of' adverbializer *-mĩʔ*:

- (21) *cug' æt cu ʔ-yóʔ hĩʔ=teg cu ʔ-yóʔ ní-mĩʔ*
 book grab-SEQ write=STICK grab-SEQ be-UNDER
 'Despite having grabbed books and pencils,
dóʔ=d' əh b'oy-ham-nñ-ñ
 child-PL study-go-NEG-DECL
 the children did not go to study.' (EL)

16.1.4. Verbal negation and modifiers (adjectives, adverbs, quantifiers)

As discussed in §3.1.3 and §10.1, predicative adjectives in Hup are formally very similar to verbs. Their behavior in negative contexts is consistent with this—they undergo clausal negation in just the same way as do verb stems:

- (22) *pññ dəb-nñ=məh*
 banana many-NEG=DIM
 '(There are) not many bananas.' (OS)
- (23) *g' i-nñ=hõ yúw-úh!*
 hot-NEG=NONVIS that-DECL
 'It's not hot!' (B.Cv)

Adjectives serving an adverbial function (see §10.2) usually appear within the compound verb in negative contexts, as in (24-25a)—whereas they typically occur outside the compound in affirmative clauses, as in (25b).

- (24) *ʔɪn=tæh=d'əh-ay yúw-úh, ʔəm-naw-nɪh*
 1pl=offspring=PL-INCH that-DECL fear-good-NEG
 'They are our children; it's not right to fear them!' (P.Sp.111)

- (25) a) *tɪh tɔʔəh-pɪb-nɪh*
 3sg run-fast-NEG
 'He doesn't run fast.'
- b) *pɪb tɪh tɔʔəh-ɔy*
 fast 3sg run-DYNM
 'He runs fast.' (EL)

There are no inherently negative quantifiers in Hup; however, the clause-level quantifier form *pɪl* ('all, each of'; see §6.5.2) can occur in negative clauses:

- (26) *ʔɪn=hin tɪh-ǎn "næh!" nɔ-nɪh pɪl*
 1pl=also 3sg-OBJ come say-NEG DIST
 'As for us, we never/ none of us told her "come!"' (P.Sp.103)

16.1.5. The interaction of verbal negation and other grammatical systems

It is cross-linguistically common for negation to interact with other grammatical systems within a language, such as tense and aspect (cf. Aikhenvald and Dixon 1998, Miestamo 2003: 18). In Hup, whether a clause is marked as affirmative or negative may influence the choices to be made in other grammatical systems.

Negative *-nɪh* can co-occur in the verb word with the majority of other inflectional forms. In keeping with the Hup verbal template (cf. §8.3), Inner Suffixes

such as the Applicative and the Completive precede the Negative Boundary Suffix, and peripheral forms pile up after it:

- (27) *ʔám-ǎñ d'óʔ-ʔáñ-n-ñ-áh ʔǎñ-ǎp*
 2sg-OBJ take-APPLIC-NEG-FOC 1sg-DECL
 'I'm not going to get any (cookies) for you!' (B.Cv2.4)
- (28) *ʔǎñ bíʔ-hi-c-ñ-n-ñ tæ*
 1sg work-FACT-COMPL-NEG YET
 'I haven't finished working yet.' (EL)

In some cases involving aspect marking, two strategies of negation are available: one symmetric (example 29a; compare 29b), the other asymmetric, with the aspect marker occurring on the copula-like verb *ni*- 'be' (29c).

- (29) a) *ham-n-ñ b-ñ ʔǎñ-ǎñ!*
 go-NEG HAB 1sg-DECL
 'I never go.' (D.int.112)
- b) *hám-áy b-ñ ʔǎñ-ǎñ*
 go-DYNM HAB 1sg-DECL
 'I always go.' (int.txt)
- c) *nɔ-n-ñ ʔín ni-b-ñ hɔ!*
 say-NEG 1pl be-HAB-TAG2
 '("Go to school!") we never say.' (P.Sp.)

On the other hand, certain tense, aspect, and mode specifications are not possible within the negated verb word. Negative *-n-ñ* (itself having an ambiguous identity as either Boundary or Inner Suffix, depending on what other formatives are present) cannot co-occur with certain Boundary Suffixes. In particular, it is ungrammatical in combination with Dynamic *-Vý* and Declarative *-Vh* (except in certain cases of clause-combining, see §18.1.2). It is likewise ungrammatical with Sequential *-yóʔ* (a Boundary

Suffix), and an auxiliary construction with *ni-* ‘be’ is required in order to convey a sequential negative event:

- (30) *wiʔ-nʔ ni-yóʔ ʔin bʼay-té-ay-áh*
 hear-NEG be-SEQ 1pl return-FUT-INCH-DECL
 ‘Having understood nothing, we’d return.’ (B.Cv1.82)

Verbal negation is ungrammatical in the Apprehensive mood (see §14.6), and it also does not co-occur with the Counterfactual marker *-tæʔ*—presumably because the irrealis nature of this morpheme gives it an inherently negative quality (see §14.2 and §16.4 below).

Finally, the Verbal Negative suffix *-nʔ* is ungrammatical with the Future suffixes *-teg* / *-te-* (although it can occur with *-teg* when this suffix acts as a purpose marker in a dependent clause, as in example 13b above; see §13.1). This apparently idiosyncratic aspect of Hup grammar probably has a historical explanation relating to the nominal origin of these future suffixes, as discussed in the Historical Note in §13.1. In order to express a negative future event, Hup relies on two alternative constructions. The most common involves the Inchoative marker *-ay*, as in (31) (but note that this combination can in some cases be used for a current, on-going event, so its future reading is implied rather than entailed). The Future Contrast particle *tán* provides a second option for expressing negative future, as in example (32).

- (31) *ham-nʔ-ay*
 go-NEG-INCH
 ‘(I’m) not going.’ (B.Cv3.130)
- (32) *ʔāh bʼʔyʔ ham-nʔ tán-áh !*
 1sg only go-NEG FUT.CNTR-DECL
 ‘I alone will not go!’ (B.Cv3.130)

16.1.6. Verbal negation and emphasis/ intensification

Several morphological strategies are available for forming emphatic negative utterances. Note that all of these emphatic or intensifier forms also occur in affirmative clauses, but in certain cases their function in negative clauses is distinct from their function in affirmatives.

The most widely used negative emphasis marker or intensifier is the verbal particle *mún*. This form follows Negative *-n̄h* with verbs, adjectives, and adverbials. By contrast, in affirmative clauses the variants *muhún* (which occurs in the Barreira dialect region and is there formally distinguished from negative *mún*) and *mún* (Tat Deh dialect area; both positive and negative) function as intensifiers with adjectives, but are not grammatical with verbs (see §15.1.2). Use of this negative emphasis form yields such adjectival and adverbial expressions as *pay-n̄h mún* ‘not bad at all’ ~ ‘good, pretty’ (example 33),¹⁸⁵ and verbal forms like *hipāh-n̄h mún* (know-NEG INTS2) ‘(I) don’t know at all’ and those in (34-35):

- (33) *yǎn’-h̄n=hin pay-n̄h mún t̄h bǎʔ-h̄n*
 that.ITG-NMZ=also bad-NEG INTS2 3sg work-DECL
 ‘That’s easy/nice work that he’s doing.’ (P.Sp.110)
- (34) *ʔh̄n-ǎn=yíʔ=níh yúp nɔʔ-n̄h mún t̄h ni-bǎh, cǎc!*
 1pl-OBJ=TEL=EMPH.CO that give-NEG INTS2 3sg be-HAB-DECL INTERJ
 ‘That one never gives us any (sugar)!’ (B.Cv.2.6)
- (35) *tǎh̄=mǎh-ǎn=yíʔ ʔm-n̄h mún híd ni-bǎh!*
 son=DIM-OBJ=TEL fear-NEG INTS2 3pl be-HAB-DECL
 ‘They’re not afraid of/ have no respect at all for my son!’ (B.Cv.2.9)

¹⁸⁵ Use of this form with adjectives appears to be somewhat idiomatic. The most striking case is *naw-n̄h-mún* (good-NEG-INTS2) ‘a lot, extremely numerous’.

Other emphatic forms that are productive with negative clauses (as well as with affirmatives; see §15.1) include the Emphasis marker =*pog*, as in (36). The most commonly used intensifier with affirmative clauses (-*Vcáp*) rarely occurs with negatives, although this combination is possible, as illustrated by (37).

- (36) *yí-d' ǎh-ǎñ pe ʔ-nǎh=pog bǐg=nih j'ám=hǎʔ!*
 that.ITG-PL-OBJ hurt-NEG=EMPH1 HAB=EMPH.CO DST.CNTR=INT.TAG
 ‘(It) never bothers/hurts them.’ (discussing biting insects swarming on men without shirts) (B-Cv.10)
- (37) *dapúñ ní-icáp-nǎh-mǐʔ, ʔǎñ d'o ʔ-ʔom-kěy ʔám=nih, bǐg!*
 hand be-INTS1-NEG-UNDER 1sg.OBJ take-fear-see 2sg=EMPH.CO anteater
 ‘Even though you have no hands at all, you’re scaring me, anteater!’ (T.txt)

16.1.7. Reinforced negation with *nǎʔ*

Hup uses an additional negative particle *nǎʔ* to mark a strongly negative clause. This particle always occurs together with and reinforces some other negative marker; this is usually the Verbal suffix -*nǎh*, as in (38-39), but it may also be the Existential negative particle *pǎʔ* (see §16.2) or Counterfactual -*tǎʔ* (see §15.2). Such reinforced negation is fairly common—though far from ubiquitous—and is used by both older and younger speakers.

- (38) *pǎhǎñ nǎʔ ʔayup=tǎʔ hǎ-nǎh*
 banana NEG:R one=fruit burn-NEG
 ‘Not a single banana is ripe.’ (EL)
- (39) *yíkán wǎh b'ǎyíʔ ʔǎh ʔǎd-ǎh, nǎʔ húp ʔǎd-nǎh*
 over.there River.indian only 1sg speak-DECL NEG:R Hup speak-NEG
 ‘Over there I spoke only Tukano, I didn’t speak any Hup at all.’ (AO.Int.117)

Reinforced negation with *næ'* is used fairly consistently to express a ‘neither...nor’

relationship between constituents:

- (40) *yíkán næ' cɔkw'ət ʔid-nɪh-íp*
 over.there NEG:R Tukano speak-NEG-DEP
 ‘There, neither speaking Tukano
- næ' potugěc wiʔ-nɪh-íp*
 NEG:R Portuguese understand-NEG-DEP
 nor understanding Portuguese, (there I arrived).’ (PC.1)

The form *næ'* is clearly a borrowing from Tukano, and is identified as such by some Hup speakers themselves. In Tukano, a strong negative is likewise conveyed by double negative marking in the clause, involving the negative particle *neê* and the verb plus negative suffix (cf. Ramirez 1997: 154), and this property of double negation to mark a strong negative is common to East Tukanoan languages generally. According to Aikhenvald (2002: 134-5), a nearly identical emphatic double negation strategy—involving the particle *ne* and the negated verb—also exists in Tariana, and can be attributed to language contact between Tariana and East Tukanoan languages. The use of the same negative strategy and form in Hup is clearly a result of its involvement in the Vaupés linguistic area. However, the parallelism is not complete in Hup; *næ'* cannot stand alone in Hup to mean ‘no’, as it can in Tukano and Tariana (Aikhenvald 2002: 134).

The negative particle *næ'* (and the Tukano and Tariana variants of this form) bears a rather striking resemblance to the Portuguese negative *nem*, which typically expresses a ‘neither/nor’ relationship, as can Hup *næ'*. However, it is not clear whether

any actual historical link exists between these forms. Aikhenvald (2002: 135) considers the resemblance “almost certainly coincidental”, noting that “a negative marker with a dental nasal is attested in many languages of the area, of different genetic affiliations”. Clarification of the origin of this particle awaits future research.

16.2. Existential negative *pǎ̃*

A second, distinct strategy of negation in Hup involves the negative particle *pǎ̃*. This strategy is used exclusively to express negation of a nominal entity, specifically relating to the negation of its existence or presence (negative identity is handled by the particle *ʔǎp*, see §16.3 below). The negative marker *pǎ̃* stands on its own as a complete predicate, ‘there does not exist’, and has scope over the noun phrase:

- (41) *ʔǎ̃n=dú=d’əh kot ʔah=cóʔ=yiʔ húp pǎ̃,*
 1pl=ancestor=PL before=LOC=TEL human NEG:EX
 ‘In the time before our ancestors there were no people,
cəkw’ə̃=d’əh pǎ̃, mináʔ=d’əh pǎ̃...
 Tukano=PL NEG:EX Desano=PL NEG:EX
 no Tukanos, no Desanos...’ (LG.29)

The noun phrase negated by *pǎ̃* may be made up of a noun and an adjective modifier, as in (42a). Compare this to the verbal negation strategy, in which the adjective + *-nʔh* together form the predicate, and the negative particle has scope only within the predicate, as in (42b).

- (42) a) *[tiyǎʔ pǒg] pǎ̃*
 man big NEG:EX
 ‘There is no big man.’ (EL)

- b) *tiyĩʔ [pog]-n̩h*
 man big-NEG
 ‘The man is not big.’

As a predicative particle, *pǎ* frequently occurs by itself as a complete utterance (in reference to an entity that is the topic of the discourse), meaning ‘(it’s) not here; (there) is none’. It can likewise act as a negative interrogative predicate, as in *pǎ t̩hʔ* (NEG:EX 3sg) ‘is there none?’ or ‘is he/she/it not here?’. The affirmative parallel of *pǎ* is the verb *ni-* ‘be, exist’ (compare examples 43a-b), whose negated form *ni-n̩h* (be-NEG) is occasionally substituted for *pǎ*, although this is not common (43c).

- (43) a) *ʔǎh=báb’=d’əh n̩-t̩y*
 1sg=sibling=PL be-DYNM
 ‘I have siblings.’ (E.int.16)
- b) *ʔǎh=báb’=d’əh pǎ, na ʔ-yĩʔ-ǎy*
 1sg=sibling=PL NEG:EX lose.consciousness-TEL-DYNM
 ‘I have no siblings; (they) are all dead.’ (D.int.121)
- c) *báb’ n̩-n̩h j’ǎh ʔǎh-t̩iʔ*
 sibling be-NEG DST.CNTR 1sg-EMPH.TAG
 ‘I have no relatives/siblings.’ (T.PN.21)

Negative *pǎ* has certain qualities of a verb; in particular, it can take a number of inflectional and tense-aspect related markers. These include some that can occur with various parts of speech, such as the Inchoative (example 44) and the Perfective (example 45; note that this form of the Perfective also occurs with nominals), but also some that are found exclusively with verbs, such as the Habitual particle (example 46).

- (44) *pídiya=hin nutǎn pǎ-ay-áh ʔǎh-ǎp*
 battery=also today NEG:EX-INCH-FOC 1sg-DEP
 ‘Today I’ve run out of batteries.’ (P.Sp.104)

- (45) *pǎ-ʔeʔ*
 NEG:EX-PERF
 ‘(There is) temporarily none.’ (EL)
- (46) *ʔāh wid-ham-tég mɔy pǎ bǐg*
 1sg arrive-go-FUT/PURP house NEG:EX HAB
 ‘There’s never a place for me to stay when I arrive.’ (EL)

However, *pǎ* is unlike a verb in several crucial respects. In particular, *pǎ* differs from all true members of the verb class in that it is *not* able to take most Boundary Suffixes, and typically occurs alone in uninflected form. Its predicative identity is also not sufficient grounds for attributing verbal status to *pǎ*, since adjectives and nouns can also form complete predicates in Hup. Thus *pǎ* is here considered a predicative particle in its own right, rather than a member of the verb class or any other word class in Hup.

Use of a copula construction with *ni-* to carry tense-aspect marking is a general option in clauses with *pǎ*, as in (47), and is in some cases required, as in (48) (as is also the case with verbal *-nʔh*, cf. example 29 above).

- (47) *yí-nʔh wag=hín pǎ jʔám púyʔ ni-bʔhɔʔ*
 that.ITG-NMZ day=also NEG:EX DST.CNTR little.brother be-HAB-TAG2
 ‘On those days little brother is always absent.’ (P.Sp.108)
- (48) *babʔ=ǎy pǎ, cɛt=ʔǎy pǎ ni-yóʔ*
 sibling=FEM NEG:EX older.sibling=FEM NEG:EX be-SEQ
 ‘Having been without a younger sister, without an older sister.’ (Dab.78)

Also unlike normal verbs, the predicative particle *pǎ* cannot directly take the Future suffixes *-teg* / *-te-*, which are similarly ungrammatical with Verbal Negative *-nʔh*

(see §16.1.5 above). As in the case of verbs taking the *-nʔh* negative suffix,

predicative *pǎ* takes the Future Contrast particle *tán* instead, as in example (49).

- (49) *mǎy pǎ tán yúw-úh*
 house NEG:EX FUT.CNTR that-DECL
 ‘There won’t be a house (for me to stay in).’ (EL)

However, a type of negative future (or purpose) can also be conveyed through a special type of clause, in which a verb stem plus *-teg* acts as a pseudo-nominal subject, and *pǎ* forms the predicate; schematically, ‘future-Verbing does not exist’ (example 50-51). The Future form *-teg* in this construction appears to have both a nominal and a verbal identity, which probably reflects the historical derivation of the verbal future suffix from a generic nominalizer (see Historical Note §13.1).

- (50) *nɔ-tég-n’ ʔh pǎ, yúp mandukorí-iw-ʔh*
 say-FUT-NMZ NEG:EX that Mandukori-Filler-DECL
 ‘He has nothing like this to say, that Mandukori.’ (P-Sp.3)

- (51) *híd ham-yʔʔ-ʔh, ʔayúʔ mǐn ʔɣ=yíʔ*
 3pl go-TEL-DECL one straight=TEL
 ‘They go (along), just straight ahead,

cǎʔǎh ham-tég-n’ ʔh pǎ=yíʔ
 side go-FUT-NMZ NEG:EX=TEL
 not going from side to side.’ (P-F.125)

Common emphatic forms involving negative *pǎ* are given in examples (52-53).

Note that the variant of the emphasis marker in (53) (*muhún*; found in the Barrera dialect area only) otherwise occurs only in affirmative clauses, whereas the Verbal Negative *-nʔh* is always followed by the variant *mún* (see §16.1.6).

- (52) *pǎ=pog !*
 NEG:EX=EMPH1
 ‘None at all!’ (OS)
- (53) *ki ʔdeh b’ɔk, ʔāh yǎh-ǎh, kayak=dēh b’ɔk;*
 manicuera.w/tapioca dish 1sg order-DECL manioc=water dish
 ‘Manicuera with tapioca, I ordered (to be brought), manicuera (lit. manioc water);
- pǎ muhún-up, kɔw y’áʔ*
 NEG:EX INTS2-DEP pimenta crush
 (for those with) nothing at all, (I ordered them to bring) crushed pimenta.’
 (LG-O.8)

The Existential negator *pǎ* can co-occur with other negative particles. In example (54), the speaker uses the negative particle *nǎ* (§16.1.7) to reinforce negative *pǎ* when relating what he has been told by Catholic missionaries. In (55), someone’s assertion *pǎ!* ‘(there are) none!’ is contradicted by another speaker via the negative Identity particle *ʔǎp* (see §16.3 below); note that the clause-level ‘contradictory’ nature of *ʔǎp* is such that this double negative results in a positive, as opposed to the use of reinforcing negative particle *nǎ* in (54). Finally, although *pǎ* cannot itself take the negative verbal suffix *-nǎh*, both existential and verbal negation occur together in the same sentence in example (56); here the two negatives are conceptually completely independent of each other.

- (54) *póh, yecú máh-an, nǎ pekádu pǎ=d’əh hám-áh*
 high Jesus near-OBJ NEG:R sin (Port. *pecado*) NEG:EX=PL go-DECL
 ‘Up high, where Jesus is, only those without sins go.’ (H.txt)
- (55) *pǎ ʔǎp!*
 NEG:EX NEG:ID
 ‘Not none!’ (OS)
- (56) *yǎ ham-nǎh-ǎy=nih j’ám tǎh ʔín pǎ-ǎyǎk*
 thus go-NEG-DYNM=EMPH.CO DST.CNTR child.mother NEG:EX-EXCL
 ‘It didn’t go well without my wife.’ (LG-O.40)

16.3. Identity negative *ʔǎp*

The negative particle *ʔǎp* has the function of contradicting an assertion or negating the identity of a nominal entity ('this is not an X'). It is not associated with any particular word class, but may occur with nouns, verbal predicates, adjectives, or adverbials.

Formally, *ʔǎp* is a free form, phonologically independent from the preceding form(s). However, it can occur within the scope of an evidential enclitic (see example 65 below), which suggests that it can sometimes undergo a degree of morphsyntactic integration with its clausal host. Negative *ʔǎp* itself does not take any inflectional markers. It appears to be homonymous with the 'quantity' marker *ʔǎp* (see §6.5.3).

The most common use of *ʔǎp* is as an identity negator with predicate nominals, as in examples (57-60). The negative particle has scope over the entire noun phrase predicate.

- (57) *núp j'áh-an-ʔáy=ʔǎy ʔǎp*
 this land-DIR-who=FEM NEG:ID
 '(I'm) not a woman of this land.' (G-Song.4)
- (58) *mangǎ ʔǎp!*
 Margarita NEG:ID
 '(It was) not Margarita (but someone else).' (TD.Cv.104)
- (59) *nutǎñ-ǎy ʔid ʔǎp*
 today-DYNM story NEG:ID
 '(It's) not a story of today.' (i.e. it's an old story) (H.txt)
- (60) *húp=ʔǎy ʔǎp páh núp-ti ʔ!*
 person=FEM NEG:ID PRX.CNTR this-EMPH.TAG
 'This is not a human woman!' (P.CR.4)

While *ʔǎp* must follow the predicate, the subject of the predicate nominal clause (when explicitly stated) is free to follow the negated predicate (example 61a), just as it is in the corresponding affirmative clause (61b). This example clarifies that *ʔǎp* is not itself predicative, unlike the existence/presence negator *pǎ* discussed above.

- (61) a) *[tiyĩʔ pǒg] ʔǎp núw-úh*
 man big NEG:ID this-DECL
 ‘This is not a big man.’
- b) *[tiyĩʔ pǒg] núw-úh*
 man big this-DECL
 ‘This is a big man.’ (EL)

Example (61a) can be understood to mean either ‘this is a man who is not big’ or ‘this is not a man at all’. However, the same clause negated with *-nǎh* has quite different constituency, and can therefore only mean ‘this man is not big’ (61c). The negation of identity in (61a) can also be contrasted with the negation of existence/presence in (61d).

- c) *núp tiyiʔ [pog]-nǎh*
 this man big-NEG
 ‘This man is not big.’
- d) *[tiyĩʔ pǒg] pǎ*
 man big NEG:EX
 ‘There is no big man.’ (EL)

The Identity Negator *ʔǎp* is not found inside subordinate clauses. However, it can be used to negate a subordinate clause acting as a nominalization:

- (62) *tih wǎd-ǎp ʔǎp páh yúw-úh !*
 3sg eat-DEP NEG:ID PRX:CNTR that.ITG-DECL
 ‘That’s not his thing to eat!’ (EL)

When the negative particle *laǎ* is postposed to a verbal predicate, it functions to contradict an entire assertion, as in examples (63-65). This negation strategy carries more contradictory force than the more common verbal negation strategy with the suffix *-n'ih*. With verbal predicates, *laǎ* must follow the fully inflected verb (but is not constrained by the type of inflection). The expression in (64) would be used with children who are begging to eat someone else's bananas, in order to impress upon them that the rightful owner is a serious possessor and the coveted item is not up for grabs.

- (63) *laǎn laǎy=dó?d'ǎh yǐ=n'ǎn laǎh-nǎh-d'ák-n'ih laǎ!*
 1pl woman=child=PL man=PL.OBJ RECP-fall-stick.against-NMZ NEG:ID
 'We as girls didn't go running after men like that!' (TD.Cv.105)

- (64) *tǎh wǎd-muǎh'ǎ-ǎy laǎ, tǎn'ih g'ǎ'ǎ-ǎh!*
 3sg eat-play-DYNM NEG:ID 3sg.POSS hang-DECL
 'It's not that she's playing around at eating that, it's her hanging bunch (of bananas)!' (RU)

- (65) *laǎh wǎd-ǎy laǎ laǎh-ǎh, wǎd tǎh=pǎy!*
 1sg eat-DYNM NEG:ID 1sg-DECL food 3sg=bad
 'I'm not eating; the food is bad!' (RU)

Note that the object of the verbal predicate negated with *laǎ* can in some cases appear outside the scope of *laǎ*, as in (66) (in which the object *laǎn-ǎn* 'us-OBJ' follows *laǎ*).

This example also illustrates the fact that evidentials—as clause- or predicate-level markers themselves, indicating the speaker's source of information—generally follow the negative particle.

- (66) *yín-ih-yó?* [hí híd tɕw-ɕy] *ɬəp=cud*
 that.ITG.be.like-SEQ no.reason 3pl scold-DYNM NEG:ID=INFR
 ‘And thus, it was not for no reason that they scolded

ɬín-ahn=hín-íp...
 1pl-OBJ=also-DEP
 us, apparently...’ (i.e. there was a reason) (P.B.1)

The negative particle *ɬəp* is also used to negate non-predicative clausal constituents. These include nominal arguments of the clause, both subjects (example 67) and objects (example 68):

- (67) *ɬáh=ɬip ɬəp ɬahn kéy-éh*
 1sg=father NEG:ID 1sg.OBJ see-DECL
 ‘It wasn’t my father that saw me (but someone else).’ (EL)

- (68) *cug’æɬ ɬəp tih d’óɬ-óh*
 leaf/paper NEG:ID 3sg take-DECL
 ‘It wasn’t the book that he took (but something else).’ (EL)

The Identity Negator *ɬəp* can also be used to negate an adverbial expression, as in (69), and can negate quantifiers such as *nihúʔ* ‘all’ (example 70) and *b’ɬyíʔ* ‘all, only’ (although, curiously, it is judged ungrammatical with the quantifier *ɬápyíʔ* ‘all’):

- (69) *pɬb ɬəp tih tɕɬɬ-ɕy*
 fast NEG:ID 3sg run-DYNM
 ‘He does not run fast.’ (EL)
- (70) *híd nihúʔ ɬəp ham-té-h, dəb-nɬh=d’əh=yíʔ*
 3pl all NEG:ID go-FUT-DECL many-NEG=PL=TEL
 ‘They won’t all go, only a few of them.’ (EL)

However, *ɬəp* is judged inappropriate or strange in combination with most adjectives:

- (71) *?? yú páy ɬəp tih bahád-áy*
 John bad/ugly NEG:ID 3sg appear-DYNM
 (Intended meaning: ‘John does not appear ugly/ bad.’)

The contradictory force of *ʔǎp* can apply to negative clauses as well as to affirmative ones. This is illustrated by its occurrence with the Verbal Negative *-nɪh* in example (72), and with the Existential Negative *pǎ* in (55) above.

- (72) *tɪh wæd-nɪh ʔǎp*
 3sg eat-NEG NEG:ID
 ‘He *didn’t* not eat.’ (i.e. he did eat)

Finally, *ʔǎp* shows the same flexibility as *-nɪh* (example 20 above) in that a single *ʔǎp* can negate an entire string of sequentially linked clauses:

- (73) *nɪ ʔǎy=hiwɪh=d’əh=yiʔ nɪh-yóʔ, b’ɔt wɪd-yé,*
 1sg.POSS FEM=relative=PL=TEL be.like-SEQ roça arrive-enter
 ‘I don’t do like my female kinsmen: return from the roça,
wɔn’ wɔn’-d’óʔ, kǎn=mæh, kǎn d’oʔ-yóʔ,
 mingau make.mingau-take farinha=DIM farinha take-SEQ
 take mingau, a little farinha, take farinha,
ʔəg-əp ʔǎp
 drink-DEP NEG:ID
 and drink.’ (i.e. I do none of these things) (T.PN.22)

16.4. Negative expressions and negative lexical items

Hup has no general lexeme for ‘no’. A negative response or refusal typically requires one of the strategies already discussed here, such as a verb phrase negated with *-nɪh* (either echoed or summarized as *nɪh-nɪh* [be.like-NEG] ‘not like that’), a noun phrase with the existence negator *pǎ* ‘none, not here’ (which, as discussed, can stand alone), or a

generic demonstrative or other noun with ‘identity’ negation (e.g. *yɛ̃ ʔǎp* ‘not thus’), depending on the type of negative required.

However, Hup does have several inherently negative lexical items and expressions, in addition to the negative particles already discussed in this chapter. The fixed negative phrase *ʔám ya ʔǎpa ʔ* is commonly used in response to questions to mean ‘I don’t know’. Its etymology is obscure, but it appears to involve the second person singular pronoun *ʔám*, and possibly the form *ya ʔǎp* ‘that’s all; that much’.

Inherently negative verbs in Hup include *muy-* ‘not get any, fail’, as in examples (74-76). This verb can occur in compounds, and can itself take clausal negation (76). It is almost certainly borrowed from Tukano, in which the near-identical form *muĩ* has essentially the same meaning as its Hup counterpart (cf. Ramirez 1997b: 108).

- (74) *d’əwyɛ̃ ʔǎp múy-úy ʔǎh-ǎh*
 today fish get.none-DYNM 1sg-DECL
 ‘Today I didn’t get any fish.’ (RU)

- (75) *badánka pɔpɔǎñ g’əç-múy-úy*
 branca(Pt) inambu-OBJ bite-get.none-DYNM
 ‘Branca (dog) did not catch the inambu.’ (EL)

- (76) *j’ám ʔǎp ʔǎh kək-muy-nɛ̃*
 yesterday fish 1sg pull-get.none-NEG
 ‘Yesterday I caught plenty of fish.’ (lit. I didn’t come away from fishing empty-handed) (RU)

Another verb that can be considered a lexical negative is *yǎhǎ ʔ-*, which usually occurs in verb compounds to mean ‘stop doing Verb’:

- (77) *yam-yǎhǎ ʔ-yɛ̃ ʔ!*
 sing-stop-TEL.IMP
 ‘Stop singing!’ (EL)

Finally, the verbal Counterfactual marker *-tæʔ-* can be considered inherently negative, as discussed in §15.2 and in §16.1.7 above; it can even occur with the reinforcing negative marker *næ*, as in (79) (from a discussion of evil spirits).

- (78) *ʔam nɔh-tæʔ-æy!*
 2sg fall-CNTRFACT-DYNM
 ‘You almost fell!’ (OS)

- (79) *ni-húʔ næ núp j’ah=cóʔ hɪd ni-tæʔ-ní-h*
 be-finish NEG:R this land=LOC 3pl be-CNTRFACT-DECL
 ‘All of these were almost in our land.’ (H.33)

Comparative Note

Negation in Hup’s sister language Nadëb has been described in some detail by Weir (1984, 1994), who observes that Nadëb has a remarkably complex set of strategies for negation, which reveal some typologically unusual features. For example, the only negative constructions reported to have direct affirmative equivalents involve dependent or embedded clauses and imperatives (Weir 1994: 291). Also, the negative marker used in clausal negation has a nominal identity, which is typologically extremely rare—in fact, Nadëb may represent the only example of such a strategy (cf. Miestamo 2003).

The strategies and morphemes found in Nadëb appear (at least superficially) to have little in common with those in Hup. One possible cognate is the Nadëb post-verbal particle *manɪh*, which bears some resemblance to the Hup Verbal Negative suffix *-nɪh*; however, in Nadëb this negative particle is used exclusively in imperative clauses.

A possible cognate with Hup *pǎ̃* is found in Dâw. According to S. Martins (1994: 163), verbal negation in Dâw involves the enclitic *-ɛh*, and nouns undergo existential negation via a combination of this form with the nominal predicate marker *ma*, resulting in the form *mɛh*. This particle combines with nouns in much the same way as does Hup *pǎ̃*; for example, compare Dâw *lay' mɛh* (fishhook NEG) ‘there aren’t any fishhooks’ with the same construction in Hup: *hɔ̃pkək pǎ̃* (fishhook NEG:EX). If future work reveals that the Hup and Dâw forms are actually cognates, this will provide some insight into the historical source of Hup *pǎ̃*. Comparative work on the systems of negation in these related languages awaits investigation.

As a final intriguing point, semantically parallel (though non-cognate) non-compositional negative lexical items meaning ‘I don’t know’ and ‘be absent/ in-existent’ (of which the latter is predicative) are found in both Tukano (*uba* and *mãrĩ*) and Tariana (*hãida* and *kuripua*) respectively, and this fact has led Aikhenvald (1999b: 404) to suggest that this parallelism is an areal feature. That Hup also has analogous forms (*ɔ̃ám ya ɔ̃ápáʔ* and *pǎ̃*) is likely yet another indication of its deep involvement in the Vaupés linguistic area.

17. Simple clauses

This chapter focuses on three major types of main clause in Hup, which correspond to distinct speech acts: declarative, interrogative, and imperative. The differentiation of these clause types is a salient aspect of Hup morphosyntax, and is encoded by both clausal constituent order and morphological marking.

17.1. Boundary Suffixes and clause type

Morphologically, Hup clauses in general are loosely defined by the Boundary Suffixes, as discussed in §3.4.1.2. While a heterogeneous group, the Boundary Suffixes (particularly the set of ‘simple’ suffixes) generally share the function of indicating a clause’s type. Accordingly, they distinguish dependent or co-subordinate clauses of various kinds (adverbial, relative, complement, sequential, conditional, etc.) and main clauses having a particular illocutionary force (e.g. negative, interrogative, optative, imperative, etc.).

Of the Boundary Suffixes, a subset of forms—which share a vowel-copying profile (plus an unmarked ‘zero’ form)—can be defined functionally as maximally ‘basic’ in that they mark several of the most distinctive clause types and are otherwise largely semantically neutral (Table 17.1; see also §3.4.1.2). Although these morphemes are heterogeneous in their patterning inside the clause (and may in some cases co-occur within the clause), when they occur on a clause-final verbal predicate they are mutually

exclusive¹⁸⁶ and correspond consistently to clause type. These are by far the most frequently occurring Boundary Suffixes in Hup, although they are often supplanted by various other Boundary Suffixes (e.g. the Verbal Negative *-nʔh* (§16.1), the forceful Imperative *-kæm* (§17.5.2), etc.). Where they relate to declarative, interrogative, and imperative clauses, the functions and patterning of the various Boundary Suffixes (including these maximally ‘basic’ forms) will be discussed in this chapter. The clause-marking functions of other Boundary Suffixes are treated in chapter 18 and other sections of this grammar.

Table 17.1. Subset of parallel clause-final Boundary Suffixes in Hup

Declarative clauses	<i>-Vh</i> (Aspect-neutral)
	<i>[-Vý]</i> (Dynamic; concurrent with speech moment)
Interrogative clauses	<i>-V?</i>
Imperative, Apprehensive clauses	<i>-Ø</i> (plus high tone for imperative)
Dependent clauses	<i>-Vp</i>

17.2. The morphosyntax of main clauses

The relative order of subject and verb plays an important role in defining declarative, interrogative, and imperative clauses. In general, more than one ordering option is available for a given clause type, but it is the interaction of syntax and clause-final morphological marking that is crucial in distinguishing one from another.

The most basic morphosyntactic patterns that define the various types of main clauses are listed below. Because the order of subject and object arguments in transitive

¹⁸⁶ Exceptions to this rule may occur in cases of clause linkage, principally regarding the suffixes *-Vý* and *-Vh*; see §18.1.2 and below.

clauses is highly flexible (as discussed in §17.3.1 below), objects are not included in this schema. The patterns are indicated using the subset of Boundary Suffixes given in Table 17.1 above, which are the most common markers of clause type, but it is important to note that other Boundary Suffixes may appear in their place. For example, verb-final declarative clauses may be marked with the Negative suffix *-nʔh* (or various other forms) instead of the Declarative or Dynamic markers, and imperative clauses may take the strong imperative suffix *-kæm* instead of the *-Ø* form and high tone.

Declarative clauses:

Verb-DYNAMIC	Subject-DECLARATIVE	(Current or on-going events)
Subject	Verb-DYNAMIC	(Current or on-going events)
Subject	Verb-DECLARATIVE	(Events not immediately concurrent with the speech moment or frame of reference)

Interrogative clauses:

Verb-DYNAMIC	Subject	(Polar questions)
Q word	Subject	Verb-INTERROGATIVE (Constituent questions)
Subject	Verb-INTERROGATIVE	(Polar constituent-focused questions)

Imperative clauses:

(Subject) Verb-Ø (plus high tone)

17.3. Declarative clauses

This section treats the declarative clause in Hup. Declarative clauses are defined both by constituent order and morphological marking, and include both affirmative and negative statements, as well as non-verbal clauses involving predicate nominals, adjectives, and locatives.

17.3.1. Constituent order in the declarative clause

Constituent order in Hup is relatively free, but the formally least-marked pattern is clearly verb-final. Defining the order of nominal arguments in the transitive clause is more difficult, but the ‘basic’ constituent order can arguably be identified as AOV. The actual order of all constituents appears to be determined primarily by pragmatics, with the most important parameter being the fronting of new information. Other relevant factors that correlate with word order are verbal tense and aspect, and the identity of nominal constituents as pronouns or full lexical nouns. Both context and the existence of morphological core case-marking (see §4.3.1), which corresponds to a consistently nominative-accusative alignment system, help to disambiguate syntactic arguments.

The dropping of arguments is common in Hup when they can be recovered from the discourse context; this is particularly true for objects (example 1). Subject dropping also occurs (example 2), but is less frequent. In general, Hup speakers seem to prefer clauses with only one full nominal (i.e. non-pronominal) argument, and will sometimes even repeat the clause, dropping an argument each time, in order to conform to this (example 3). In providing information in response to a question or related solicitation from an interlocutor, an utterance may consist of only a verb (plus inflection), or only a noun or adjective, but in most other discourse contexts a predicate with at least one nominal argument (usually the subject) is the norm.

- (1) *yo-cak-wob-ni-yó?* *póh tih w'ob-yí?ay-áh,* *nukán,* *wáb-an*
 pull-climb-rest.on-be-SEQ high 3sg set-TEL-INCH-DECL over.here jirau-DIR
 ‘Having pulled (her children) up, she set (them) up high, here, on the jirau.’
 (P.BT.95)

- (2) *cet-ham-tubud-yĩʔ-ĩy, hup= ʔǎy-ǎñ!*
 carry.on.back-go-INTS3-TEL-DYNM person=FEM-OBJ
 ‘(The tapir) carried the woman a long way off!’ (H.TY.79)

- (3) *nút=mah, ba ʔĩb-ǎñ g’ǎç-g’et-pó-h!*
 here=REP spirit-OBJ bite-stand-EMPH1-DECL
 ‘Here, it’s said, (he) bit the spirit!’

hǎʔ g’ǎç-g’et-pó-h, [ba ʔĩb’ hohōʔ-ót]
 alligator bite-stand-EMPH1-DECL spirit rib.cage-OBL
 ‘The alligator bit (him), on the spirit’s ribs.’ (M.BK.75)

While verb-final constituent order is basic in Hup, an alternative order, in which the verb precedes the subject in the declarative clause, is also in use. This order is often favored when the clause encodes an ongoing or currently relevant event, and particularly when the subject is a pronoun; these clauses are therefore common in everyday conversation, but quite infrequent in narrative and other types of discourse. In such cases, the verb is usually marked with the Dynamic suffix *-Vý*, but other Boundary Suffixes are possible (e.g. Inchoative *-ay*, Negative *-nʔh*, etc.).

A crucial feature of clause-final subjects in declarative clauses is their inability to stand by themselves without additional morphology—a feature that sets apart this VS constituent order as clearly more marked than the more neutral verb-final order (in addition to the fact that the clause-final subject is frequently a pronoun). In this context, subjects are obligatorily marked by an inflectional suffix, most often the Declarative *-Vh* (§17.3.2 below), but other markers are also possible. If an unmarked subject does occur in clause-final position, the clause can only be interpreted as a polar interrogative (see §17.4.2 below). Third person pronouns in post-verbal position are typically the

‘intangible’ demonstrative variants (*yu*), rather than the regular personal pronominal forms (cf. §6.3).

Examples of this clause type are given in (4-5).

- (4) *ɬamɬh tegcáʔ d'óʔ-óy páh ʔáɬ-áɬ!*
 2sg.POSS wood.box take-DYNM PRX.CNTR 1sg-DECL
 ‘I took your matches!’ (B.Cv.136)

- (5) *tɬh-ɬy yúw-úh, páti!*
 lie-DYNM that.ITG-DECL Pattie
 ‘That one’s lying, Pattie!’ (B.Cv.136)

The functional and historical motivations for this Verb-Subject constituent order variant in the declarative clause may be several. Fronting the verb in relation to the subject places focus on the event itself; this is consistent with the verb’s typical aspectual value in such cases (usually Dynamic; i.e. action in progress or otherwise relevant to the speech moment), and with the fact that the pronominal subject is relatively given information. That this constituent order strategy reflects the information structure of the clause is supported by the fact that subjects which are full nominals are more likely to be clause-initial (example 6). Subject-final order also makes it possible both for the clause to receive Declarative marking and for the verb to be marked with the Dynamic marker or some other Boundary Suffix (which otherwise cannot co-occur with the Declarative on the verb), such as Negative *-nɬh*.

- (6) *wɬh pææw=d'ɬh b'ɬyiʔ ní-íy*
 river.indian youth=PL only be-DYNM
 ‘There are only River Indian boys.’ (B.Cv.131)

It is important to note that while this subject-final constituent order strategy is typical in Hup discourse when expressing events in progress, it also has a parallel in the general information-packaging conventions of Hup, whereby arguments are often expressed (or re-stated) as external arguments to the main clause, following the predicate in little appositional packages which are independently marked with the Declarative suffix (while the preceding clausal material may *also* take the Declarative marker; see below). The predicate-final subjects in examples such as (4-5) should probably not be considered as external to the main clause, however; they are not co-referential with any other subject nominal in the clause, and Declarative marking on the verbal predicate in these cases is not grammatical, suggesting that the predicate is understood to be really clause-internal.

Verb-final constituent order is the norm when clauses encode events that are not currently in progress or otherwise concurrent with the temporal frame of reference. These correspond to a range of discourse types; they are standard in past-tense narrative and in descriptive and other time-neutral discourse, and are also common in clauses with future or past tense reference generally. In these cases, the clause-final verb is very often marked with the Declarative marker *-Vh* (§17.3.2 below), but a variety of other Boundary Suffixes also occur (e.g. Future *-téɡ*, Negative *-n#h*, etc.).

Declarative verb-final constituent order is illustrated in the intransitive clauses in (7-8). As these examples show, intransitive (and also transitive) clauses are frequently initiated by an adverbial word or clause (often denoting temporal sequence), followed by the subject, and finally the verb.

- (7) *bĩg=mah=yĩʔ tĩh nĩh-ĩh, ham-g'óʔ-óh*
 long.time=REP=TEL 3sg be.like-DECL go-go.about-DECL
 'For a long time, it's said, he did thus, wandered about.' (H.TY.81)
- (8) *tāʔāy nĩh wǎç ká-át=mah, taĩh y'æʔ-tuʔ-ní-h*
 woman POSS fish.trap barricade-OBL=REP tapir defecate-immersed-INFR2-DECL
 'On the woman's fish-trap (in the water), the tapir defecated.' (H.TY.79)

In the transitive clause, the basic order of nominal arguments (where these are explicitly stated at all) is difficult to ascertain definitively. In cases where there are absolutely no other clues to the identity of subject and object, Hup speakers prefer AOV constituent order, which suggests that this order is in some sense the most basic:

- (9) a) *m'æh yaʔám mæh-æy*
 snake jaguar kill-DYNM
 'The snake kills the jaguar.'
- b) *yaʔám m'æh mæh-æy*
 jaguar snake kill-DYNM
 'The jaguar kills the snake.' (EL)

It is, however, extremely rare for constituent order to be the only clue to the identity of subject and object in a transitive clause, even in elicitation contexts. Grammatical objects that are human entities, pronouns, and NPs involving demonstratives are obligatorily marked with Object case in Hup (see §4.3.1.1), so their identity as subject or object is always clear. On the other hand, inanimate entities in object function are not generally object-marked; yet inanimate entities can hardly ever be interpreted as agents, hence hardly ever as subjects, so this lack of object marking rarely leads to confusion. Cases of potential ambiguity are therefore for the most part limited to interactions between two animal entities, for which object marking is optional. Even in these cases, if context-

related clues to the identity of the participants are inadequate or lacking, speakers prefer to use the optional case markers rather than simply to rely on constituent order.

Actual Hup discourse provides few clues to establishing one order of core nominal arguments as more ‘basic’ than another, because clauses containing both a full (non-pronominal) nominal subject and object are extremely rare. When these do occur, the order of subject and object is flexible, and is subject to pragmatic considerations—in general, newer or more focused information is fronted, while more topical constituents tend to come later in the clause. However, a text count of such clauses does suggest that AOV order is at least twice as common as OAV order, which supports the apparent preference for AOV order found in elicitation contexts, as discussed above. A text example of AOV order is given in (10); the alternative OAV order (in which the speaker is focusing on the object, Curupira) in (11).

- (10) *yúp=mah yúp, tɬ=tɬɬ ʔip b’áʔ cim’-d’oʔ-yɬɬ-ɬɬ*
 that.ITG=REP that.ITG 3sg=child.father beiju claw-take-FRUST-DECL
 ‘Then, it’s said, her husband reached for the beijú in vain.’ (P.CR.7)

- (11) *doh ʔáɣ-áɳ=mah ʔayúʔ=ʔɬ, húp=ʔɬ kéy-éh*
 Curupira-OBJ=REP one=MSC Hup=MSC see-DECL
 ‘A man, a Hup man saw Curupira, it’s said.’ (P.CC.81)

The order of pronominal objects relative to other nominal constituents also depends on pragmatics; they tend to follow full nominal subjects in the clause (example 12), but this is not obligatory (13):

- (12) *yɬ j’ɬ hɬyɬɬ=mah j’ám ba ʔɬ tɬ-áɳ wɬdnɬn-pó-ay-áh*
 thus night middle=REP DST.CNTR spirit 3sg-OBJ arrive.come-EMPH1-INCH-DECL
 ‘So in the middle of the night, it’s said, a spirit came to him.’ (M.NS.65)

- (13) *ʔǎn ba ʔh' wæd-tæʔ-æy páh ʔǎn-áh !*
 1sg.OBJ spirit eat-CNTRFACT-DYNM PRX.CNTR 1sg.OBJ-DECL
 'A spirit nearly ate me up!' (M.NS.68)

As is common in many languages, pronominal subjects in Hup (which tend to be highly topical) almost always immediately precede the verb in the clause (examples 14-15) (resulting in a default OAV order). Because pronominal objects are obligatorily case-marked, ambiguity in the identity of core syntactic arguments is always avoided when one argument is a pronoun. Probably as a result of this preference for pronominal subjects to directly precede the verb, they have acquired some of the characteristics of proclitics when in this position in the clause (i.e. lack of stress, and a tendency for the third person singular pronoun *tʔh* to be phonologically dependent on the verb in the Umari Norte dialect; see §3.4.2.1 and §6.1).

- (14) *páti-ǎn húp-út ʔǎh ʔǐd-ihɔʔ*
 Pattie-OBJ Hup-OBL 1sg speak-TAG2
 'I speak Hup to Pattie, you know.' (P.Sp.109)

- (15) *yʔh=mah háʔ-ǎn tʔh d'oʔ-yʔʔ-ʔh*
 thus=REP alligator-OBJ 3sg take-TEL-DECL
 'Then he grabbed the alligator.' (M.BY.96)

Despite the strong preference for subject pronouns to precede the verb, this is not absolutely obligatory in the Hup clause (although this order appears to be more fixed in the Umari Norte dialect, in keeping with the pronouns' more clitic-like identity in that dialect). Highly salient, emphasized pronominal subjects may precede objects (especially where these are themselves pronominal), as in example (16)—where the subject receives additional emphasis through its clause-final repetition as an external argument.

- (16) *ʔāh tʔh-ān mæh-yʔʔ-ʔy=tih, ʔāh-āh!*
 1sg 3sg-OBJ kill-TEL-DYNM=CNTRFCT2 1sg-DECL
 ‘I would kill him, I (would)!’ (P.CC.86)

Nevertheless, Hup has a number of strategies for maintaining its preference for immediately preverbal pronominal subjects in transitive clauses. For example, subjects are often referred to initially via a pronoun, and only made explicit post-verbally as an external argument to the main clause:

- (17) *tʔh hehéʔ-éh, tʔh-ān, yúp doh ʔāy-āh*
 3sg laugh.loudly-DECL 3sg-OBJ that.ITG Curupira-DECL
 ‘She laughed loudly at her, (did) that Curupira (wife).’ (P.CR.3)

It is also fairly common to have a full nominal subject *and* a co-referential (resumptive) pronoun together in same clause, as in (18), especially in the Umari Norte dialect.

- (18) *yʔnʔh-yóʔ=mah ba ʔʔb’ tʔh pe ʔpeʔ-kót-óh*
 that.ITG-be.like-SEQ=REP spirit 3sg grope-go.in.circles-DECL
 ‘Then, it’s said, the spirit went groping around.’ (M.NS.65)

This prevalence of pronominal subjects, which appear to be marginally procliticized to the verb, may represent an early step towards the historical development of a system of pronominal clitics—a process which, when further developed, often gives rise to verbal person agreement. Such systems of person-marking on the verb are fairly common in Amazonian languages.

Other orders of predicates and arguments are possible in Hup, although they are less clearly limited to the domain of a single clause. As mentioned briefly above, Hup has a productive strategy of information packaging that involves the stringing along of arguments *after* the predicate. These arguments appear as self-contained pieces of information that relate to, but occur outside, the main clause, as external arguments or

antitopics. In many cases, the fact that these external arguments occur outside the main clause proper is signaled by the ability of both the argument and the preceding predicate to independently take the Declarative suffix *-Vh̃*. Because the Declarative suffix is not grammatical clause-internally, the *-Vh̃*-marked predicate preceding the external argument cannot be interpreted as clause-medial. Moreover, the main clause and its external argument are typically separated from each other by a short pause and/or intonation juncture.

This external argument strategy is common with objects, as illustrated in the following examples. In (20) both subject and object are stated as pronouns in the main clause, and then restated more explicitly in the string of arguments that follow.

- (19) *děh hǎn-ɔp=mah tɪh kéy-éh, tɪh-añ-áh*
 water vomit-DEP=REP 3sg see-DECL 3sg-OBJ-DECL
 ‘While (ritually) vomiting water, he saw her (reflected in the water).’
 (M.KTW.99)

- (20) *yɬ̃=mah tɪh-añ tɪh g’əɕ-d’oʔ-póg-b’ay-áh,*
 thus=REP 3sg-OBJ 3sg bite-take-EMPH1-AGAIN-DECL
 ‘So then he bit him,

haɬ̃=b’ay-áh, tɪnɪh mumuy=cúm, ba ɬ̃ɬ̃’-añ-áh
 alligator=AGAIN-DECL 3sg.POSS arm=beginning spirit-OBJ-DECL
 (did) the alligator, on his upper arm, (bit) the spirit.’ (M-BY.96)

This strategy of expressing arguments externally to the main clause also applies to oblique constituents, as in (21), where the demonstrative ‘here’ of the main clause is elaborated following the predicate.

- (21) *nút híd ni-ʔě̃h, núp mɔ̃y-ɬ̃*
 here 3pl be-PERF-DECL this house-OBL
 ‘They lived here, in this house.’ (B.Cv.134)

This tendency to restate nominal arguments as little self-contained packages of information, external to the main clause, is especially frequent in narrative discourse in the Umari Norte dialect (examples 22-23). This probably has to do with the fact that verbs in this dialect almost always occur with their pronominal subjects (often clearly procliticized), which are then clarified as co-referential external arguments marked with *-Vh*.

- (22) *mih-ǎn=maám* *tu-hup-yǎd-ǎh*, *tǎh-íw-ǎh*, *tah-áh*
 turtle-OBJ=REP.DST.CNTR 3sg-RFLX-hide-DECL 3sg-FLR-DECL tapir-DECL
 ‘He hid himself from the turtle, he (did), the tapir.’ (JA.AJ.70)
- (23) *maca-cák-maám* *tǎh-ǎn* *tǎh wǎn-hám-ay=mah* *yúp*,
 heal-climb-REP.DST.CNTR 3sg-OBJ 3sg follow-go-INCH=REP that.ITG
 ‘Having got well and climbed out (of the hole), he followed after him,
- mih-íh*, *tah-ǎn-áh*
 turtle-DECL tapir-OBJ-DECL
 (did) the turtle, (after) the tapir.’ (JA.AJ.65)

Not every post-predicative NP can easily be interpreted as external to the main clause, however, especially when the NP is not co-referential with another NP stated within the main clause (as opposed to cases like examples 20 and 23, where the external subject and object reference pronouns in the main clause). Subjects, as noted above, frequently appear post-verbally, and there often is little or no evidence that this is anything more than a variation in clause-internal constituent order (although subjects certainly can and often do appear as external arguments, as the examples above illustrate). In many of these cases of Verb-Subject constituent order, Declarative *-Vh* is not acceptable on the preceding verb (which may take the Dynamic or some other Boundary Suffix), suggesting that the verb is clause-medial (example 24; see also 4-5

above). Post-verbal objects are likewise not always clearly external to the main clause, as in (24-25); again, this is the case when the clausal chunks are not distinguished from each other by the Declarative marker (which tends to be optional on clause-final objects, unlike clause-final subjects) and the object is not co-referential with another NP. Nevertheless, the verb or predicate of the clause is often separated from its clause-final argument (whether subject or object) by a slight pause (as is the case in 24-25), suggesting a juncture. The actual status of these post-verbal arguments as inside or outside the main clause will have to await future research.

- (24) *ʔid-cʰw-ɬy* *j'ám* *tʰh-ǎn*, *ʔǎh-ǎh*
 speak-COMPL-DYNM DST.CNTR 3sg-OBJ 1sg-DECL
 'I already spoke to her.' (B.Cv.87)

- (25) *ʔǎh* *hipǎh-cʰw-ɬy*, *hǎd-ǎn*
 1sg know-COMPL-DYNM 3pl-OBJ
 'I already know (how it is with) them.' (P.Sp.109)

The order of constituents in ditransitive clauses follows similar guidelines to that in transitive clauses. The dropping of one or even both objects from the clause is quite common, since the participants can usually be recovered from the discourse context. When both objects are present, their order is governed mainly by pragmatics. Their respective identities are usually not in question, since recipients/beneficiaries are more likely to be human or at least animate (and receive differential object marking), while direct objects tend to be inanimate. However, even if both objects are human—leading to potential ambiguity between object and recipient/beneficiary—their order is quite flexible and is determined by pragmatics and context. For example, consultants interpret both of

(29-30), the recipient or indirect object precedes the direct object (as it also does in 31 below):

- (29) *‘máý! tegh ʃ= ʔáý-ǎñ dadánya ʔín du-wæd- ʔáy-ay-áh*
 let’s.go Non.Indian=FEM-OBJ orange 1pl sell-eat-VENT-INCH-DECL
 ‘C’mon! Let’s go sell some oranges to the Non-Indian girl.’ (P.txt.92)
- (30) *nǫ-ǎñ yʃ-n’ ʔh ʔid-tuk-n ʔh ʔáh-ǎh*
 2pl-OBJ that.ITG-NMZ speak-want-NEG 1sg-DECL
 ‘I don’t want to say this to you all.’ (P.Sp.111)

In (31-32), the direct object precedes the recipient or indirect object:

- (31) *ʔam ʔh kág’ ʔǎñ be-kǎm!*
 2sg.POSS forehead 1sg.OBJ show-IMP2
 ‘Show me your forehead!’ (M.NS.65)
- (32) *yúp=mah yawǎç kág’=mah ba ʔh-ǎñ tih bé-éh*
 that.ITG=REP Titi.Monkey forehead=REP spirit-OBJ 3sg show-DECL
 ‘So he showed the monkey’s forehead to the spirit.’ (M.NS.66)

Note that pronominal subjects in these clauses tend to immediately precede the verb, just as they do in mono-transitive clauses; non-pronominal subjects, on the other hand—while infrequent—are more likely to be clause-initial (supporting the argument that basic constituent order is AOV):

- (33) *tih=tǎh ʔín tǎh-ǎñ wǎd nɔʔ-ay-áh*
 3sg=child.mother 3sg-OBJ food give-INCH-DECL
 ‘His wife gave him food’ (P.CC.85)

Finally, objects of ditransitive clauses may be tacked on behind the predicate as external arguments (example 34), just as in mono-transitive clauses. In the very rare cases in which a clause has more than three explicitly stated arguments (i.e. a tritransitive applicative construction), then at least one argument (usually the beneficiary of the applicative) occurs in this external or clause-final position.

- (34) *yúp mĩh kinim hɔk-d'oʔ-yóʔ=mah tĩh d'əh-d'əh-wáy-áh, baʔĩb'-ań*
 that.ITG turtle wrist saw-take-SEQ=REP 3sg send-send-go.out-DECL spirit-OBJ
 'So having cut off the turtle's foot, it's said, he passed (it) out to the spirit.'
 (M.NS.66)

17.3.2. Declarative marker -*Vh*

The vowel-copying Boundary Suffix -*Vh*—perhaps the most ubiquitous bound morpheme in Hup—marks the declarative clause. While it is not obligatory on every declarative clause in Hup (its place may be filled by other Boundary Suffixes) it is very often present. Conversely, it is obligatorily absent from all other major clause types in the language: interrogative, imperative, optative, apprehensive, and subordinate, as well as (in most circumstances) negative.¹⁸⁷ The Declarative marker is a member of the subset of parallel vowel-copying suffixes defined in Table 17.1 above, which exist in a mutually exclusive relationship on clause-final verbs and mark each of the various clause types. Although the overt marking of declarative clauses is cross-linguistically less common than the marking of interrogative and other clause types, it is not a rare phenomenon, and often involves syntactic or morphological marking parallel to that of other sentence types (cf. Sadock and Zwicky 1985: 166).

Whereas most of the other vowel-copying Boundary Suffixes in Hup can appear clause-internally (and in certain cases on more than one constituent or type of constituent), the Declarative marker is found no more than once per clause, and is in general limited to main clauses—although it may also occur on multiple external arguments following the main clause, as discussed above (§17.3.1). It is also restricted to

clause-final position (or as the final morphological element of an external argument)—acting rather like a punctuation mark.

As a clause-final marker, the Declarative suffix attaches to whichever constituent appears last in the clause—whether this is the verb, subject, or something else.¹⁸⁷ In a non-interrogative clause, a subject that follows the predicate (and is presumably not extra-clausal, cf. §17.2.1 above) takes obligatory inflection, which is typically the Declarative marker (example 36; cf. §17.3.1). The Declarative marker is also the most common Boundary Suffix to appear on clause-final verbs (example 36). Because of its obligatory clause-final nature, it follows all other verbal suffixes, and provides the environment for many peripheral formatives to appear as Inner Suffixes (see §3.5).

- (35) *kʰ-d'ák-áy=mah tʰh-ʰh*
 chop-be.against-DYNM=REP 3sg-DECL
 ‘She hit (her machete) against (the fishtrap).’ (H.TY.79)

- (36) *yúp yǎy ya ʔám=wəd=mah yúp b'ay-yʔʔ-ʰh*
 that.ITG curauá(pineapple) jaguar=RESP=REP that.ITG return-TEL-DECL
 ‘Then that old jaguar-chief went back, it’s said.’ (H.YP.71)

Examples (37-39) illustrate the multiple occurrences of the Declarative marker, both on the main clause and on the following coordinated external arguments (which include both subjects and objects, and are in some cases co-referential with NPs in the main clause; see also 19-20 above).

- (37) *yúw-ǎn ʔin bi ʔd-ʰh, haŋ-j'ǎp bi ʔd-ip=ʔh-ʰh*
 that.ITG-OBJ 1pl bless-DECL breath-snap spell-DEP=MSC-DECL
 ‘We do this spell, the “breath-snapping” sickness one.’ (MD.90)

¹⁸⁷ Except where a subordinate clause (a nominalization) occurs at the end of a main clause, appended as an external argument; see below.

¹⁸⁸ In an apparent exception to this rule, Protestive *báʔ* (a clause-level affect marker) can appear after the Declarative marker in the clause; however, it is probably best considered as falling outside the main clause, on a par with interjections.

- (38) *nút caʔ=cud ʔúh, hidnʔh yaʔ pǎʔ cáʔ ni-pǎd-ʔh, hidnʔh=hup-úh*
 here box=INFR.EPIST 3pl.POSS macaw hair box be-DIST-DECL 3pl.POSS=RFLX.INTS-DECL
 ‘(It was) a box of this size, their macaw-feather box was, their own (box).’ (H.75)
- (39) *yúp=yiʔ biʔ-nʔh-ʔy=cud yǎh wəhəd=dʔəh-ʔh, mʔh kākǎw-ǎh*
 that.ITG=TEL make-be.like-DYMN=INFR FRUST old.man=PL-DECL turtle anklebone-DECL
 ‘Thus they made it, the Ancestors, the Turtle-Anklebone oracle.’ (H.txt.21)

The use of the Declarative suffix in marking coordinated external arguments of a clause is probably what lies behind its common occurrence on nominals in a list (cf. §6.7), as in (40), although it is not required in this context. Like the external arguments, listed entities are all on the same syntactic level; none is subordinate to the others.

- (40) *yág, bʔəh-óh, wǎn-áh, mǎm-ʔh, niʔhúʔ!*
 hammock salt-DECL machete-DECL axe-DECL all
 ‘Hammocks, there was salt, there were machetes, there were axes, everything!’
 (H.txt.64)

Because Boundary Suffixes in general are mutually exclusive on a given verb, a verb can usually take only one of the parallel vowel-copying suffixes listed in Table 17.1 at a time. However, since both the Declarative marker *-Vh* and the Dynamic *-Vý* can occur in declarative clauses, their relationship is somewhat complex. This relationship is discussed here and in §12.2.

To begin with, Declarative *-Vh* and Dynamic *-Vý* differ from each other in their overall patterning. The Declarative marker is limited to declarative clauses, where it is restricted to clause-final constituents, regardless of part of speech. The Dynamic, on the other hand, can in general occur only on verbs,¹⁸⁹ but it is not strictly clause-final, and it can occur in clause-medial position in interrogative clauses, as well as in either clause-

¹⁸⁹ But see §12.2 for exceptions.

medial or final position in declarative clauses. Thus the two suffixes can actually co-occur in a single clause when the subject nominal is clause-final and Declarative-marked, and the predicate is clause-medial and Dynamic-marked.

When a declarative clause ends in a verb, on the other hand, the Dynamic and Declarative suffixes are mutually exclusive (but see below for an exception related to clause linking). The Dynamic marker has an aspectual function, and is usually preferred when describing events that are on-going and dynamic in relation to the speech moment (or a more general frame of temporal reference; cf. §12.2). The Declarative marker, on the other hand, is neutral with regard to tense and aspect. It is accordingly the preferred inflectional form in narrative descriptions of past events (example 41), procedural discourse (42), descriptive or generic statements (43-44), and spells (which are based on narrative and descriptive discourse forms).

- (41) *bĩg tĩh ham-g'óʔ-óh*
 long.time 3sg go-go.about-DECL
 'He traveled around for a long time.' (H.txt.65)
- (42) *děh hi-wǎy hám=d'əh yúp, hǝpkǝk, mǝmb'ǝk híd tǝn-hám-áh*
 water FACT-go.out go=PL that.ITG fish.pull metal.pot 3pl take-go-DECL
 'Those who go out (to fish) in the flooded area (igapó), they take along fishhooks and pots.' (P.F.125)
- (43) *canǎ b'ǝyiʔ macá-áh*
 pineapple only be.born-DECL
 'Only pineapples grow (in this kind of soil).' (B.Cv2.132)
- (44) *ǝāh b'ǝyiʔ-ay hipǎh-ǎh; dóʔ=d'əh, tǎh=d'əh hipǎh-nĩh-ay-áh*
 1sg only-INCH know-DECL child=PL offspring=PL know-NEG-INCH-DECL
 'I'm the only one who knows; the children, sons/daughters don't know.'
 (H.txt.27)

- (45) *núw-ǎñ ʔǎh key-d' əh-hám-áh, ʔǎh=tǎh ʔín-ǎñ*
 this-OBJ 1sg see-send-go-DECL 1sg=child.mother-OBJ
 'I go along to look after my wife (to the roça; in general)' (P-Sp.5)

Statements taking the Future marker *-te-* usually also involve a clause-final verb marked as Declarative:

- (46) *ʔamñ ʔǎd ʔín wiʔ-té-ay-áh*
 2sg.POSS speech 1pl hear-FUT-INCH-DECL
 'We're going to understand your language!' (B.Cv1.82)
- (47) *té yawadaté ʔǎh ham-té-h*
 until Yawaraté 1sg go-FUT-DECL
 'I'll go all the way to Yawaraté.' (A.Int.51)

Because the Declarative is *neutral* with regard to aspect, it is usually acceptable in place of the Dynamic in reference to a current, aspectually dynamic state, as in (48). This example also illustrates the distinct patterning of peripheral formatives in the context of these two suffixes (see §3.5 for a detailed discussion of this phenomenon). By definition, they follow the Boundary Suffix when the Dynamic is present (48a); however, the Declarative's obligatorily clause-final status requires them to occur in Inner Suffix position, within the verb word (48b). In most cases, the meaning of the bound forms is essentially the same regardless of their position.

- (48) a) *cúg ʔǎh wiʔ-tú-y=hɔ̃ yǎh*
 stringed.instrument 1sg hear-want-DYNM=NONVIS FRUST
 'I'd like to hear the fiddle (in vain).' (OS)
- b) *nutǎñ=mǎh=yíʔ ʔǎh wiʔ-tuk-hɔ̃-yǎh-ǎh*
 today=DIM=TEL 1sg hear-want-NONVIS-FRUST-DECL
 'Right this minute, I want to listen (to the tape recorder, in vain).'
 (B.Cv.83)

In a 1977 article on Hup, Moore claims that the primary function of these two vowel-copying suffixes (*-V́y* and *-V́h*) is one of organizing discourse. The *-V́y* form, she argues, “indicates that the material is organized around the action or the object of the action rather than around the subject,” whereas *-V́h* “indicates significant participant involvement...where a discourse or part of a discourse can be said to be organized around a participant” (1977: 27-9). However, her discussion overlooks crucial characteristics of these two suffixes’ patterning. First, she considers them only in terms of their mutually exclusive realization on clause-final verbs, ignoring the fact that they pattern differently within the clause and with regard to the part of speech of their host, and can co-occur when *-V́y* is not clause-final. She also claims incorrectly that “one [of these two suffixes] occurs on the main verb phrase of every sentence in a discourse” in Hup (1977: 25), when in fact their presence depends on the tense, aspect, and modality of the clause, and whether or not other Boundary Suffixes are present on the verb.

According to my analysis, Moore’s claim regarding these suffixes’ patterning—to the extent that it is accurate—is simply an epiphenomenon, a by-product of their actual functions, not a primary function in its own right. Clauses which specify verbal aspect as linked to the speech moment (as with *-V́y*) are more likely to focus on the event itself, whereas when aspect is neutral vis-à-vis the temporal frame of reference (as with *-V́h*) the event per se is less likely to be focal—producing the pattern Moore observed. However, this pattern is not consistent, since even strongly event-oriented discourse may be consistently unmarked for dynamicity, as in the case of procedural discourse, where the Declarative marker is preferred over the Dynamic. The mutual exclusivity of the *-V́y* and

-*Vh* markers in clause-final context is probably due primarily to the morphological or slot restriction common to Boundary Suffixes in general; the details of this question will have to await further research.

The Declarative marker -*Vh* has two other functions, which are at least marginally distinct from its function as the marker of a declarative clause. When -*Vh* occurs on clause-final verbs with a first person plural subject, the clause can function as an inclusive, hortative-like future construction, as illustrated in example (49). In this case, and only in this case, it has a tense-related value: it conveys future semantics, even though with all other person and number values future tense must be signaled via an overt future gram (see §13.3). However, note that this is only one possible interpretation of this syntactic combination (1pl.Subj + Verb-*Vh*), which can also relate to a past event (example 50).

- (49) *cā'-wag ʔin hám-áh, páti!*
 other-day 1pl go-DECL Pattie
 'Someday we'll go (together), Pattie!' (B.Cv.130)

- (50) *ʔew' hɔy ʔin wid-d'ób-óh*
 bird.sp. pool 1pl arrive-go.to.river-DECL
 'We arrived down at ʔew' Pool.' (S.PN.16)

The Declarative marker has an additional function related to clause linking (see §18.1.2). As such, Declarative -*Vh* occurs in contexts where it usually does not appear or is not required—such as following a predicate adjective (these do not usually take a Boundary Suffix) or even directly following another Boundary Suffix (Boundary Suffixes are normally mutually exclusive)—although -*Vh* is still restricted to clause-final position.

In (51), for example, the Declarative occurs on a predicate adjective in the first of a pair of linked clauses;¹⁹⁰ clause linking likewise accounts for the appearance of *-Vh* in (52), following the Negative Boundary Suffix *-n#h*. It may be some reflex of this clause-linking function that motivates the Declarative marker's repeated occurrence on external arguments following the main clause and on entities in a list (see above).

- (51) *máki náw-áh; páy ?ín ?h-tǎn, wɔy-n#h*
 Marc good-DECL merchandise 1pl ask.for-COND be.stingy-NEG
 'Marc is nice; when we ask for merchandise, he is not stingy.' (EL)
- (52) *m'ǎh híd wǎd-ǎy, híd hup-hipǎh-n#h-#h*
 snake 3pl eat-DYNM 3pl RFLX-know-NEG-DECL
 'When they eat snake, they lose all self-control.' (lit. have no self-awareness, sense) (TD.Cv.04.20)

The use of the Declarative in (53-54) is particularly striking, since it follows the Dynamic marker on the same verb root—which in all other contexts is completely ungrammatical, as discussed above. Clause-linking contexts thus may provide a marginal exception to the mutual exclusivity of the Dynamic and Declarative forms; note, however, that this co-occurrence has as yet been attested only in elicitation, and even then consultants do not all agree on its acceptability.

- (53) *?óga ?íd-ǎy-#h, múndu ?íd-n#h-#h (?íd-n#h-ǎy-#h)*
 Olga speak-DYNM-DECL Mundo speak-NEG-DECL (speak-NEG-DYNM-DECL)
 'Olga speaks, but Mundo does not.' (deaf and dumb boy in village) (EL)
- (54) *?ín bí?ǎy-#h, ?ícáp ?ín có-óh*
 1pl make-DYNM-DECL tomorrow 1pl rest-DECL
 'Today we work, tomorrow we rest.' (EL)

¹⁹⁰ Both options—Declarative or zero inflection on the adjective—are grammatical here.

17.3.3. Verbless clauses

This section addresses clauses without verbs in Hup, which all involve either predicate nominals or predicate adjectives. These have many features in common with clauses involving verbal predicates, especially in terms of their ability to take TAM-related inflection, but they also differ in significant ways.

Predicate nominal and adjective clauses are the only verbless clause types in Hup, and are discussed individually in the following subsections. In contrast, predicate locatives typically involve a positional verb (stand, lie, be inside, etc.) or the neutral verb *ni-* ‘be present, exist’, in addition to the predicative noun and locative postposition:

- (55) *ʔág b'ʃk g'od-an cúd-úy*
 fruit pot inside-OBJ be.inside-DYNM
 ‘The fruit is inside the pot.’ (EL)

17.3.3.1. Nominal predicates

Predicate nominal clauses equate two nominal entities, one of which is usually a demonstrative. Under most circumstances, a copula is absent (and in fact is ungrammatical), but a copula is required when certain tense/aspect specifications are made (see §17.3.4 below).

A common predicate nominal clause in Hup is the standard identity statement (‘that’s a N’), which involves a demonstrative subject—most often the ‘intangible’ *yu* (usually expressed as the clause-final unit *yúw-úh* [that.ITG-DECL])—and a nominal predicate. When the subject is a demonstrative (whether clause-initial or clause-final), the Declarative marker is required on the end of the clause. Especially in the case of a

clause-initial demonstrative subject, the presence of the Declarative marker serves to identify the predicate nominal clause as a clause, rather than a stranded noun phrase. For example, the clause in (56) ‘that’s a deer’ (uttered by a child in reference to a picture in a magazine) would be *yúp mɔhɔy* ‘that deer’ without the Declarative. Further examples are given in (57-59).

- (56) *yúp mɔhɔy-ɔh*
 that.ITG deer-DECL
 ‘That’s a deer’ (OS)

- (57) *híð hi-g’et-ʔe ʔ-ní=n’íh mɔy, niɦúʔ yúw-úh!*
 3pl FACT-stand-PERF-be=NMZ house all that.ITG-DECL
 ‘The houses where they stayed, that was all of them!’ (H.txt.30)

- (58) *muñ hayam yúw-úh*
 caatinga town that.ITG-DECL
 ‘It’s a caatinga town.’ (B.Cv2.131)

- (59) *pé ʔ-ep=ʔíh yúw-úh, cɔ=wəd-ɔh!*
 hurt-DEP=MSC that.ITG-DECL rainbow=RESP-DECL
 ‘That one is a powerful one, the Rainbow Spirit!’ (H.txt.41)

Predicate nominal clauses which equate two full nouns can follow the same pattern, although they normally undergo a clear pause between subject and predicate. However, speakers prefer to form a clause using the declarative demonstrative form *yúw-úh* as the subject, with the co-referential nominal appearing as an external argument. This preference highlights the copula-like use of the demonstrative identifier *yúw-úh*, as discussed in §6.3.C. These options are illustrated in examples (60-61).

- (60) a) *ʔam=ʔín, tíh=bab’ ʔáy-áh* b) *ʔam=ʔín, tíh=bab’ ʔáy yúw-úh*
 2sg=mother 3sg=sibling.FEM-DECL 2sg=mother 3sg=sibling.FEM that.ITG-DECL
 ‘Your mother is his sister.’ (EL)

In all cases, clause-final subject nominals are obligatorily marked with the Declarative (as in any other Hup clause).

- (66) *muñ hayám, hidn̄h hayám-áh*
 caatinga town 3pl.POSS town-DECL
 ‘(It’s) a caatinga town, their town.’ (B.Cv2.131)

Many aspect and mood markers combine with predicate nominals in much the same way as they do with verbal predicates (cf. chapter 12)—whereas they often have a distinct discourse-marking function in combination with nominal arguments, when they are grammatical with these at all (see §7.1). Such Inner Suffixes as the Perfective (example 67) and the Counterfactual (69) do not require a Boundary Suffix when they occur with predicate nominals (although the Boundary Suffix follows them obligatorily with verbal hosts). The Inchoative suffix (which can act as either an Inner or a Boundary suffix with verbs) also attaches to predicate nominals without following inflection (example 68). Finally, the Frustrative marker occurs as a peripheral formative with nominal predicates, much as it does in some verbal constructions (example 70).

- (67) *t̄h=t̄ǎh t̄h=c̄w-ʔeʔ*
 3sg=son 3sg=shaman-PERF
 ‘His son used to be a shaman.’ (EL)
- (68) *děh-ay ʔñ-ñh*
 water-INCH 1pl-DECL
 ‘We’re going to get rained on.’ (OS)
- (69) *ʔdía kapitãw-t̄ǎʔ yǎh*
 Elias village.leader-CNTRFACT FRUST
 ‘Elias would have been the capitão.’ (EL)

Use of the copula *ni-* (see §17.3.4 below) is also an option when indicating the above aspectual specifications with nominal predicates, and is required when many other

inflectional forms are expressed in connection with nominal predicates, such as

Habitual *bĩg* / *-bĩ-* and Future *-teg* / *-te-*.

17.3.3.2. Adjectival predicates

As discussed in detail in §10.1 (and briefly in §3.1.3), adjectives are a distinct, closed word class in Hup, with properties of both nouns and verbs; as predicates, they pattern much like verbs—although unlike verbs, they do not require a Boundary Suffix.

Predicate adjective clauses do not take a copula (probably because predicate adjectives already have a semi-verbal status); a copula is grammatical only if the adjective is nominalized and appears as a predicate nominal, and the clause is marked with tense-aspect inflection.

Predicate adjective clauses—in which the adjectival predicate is unmarked with any inflection—are illustrated in the following examples:

- (70) *wowó=hin nájw pĩd, hehé=hin nájw pĩd*
 wowo.flute=also good DIST pan-flute good DIST
 ‘The *wowo* flute is also nice; the pan-flute is also nice.’ (H.txt.23)

- (71) *děh páy!*
 water bad
 ‘The rain is unpleasant!’ (OS)

Although predicate adjectives (unlike verbs) do not require a Boundary Suffix, a Boundary Suffix may be present—such as the Dynamic (see §12.2), the Declarative (72-73), or other forms. The Declarative suffix is required on a clause-final subject, as in any other Hup clause (examples 74-75) (note that Predicate-Subject and Subject-Predicate word order may be interchangeable, as in 73-74). Example (74) *nájw yúw-úh* ‘that’s

- (78) *ʔǎ́h=tóg tǎ́h=tǎ́h=mǎh-ǎ́h*
 1sg=daughter 3sg=small=DIM-DECL
 ‘My daughter is small.’ (EL)

The various options for expressing an adjective as predicate (both as a predicate adjective and as a predicate nominal) are summarized in the elicited paradigms below. These options apply to adjectives generally in Hup, with the exception of the irregular adjective *cípmǎh* ‘small’, which differs from normal adjectives in various ways (see §10.1).

Example (79) illustrates the verbless clause when it is unmodified for tense/aspect. The sequence N-Adj can be interpreted in two ways: as an NP (Noun-Modifier) and as a clause (Subject-Predicate); note accordingly the variations in the construction that yield interpretations of the predicate as adjectival (79a-c) or nominal (79d).

- (79) Adjectival predicates:
- a) *ʔǎ́h=tǎ́h póg*
 1sg=offspring big
 ‘My son is big; my big son.’
- b) *ʔǎ́h=tǎ́h póg-óh*
 1sg=offspring big-DECL
 ‘My son is big.’
- c) *n’íp=ǎ́h póg yúw-úh*
 that=MSC big that.ITG-DECL
 ‘That guy is big.’

Nominal predicate:

- d) *ʔǎ́h=tǎ́h tǎ́h=póg*
 1sg=offspring 3sg=big
 ‘My son is big; my big son.’

Certain Inner Suffixes and other forms that typically associate with verbs, such as the Perfective aspect marker (*-ʔeʔ/-ʔe-*), can attach directly to the adjectival predicate; in this case a Boundary Suffix is required (just as if the predicate were verbal), as in (80a). Alternatively, the formative can attach to and have scope over a noun phrase formed by [noun + adjective modifier], resulting in a predicate nominal clause; accordingly no verbal Boundary Suffix is required (examples 80b-c).

(80) Adjectival predicate:

- a) $\text{ʔǎh}=\text{tǎh}$ [pog]-ʔe-h
 1sg=offspring big-PERF-DECL
 ‘My son used to be big.’

Nominal predicates:

- b) [$\text{ʔǎh}=\text{tǎh}$ póg]=ʔeʔ
 1sg=offspring big=PERF
 ‘(That) used to be my big son.’
- c) $\text{ʔǎh}=\text{tǎh}$ [tǎh=pög]=ʔeʔ
 1sg=offspring 3sg=big=PERF
 ‘My son used to be big.’ (EL)

As noted above (see also §17.3.4 below), the use of *ni-* as a copula verb can only occur with an adjective when the latter is nominalized and is realized as a predicate nominal, and when *ni-* hosts aspectual or other inflection (81a). With a non-nominalized adjective, on the other hand, *ni-* can only be interpreted as a verbal predicate, while the adjective is understood to be part of the subject NP (81b).

(81) Copula *ni-*:

- a) $\text{ʔǎh}=\text{tǎh}$ [tǎh=pög] ni-ʔe-h
 1sg=offspring 3sg=big be-PERF-DECL
 ‘My son used to be big.’

Verbal predicate *ni*-:

- b) [ʔǎ́h=tǎ́h pǒg] ni-ʔé-h
 1sg=offspring big be-PERF
 ‘My big son used to exist/ be here’ (EL)

Some inflectional forms, such as Future *-te-*, can only appear on the copula (in contrast to the Perfective, which can optionally be indicated directly on the predicate nominal/adjective), as in (82). The fact that certain forms like the Future suffix can attach directly to verbal predicates, but not to adjectival predicates, constitutes another difference between members of the verb and adjective classes (and an exception to the general rule that predicate adjectives pattern like verbs).

(82) Copula *ni*-:

- a) ʔǎ́h=tǎ́h tǎ́h=pǒg ni-té-h
 1sg=offspring 3sg=big be-FUT-DECL
 ‘My son will be big.’
- b) *ʔǎ́h=tǎ́h pog-té-h
 1sg=offspring big-FUT-DECL

17.3.4. Copula clauses

As noted in the preceding sections, the verb *ni*- ‘be, exist’ can play the role of a copula in predicate nominal clauses (including nominalized adjectives). This is not the only manifestation of this verb’s special status in Hup grammar, as discussed in §8.4; it appears in a wide range of unusual contexts and performs various functions that are in general impossible for other verbs (e.g. noun incorporation, forming negative imperative clauses, etc.).

The basic meaning of *ni*- is ‘be, exist’, and it occurs as a normal intransitive verb in statements of location and existence. This use is extremely common, and is illustrated

in (83-84). Its negative counterpart, the predicative particle *pǎ̃*, typically replaces it in expressions of negative existence, as discussed in §16.2.

- (83) *mǎy-ǎñ cug'ǎř ní-íy*
 house-DIR paper be-DYNM
 'The book is in the house.' (EL)

- (84) *wǎh=d'ǎh ní-íy pǎ̃d*
 river.indian=PL be-DYNM DIST
 'There are also River Indians (there).' (B.Cv.133)

As a copula, the primary function of *ni-* is to host verbal inflection in predicate nominal and adjective clauses. Its use is subject to several restrictions; as mentioned in §17.3.3.2 above, the copula appears with nominal predicates only, and therefore predicate adjectives must be nominalized if they are to occur with a copula. Also, copular *ni-* does not occur when no verbal inflectional markers (other than the Dynamic Boundary Suffix) are present for it to host; if it does occur in the clause under these circumstances, *ni-* can only be interpreted in its verbal 'be, exist' sense:

- (85) *ǎǎh=tǎǎh tǎh=pǎǎg ní-íy*
 1sg=son 3sg=big be-DYNM
 'My big son exists/ is present.' (EL)

The use of a copula construction is optional with some inflectional forms—primarily the Perfective, Inchoative, and Counterfactual markers—since these inflections may attach directly to the predicate nominal or adjective. However, the copula *ni-* is the only option for expressing other, strictly verbal inflectional forms with predicate nominals and adjectives—particularly the Sequential, Future, and Habitual inflections. Examples (86-88) illustrate the function of copular *ni-* as the bearer of inflectional suffixes.

- (86) *tɪh=tæh tɪh=cɔw ni-ʔɛh*
 3sg=offspring 3sg=shaman be-PERF-DECL
 ‘His son was a shaman.’ (EL)
- (87) *ʔidia kapitãw ni-tæʔ-æy yæh*
 Elias village.leader be-CNTRFACT-DYNM FRUST
 ‘Elias would have been capitão.’ (EL)
- (88) *páti nɪh yẽnu-an-ʔy ni-yóʔ yúp tɪh nɔʔ-ʃh, dúdu-ãh-áp*
 Pattie POSS money-OBJ-WHO be-SEQ that.ITG 3sg give-DECL Pedro-OBJ-DEP
 ‘Having become one who has Pattie’s money, he gives (merchandise) to Pedro.’
 (B.Cv.)

In addition to nominal predicates, *negative verbal* predicates also require copular *ni-* for expressing the majority of TAM-related specifications (Habitual, Sequential, Counterfactual, Future; see also §16.1.5):

- (89) *hup-hæb=mah, báb’ pã@ ni-yóʔ*
 RFLX-be.bereft=REP sibling NEG:EX be-SEQ
 ‘All alone, being without kin.’ (C-Dab.)
- (90) *d’oʔ-ham-yíʔ-yóʔ, bahad-nɪh tɪh ni-yíʔ-ay-áh*
 take-go-TEL-SEQ appear-NEG 3sg be-TEL-INCH-DECL
 ‘After he had taken her off, she did not appear.’ (M-KTW.101)
- (91) *doh-nɪh tɪh ni-tæʔ-æp=b’ay*
 curse-NEG 3sg be-CNTRFACT-DEP=AGAIN
 ‘He’s on the verge of cursing them.’ (B-Cv.9)

As mentioned in §8.4, the verb *g’ɪh-* is the functional counterpart of *ni-* in the Rio Vaupés and Umari Norte dialect areas, and sometimes serves a copular function not unlike that of *ni-*, as exemplified in (92). Note, however, that *g’ɪh-* does not replace *ni-* completely, since in some people’s speech the two forms can actually co-occur, even in a single copula construction (example 93). Because *g’ɪh-* does not normally occur in the

dialects on which this grammar is mostly based, the details of its relation to *ni-* will have to await future research.

- (92) *həp wæd-tú-up g'ḡ-ḡy=nih, tæh ḡp pǎ-ǎp g'ḡ-ḡy=nih,*
 fish eat-want-DEP be2-DYNM=EMPH.CO child.father NEG:EX-DEP be2-DYNM=EMPH.CO
 ‘Wanting to eat fish, and being without a husband,

hĩ⇒ tih d'o ʔpæ-yĩʔ-ih
 only 3sg take-go.upstream-TEL-DECL
 just for this she was going upstream taking (the fish).’ (I.M.43)

- (93) *yúp tih=ʔǎy, hup=ʔǎy g'ḡ-ʔe-yæh-ǎp=mĩʔ ba ḡḡb' tih ni-g'ḡ-ní-h*
 that.ITG 3sg=FEM person=FEM be2-PERF-FRUST-DEP=UNDER spirit 3sg be-be2-INFR2-DECL
 ‘This woman, despite having been a person, was now an evil spirit.’ (D-BWB.4)

While *ni-* is the main copula verb in Hup, a few other verbs can serve a quasi-copular function in certain contexts. In particular, the concept ‘become’ is expressed by the verb *hidoho-*, and the verb *ham-* ‘go’ is also occasionally used in this sense, as with the nominalized predicate adjective in example (94):

- (94) *yí-d'ḡ yúp tih=páy=d'ḡ ham-ní-h*
 that.ITG-PL that.ITG 3sg=bad=PL go-INFR2-DECL
 ‘Those people became bad (i.e. went bad).’ (H.txt.41)

17.4. Interrogative clauses

Hup has three main types of interrogative clause, which differ from each other both formally and functionally. These are constituent or ‘question-word’ questions, polar (yes-no) questions with emphasis on the predicate, and polar questions with emphasis on a constituent (typically used in discursive backchanneling). The features that formally define the interrogative clause vis-à-vis other clause types in Hup are constituent order, the presence of a question word (interrogative pronoun, demonstrative, or adverbial), and

the presence of the Interrogative suffix *-Vʔ*, although which of these are present depends on the subtype of interrogative. Crucially, the Declarative suffix never occurs in an interrogative clause. Two clause-final particles (*yaʔ* and *tĩʔ*) are also used primarily in interrogatives as discourse tags (see §15.3), and are acceptable with all three subtypes of interrogative clause. Most verbal inflectional forms are acceptable in interrogative clauses, including evidentials (see §14.9).¹⁹¹

17.4.1. Constituent (question-word) questions

The primary function of constituent or ‘question-word’ questions is to solicit specific information. The formal organization of these clauses is quite distinct: the clause begins with a question word (an interrogative pronoun, determiner, or adverbial), and—when a verbal predicate is present—the clause ends with a verb inflected with the Interrogative suffix *-Vʔ*.

The Hup question words are discussed in detail in §6.3 (Table 6.2), and are summarized in (95) below. With the exception of the interrogative pronoun used specifically for human referents (*ʔĩy* ‘who’), all of the question words are derived from the interrogative particle *hĩ*. In addition to appearing as focused constituents in interrogative predicates, the question words can all stand alone as independent interrogative utterances.

¹⁹¹ But note that peripheral particles in verb-final (content and constituent-focused) questions generally occur in the verb core when the vowel-copying Boundary Suffix *-Vʔ* is present, see §3.5.

- (95) *ǀǂǂ* ‘who’
hǁǂ ‘where? in what way?’
hǁǂ ‘which; how, in what manner?’
hǁǂóǀ ‘at/to what location?’
hǁǂkán ‘in/from what direction?’
hǁǂn’ǂh ‘what, what kind?’
hǁǂǀǂǂ ‘how many?’
hǁǂm’ǂ ‘when, what quantity?’
hǁǂǂǂkeyóǀ ‘why’ (*hǁǂnǂh-ǂǂ key-yóǀ* Q-be.like-DYNM see-SEQ)
hǁǂnǂǂ ‘what did you say?’ (*hǁǂnǂh-ǂǂ* Q-be.like-DYNM)

The *-V?* interrogative inflection that marks the clause-final verb stem in constituent questions is an unstressed vowel-copying Boundary Suffix. It exists in a mutually exclusive relationship with the other vowel-copying Boundary Suffixes on clause-final verbs (Dynamic, Declarative, and Dependent marker suffixes; see Table 17.1), as well as with the Inchoative and most other Boundary Suffixes. The intonation contour in constituent questions is consistently highest-pitched on the clause-initial question word, and lowest on the clause-final verb. While a subject and, in a transitive clause, a direct object (modified by the interrogative pronoun, see example 98 below) may be present in the initial NP, other objects or oblique arguments usually occur outside the main clause, as external topics following the verb (and usually uninflected).

Content interrogatives are illustrated in the following examples. Note that emphatic questions often involve the Emphasis particle *-pog*, as in (99).

- (96) *hǁǂn’ǂh ǀám bǁǂ-ǂǀ?*
 Q-NMZ 2sg work-INT
 ‘What are you doing?’ (OS)
- (97) *hǁǂǀǂǂ g’ǂ ǀám tǂǂ-ǂǀ?*
 Q-QTY hot(season) 2sg hold-INT
 ‘How many years do you have (i.e. how old are you)?’ (OS)

- (98) *ǂũy̌ yĩ̌ nɔɔʔʔ*
 who that.ITG give-INT
 ‘Who said that?’ (B.Cv.86)
- (99) *ǂũy̌ yĩ̌ nĩh-pog-pĩd-iʔʔ!*
 who that.ITG be.like-EMPH1-DIST-INT
 ‘Who the heck did that?!’ (B.Cv.94)

Only one question word can be used per clause, but it is possible to append additional question words to the main clause as external arguments:

- (100) *hĩn'ĩh tĩh nɔʔɔʔʔ ǂũy̌-ǎnʔʔ*
 Q-NMZ 3sg give-INT who-OBJ
 ‘What did she give? To whom?’ (EL)

Where Inner Suffixes are present, most (such as Applicative -*ǂũh*- and Distributive -*pĩd*- above) take the -*Vʔ* suffix, as would any verb stem. However, the Future suffix pair -*teg* / -*te*- is exceptional: whereas clause-final verbs in declarative clauses generally take the reduced form -*te*- followed directly by Declarative -*h*, only the unreduced form -*teg* can appear in an interrogative clause, as illustrated in (101-4). It is possible (although rare) for the Future suffix -*tég* to receive an additional -*Vʔ* suffix, but the reduced counterpart -*te*-*ʔ* cannot occur (example 103). This is not true of phonologically reduced suffixes generally, as illustrated by the reduced sequence -*bĩʔ* of Habitual *bĩg* / -*bĩ* in (104). Note that the Future suffix is irregular in other ways as well; this may be due to its unusual historical origin (see §13.1).

- (101) *hĩn'ĩh ǂam bĩʔ-tégʔ*
 Q-NMZ 2sg make-FUT
 ‘What are you going to make?’ (OS)

- (102) *hǎ́cǒʔ ǎǎ́ ǎǎ́ ham-tég páhʔ*
 Q-LOC EPIST 1sg go-FUT PRX.CNTR
 ‘Where can I go now?’ (H-81)
- (103) *hǎ́ǎ́-keyǒʔ ǎam ham-tég-(eʔ) (*ham-té-ʔ)ʔ*
 Q.be.like.DYNM-cause 2sg go-FUT-INT
 ‘Why are you going?’ (EL)
- (104) *n’íkán hǎ́d cak-bǎʔʔ*
 over.there 3pl climb-HAB-INT
 ‘They always climb up there?’ (TD.Cv.04.36)

With predicate nominals, no clause-final Interrogative suffix *-Vʔ* occurs. The clause begins with the question word, and ends with the noun being questioned; this may be a demonstrative, a demonstrative NP, or a full lexical noun (examples 105-07). In the Tat Deh dialect, the ‘intangible’ demonstrative *yúp* has a special interrogative variant *yúw*, as example (105b) illustrates.

- (105) a) *hǎ́n’ǎ́ yúpʔ*
 Q-NMZ that.ITG
 ‘What’s that?’ (OS; Barreira)
- b) *hǎ́n’ǎ́ yúwʔ*
 Q-NMZ that.ITG
 ‘What’s that?’ (OS; Tat Deh)
- (106) *ǎǎ́ yúp=ǎǎ́ʔ*
 who that.ITG=FEM
 ‘Who’s that woman?’ (EL)
- (107) *hǎ́n’ǎ́ yágʔ*
 Q-NMZ hammock
 ‘What hammock (is it)?’ (EL)

The enclitic *=b’ay*, which appears with nominal arguments as a topic-switch marker (§7.1.3) and with verbal predicates as an aspectual marker of a repeated action or return to a state (§12.9.2), occurs frequently in interrogative clauses. It is always clause-

final, and it usually occurs on a noun, as in predicate nominal content interrogatives (examples 108-9), and also in polar questions (see below). Its function in interrogatives, where it attaches to a nominal constituent, appears to be linked to its function with nominal constituents more generally; that is, it may focus attention on a selection among a group of possible referents or options, especially in relatively emphatic contexts.

- (108) *hĩn'ĩh=pog yúp=b'ay, cǎc?!*
 Q-NMZ=EMPH1 that.ITG=AGAIN INTERJ
 'What the heck is that?!' (B.Cv.83)

- (109) *ĩũ yúp=b'ay?*
 who that.ITG=AGAIN
 'Who's that?' (B.Cv.90)

In addition to appearing with clause-final nouns in interrogatives, =*b'ay* can also attach directly to some question words when these occur as independent utterances:

- (110) *hĩp=b'ay, hĩ tĩh ʔǎg-pǎm-ǎy ʔǎp!*
 how=AGAIN only 3sg drink-sit-DYNM NEG:ID
 'How is this? She's not just sitting there drinking!' (TD.Cv.102)

Although the normal function of =*b'ay* on verbal predicates is aspectual, it can nevertheless serve its discourse-marking function when it occurs on an interrogative verbal predicate. In this case, it always follows the interrogative inflection on the verb, as in examples (111-13).

- (111) *ĩũ d'o ʔ-yĩʔ-pó-ʔ=b'ay?*
 who take-TEL-EMPH1-INT=AGAIN
 'Who the heck stole it?' (B.Cv.93)

- (112) *hecínado way-hũy ʔah=b'ay... ĩũ yǎh-tég=b'ay?*
 Reginaldo go.out-after=AGAIN who order-FUT=AGAIN
 'After Reginaldo leaves... who will send another (teacher)?' (P.Sp.99)

- (113) *hʃ tʃh nɔ-d'oʔ-nʃh-tʃʔ-ʃʔ=b'ay?*
 how 3sg say-take-be.like-CNTRFACT-INT=AGAIN
 'How could she respond?!' (TD.Cv.104) (rhetorical)

In general, all nominal constituents of the main clause can be questioned, whether they are core or peripheral, as can heads within nouns phrases. For example, while (114) questions a locative phrase, (115) selects the nominal element *within* the locative.

- (114) *hʃcɔʔ cug'ʃʔ cúd-uʔ?*
 Q-LOC paper be.inside-INT
 'Where is the book?' (EL)
- (115) *hʃn'ʃh g'od-an cug'ʃʔ cúd-uʔ?*
 Q-NMZ inside-OBJ paper be.inside-INT
 'Inside what is the book?' (EL)

On the other hand, locative postpositions cannot themselves be directly questioned:

- (116) **cáʔ hʃn'ʃh cug'ʃʔ ní-iʔ?*
 box Q-NMZ paper be-INT
 (Intended meaning: 'Where in relation to the box is the book?')

Questions in Hup can involve embedding. For instance, a question word can occur in a subordinate clause, embedded within an interrogative main clause:

- (117) *hʃn'ʃh kéy-ep ʔam yé-eʔ?*
 Q-NMZ see-DEP 2sg enter-INT
 'What did you come in for?' (lit. 'what did you come in to see') (OS)

Also, in quoted speech (see §18.2.1), an interrogative clause can itself be embedded within a declarative main clause:

- (118) *hʃn'ʃh yup g'ʃh-ʃʔ, nɔɔy ʔʃn-ʃh*
 Q-NMZ that.ITG be-INT say-DYNM 1pl-DECL
 "'What's that?' we say.'" (B.Cv.84)¹⁹²

¹⁹² The speaker, a teenaged girl from Barreira, uses the verb *g'ʃh* 'be' here instead of *ni-*, in joking imitation of the Vaupés dialect.

As discussed in §6.2, the interrogative particle *hĩ* (like Hup's demonstratives) occurs as a quasi-free particle when followed by the verbs *nɔ*- 'say' and *nĩh*- 'be like' whereas in all other contexts it is obligatorily inflected. Interrogative clauses formed with *hĩ* plus 'say' or 'be like' are irregular syntactically, as well as morphologically—the clause is subject-final, as is typical of the polar interrogative subtype (see below), despite the fact that this is a content question (examples 119-20). This non-canonical constituent order is probably due to the fact that *hĩ* is essentially inflected by the verb itself and is therefore morphosyntactically bound to it; although certain bound morphemes can come between *hĩ* and the verb stem 'say' or 'be like', the subject of the clause cannot and is therefore unable to precede the verb in the clause.

- (119) *hĩ=yĩ? nɔ-nĩh-ĩ ɔám?*
 Q=TEL say-be.like-DYNM 3sg
 'What does this (word) mean?' (lit. 'What/how are you saying?') (P.Sp.110)

- (120) *hĩ bí?nĩh-ĩ ɔám=b'ay, ɔamĩh kɔwɔg?*
 Q make-be.like-DYNM 2sg=AGAIN 2sg.POSS eye
 'What have you done with your eyes?' (H-CO.2)

An additional minor subtype of interrogative clause that solicits a content response involves the 'Related Instance' particle *tá?* as its predicate (see §7.6):

- (121) *dúdu-nĩh tá??*
 Pedro-POSS REL.INST
 'What about Pedro's?' (B.Cv.80)
- (122) *pĩhĩ, cǎp tá?, hĩ'n'ĩh tĩh key-ní-i??*
 banana other REL.INST Q-NMZ 3sg see-be-INT
 'She went to check the bananas, and what else?' (EL)

17.4.2. Polar questions with focus on predicate

This interrogative subtype solicits a yes/no answer, and is formally quite different from the content questions. It does not involve a question word, and constituent order is subject-final rather than verb-final; moreover, this clause-final subject can only be a pronoun (a fact that is consistent with the de-focused subject in this interrogative clause type). Also—presumably because there is no clause-final verb—the Interrogative Boundary Suffix *-Vʔ* is not present in this type of question. Crucially, it is the obligatory lack of the Declarative marker on the subject that defines the clause as an interrogative rather than a subject-final declarative (see §17.3.1). The clause-medial verb must take a Boundary Suffix other than Declarative *-Vh* or Interrogative *-Vʔ*, such as the Dynamic, Future, Negative, or Inchoative. Direct objects usually occur clause-initially; other objects may either precede the verb or follow it as a tacked-on external argument.

Intonation in polar questions tends to be relatively high throughout the clause (compared to declarative and other Hup clause types); it is fairly level, but falls slightly at the end of the clause (as does intonation on constituent questions). The fact that Hup polar questions in general have a relatively higher intonation than declarative clauses is a typologically common pattern; even the placement of the higher intonation at the beginning of the clause rather than at the end is typologically not unusual (cf. Siemund 2001: 1013).

Examples of predicate-focused polar questions are given in (123) (posed on the morning after a drinking party), and (124), which was uttered by a grandmother, exasperated by the younger men's liquor-drinking.

- (123) *ʔəg-na ʔ-yiʔ-ǵ nǵ?*
 drink-lose.consciousness-TEL-DYNM 2pl
 'Did you all get drunk?' (OS)

- (124) *wæd=yiʔ nǵh-ǵ nǵh-ǵ tǵh ?!*
 food=TEL be.like-DYNM 2pl-OBJ 3sg
 'Is it just like food for you all?!' (B.Cv.90)

Because predicate-focused polar interrogatives require a pronominal subject, the subject referent can only be referred to by non-pronominal means externally to the interrogative clause (i.e. in cases where it is not already clear from the discourse):

- (125) *mangá táʔ-ay, hǵd-ǵ yamhidɔʔ-nǵh tǵh ?*
 Margarita REL.INST-INCH 3pl-OBJ sing-NEG 3sg
 'What about Margarita, did she sing to them?' (TD04.Cv)

The interrogative discourse-marker =*b'ay* (see §17.4.1 above) is very common in polar questions, where it follows the clause-final subject:

- (126) *hi-wag-yiʔ-pó-y hǵd=b'ay, ʔána?*
 FACT-day-TEL-EMPH1-DYNM 3pl=AGAIN Ana
 'Did they stay up all night, Ana?' (TD.Cv.97)

- (127) *nutǵn biʔ-ní-íy nǵh=b'ay?*
 today make-be-DYNM 2pl=AGAIN
 'Did you all work today?' (B.Cv.90)

Negatively biased polar questions are phrased as negative predicates within the interrogative clause (example 128). A negative polar interrogative can also be used as a polite invitation (example 129).

- (128) *ham-nĩh-ay ʔám?*
 go-NEG-INCH 2sg
 ‘Are you not going?’ (OS)

- (129) *wæd-nĩh-ay ʔám?*
 eat-NEG-INCH 2sg
 ‘Won’t you eat something?’ (OS)

Emphasis in polar questions can be signaled via the clause-final Focus marker *-áh*, as well as the predicative Emphasis form *-pog*:

- (130) *ham-pog-tég nĩŋ-áh?!*
 go-EMPH1-FUT 2pl-FOC
 ‘Will/would you really go?!’ (B.Cv.81)

Polar interrogatives involving predicate nominals are typically identity questions, and are most commonly formed with the ‘intangible’ demonstrative *yúp* (often *yúp=b’ay* in *Barriera*; *yú* in *Tat Deh*):

- (131) *mǝŋy=yi? yúp?*
 deer=TEL that.ITG
 ‘Is that a deer?’ (EL)

Perhaps the most frequent use of polar questions is the standard Hup greeting, which involves asking a question about whatever the addressee is obviously engaged in at the time. These questions are clearly not really requests for information—the formula virtually requires the answer to be obvious—but are a conventionalized speech act for the purpose of social interaction. The standard answer is an affirmative repetition of the verb phrase (see §17.4.5 below). One of the most conventionalized of these questions is the standard morning greeting (example 132). Other common greetings are provided in (136-38); (133) is often said when entering a house where a number of people are

gathered, and (135) is conventionally used to greet a visitor from another community on his/her arrival in one's own village. As expected, addressing more than one person requires the second person plural pronoun *nĩŋ* in place of singular *ɔám*, as in (133).

- (132) *cəwəʔ-əy ɔám?*
 awake-DYNM 2sg
 'Are you awake?' (OS)

- (133) *ní-íy nĩŋ?*
 be-DYNM 2pl
 'Are you all here?' (OS)

- (134) *g'ǎʔ-ǎy ɔám?*
 suspend-DYNM 2sg
 'Are you lying in a hammock?' (OS)

- (135) *nǎn-ǎy ɔám?*
 come-DYNM 2sg
 'Have you arrived?' (OS)

Likewise, situation-specific questions regarding the addressee's current (observable) activity are perfectly acceptable greetings:

- (136) *těg təʔ-əy ɔám?*
 wood light.fire-DYNM 2sg
 'Are you lighting a fire?' (OS)

- (137) *hǎw-ǎy ɔám?*
 scrape-DYNM 2sg
 'Are you scraping (manioc)?' (OS)

The word order inversion strategy used in these predicate-focused polar questions is undoubtedly the most typologically striking feature of Hup. Such use of word order inversion in polar questions is common in European languages, but it is relatively uncommon elsewhere in the world. Moreover, the fact that it is the *only* interrogative subtype in Hup to use a word order inversion strategy violates—at least marginally—

Greenberg's (1966) universal 11, which states that inversion with polar interrogatives only occurs in those languages which use inversion to mark constituent interrogatives.¹⁹³

However, inversion in polar questions is restricted in Hup; it involves only pronominal subjects, and does not occur in constituent-focused polar questions (see §17.4.3 below).

17.4.3. Polar questions with focus on constituent

This interrogative strategy is typically used in questions involving a focused constituent, and is also very common for rhetorical purposes, such as when responding to a speaker (i.e. a 'backchanneling' strategy akin to 'really?', 'is that right?', 'uh-huh', etc. in English). Its formal organization is essentially like that of the constituent or 'question-word' question, but without the initial question word; however, like the predicate-focused polar questions discussed above, it solicits a yes-no answer. Its constituent order is the same as that of the typical declarative clause, from which it is formally distinguished by the presence of the Interrogative Boundary Suffix *-Vʔ* (or the unreduced form of the Future suffix *-téɡ*) on the clause-final verb, in place of the Declarative marker *-Vh*. Intonation in these interrogatives tends to peak clause-initially on the focused constituent (usually a nominal or adverbial), and fall at the end of the clause.

While soliciting a yes-no answer, these questions front a non-predicative constituent of the clause, which is understood (via this fronting strategy) to be the focus of the question.¹⁹⁴ In many cases, this results in a semi-rhetorical question—i.e. a

¹⁹³ Note that word order inversion is attested in Hup constituent questions, but only those involving the exceptional interrogative verb forms 'say' and 'be like' (§17.4.1).

¹⁹⁴ Note that the strategy of fronting a focused constituent of the clause is common to Hup clauses generally, not just interrogatives (see §17.3.1).

question to which one already knows the answer and is simply soliciting agreement or confirmation, rather than more substantial information. Thus in Hup this type of interrogative, which is the least formally marked subtype, also corresponds to the least information-oriented interrogative—a cross-linguistically common pattern (Sadock and Zwicky 1985: 180).¹⁹⁵

Examples of this interrogative strategy are given in (138-40); in all cases, the question is focused on the clause-initial constituent.

- (138) *j'əb-tæ=yi? tih y'æí-æw-æ'?*
 night-still=TEL 3sg lay-FLR-INT
 'He left it this morning?' (B.Cv.93)

- (139) *yñ=yi? niŋ hipāh-hǎ? yúw-ǎn?*
 thus=TEL 2pl know-NONVIS-INT that.ITG-OBJ
 'You all think thus, about this?' (P.Sp.99)

- (140) *b'ǎ-an lam hám-a?*
 roça-DIR 2sg go-INT
 'You're going to the roça?' (OS)

In this type of interrogative, it is common for the *-V?* Interrogative suffix to occur *twice* in the clause: both clause-finally on the verb, as expected, and also directly on the fronted, queried nominal entity, giving it special interrogative focus. In this case, it attaches to the final element of the queried noun phrase (as is consistent with nominal morphological patterns generally), and receives stress—unlike the clause-final occurrence of *-V?* on the verb, which is unstressed. This focus function of *-V?* is illustrated in examples (141-44).

¹⁹⁵ The use of the clause-final Interactive tag *-(V)hə?* (which itself occurs as a Boundary Suffix on the verb) with affirmative-type clauses is probably related to this interrogative strategy (see §15.3.4).

- (141) *nř hǒp pog-ó? lam wǎd-ǣ? ?*
 1sg.POSS fish big-INT 2sg eat-INT
 ‘It was my big fish you ate?’ (EL)
- (142) *núp=mǣh=yř? páh yúw-úh, yúw-an-á? lam wǎn-ǣ? páh?*
 this=DIM=TEL PRX.CNTR that.ITG-DECL that.ITG-OBJ-INT 2sg follow-INT PRX.CNTR
 ‘That one was just here; is that the one you’re following?’ (JA-AJ.73)
- (143) *cecádio=wǎd-ǣ? yikán cu?pog-pǎd-ǣ? yǎ, n’ikán?*
 Cesario=RESP-INT over.there.ITG grab-EMPH1-DIST-INT TAG1 over.there
 ‘Cesario always gets (the money) there, doesn’t he, over there?’ (B.Cv.87)
- (144) *nĩḡh=hup-ú?, řǎn nĩḡ dú-u?? j’ek-nĩḡ řám páh ?*
 2pl.POSS=RFLX-INT 1sg.OBJ 2pl exchange-INT steal-NEG 2sg PRX.CNTR
 ‘Is it your own thing you’re selling me? You didn’t steal (it)?’ (OS)

It is also possible for the interrogative focus marker to occur on a vocative kin term or personal name, used to reference the addressee to whom the question is directed:

- (145) *pǎč-ǎ? řǎy= řǎhný húp řid-kǎd-ǣ? núp hayám-át?*
 father’s.brother who=maybe Hup speak-pass-INT this village-OBL
 ‘Uncle, who might speak the best Hup in this village?’ (D.int.112)

The constituent-focusing polar interrogative strategy is typically used to ask for clarification of what someone has just said, especially with reference to a nominal or adverbial element of the clause. It is frequently used rhetorically, often as a kind of backchanneling strategy by which one person responds neutrally to what another has just said. In these cases, frequently just the focal word will be uttered alone with the Interrogative focus marker (stressed -*Vř*). This type of interrogative response is ubiquitous in Hup discourse, as illustrated in examples (146-148) below; here the first speaker’s statement is marked as (A), and the rhetorical / interrogative response as (B).

- (146) A) *nu-có?ř-o řĩh nĩh*
 this-LOC-MSO POSS
 ‘The guy from over there’s (radio).’

- B) *cĩ? tæh ĩp nĩh-ĩ?*
 Si? child.father POSS-INT
 ‘Si?’s husband’s?’ (B.Cv.91)
- (147) A) *hĩ-n’ ĩh ĩam ĩh hăĩ?*
 Q-NMZ 2sg.POSS name
 ‘What’s your name?’
- B) *nĩ hăĩ-á?*
 1sg.POSS name-INT
 ‘My name?’ (OS)
- (148) A) *tán ĩăh j’om-té-h*
 later 1sg bathe-FUT-DECL
 ‘I’ll bathe later.’
- B) *tán-á?*
 later-INT
 ‘Later?’ (OS)

Note that the queried element may itself be a predicate, as in (149). When this is the case, the Interrogative suffix *-V?* does not behave as it does in a normal interrogative clause, where it fills the verbal Boundary Suffix slot in the place of the Dynamic or other markers. Instead, here it simply attaches to whatever word-final morphology is present—even an enclitic that follows the Dynamic marker.

- (149) A) *nút hɔ mĩnĩŋ hĩd g’ig-b’uy-d’əh-ye-yĩ?-ĩh!*
 here liver straight 3pl shoot.arrow-throw-send-enter-TEL-DYNM
 ‘They shot (another man) right here straight through the liver!’
- B) *na ĩ-yĩ?-ĩy=mah-á?*
 lose.consciousness-TEL-DYNM=REP-INT
 ‘(He) died, they say, right?’ (TD.Cv04.20)

17.4.4. Interrogative Alternative marker =*haʔ*

The enclitic =*haʔ* signals an alternative question, in which the speaker presents a choice between two (or more) opposing options. The marker =*haʔ* can appear utterance-finally or multiple times within the clause, or both simultaneously, and can attach both to focused constituents and to the predicate, as examples (150-52) illustrate. The disjunction *ʔó* ‘or’ (probably from Portuguese *ou* ‘or’, borrowed via Tukano) is common in these clauses, though not in general obligatory (see §18.1.5).

- (150) *carakǎʔ cǐh=haʔ tǐh wǎd-ǎʔ, ʔó m'íʔ=haʔ tǐh wǎd-ǎʔ?*
 chicken grass=ALT.INT 3sg eat-INT DISJ worm=ALT.INT 3sg eat-INT
 ‘Is the chicken eating grass, or is it eating worms?’ (EL)

- (151) *picána bíʔ mǎh-ní-h, ʔó ya ʔamhǒʔ=haʔ?*
 cat rat kill-INFR2-DECL DISJ dog=ALT.INT
 ‘The cat killed the rat, or was it the dog?’ (EL)

- (152) *wǐh=haʔ cǐm'-íy=haʔ, ʔó ya ʔamboʔ=haʔ g'ǎʔ-ǎy=haʔ?*
 hawk=ALT.INT claw-DYNM=ALT.INT DISJ dog=ALT.INT bite-DYNM=ALT.INT
 ‘Did the hawk claw (it), or did the dog bite (it)?’ (EL)

The alternative option need not always be explicitly stated:

- (153) *hǎn'ǎh ʔǎn yum-tég páh? canǎ ʔǎn yum-tég=haʔ?*
 Q-NMZ 1pl plant-FUT PRX.CNTR pineapple 1pl plant-FUT=ALT.INT
 ‘What should we plant? We’ll plant pineapple, or?’ (RU)

The marker =*haʔ* also appears to be part of the expression *nǎyhaʔ* (probably from *nǎ* *ǎy=haʔ* [say-DYNM=ALT.INT] ‘I say, or’; cf. §15.6.1). This construction is used as a kind of interjection or interactive tag, particularly for expressing a shade of doubt regarding an affirmation (example 154), and can also be used to mark a self-correction (example 155).

- (154) *ʔín ni-hipāh-āh, núp hayám-át-áh, núp mǎy-ǎ-ǎ, nǎyha?*
 1pl be-know-DECL this town-OBL-DECL this house-OBL-DECL say.INT
 ‘We know how to live/behave ourselves, in this town, in this (community) building, I’d say.’ (P.Sp.98)

- (155) *ko ʔǎp wág-áh yí-d’ǎ-əp pécta bǎʔ=d’əh-əp, ʔǎg-əp.*
 two day-FOC that.ITG-PL-DEP party(Pt) make=PL-DEP drink-DEP
 ‘For two days they were holding the party, drinking.’

mǎta ʔǎp wág nǎyha?
 three day say.INT
 ‘Three days I mean.’ (B.Cv2.130)

17.4.5. Responding to interrogatives

Content questions are typically answered with a standard declarative clause, or more minimally, a single word that provides the particular information solicited. In the case of yes-no questions, the typical response is the repetition of the verb phrase that appeared in the interrogative (whether negative or affirmative), in declarative form. Subjects are frequently dropped. Examples (156-60) illustrate question-answer dyads between two speakers (A and B).

- (156) A) *nǎn-ǎy ʔám ?*
 come-DYNM 2sg
 ‘Have you come?’ (greeting new arrival)

B) *nǎn-ǎy*
 come-DYNM
 ‘(I’ve) come.’ (OS)

- (157) A) *ham-nǎh-ay ʔám ?*
 go-NEG-INCH 2sg
 ‘Will you not go?’

B) *ham-nǎh-ay*
 go-NEG-INCH
 ‘(I) won’t go.’

- A) *hñĩy-keyóʔʔ*
Q.be.like-cause
'Why?'
- B) *ʔǎn híd d'óʔ tán-áh*
1sg.OBJ 3pl take.APPR FUT.CNTR-DECL
'They (Tukano men) would get me.' (B.Cv)
- (158) A) *ʔəg-na ʔ-yĩʔ-ĩy nĩŋʔ*
drink-lose.consciousness-TEL-DYNM 2pl
'Did you all get drunk?'
- B) *ʔǎh-āp ʔəg-na ʔ-m'uy-nĩh j'ám-ap,*
1sg-DEP drink-lose.consciousness-do.a.lot-NEG DST.CNTR-DEP
'As for me, I didn't get very drunk,

nĩ-d' əh-əp dóʔ=d' əh-əp ʔəg-ná ʔ-áy!
that-PL-DEP child=PL-DEP drink-lose.consciousness-DYNM
(but) as for those kids, they did get drunk!' (TD.Cv.97)
- (159) A) *kawag-hiyǎt-ay híd ʔəg-əʔʔ*
pass.day-FACT.lie-INCH 3pl drink-INCH
'Until after dawn they drank?'
- B) *nukán-ay, nukán-ay híd ʔəg-əh!*
over.here-INCH over.here-INCH 3pl drink-DECL
'(Until the sun was) there, there they drank!' (TD.Cv.97)
- (160) A) *ʔũy-ǎn=yĩʔ tĩh nʃɔʔʔ ʔũy-ǎnʔ*
who-OBJ=TEL 3sg say-INT who-OBJ
'To whom did she say (that)? To whom?'
- B) *mændí tóg-ǎn*
Bernadito daughter-OBJ
'To Bernadito's daughter.' (TD.Cv.105)

The affirmative particle *həʔ* 'yes, all right' is also common in response to polar questions, and can be used either by itself or preceding an affirmative clause. For example, the response in (161) comes from the story of the Tapir and the Turtle; the

Turtle has questioned the leaves of trees at the places where the Tapir had slept, and they answer as follows:

- (161) *həʔ n'it tɬ ʔəh-əh*
 yes there 3sg sleep
 'Yes, he slept there.' (JA.73)

There is no general word for 'no' in Hup; however, the negative predicative particle *pă* (see §16.2) can be used in response to questions dealing with the presence or existence of nominal entities:

- (162) A) *hup=d'əh pă hɪd?*
 Hup=PL NEG:EX 3pl
 'There are no Hup people?'
 B) *pă*
 NEG:EX
 '(There are) none.' (B.Cv.133)

17.5. Imperative clauses

Imperative clauses in Hup are easily distinguished from other clause types. The primary morphological characteristics marking the simple imperative are several. These include the *lack* of any Boundary Suffix on the verb (such that this clause type can be considered the unmarked member of the set in Table 17.1 above, contrasting with Dynamic, interrogative, declarative, and subordinate clauses), and obligatory high (falling) tone. Additionally, word-final CV stems typically appear with epenthetic [h] in the imperative; thus *nɔ* 'say' appears as *nəh*, *yu*- 'wait' as *yúh*, etc.

The syntax of the imperative clause is typically verb-final, and the most focal nominal constituent is usually fronted (as is the norm in Hup clauses generally); this

constituent is most often the direct object of a transitive or ditransitive clause, while ditransitive recipients tend to come later in the clause. The singular second person subject pronoun *ʔám* is normally dropped altogether, so it is common for an imperative verb stem to form an entire clause by itself. The second person plural pronoun *nĩŋ* is usually present, but can also be dropped. Such subject-deletion in imperative clauses is a cross-linguistically common phenomenon (cf. Sadock and Zwicky 1985: 171).

Hup imperatives are limited to second person subjects. Other, related moods are therefore expressed via different strategies; for example, first person plural hortative-type constructions involve the Declarative *-Vh* (§13.3 and above; also compare the hortative function of the ‘Cooperative’ suffix *-nĩŋ*, §14.5). An identical form (*-nĩh*) is used both as the imperative form of the applicative construction and to signal optative mood (which is limited to third person subjects)—probably indicative of a historical relationship between the applicative and the optative constructions, as argued in §14.7. Finally, there is also a formal similarity between the simple unmarked imperative and the apprehensive mood (§14.6), both of which are expressed by a bare verb stem and a second person subject; moreover, these are pragmatically similar speech acts, since an utterance in the apprehensive mood is usually intended as a warning (i.e. a negative command), and solicits some action (usually one relating to protecting himself) from the addressee.

Various aspectual distinctions (though not all) are acceptable in Hup imperative clauses.¹⁹⁶ Imperative nuances contributed by aspectual-type markers can relate to

¹⁹⁶ Sadock and Zwicky (1985: 172) note that both tense and aspect distinctions are cross-linguistically relatively uncommon in imperatives.

directionality (toward or away from the speaker), urging, politeness or short-term action, and completeness. Hup also has a specifically imperative suffix *-kǎm*, which attaches to verb stems and lends additional force to the command.

17.5.1. Simple imperative

The simplest form of the imperative in Hup involves a bare verb stem (i.e. lacking any Boundary Suffix) with high/falling tone on the final syllable. Such lack or reduction of affixes on verbs in imperative mode is a cross-linguistically common phenomenon (cf. Sadock and Zwicky 1985: 172). As noted above, vowel-final (CV) stems almost always take epenthetic final [h], but this seems to be subject to a minor degree of variation (the alternative is a long vowel with falling tone, as is typical in nominal CV words).

Examples of the simple imperative are given in (163-65):

(163) *nǎh!*

come.IMP

‘Come!’ (B.Cv.)

(164) “*nút niŋ nǐh !*” *nɔ-yóʔ, tǐh y’ǎt-b’ay-áh*

here 2pl be.IMP say-SEQ 3sg lay-AGAIN-DECL

‘Having said “you all stay here!” he left (us).’ (H.txt.67)

(165) “*húptok niŋ bǐʔ! ʔǎg niŋ bǐʔ!*” *híd nɔ-pǐd-ǐh*

person.belly 2pl make.IMP drink 2pl make.IMP 3pl say-DIST-DECL

‘“You all make caxiri! You all make drink!” they were saying.’ (H.txt.73)

The same strategy applies to verb compounds, where the imperative high/falling tone occurs on the final stem of the compound word:

(166) *kǎʔah b’ay-yúh!*

in.front return-wait.IMP

‘Go back and wait!’ (M-KTW.109)

- (167) “*yok-d’əh-næn!*” *tɪh nɔ-pɪd-ɪh*, “*yok-d’əh-næn!*”
 poke-send-come.IMP 3sg say-DIST-DECL poke-send-come.IMP
 “‘Poke (with the stick) and send (them) through!’ he was saying, ‘Poke and send
 (them) through!’” (H.txt.45) (sending fish through a hollow log)
- (168) *d’oʔ-kænæn!*
 take-pass.come.IMP
 ‘Bring it here!’ (B.Cv.137)

A few verbs with postural or directional semantics are commonly followed by the verb *d’oʔ* ‘take’ in the imperative. This results in a specifically imperative compound, used to tell someone to assume a certain position—much as ‘take’ is used in English. For example, imperative ‘take a seat’ (example 169) is uttered when inviting or ordering someone to sit down; ‘take a duck’ (170) when going under a low branch on a forest trail. Compound-final *d’oʔ* is ungrammatical with many verbs; e.g. **ham-* ‘go’, **yæt-* ‘lie’, etc.

- (169) *pæm-d’oʔ!*
 sit-take.IMP
 ‘Sit down!’ (‘Take a seat!’) (OS)
- (170) *doy-d’oʔ!*
 duck-take.IMP
 ‘Duck!’ (‘Take a duck!’) (OS)

Many verbal Inner Suffixes can occur in imperative mood, coming as always in the post-stem position. Just like a compound-final imperative verb stem, such suffixes take the high/falling tone associated with the imperative, and occur without a following Boundary Suffix. In some cases, these add distinct nuances to the imperative speech act, which are linked to but not necessarily predicted by their aspectual or modal functions.

The aspect-related variations of the imperative that are most frequently exploited by Hup speakers are summarized here.

The Ventive suffix *-ɔ́y-* (see §12.7) is common in imperatives. Used by itself with a verb stem, it indicates motion toward the speaker, ‘come and do V’:

- (171) *kɔw wæd-ɔ́y!*
 hot.pepper eat-VENT.IMP
 ‘Come eat quinhapira!’ (OS)
- (172) *ɔ́n cug’æ̃t nɔʔ-næn-ɔ́y, tæ̃h!*
 1sg.OBJ paper give-come-VENT.IMP son
 ‘Bring me a piece of paper, Son!’ (B.Cv.91)
- (173) *ɔ́n kəwə̃g d’oʔ-tuʔ-ɔ́y!*
 1sg.OBJ eye take-immersed-VENT.IMP
 ‘Come put my eyes (back) in for me!’ (H.CO.78)
- (174) *ɔ́n nɔʔ-ɔ́y!*
 1sg.OBJ give-VENT.IMP
 ‘(Come) give me (one, it)!’ (OS)

When the imperative form of the verb *ham-* ‘go’ is added to the imperative ventive form of the verb, the resulting construction indicates movement away from the speaker, ‘go and do V’ (cf. §12.7), as in example (175). This construction is irregular in that it involves two separate imperative verbs in the same predicate. The alternative interpretation, whereby the two verbs form a single compound, is ruled out by the fact that the two verbal forms are independently stressed; moreover, Ventive *-ɔ́y-* is consistently stem-final in all other Hup compounds, whereas in this case it comes between the two stems.

- (175) *həb-ɔ́y hám! tɛ̃ghod-ót həb-pæm-ɔ́y hám!*
 dry-VENT.IMP go.IMP wood.hole-OBL dry-sit-VENT.IMP go.IMP
 ‘Go dry them! Go sit and dry them at the fire!’ (B.Cv.135)

The Inchoative marker *-ay* (see §12.3), when used imperatively, produces a relatively forceful directive. It urges the addressee to hurry up and get started in carrying out the activity. Example (176)—in which the Inchoative and Ventic forms co-occur—was uttered by a companion who was waiting for me to finish my bath in the river, and was growing impatient.

- (176) *cɔp-ʔáy-áy!*
 go.from.river-VENT-INCH.IMP
 ‘Come up from the river!’ (OS)

The imperative use of the Telic marker *-yĩʔ* (see §12.6) can also contribute extra force to the utterance. Its emphasis on the full effect of an action may indicate straightforward completion, as in (177), but may also be used more generally as a kind of verbal exclamation point, as in examples (178-79).

- (177) *bĩʔ-yĩʔ*
 make-TEL.IMP
 ‘Finish making it!’, ‘Do it all!’ (OS)

- (178) *ham-yĩʔ*
 go-TEL.IMP
 ‘Go away!’ (vs. *hám* ‘go!’) (OS)

- (179) *poʔ-yĩʔ*
 open-TEL.IMP
 ‘Open (it) up!’ (vs. *póʔ* ‘open (it)!’) (OS)

The Perfective suffix (specifically, its unreduced variant *-ʔeʔ*, see §12.4) is also commonly used in imperative mode. In keeping with the standard use of the Perfective, its imperative use can indicate that the event is expected to be of short-term or limited duration; however, it is also used simply to tone down the command, making it gentler or

more polite. This pragmatic extension of the Perfective's aspectual function is probably motivated by the fact that a request for a short-term, temporally limited action is likely to represent less of an imposition on the addressee than a request for something more long-term. For example, a child said (180) to me when begging for a fruit to eat, and my consultant said (181) when gently telling a child to leave the house so that we could work. Example (182) was given as an example of a maximally wheedling request for a favor.

- (180) *j'ǎk ɭǎn nɔʔ-ɭéʔ!*
 buriti 1sg.OBJ give-PERF.IMP
 'Please give me a buriti!' (OS)

- (181) *n'i-cóʔ way-ɭéʔ!*
 that-LOC go.out-PERF.IMP
 'Go out for a little while!' (OS)

- (182) *děh ɭǎn g'ɔp-ɭũh-ɭay-ɭéʔ, nutǎñ b'yíʔ!*
 water 1sg.OBJ serve-APPL-VENT-PERF.IMP today only
 'Won't you please go fetch water for me, just today?' (RU)

The Repetitive aspectual enclitic =*b'ay* is also quite common in the imperative:

- (183) *key-kǎm=b'ay!*
 see-IMP2=AGAIN
 'Look (again)!' (OS)

While the aspectual Inner Suffixes above take on distinct semantic nuances when used imperatively, other tense-aspect-mood specifications do not occur in the imperative at all. In addition to the Dynamic marker (which belongs to the set of vowel-copying Boundary Suffixes that are mutually exclusive with imperative mode), the Habitual, Frustrative, and Counterfactual forms are ungrammatical in the imperative. The same is

true of the Future gram *-té* / *-té-*, although a future time value can be specified in the imperative by means of the Future Contrast particle *tán*:

- (184) *hɔh=yíʔ tán!*
 smoke=TEL.IMP later
 ‘Smoke them later!’ (T.C.73)

Many other bound forms are also ungrammatical with imperatives. These include the Proximate and Distant Past Contrast particles *páh* and *j’ám* / *j’ǎh* and the evidential enclitics, with the exception of the Reportive form *=mah* (and, marginally, the Inferential *-ni-*). The imperative use of the Reportive evidential has a quotative function, used for repeating a command previously uttered by another speaker (see §14.9.4).

Negative clauses require a special imperative construction, in which the negative predicate functions as an adverbial clause (usually marked as such by the adverbial/Telic enclitic *=yíʔ*, see §10.2), together with the affirmative imperative form of the verb *ni-* ‘be’, which acts as the main clause. This produces the construction [Verb-*nǎh=yíʔ níh*] (Verb-NEG=TEL be.IMP) (example 185; see also §16.1.5). The imperative ‘be’ can occasionally be dropped (example 186), and the entire construction (*-nǎh=yíʔ níh*) is frequently shortened to *-nínih* (example 187), especially when the subject is singular (since singular subjects are usually deleted in imperative clauses).

- (185) *d’oʔ-ham-nǎh níŋ níh!*
 take-go-NEG 2pl be.IMP
 ‘Don’t take (it) away!’ (P.Sp.105)

- (186) *tǎʔnɔhɔ-nǎh=yíʔ níʔ ʔǎd!*
 laugh-NEG=TEL 1sg.POSS speech
 ‘Don’t laugh at what I say!’ (B-Cv.1.3)

- (187) *cuʔ-níníh!*
 grab-NEG.IMP
 ‘Don’t touch!’ (OS)

17.5.2. Imperative suffix *-kǎm*

Hup has one specifically imperative suffix, the form *-kǎm*. Formally, this is a consonant-initial Boundary Suffix, which can follow Inner Suffixes and takes word-level stress.

Unlike all other imperative verb forms, it has rising tone, rather than high. Semantically, *-kǎm* produces a command which is somewhat more forceful than the simple imperative form. This is nevertheless not incompatible with politeness; for example, my consultants often accepted an offer of something to eat or drink with *nɔʔ-kǎm!* (give-IMP2).

Examples of this imperative form are given in (188-90).

- (188) *náw=yíʔ, níŋ tɔn-ʔay-kǎm, ʔǎh píníŋ-té-t, núp=wa-ǎn!*
 good=TEL 2pl hold-VENT-IMP2 1sg tell.story-FUT-OBL this=old.woman-OBJ
 ‘That’s enough! You all come hold (the baby) while I tell this respected one a story!’ (I.Mn.81)

- (189) “*ʔǎn hi-yíʔ-ʔay-kǎm, ya ʔám!*” *nɔ-ʔy=mah*
 1sg.OBJ descend-TEL-VENT-IMP2 jaguar say-DYNM=REP
 “‘Come on and jump down on me, Jaguar!’ he said.” (H.CO.78)

- (190) *tók=teg d’oʔ-ʔay-kǎm, cɔc, d’oʔ-kǎdnæn-kǎm=b’ay!*
 pestle=stick take-VENT-IMP2 INTERJ take-pass.come-IMP2=AGAIN
 ‘Bring the pestle, darn it, bring it quick!’ (B.Cv.88)

Example (191) was uttered in joking anger, directed toward the village men in general (none of whom were present)—the speaker was clambering under a tree fallen across the path, while encumbered with a heavy basket of manioc.

- (191) *núw-ǎñ kít-kǎm!*
 this-OBJ chop-IMP2
 ‘Cut this one!!’ (OS)

In a much less frequent use, the form *kǎm* appears without any preceding verb stem, and behaves like a discourse particle or interjection (example 192). Consultants say that this use is related to *key-kǎm* ‘look, pay attention!’; it may be an abbreviated form of this common attention-getting expression that has developed a secondary use as a discourse marker.

- (192) *cǎ́-wag ǎh ní-ít kǎm, n’ikán b’ǎ́-an ham-ǎ́-ǎ́-ké?, nǎ́-ǎp ǎp*
 other-day 1sg be-OBL IMP2 over.there roça-DIR go-PERF-KE? say-DEP NEG:ID
 ‘Look how I spend every day at home, never saying “I’m off alone to the roça”.’
 (T-PN.3)

17.5.3. Responses to imperatives

Responses to commands are much like the responses to questions, discussed above in §17.4.5. An acquiescent response is usually a simple *hǎ́?* ‘yes, all right’, as illustrated in the text example in (193), and may also involve the repetition of the predicate (often in future form). A negative response may likewise involve the repetition of the predicate, in negated form.

- (193) “*hú* *yǎ́-ǎ́-ǎ́!*” *tǎ́-ǎñ tǎ́ nǎ́-ǎ;*
 animal singe-VENT.IMP 3sg-OBJ 3sg say-DECL
 “‘Go singe the game!’ he told her;

“*hǎ́?*” *nǎ́-yó-ǎ́=mah, yǎ́-ǎ́-ǎ́ tǎ́ d’ób-óh*
 yes say-SEQ singe-DEP 3sg go.to.river-DECL
 having said “all right,” she went down to the water to singe (it).’
 (P.BWB.87)

18. Clause combining

Hup has a rich repertoire of strategies for combining clauses. Mechanisms involve coordination, subordination, and cosubordination, including what may be best characterized as clause-chaining. This chapter begins with a discussion of coordination in Hup, then moves on to subordination and cosubordination, where at least one clause is dependent on another. Hup has an especially wide selection of (co)subordination strategies for indicating temporal overlap or succession of events.

As is consistent with Hup morphological patterns generally, most of the morphological forms used to signal clause linkage are verbal suffixes or enclitics, and these usually follow the second (or final) clause, occurring at the end of the sentence. Only two are particles that come between the linked clauses, and both of these are probably borrowings from Portuguese (likely via Tukano).

Many of the markers discussed in this section have already been encountered in previous sections of this grammar. These have other uses that are distinct or only marginally related to their clause-linking functions, and as such they may also occur on independent clauses and even on clausal constituents. While doubt can rarely be completely eliminated as to whether they are polysemous (either synchronically or diachronically) or homonymous, polysemy often appears to be motivated semantically, and is certainly in keeping with the high level of polysemy found among forms in Hup generally. Where these forms are addressed in this chapter, their other uses are mentioned, and cross-references are made to the appropriate sections in other chapters.

The bound formatives relating to clause-combining (their functions, slot classes, etc.) are summarized in Table 18.1:

Table 18.1. Formatives relating to clause combining

Form	Slot class (formative type)	Identity / word-class of host	Function	Other relevant functions of same form
= <i>nih</i>	Enclitic	Various hosts, clauses	Emphatic Coordinator	
<i>kañ</i>	Particle	Predicates	Adversative conjunction	
- <i>Vp</i>	Boundary Suffix	Verbs, clauses	Dependent marker	Topic marker (w/ nouns, other hosts)
- <i>n'ñh</i>	Boundary Suffix	Verbs	Nominalizer, complementizer	
= <i>yiʔ</i>	Enclitic	Adverbs, clauses	Adverbializer	Telic aspect (Inner Suffix w/ verbs) Contrastive emphasis marker (enclitic w/ nouns)
- <i>Vt</i> - <i>an</i>	Boundary Suffixes	Verbs	Adverbializers	Case markers (w/ nouns; Oblique, Directional oblique)
- <i>yóʔ</i>	Boundary Suffix	Verbs (Oblique case nouns)	Sequential	
- <i>mñʔ</i>	Boundary Suffix	Verbs	Adverbial: simultaneous events (different actors); concessive	Locative postposition <i>mñʔ</i> 'under'
	Particle	Various hosts	Concessive	
- <i>kamí</i>	Boundary Suffix	Verbs Nominals	Temporal adverbial	
<i>keyóʔ</i>	Particle	Verbs (Object-case nouns)	Cause	Verb 'see' + Sequential: <i>key-yóʔ</i>
<i>té</i>	Particle	Free	Spatial / temporal adverbial 'until'	Cf. Portuguese <i>até</i> 'until' (space/time)

18.1. Coordination

Hup has a number of strategies for indicating a conceptual link between two clauses, where both are on the same syntactic level and neither is dependent on the other. These strategies include simple juxtaposition of linked elements, as well as additional

morphological means for signaling the relation between them. In some cases, the clause-level strategies can also apply to linked phrases or constituents within the clause.

As discussed in chapter 9, many distinct activities (usually performed by the same subject) are expressed in Hup not through clause-level coordination, as they would be in English, but through verb compounding, as in the following example:

- (1) (*hid*) ʔəg-yamhĩdɔʔ-ʔeːh
 3pl drink-sing-PERF-DECL
 ‘(They) were drinking and singing (at the same time).’ (TD.Cv.98)

Such compounding involves co-subordination at the nuclear level (in the terminology of Foley and Van Valin 1984), whereas in Hup linking or ‘nexus’ at the peripheral level (i.e. involving whole predicates) is preferred for events that are conceptually relatively less integrated. This latter type of linking is the subject of this chapter.

18.1.1. Juxtaposition strategy

The most common strategy in Hup for both phrasal and clausal coordination is the simple juxtaposition of the coordinated elements, or ‘zero strategy’ (cf. J. Payne 1985b: 25).

Clues that this is indeed clausal coordination include intonation (which tends to descend further sentence-finally than between coordinated clauses), pause phenomena (which tend to be longer and more salient between sentences), and the general absence of ‘resummarizing’ devices such as *yĩm̩h-yóʔ* (that.ITG.be.like-SEQ) ‘and after that’ between coordinated clauses.

Clausal juxtaposition can be used to express events occurring in succession, and those happening at the same time, as in examples (2-3). Note that verb compounding is

not appropriate in these cases because the events are too loosely integrated

conceptually, and in (3) because the predicates have different subjects.

- (2) *nút tĩh-ǎñ d'oʔ-cæŋpe-g'et-yĩʔ-ǣy=mah, tĩh-ǎñ tĩh yók-óh*
 here 3sg-OBJ take-astraddle-stand-TEL-DYNM=REP 3sg-OBJ 3sg poke-DECL
 '(He) made him stand with legs apart like this, (and) he poked him.' (P.BY.91)

- (3) *núp tĩh kəmən-g'ét-ay-áh,*
 this 3sg wrap.arms.around-stand-INCH-DECL
 'He's standing like this with his arms around (the dog),

tĩh-ǎñ dɔwǎh n'æm'-g'ét-éy=cud, tĩnǎh yaʔambóʔ-óh!
 3sg-OBJ cheek lick-stand-DYNM=INFR 3sg.POSS dog-DECL
 and (it) is licking his cheek, his dog!' (A.FS.4)

Variants of a clause (as well as its constituents; see §17.3.1) are often repeated or paraphrased for rhetorical effect in Hup discourse, and these are also typically coordinated with the main clause via the juxtaposition strategy:

- (4) *nĩ-n'ǎh mǎy hi-j'ǣp-ʔé-y yǎǎh=mah, tǎh-ǎh, mǎy tĩh hi-j'ǣp-yǎǎh-ǎh*
 this-NMZ house FACT-tie-PERF-DYNM FRUST=REP 3sg-DECL house 3sg FACT-tie-FRUST-DECL
 'She had tied up the house like this (i.e. the door) in vain; she had tied up the house in vain.' (P.BT.94)

The juxtaposition strategy is likewise used to coordinate multiple arguments (bearing the same grammatical relation to the verb) within a single clause (§6.7).

18.1.2. Vowel-initial Boundary Suffixes and clause linkage

Hup's vowel-initial Boundary Suffixes (see §3.4.1.2) are those which usually occur on verbal predicates in main clauses, where they indicate aspect and clause type (related to mood). However, several of them have a distinct function relating to the linking of clauses and other parts of discourse, and as such they typically occur in contexts where

they would otherwise be ungrammatical. The linking function of these forms is not yet fully understood, and will be treated relatively briefly here; more information on these suffixes is given in the sections focusing on their primary uses, in other chapters.

As discussed in §17.3.2, the Declarative marker *-Vh* occasionally occurs in environments where it ordinarily does not appear: *following* another Boundary Suffix on a verb. Normally, a single Boundary Suffix is all that a verb requires, and the Boundary Suffixes are normally mutually exclusive (see §3.4.1.2 and §8.3). All of these non-canonical uses of the Declarative involve clause linkage, whereby the two clauses are associated in some general way—e.g. cause, explanation, etc. Thus the interpretation suggests itself that this non-canonical use of *-Vh* may in fact be the signal of the clause linkage, although this function is not yet well understood.

In (5-6) (from §17.3.2), for example, the Declarative follows the Negative and the Dynamic Boundary Suffixes—an ungrammatical combination in independent clauses. Note that the non-canonical use of the Declarative can occur on either the initial or the final clause of the pair.

- (5) *m'æh híd wæd-æý, híd hup-hipāh-nh-nh*
 snake 3pl eat-DYNM 3pl RFLX-know-NEG-DECL
 'They eat snake, and (then) they lose all self-control.' (TD.Cv.04.20)

- (6) *?m bí?h-nh, ?cáp ?m có-óh*
 1pl make-DYNM-DECL tomorrow 1pl rest-DECL
 'Today we work, and tomorrow we rest.' (EL)

A similar use of the Declarative for clause coordination involves its combination with the Filler syllable *-Vw-*. The *-Vw-Vh* combination occurs on the second of two coordinated clauses, where the second clause expresses a paraphrase, explanation, or

continuation of the idea expressed in the first, as in example (7). Such a coordination-related function may be a more general feature of the Filler syllable, as well as of the Declarative, as discussed in §15.2.4 and below.

- (7) *yúp=mah yúw-úh, mǝhǝy hod híd nɔ́-ɔw-ǎh*
 that.ITG=REP that.ITG-DECL deer hole 3pl say-FLR-DECL
 ‘So that was it, that which they should call the Deer’s Tomb.’ (I-M.14)

The linking function of Declarative *-Vh* is not limited to clauses. It typically marks non-verbal entities that come after the main clause and appear as external arguments—tacked-on, associated packages of information (see §17.3.1-2). These Declarative-marked entities are usually restated or additional constituents of the main clause, which develop and/or clarify the original proposition:

- (8) *maca-cák-maám tǝh-ǎn tǝh wɔn-hám-ay=mah yúp,*
 heal-climb-REP.DST.CNTR 3sg-OBJ 3sg follow-go-INCH=REP that.ITG
 ‘Having got well and climbed out (of the hole), he followed after him,
mǝh-ǝh, tah-ǎn-ǎh
 turtle-DECL tapir-OBJ-DECL
 (did) the turtle, (after) the tapir.’ (JA.AJ.65)

The Declarative marker also occurs optionally on coordinated nominal entities in a list of items (cf. §6.7 and §17.3.2).

Note that these uses of the Declarative marker involve various distinct types of linkage—between nominal constituents and between clauses, whether among like entities (such as the restated constituents of the main clause in (8)), or among different entities (such as the coordinated clauses in (5-7) and listed items). Nevertheless, they all involve the linking of entities on the same syntactic level. The Declarative marker can therefore

be considered to have a kind of all-purpose linking function, in addition to its more canonical role as a marker of Declarative clauses.

The use of the Filler syllable *-Vw-* in combination with the Declarative suffix *-Vh* to signal coordination (as in 7 above) may not be a property of the Declarative Boundary Suffix alone. There is evidence that this clause-linking function is also characteristic of the Filler syllable in combination with other Boundary Suffixes, although in limited contexts, as discussed in §15.2.4. When the Filler syllable occurs coupled with the Interrogative suffix *-V?*, the combination *-Vw-V?* has a coordinating function similar to that in (7) above. In addition, the combination of Filler syllable *-Vw-* and Inchoative *-ay* (yielding *-Vw-ay*, which elsewhere indicates an inchoative event with long-term duration or consequences; see §12.3) appears in certain cases to have a clause-linking function relating to temporal simultaneity: ‘when (actor) begins to (verb)’:

- (9) *núp nīŋ pæ-æw-ay, wayd’óʔ=teg-an=yĩʔ nīŋ pæ-æʔ=b’ay ?*
 this 2pl go.upriver-FLR-INCH fly=STICK-DIR=TEL 2pl go.upriver-INT=AGAIN
 ‘When you all went upriver, was it in a plane that you went?’ (TD.Cv04.31)
- (10) *húp-ǎñ tīh wæd-tú-w-ay, pīk-ĩy=mah*
 person-OBJ 3sg eat-want-FLR-INCH shriek-DYNM=REP
 ‘When he wants to eat people, he shrieks (to lure them near).’ (T.C.1)

The Dynamic suffix *-Vý* also has a function relating to the linking of entities in discourse. Like the Declarative marker, the Dynamic is a vowel-copying Boundary Suffix; it normally occurs only on verbal predicates, carries aspectual information, and (like all Boundary Suffixes) is mutually exclusive with other Boundary Suffixes. As discussed in §12.2, however, it can also appear in non-canonical contexts—on non-verbal constituents and together with other Boundary Suffixes. This is especially common in

co-occurrence with the Emphatic Coordinator =*nih* in clause-linking contexts (see §18.1.3 below), but -*Vy* can also occur by itself following other Boundary Suffixes, such as the Negative in (11), to signal coordination between clauses—much as the Declarative does in (5) above. Finally, in what may be a related function, the Dynamic also appears in a few contexts as an attributive marker in certain nominal compound constructions (see §5.1.4 and §18.2.3 below).

- (11) *tih* *ʔɔh-nih-ɣy*, *tih* *mæh-æh*
 3sg sleep-NEG-DYNM 3sg kill-DECL
 ‘He didn’t sleep, he killed (fish).’ (RU)

How are we to understand the use of these clause-level morphemes to signal linking *between* clauses? While it is not yet clear how this came about, it is in fact relatively common in Amerindian languages for clause- and sentence-level structures to migrate into the broader discourse context. As discussed below (§18.2.4.2), this has apparently occurred with the Dependent marker -*Vp* in Hup, which not only indicates dependency between clauses, but also appears on independent clauses and even clausal constituents as a marker of emphasis and topic. Similarly, the other vowel-copying Boundary Suffixes mentioned above may have moved from being purely clause-level features to having a function within the sentence or wider discourse.

18.1.3. Emphatic Coordinator =*nih*

The enclitic =*nih* has a function related to clause linking. It is conjunction-like, but serves a variety of other linking functions that are not typical of conjunctions cross-linguistically. In general, it links a predication to a previous assertion, which may occur

either within the same sentence, or in the preceding discourse context. As is somewhat atypical for conjunctions cross-linguistically, it tends (with some exceptions) to occur sentence- or utterance-finally, on the *final* clause of two (or more) conjoined clauses. As mentioned above, however, this position is consistent with the clause-final placement of morphology in Hup generally.

The Emphatic Coordinator =*nih* is an optional, emphatic coordinating device, rather like English ‘too’ (which also occurs sentence-finally; e.g. “I ate beans and I drank beer too”). While not yet fully understood, its main function appears to be one of emphasizing that the clause is comparable or parallel to the associated assertion. The linked clauses are typically temporally simultaneous (where temporality is relevant) and conceptually closely related, involving a restatement or development of the same idea. Note that this coordinating function of =*nih* appears to be similar to that of the non-canonical uses of Declarative -*Vh* (above), but that the latter tends to link clauses that are temporally *not* simultaneous.

The Emphatic Coordinator =*nih* can attach to virtually any part of speech, and the phrase bearing =*nih* typically acts as a predicate. The most interesting morphological feature of =*nih* is that it is very frequently preceded by the Dynamic Boundary Suffix -*Vy*, and it licenses this suffix to appear in environments where it would otherwise be ungrammatical (see also §12.2 and above). Otherwise restricted mainly to verbal and adjectival predicates in main clauses, the Dynamic suffix when followed by =*nih* can attach to other Boundary Suffixes, adverbials, nouns, etc. This is undoubtedly related to the more general clause-linking function of Dynamic -*Vy*, as discussed in §18.1.2 above.

Also, the use of the Dynamic marker plus *=nih* to link two temporally simultaneous or conceptually closely related assertions can perhaps be understood as an extension (to the discourse level) of the aspectual use of *-V́y* within the clause, where it signals that the event is concurrent with the speech moment or the temporal frame of reference (cf. §12.2).

The examples below illustrate the use of *=nih* to express coordinated assertions about a single topic. These develop and restate a single point or idea, and the clauses are on the same syntactic level. The marker *=nih*, and the accompanying Dynamic suffix (whether directly or indirectly followed by *=nih*) are highlighted in bold. Specifically non-canonical uses of the Dynamic (as licensed by *=nih*) are also underlined.

- (12) *ʔāh hipāh-yíʔ-ay bǵ ʔāh-āh,*
 1sg know-TEL-INCH HAB 1sg-DECL
 ‘I always start thinking (of another story);

*nɔʔɔ bǵ=**nih** ʔāh-āp=hɔʔ ʔāh ʔid-iw-ay*
 say-DYNM HAB=EMPH.CO 1sg-DEP=TAG2 1sg speak-FLR-INCH
 ‘I always keep talking once I get started.’ (I-M.21)

- (13) *pán ham-nih-ip=ʔih, yíʔ=yíʔ g’āʔ-āp=ʔih-íy=**nih***
 sloth go-NEG-DEP=MSC thus=TEL be.suspended=MSC-DYNM=EMPH.CO
 ‘The sloth is the one that doesn’t go, that stays thus in one place.’ (EL)

- (14) *cih-nih=mah yúp mih-iw-ih, tih-ān wɔn-w-ɔh. j’əb baktúk=hin*
 tire-NEG=REP that.ITG turtle-FLR-DECL 3sg-OBJ follow-FLR-DECL night dark=also
 ‘That turtle did not get tired, (as he) followed him (Tapir). He came along

*næn-æy=**nih**, næn-hi-wǎg, næn-hi-d’úʔ=mah*
 come-DYNM=EMPH.CO come-FACT-day come-FACT-afternoon=REP
 in the darkness too, came in the morning, came in the afternoon.’ (J-AJ.9)

- (15) *d'oʔ-ye-yóʔ ʔñ-ǎñ, yñ-yíʔ-ñ píd=niḥ,*
 take-enter-SEQ 1pl-OBJ thus-TEL-DYNM DIST=EMPH.CO
 'Having brought us into the village, it was just the same,

b'oy-ye-nñ-ñ píd-ñ=niḥ, có-wag-áh
 study-enter-NEG-DYNM DIST-DYNM=EMPH.CO rest-day-DECL
 we still didn't go to church on Sundays.' (P-B.5)

In a comparable phenomenon to the Emphatic Coordinator's licensing of preceding Dynamic -*Vy* in environments where it would otherwise not occur, =*niḥ* also conditions stress on a preceding Inchoative marker -*ay* (which is otherwise lexically specified as unstressed), as in example (16). This stress assignment is clearly particular to =*niḥ*, since other unstressed enclitics (such as evidentials) do not have this effect on preceding -*ay*.

- (16) *tñ wən-hám-áh... "hñ tñ hám-aʔ j'am? hñ-m'æ j'am tñ hám-aʔ?"*
 3sg follow-go-DECL where 3sg go-INT DST.CNTR Q-MEAS DST.CNTR 3sg go-INT
 'He went following him... "Where did he go? When did he go (by here)?"

tñ nɔ=mah-áh; bñg-áy=niḥ nɔɔy píd=mah yúp,
 3sg say=REP-DECL long.time-INCH=EMPH.CO say-DYNM DIST=REP that.ITG
 he said; and it was for a long time that he kept asking (this),

yup tñ ʔñ-ʔé-p hód-óh
 that.ITG 3sg sleep-PERF-DEP hole-DECL
 at each place he (Tapir) had slept.' (J-AJ.4)

The Emphatic Coordinator =*niḥ* is also acceptable in an interrogative:

- (17) *hñp=b'ay cæc? ʔāh wæd-hi-tæʔ-key-nñ!*
 where=AGAIN INTERJ 1sg eat-FACT-CNTRFCT-see-COOP
 'How is it, hey? I'll try some,

hñp=yíʔ tñ nñ-ñ=niḥ?
 how=TEL 3sg be.like-DYNM=EMPH.CO
 what's it like?' (B.Cv.93)

The simultaneity of the events in example (18) is crucial to the use of *=nih* (although cooperation or involvement between the participants is not). If Mouro went fishing first and returned before I went, speakers would instead use Distributive *píd* ‘also’ (see §12.9.1) rather than *=nih*. Likewise, the Emphatic Coordinator *=nih* is not used for two simultaneous events that are conceptually more distinct; in (19), the clauses are coordinated via the juxtaposition strategy, while the Proximative Contrast particle *páh* on the second clause contributes an adversative sense (‘but’):

- (18) *mówdu hǎp kək-əp hám-áy, ǎh=hin hǎp kək-əp hám-áy=nih*
 Mouro fish pull-DEP go-DYNM 1sg=also fish pull-DEP go-DYNM=EMPH.CO
 ‘Mouro went fishing, and I went fishing too.’ (EL)
- (19) *ǎba b’ǎ-an hám-áy, mówdu hǎp kək-əp hám-áy páh (*=nih)*
 Alba roça-DIR go-DYNM Mouro fish pull-DEP go-DYNM DST.CNTR (*=EMPH.CO)
 ‘Alba went to the roça, but Mouro went fishing.’ (EL)

As the coordinated clauses in (20) illustrate, the linking of simultaneous, associated events or states can involve an explicit contrast. Also note that the Emphatic Coordinator morpheme (and preceding *-Vý*) is not limited to the last clause, but can occur on both.

- (20) *tǎh=dó wǎn-əp=ǎh-ǎy=nih, tǎh=tohó wǎn-nǎh-íw-ǎy=nih*
 3sg=red follow-DEP=MSC-DYNM=EMPH.CO 3sg=white follow-NEG-FLR-DYNM=EMPH.CO
 ‘The brown (dog) chases animals, while the white one does not.’ (EL)

The Emphatic Coordinator *=nih* is used not only with coordinated clauses in the same sentence, but also across speakers in discourse. For example, it often occurs on successive assertions about the same topic by different participants in conversation. In (21), speaker A chimes in to add something to what speaker B says. Example (22)

involves three different speakers involved in a conversation about hair: according to the myth, among the various possessions the different peoples received at the time of their origin (in the Boiling Hole into which they were told to jump) were a number of leaves, of which the different types determined the type of hair each people would have (longer and blacker vs. shorter and less luxuriant). Note that while Dynamic -*Vý* (or Inchoative -*ay*) is usually found with =*nih*, it is not required in all contexts (21).

- (21) (A): *yí-cóʔ=yíʔ píd yúw-úh, cíʔ deh cóʔ=yíʔ píd*
 there.ITG-LOC=TEL DIST that.ITG-DECL slug water LOC=TEL DIST
 ‘It’s over there too, where Slug Creek is.’
- (B): *wáʔah cóʔ=**nih***
 other.side.of.water LOC=EMPH.CO
 ‘And on the other side of the creek.’
- (A): *wáʔah cóʔ*
 other.side.of.water LOC
 ‘On the other side of the creek.’ (B.Cv.132)
- (22) (A): *ʔáħ-ãp núp púp=g’æt-**áy**=**nih** kaħ d’oʔ-ní-p !*
 1sg-DEP this paxiuba=leaf-DYNN=EMPH.CO ADVR take-INFR2-DEP
 ‘But as for me, I certainly got that paxiuba leaf too!’ (laughs)
- (B): *ʔáħ-ãp yĩ-cáp-**áy**=**nih**=*cud* kaħ*
 1sg-DEP thus-INTS1=EMPH.CO=INFR ADVR
 ‘For me it’s definitely the same too!’
- (C): *hídñĩh-ĩp yĩ cáp-**áy**=**nih**=*cud*=poʔ báʔ*
 3pl.POSS-DEP thus INTS1-INCH=EMPH.CO=INFR=EMPH1 PRTST
 ‘But theirs (Tukanos’) was thus though,
- wáħ=g’æt-**áy**=**nih**=*cud**
 pataua=leaf-DYNN=EMPH.CO=INFR
 (they got) the pataua leaf, apparently!’
- (A): *wáħ=g’æt d’oʔ-nĩh=*mah**
 pataua=leaf take-NEG=REP
 ‘It wasn’t the pataua leaf they got, they say.’

(B): *nĩn'ĩh ciwĩb=g'æt náu!*
 this-NMZ bacaba=leaf good
 'It was that nice bacaba leaf!'

(A): *ciwĩb=g'æt ʔapĩd-yiʔ-~~ĩ~~=nih=mah hid d'oʔ-cak-g'ét-éh*
 bacaba=leaf immediately-TEL-DYNM=EMPH.CO=REP 3pl take-climb-stand-DECL
 'And they grabbed the bacaba leaf immediately and climbed out with it!'
 (B.Cv.80)

In another discourse-related use, the Emphatic Coordinator =*nih* is sometimes used in response to questions, as in example (23)—the response to my asking after someone's illness. The Emphatic Coordinator is especially common when providing an 'it just is' type of answer, using the 'no reason' particle *hĩ*; for example, a teenager answered my question, 'Why did you leave school?' with (24). The function of the Emphatic Coordinator in these instances is not completely clear, but it may serve to link the response back to the preceding discourse, or even to the question itself.

(23) *peʔ-widnǎn j'ap-nĩh-~~ĩ~~=nih*
 sick-arrive.come break-NEG-DYNM=EMPH.CO
 'The fever still hasn't broken.' (OS)

(24) *hĩ ʔāh way-yiʔ-~~ĩ~~=nih*
 only 1sg go.out-TEL-DYNM=EMPH.CO
 'I just left.' (OS)

When the Emphatic Coordinator =*nih* is used to indicate coordination among NPs (cf. §6.7), this is usually expressed via full coordinated predicates, in which =*nih* appears on a verb, an adverbial expression, or even a predicate nominal:

(25) *cug'ǎt mǎy-an ní-ty=nih, dapicéda=hin ní-ty=nih...*
 book house-DIR be-DYNM=EMPH.CO pen(Pt)=also be-DYNM=EMPH.CO
 'And the book is in the house, and the pen is there too...' (EL)

- (26) *tínĩh páy ni-ʔe-y=cud, d'əwyĩʔ=nĩh, tĩh tən-ham-huĩʔ-uĩh*
 3sg.POSS baggage be-PERF-DYNM=INFR today=EMPH.CO 3sg hold-go-finish-DECL
 'His stuff was there (yesterday), and then today, he took it all away.'
 (B-Cv.2.9)

- (27) *núp tĩh-ĩh-ʔũy=d'əh, cãp=yĩʔ b'ĩyĩʔ ʔĩd-ĩh...*
 this pig-OBL-who=PL other=TEL only speak-DECL
 'Those people from Serra dos Porcos all have a different speech...'

núp ʔĩnĩh=hin cãp=yĩʔ-ĩy=nĩh kãh
 this 1pl.POSS=also other=TEL-DYNM=EMPH.CO ADVR
 but our language is different too.' (Alb-Int.3)

Finally, Hup speakers occasionally use the conjunction *ʔó* (probably borrowed from Portuguese *ou* 'or', via Tukano¹⁹⁷) together with *=nih* in environments of coordination, as in (28). However, *ʔó* is more commonly used in disjunctive expressions (see §18.1.5 below).

- (28) *páti bĩʔ-ĩy=nih, ʔó pedú bĩʔ-ĩy=nih*
 Pattie work-DYNM=EMPH.CO or Pedro work-DYNM=EMPH.CO
 'Pattie worked, and Pedro worked too.' (EL)

18.1.4. Adversative Conjunction *kãh*

Hup speakers use the adversative conjunction-like form *kãh*¹⁹⁸ ('but, though, on the other hand') to signal a semantic opposition to a previous clause or assertion in discourse, and it can also occur in expressions of disjunction (usually in combination with the disjunctive marker *ʔó*; see §18.1.5 below). Use of Adversative *kãh* is limited to

¹⁹⁷ Consultants who speak Portuguese identify this as a Portuguese borrowing.

¹⁹⁸ A phonetically identical form *kah* appears in the verb compound *kah-kəd-əy* (*kah* + 'pass') 'step over (something)' and in the locative postposition *kakãh* 'between', but there is no evidence that this resemblance is anything other than homonymy.

declarative clauses, while the Alternative Interrogative form *=haʔ* is used to indicate disjunction in ‘either or’ questions (see §17.4.4).

Like most other formatives relating to clause linking in Hup, Adversative *kañ* is a peripheral formative (a particle), which *cannot* occur in the verbal Inner Suffix position (unlike many other peripheral formatives). It usually follows the last of two (or more) coordinated predicates. Example (29) illustrates its use in coordinating two clauses within the same sentence. In examples (30-31), it occurs on an independent clause that is linked to the preceding discourse. The speaker in (31) had been talking about the challenge of keeping one’s children fed.

- (29) *tĩh=tãh ʔip=mah cípm’æh=mah, tĩh=yiʔ póg=mah kañ!*

3sg=child.father=REP small=REP 3sg=TEL big=REP ADVR

‘Her husband is small, but she is big, they say!’ (TDB.Cv.13)

- (30) *yĩ=mah tĩh-ǎñ tĩh g’æç-d’oʔ-póg-b’ay-áh, háʔ=b’ay-áh,*

thus=REP 3sg-OBJ 3sg bite-take-EMPH1-AGAIN-DECL alligator=AGAIN-DECL

‘So then he bit him, (did) the alligator,

tĩññ mumuy=cúm, ba ʔĩb’-ǎñ-áh. tĩh-íp húp ham-yiʔ-ay=mah kañ

3sg.POSS arm=beginning spirit-OBJ-DECL 3sg-DEP person go-TEL-INCH=REP ADVR
on his upper arm, (bit) the spirit. But as for him, the man, (he) got away.’

(M-BY.96)

- (31) *tãʔh pã=d’æh-əp=yiʔ náw kañ*

offspring NEG:EX=PL-DEP=TEL good ADVR

‘(For those) with no kids, on the other hand, it’s all right.’ (P-Sp.3)

The Adversative Conjunction in in general optional; clauses in an adversative relationship can also be expressed by simple juxtaposition, as in (32) (note that *kañ* is acceptable here, although the speaker did not choose to use it):

- (32) *ʔāh-āp ʔəg-na ʔ-m'uj-nāh j'ám-ap,*
 1sg-DEP drink-lose.consciousness-do.a.lot-NEG DST.PST-DEP
 'As for me, I didn't get very drunk,
nī-d' əh-əp dó ʔ=d' əh-əp ʔəg-ná ʔ-áy!
 this-PL-DEP child=PL-DEP drink-lose.consciousness-DYNM
 (but) as for those kids, they did get drunk!' (TD.Cv.97)

The use of *kaḥ* is not limited to expressing a semantic opposition between the clause it marks and a preceding assertion. It can also mark a clash between reality and intent or effort—in other words, between the situation expressed by a clause and another possible world of which the listener is expected to be aware:

- (33) *bǵ=mah=yǐʔ tñ nñh-ñh, ham-g'ó ʔ-óh;*
 long.time=REP=TEL 3sg be.like-DECL go-go.about-DECL
 'For a long time she did thus, wandered about;
hayám hup-hipāh-nñh-ay=mah kaḥ, tñh-ñw-ñp
 town RFLX-know-NEG-INCH=REP ADVR 3sg-FLR-DEP
 she didn't know where her village was.' (H-81)

As discussed in §15.2.3, Adversative *kaḥ* belongs to a small class of focus markers (of which *-áh* is the unmarked form) that resemble each other phonologically (i.e. they all end in [ah]) and pattern in similar ways. In particular, in expressions like (34) which require a focus marker (because the clause ends in a subject that takes the Dependent marker, producing an emphatic construction), *kaḥ* can fill this slot.

- (34) *pó ʔdah có ʔ-óy=d' əh-əp cǎp=yǐʔ kaḥ ʔǐd-íp*
 upriver LOC-DYNM=PL-DEP other=TEL ADVR speech-DEP
 'As for the upriver folks, (it's) actually quite different, their speech.' (A-Int.3)

18.1.5. Disjunction

To indicate an explicit disjunction, speakers may simply express the options as two coordinated clauses or phrases, each marked with the Epistemic modality particle *ʔũhníy* ‘maybe’ (usually together with the Inferred evidential =*cud*, see §14.9.3):

- (35) *wĩh cĩm’-íy=cud ʔũhníy, ya ʔamboʔ g’ǵ-ǵy=cud ʔũhníy*
hawk claw-DYNM=INFR maybe dog bite-DYNM=INFR maybe
‘Either the hawk clawed (it), or the dog bit (it), apparently.’ (EL)

The borrowed form *ʔó* (from Portuguese *ou* ‘or’, cf. §18.1.3 above) is in common use to indicate disjunction, either instead of or in addition to the strategy in (35) above, as illustrated in example (36). Note that disjunctive *ʔó* typically occurs twice, coming both *before* and *between* the expressed options—exactly as Portuguese speakers use *ou...ou* in either/or expressions—rather than following only the second option (the more typical native pattern). This is also distinct from the less common conjunctive ‘and’ use of *ʔó* (example 28 above), where it occurs only once and in the intermediate position. The Adversative particle *kañ* can also appear at the end of the sentence as an extra signal of the disjunction (with or without *ʔó*). However, this is only a marginal function of *kañ*; not only is *kañ* optional here, but it also is not by itself indicative of a disjunction, as example (37) illustrates.

- (36) *ʔó ʔatúdu=cud ʔũhníy, ʔó cibínu=cud ʔũhníy, ham-yiʔ-cǵw-ǵy kañ*
or Arthur=INFR.maybe or Silvino=INFR.maybe go-TEL-COMPL-DYNM ADVR
‘It was maybe Arturo, or on the other hand maybe Silvino who already left.’ (EL)
- (37) *ʔatúdo, cibíno ham-yiʔ-cǵw-ǵy ʔũhníy kañ*
Arthur Silvino go-TEL-COMPL-DYNM maybe ADVR
‘Arthur and Silvino may have already left, however.’ (EL)

The borrowed form *ʔó* is also frequently used without *kañ* to link disjointed

nominal entities in a list:

- (38) *ʔó cǎp g'ǎ ʔó mǎta ʔáp g'ǎ ʔāh biʔ-ni-té-h*
 or other year or three year 1sg work-be-FUT-DECL
 'Next year, or a third year, I'll stay here to work' (P.Sp.98)

- (39) *ʔín key-b'áy-át yúp, hǎp=d'əh g'ǎʔ-b'ay-áh.*
 1pl see-return-OBL that.ITG fish=PL be.suspended-AGAIN-DECL
 'When we go back there to see, fish are hanging (from the hooks).'

ʔó d'ób=d'əh, ʔó tǎnyayǎg, ʔó yáy, ʔó g'əwd'ǎk,
 or acará=PL or jacundá.sp. or traira.sp. or tubo
 Acará, or jacundá, or traira sp., or tubo,

ʔó báh, ʔó pǎy=d'əh, yúp hǎpkǎk-ǎ g'ǎʔ-ǎh
 or acará.sp. or acará.sp.=PL that.ITG fish.pull-OBL be.suspended-DECL
 or acará sp., or acará sp., these are hanging from the fishhooks.'
 (P.F.126)

18.2. Subordination and cosubordination

The majority of Hup's clause-linking strategies involve a combination of a main clause and a dependent clause. The verb in the dependent clause typically takes a Boundary Suffix (see §3.4.1.2) that specifies its relationship to the main clause, but in general this dependent-clause verb lacks inflection for tense-aspect-mode, illocutionary force, or even—in some cases—negation. These are usually specified on the verb in the main clause, which typically takes one of the vowel-initial Boundary Suffixes (§3.4.1.2).

The combination of a dependent clause and a main clause is typical of both subordination and cosubordination phenomena cross-linguistically, according to the typology proposed by Foley and Van Valin (1984; cf. Van Valin and La Polla 1997). In

cases of subordination, the dependent clause is embedded in the main clause and acts as an argument or a modifier of that clause; examples include relative clauses, complement clauses, and adverbial clauses. Cosubordination, on the other hand, entails dependency without embeddedness; usually, moreover, some morphological category (such as TAM, illocutionary force, or negation) is expressed only on the main clause but has scope over the dependent clause as well. This appears to be the case for a number of Hup clause types.

On the peripheral level (i.e. involving whole clauses or predicates), cosubordination is realized in some languages—including Hup's Tukanoan and Tariana neighbors—as clause-chaining. In addition to dependency without the embedding of one clause in the other, phenomena typically associated with clause-chaining include attention to temporality (sequence and simultaneity), the lack of a conjunction heading the dependent clause (rather, temporal or circumstantial meaning is marked on the verb in this clause), and switch-reference particles marking whether the dependent clause has the same subject or a different subject from the associated clause (cf. Longacre 1985: 264-67).

Some types of clause linkage in Hup apparently involve cosubordination; others are clear cases of subordination. For still others, however, it is not altogether clear whether they should be analyzed as subordinate or as cosubordinate. Quite a few dependent clause types in Hup contribute adverbial-like information to the associated clause, in most cases relating to temporality; they lack conjunctions, and instead rely on a suffix attached to the (often otherwise uninflected) verb stem to mark them as dependent—all cross-linguistically common features of clause-chaining. However, there

are no special markers of switch-reference in Hup. There are, on the other hand, certain constructions that typically occur either primarily with the same subject (such as the Sequential *-yóʔ*, §18.2.6.3) or primarily with different subjects (such as Simultaneous *-mĩʔ*, §18.2.6.4), and thus exhibit some sensitivity to switch-reference phenomena.

Possibly, the fact that some clause linking strategies in Hup appear to have characteristics both of subordination (as adverbial clauses) and of clause-chaining reflects a diachronic shift from one strategy to the other. Aikhenvald (2003: 515) notes that switch-reference phenomena appear to have developed in Tariana through areal diffusion from the Tukanoan languages; a similar shift in Hup would be no surprise, given the profound extent to which Tukanoan has influenced other aspects of Hup grammar.

18.2.1. Quoted speech

Unlike all the other strategies of subordination and cosubordination to be discussed in this chapter, directly quoted speech in Hup involves the combination of two or more (apparently) main clauses, neither of which is morphologically marked as dependent on the other. The quoted material forms a complete, main-clause utterance—no different from any other independent utterance in Hup—and (with the exception of a few cases involving the rapid exchange of dialogue, in which the quoted speech forms an independent clause) it is always framed by an associated main clause involving the verb *nɔ* ‘say’.

Despite the fact that neither clause has any morphological marking of dependence, their relationship is best analyzed as one of subordination. As the examples

below illustrate, the framing verb ‘say’—which requires a complement—always follows the quotation; accordingly, treating ‘say’ as the main verb and the quoted speech as its embedded complement is consistent with Hup’s verb-final constituent order. In addition, arguments of ‘say’ can (although rarely do) *precede* the quoted speech, a further indication that the latter is embedded.

- (40) “núh péʔ-éy=hɔ̃ ʔāñ-áh,” ʔāh nɔ̃-ɔy, nɔ̃-yíʔ-ay tɪh-āñ, ʔāh-āh
 head sick-DYNM=NONVIS 1sg.OBJ-DECL 1sg say-DYNM say-TEL-INCH 3sg-OBJ 1sg-DECL
 “‘I have a headache,’ I said, I said (that) to her.’ (TD.Cv.99)

- (41) “ʔāñ d’oʔ-næñ, mæh!” nɔ̃-ɔy, “ʔāh ʔəg-nɪŋ!” nɔ̃-ɔy
 1sg.OBJ take-come.IMP yng.sister say-DYNM 1sg drink-COOP say-DYNM
 ‘“Bring me some, younger sister!” (I) said, “I’ll drink some!” (I) said.’
 (TD.Cv.103)

- (42) “wæd-nɪh nɪŋ nɪh! póh nɪŋ d’oʔ-cak-w’ob-yíʔ,
 eat-NEG 2pl be.IMP high 2pl take-climb-set-TEL.IMP
 ‘“You all don’t eat (it)! Put it up high,

ʔɪn pəʔ-cóʔ-ay=nih, nɪŋ wæd!” hɪd nɔ̃-ɔh
 1pl dabacuri-LOC-INCH=EMPH.CO 2pl eat.IMP 3pl say-DECL
 and when we hold our dabacuri, you all eat (it)!” they said.’ (H.txt.70)

- (43) yúp yawăç tɪh=tæh ʔɪn-āñ, “cɪw-ʔáy!” tɪh nɔ̃-ɔh
 that.ITG titi.monkey 3sg=child.mother-OBJ cook-VENT.IMP 3sg say-DECL
 ‘So (regarding) that monkey, to his wife, “Cook (it)!” he said.’
 (i.e. ‘He told his wife to cook the monkey.’) (M.NS.68)

Example (44) illustrates the fact that the framing verb *nɔ̃* ‘say’ can be part of a larger verb compound:

- (44) “yók, yók!” tɪh nɔ̃-kədd’ob-yíʔ-ay-áh, “yók!” nɔ̃-ɔy=mah
 poke.IMP poke.IMP 3sg say-pass.go.to.river-TEL-INCH-DECL poke.IMP say-DYNM=REP
 ‘“Poke, poke (me)!” he said as he came down to the water, “poke (me)!” he said, it’s said.’ (H.TY.79)

The quoted speech construction with ‘say’ is also used with more marginally linguistic phenomena, such as someone’s unspoken thoughts, laughter (as in example 45), or other noises—even if made by animals or inanimate objects (cf. §15.7 on ideophones).

- (45) “‘*hehé!*’ *nɔ́ɔ́ hɛ́d=wá=d’əh, ʔǎn-áh*
 (laughing noise) say-DYNM 3pl=old.woman=PL 1sg.OBJ-DECL
 ‘“Ha ha!” said those old bags to me.’ (TD.Cv.102)

That the verb *nɔ́* ‘say’ is itself a crucial part of the quoted speech construction is illustrated by the fact that other verbs relating to various speech acts (‘ask’, ‘scold’, ‘call’, etc.) cannot take quoted speech as a complement. Even quoted questions are framed with ‘say’, just as are statements:

- (46) ‘“*hɛ́-n’ɪh=pó-y ʔám ʔɪʔ=tǽh?! hɛ́-n’ɪh ʔám-ǎn hɔ́h-ɔ́ʔ?*” *nɔ́ɔ́=mah*
 Q-NMZ=EMPH1-DYNM 2sg mother=son Q-NMZ 2sg-OBJ make.noise-INT say-DYNM=REP
 “‘What in the world are you doing, mother’s son?! What’s making that noise (come) from you?’” he said.’ (P.BY.91)

Such speech act verbs *can* appear in the context of quoted speech, but they require the obligatory co-presence of ‘say’, which takes the quoted speech as its complement:

- (47) *tɪh ʔey-wɔn-yɪʔ-ay-áh, “ɔ́ɔ́əh! ʔǎn yu-ʔéʔ!*
 3sg call-follow-TEL-INCH-DECL (calling noise) 1sg.OBJ wait-PERF.IMP
 ‘She followed after him calling, “Ooooh! Wait for me!’

núp ʔah hup-cúd-uw-ǎn wɔ́y-nɪh ʔám?” tɪh nɔ́pɪd-ɪh
 this 1sg RFLX-be.inside-FLR-OBJ love-NEG 2sg 3sg say-DIST-DECL
 ‘Don’t you love this one inside me (your unborn child)?” she was saying.’
 (P.BWB.187)

Quoted speech is extremely common in Hup, especially in narrative discourse. However, a strategy for communicating indirect speech exists as well; this is used mainly in the context of conversation. The primary mechanism for this is the Reportive

evidential (see §14.9.4), which allows the speaker to relate the content of a proposition or even a command without restating the words of the original speaker.

Hup speakers prefer the Reportive evidential for presenting information that is considered immediately relevant to the speech moment and the situation at hand, whereas quoted speech is more likely to have complete independence from the pragmatic context. Thus indirect speech via the Reportive is usually chosen to communicate something like ‘he said he’ll come’ when people are preparing for a trip and are discussing who will be a part of the group. Conversely, Hup speakers would prefer quoted, direct speech to say the same thing when relating a scene (usually including a more complete conversation) that took place between them (or someone else) and the other person. Quoted speech therefore communicates more than just content, but also contributes to re-create the scene by preserving the illocutionary force of the original utterance. Quoted and indirect speech are in fact compatible; in non-firsthand narrative, the Reportive evidential is typically used *together* with the verb ‘say’ in the clause framing the quoted speech (as in example 46 above), in reference to the fact that the tale itself is secondhand information (‘he said “X”, it’s told’).

In addition to the quotative function of the Reportive evidential, commands and requests in Hup can be related indirectly by the verb *yǎh*- ‘request, order’, which usually appears in compounds such as *biʔ-yǎh*- ‘request/order to work’ (see §9.4.1.2).

18.2.2. Cosubordination and predicate reduplication with *ni*-

Hup relies on the verb *ni*- (which is idiosyncratic in a number of ways, see §8.4) to form a particular strategy of clausal cosubordination. According to this strategy, which is strictly limited to *ni*- among Hup verbs, a string of dependent clauses is followed by utterance-final *ni*-. While *ni*- is inflected normally with a Boundary Suffix, thus constituting a main clause predicate, the verbs in the preceding predicates all lack the Boundary Suffix that is otherwise obligatory for verbs in Hup (except for those in apprehensive and imperative clauses; cf. §3.4 and §8.3). These dependent predicates carry the main information of the utterance, whereas *ni*- acts as a kind of ‘light’ or ‘dummy’ verb, conveying no particular semantics but carrying the required inflection, the Boundary Suffix.

The most frequent realization of this cosubordination strategy with *ni*- in Hup is the phenomenon of ‘predicate reduplication’, which indicates a repeated event. This iconic strategy involves multiple repetitions of what is usually the same bare verb, often stated together with an object or adverbial expression (which is also repeated), followed by fully inflected *ni*-:

- (48) *cǎw-añ d’o ʔ-cak-w’ob-yǎʔ, cǎw-añ d’o ʔ-cak-w’ob-yǎʔ,*
 other-OBJ take-climb-set-TEL other-OBJ take-climb-set-TEL
 ‘(He) put another up (on the smoking-platform), and another up,
cǎw-añ d’o ʔ-cak-w’ob-yǎʔ, ní-íy=mah
 other-OBJ take-climb-set-TEL be-DYNM=REP
 and another up, thus, it’s said.’ (H.txt.43)

- (49) *hǎl-añ wæd-nǎʔ, hǎl-añ wæd-nǎʔ,*
 3pl-OBJ eat-give 3pl-OBJ eat-give
 ‘(He) would give them food, (always) give them food,
- ni-yóʔ pǎd=mah tǎh way-yiʔ-pǎd-ǎh*
 be-SEQ DIST=REP 3sg go.out-TEL-DIST-DECL
 having done thus he would go out again, it’s said.’ (P.BY.85)
- (50) *yǎkán=yiʔ pǎd wǎd-b’ǎy, yǎkán-yiʔ pǎd wǎd-b’ǎy, ní-íy=mah.*
 over.there=FOC DIST arrive-return over.there-FOC DIST arrive-return be-DYNM=REP
 ‘(He) arrived back there again, arrived back there again, it’s said.’ (i.e. He kept finding himself back at the house of the evil spirits.) (P.BY)

This strategy of bare (usually repeated) predicates plus *ni-* involves cosubordination. The predicates lacking Boundary Suffixes form clauses that are dependent, but not embedded, so this phenomenon is not one of subordination. Likewise, the main ‘dummy’ verb *ni-* carries information relating to tense-aspect-mode and illocutionary force (encoded in the Boundary Suffix), which has scope over the preceding bare verbs; thus the phenomenon is not one of coordination. However, note that the construction is not sensitive to switch-reference; both same and different subjects are encountered among the cosubordinated clauses. Example (51) illustrates predicate reduplication with *ni-* for repeated verbs having different subjects, explicitly stated in succession:

- (51) *yúp=mah hǎd yǎhǎy-pǎd-ǎh, ya ʔamboʔ=hín yǎhǎy,*
 that.ITG=REP 3pl search-DIST-DECL dog=also search
 ‘So they were searching, the dog also searching,
- tǎh=hup=hín yǎhǎy, ní-íy=mah*
 3sg=RFLX.INTS=also search be-DYNM=REP
 and he himself (boy) also searching.’ (FS.2)

Predicate reduplication with *ni-* can also involve more than one repeated predicate:

- (52) *kɨ́-pǽ* *d'ɔ ʔ-cud-pǽ* *kɨ́-pǽ*
 chop-go.upstream take-be.inside-go.upstream chop-go.upstream
 'He was cutting (fish) and going upstream, putting them inside (a basket)

d'ɔ ʔ-cud-pǽ *ní-íy=mah*
 take-be.inside-go.upstream be-DYNM=REP
 and going upstream...it's said.' (M.BP.77)

- (53) *yúp* *cǎp* *d'òb*, *mǎh-yǽ?* *cǎp* *d'òb*, *cǎp* *d'òb*, *ní-íy=mah*
 that.ITG other go.to.river kill-TEL other go.to.river other go.to.river be-DYNM=REP
 'So another went down to the river, and was killed, another went down, another
 went down, thus.' (H.txt.43)

Although it applies on the clausal level, this strategy is closely related—both formally and functionally—to lexical reduplication in Hup. Verb stems undergo semi-productive reduplication to express an event or state that is intrinsically characterized by multiple repetitions, such as coughing (see §12.9.3). Predicate reduplication is preferred when the repetition is not an intrinsic characteristic of the verb, but rather applies to the entire situationally dependent event, including both the action and the participants. This is represented iconically by shifting the reduplication from the lexical to the predicative level, but still summing it up as one unified event with *ní-*. This similarity between lexical and predicate reduplication is even more apparent when the reduplicated predicate is composed of only a single verb stem, with no repeated arguments and a common subject, as in examples (54-55). Indicators that this is predicate, rather than lexical, reduplication are the presence of *ní-*, the multiple repetitions of the verb (whereas a reduplicative verb stem involves only one repetition), and the fully copied CVC syllable form of the repeated verb (whereas reduplicated stems do not include non-homorganic medial consonant clusters).

- (54) *núp pǎ biʔ-yóʔ, j'ǎp j'ǎp j'ǎp ní-ty hid d'əh-d'əh-hám-b'ay-áh*
 this circle work-SEQ wrap wrap wrap be-DYNM 3pl send-send-go-AGAIN-DECL
 'Having made this loop, having wrap-wrap-wrapped (the string), they would send
 (the top) off.' (H.txt.18)
- (55) *yǎ-nǎh-yóʔ, wǎ wǎ ní-yóʔ=mah yúp...*
 that.ITG-be.like-SEQ pull.out pull.out be-SEQ=REP that.ITG
 'Then, having taken out, taken out, it's said...' (H.CO.78)

This use of *ni-* as a light verb following a bare verb in a dependent predicate is not limited to reduplicative predicates like those in the examples above. As discussed in §9.3, the same kind of cosubordination can also be present in a non-reduplicative construction, involving a single dependent predicate, or two (or more) *different* dependent predicates, followed by *ni-*, as in the following examples:

- (56) *tínǎh ya ʔamboʔʔ=b'ay nǎh-kǎdhi-yǎʔ, ní-yǎʔ-ay=cud*
 3sg.POSS dog=AGAIN fall-pass.descend-TEL be-TEL-INCH=INFR
 'His dog too fell down fast, apparently.' (FS.9)
- (57) *[tǎw deh hid nǎʔ]-an, biʔ-g'oʔ-ʔay ní-pǎd-ǎh*
 Brazil.nut water 3pl say-DIR work-go.about-VENT be-DIST-DECL
 'We went to work at the place they call Rio Castanha.' (P.B.12)
- (58) *yúb d'úǎ, kayak=tǎg čǎy' ʔín ní-té-h*
 cipó pull.down manioc=stem poke.in 1pl be-FUT-DECL
 'We'll both pull cipó and plant manioc.' (EL)

This (non-reduplicative) bare predicate plus *ni-* sequence bears some resemblance to serial verb constructions in other languages (cf. §9.3). It is also reminiscent of a construction found in Tariana (Aikhenvald 2003: 438), in which the Tariana verb *ni-* ('do'; almost certainly related to Hup's *ni-* via areal diffusion) has what Aikhenvald terms a 'recapitulating' function in a serial verb construction.

In the Hup case, various clues indicate that cosubordinative constructions with *ni-* like those in (56-57) are not compounds of the form (Verb-*ni-*), despite the fact that the

first verb form is followed immediately by *ni-*. In contrast to (Verb-*ni-*) compounds, which do exist (and in which *ni-* acts as an auxiliary verb; see example 59), in cosubordinative contexts a slight pause often precedes *ni-*. Both verbs also can have separate word-level stress, which in a verb compound occurs only on the last stem and/or on the Boundary Suffix (i.e. one to two primary stresses per word). Finally, Inner Suffixes cannot come between verb stems within compounds in Hup, but can occur between the bare verb in the dependent clause and the following *ni-*; moreover, the same suffixes can appear again on *ni-*, as in the case of the Telic marker in example (56). These features suggest that the bare verb and *ni-* in cases like (56-57) above should be considered as separate predicates in a cosubordinated relation, rather than as components of a single compound verb.

- (59) *n'ikán=b'ay tɪ́nʔh ya ʔamboʔʔ=b'ay j'ɔ́m-tu ʔ-g'et-ní-b'ay-áh*
 over.there=AGAIN 3sg.POSS dog=AGAIN bathe-immense-stand-be-AGAIN-DECL
 'Over there, his dog goes back into the water.' (FS.11)

Finally, an additional case of *ni-* used as a light verb occurs when the verb in the preceding dependent clause is marked with the Sequential marker -*yóʔ*, itself a Boundary Suffix, as in (60). Note that Sequential -*yóʔ* marks a dependent clause in contexts of cosubordination in Hup, and normally requires a corresponding main clause; the light verb *ni-* is apparently chosen when no other main clause verb appears readily available (see §18.2.6.3 below).

- (60) *tĩh na ʔ-yĩʔ-ay-áh. tĩh na ʔ-yóʔ ní-íy, d'o ʔ-taw-ham-yóʔ ní-íy*
 3sg die-TEL-INCH-DECL 3sg die-SEQ be-DYNM take-carry.together-SEQ be-DYNM
 'He died. When he was dead, having carried him away,

tĩh-ǎn híd j'ũg hæhɔ-an tĩh-ǎn kǎʔ-g'et-yĩʔ-ay ní-ay-áh.
 3sg-OBJ 3pl forest middle-DIR 3sg-OBJ bury-stand-TEL-INCH be-INCH-DECL
 they buried him in the middle of the forest.

yúp kǎʔ-g'o ʔ-yóʔ, wíd-ye-yóʔ ní-íy,
 that.ITG bury-go.about-SEQ arrive-enter be-DYNM
 Having buried him, after having come back to the village,

“hĩ-cóʔ ʔín ham-tég páh ?” nɔ-g'et-g'óʔ-óy ʔín-ih
 Q-LOC 1pl go-FUT PRX.CNTR say-stand-go.about-DYNM 1pl-DECL
 “where can we go?” we said, wandering about.’ (P-B.9)

18.2.3. Relative clauses

Relative clauses in Hup are formed via the nominalization of a verb, together with its arguments. They are built on a gapping strategy and lack any overt relativizer morpheme (cf. Keenan 1985). They may be headless, but otherwise are externally headed—that is, the relativized or head nominal is external to the relative clause. Normally, a headed relative clause directly precedes the head nominal it modifies. This pattern is consistent with the nominal compound construction in Hup, where the modifying noun occurs in the N1 slot, followed by the head noun in the N2 slot (see §5.2);¹⁹⁹ note that this is distinct from the pattern represented by adjectives, which always follow the noun they modify. Both restrictive and non-restrictive relative clauses are encountered in Hup; there is no essential formal difference between them.

¹⁹⁹ It is also relatively common for a demonstrative to precede the NP formed by the relative clause + head noun (i.e. Dem – [RelCl] – Head nominal); this is also consistent with the pattern of nominal compounding in Hup.

Hup has a variety of strategies for expressing relative clauses, which can be understood in terms of a continuum from headed to headless. A fully headed clause has a standard (free lexical) noun as its head, while a headless clause—by definition—lacks any head nominal at all. Intermediate between these are those clauses that take a bound noun as a head nominal; this bound noun is less semantically explicit than a full noun, and relies more on anaphoric reference to a previously mentioned (or physically present) entity:

Full noun as head – Bound noun as head – No head nominal
Headed <-----> *Headless*

Crucially, whatever its position on this continuum, the relative clause must be nominalized. Hup relies on a hodgepodge of available devices for doing this, which depend on the presence or absence of a head nominal and the role of the relative clause (as subject, object, or oblique) within the main clause.

Hup's default nominalizer in a relative clause is the Dependent marker *-Vp*, a Boundary Suffix that attaches directly to the verb. Normally, a relativized verb marked with *-Vp* is directly followed by a head nominal; this may be a full noun (example 61-63), or a bound noun (example 63). This relative clause + head noun construction is syntactically akin to the compound noun (see Chapter 5), in that the relative clause resembles the first nominal constituent—the modifier—of the noun phrase. Use of a bound noun as the head nominal is generally preferred when one is available. Note that the Dependent marker *-Vp* has other functions in Hup besides its role in relative clauses; these are discussed in §18.2.4 below (see also §7.1.5).

- (61) *yúp [hɪl key-ʔɛp] hɔhɔh=b'ay, ham-yiʔ ní-ay-áh*
 that.ITG 3pl see-PERF-DEP toad=AGAIN go-TEL be-INCH-DECL
 'That frog they were looking at, (it) went away.' (FS.2)
- (62) *[ʔǎn hɪl yamhidɔʔ-g'ɔp-ɔp] mǎy*
 1sg.OBJ 3pl sing-serve-DEP payment
 '(It was) the payment for their singing to and serving me.'
 (lit. their singing-and-serving-me payment) (TD.Cv.98)
- (63) *yɪ̃=mah yúp húp=wəd wiʔ-g'ét-éy, [mɔh g'íg-ip]=ʔh*
 thus=REP that.ITG person=RESP hear-stand-DYNM inambu shoot.w.arrow-DEP=MSC
 'There a man was standing listening, (it was) one who was shooting inambu.'
 (E.SB.4)

Headless relative clauses marked only with the default nominalizer *-Vp* are quite rare in Hup, but they do exist. In such cases, the headless relative must act as the subject of the main clause (example 64), or as a predicate nominal (example 65); headless relatives acting as objects or obliques within the main clause are nominalized via a different strategy (see below).

- (64) *tā ʔǎy tɪh-ǎn nɔh-d'ak-yǎh-b'ay-áh, [tɪh=báb']=ʔǎy ni-ʔɛp]*
 woman 3sg-OBJ fall-stick.to-FRUST-AGAIN-DECL 3sg=sibling=FEM be-PERF-DEP
 'A woman tried (in vain) to be his lover, (she who) had been her younger sister,
- yúp [m'ǎh=tǎh ʔn nɪh báb']=ʔǎy ni-ʔɛp]*
 that.ITG snake=child.mother POSS sibling=FEM be-PERF-DEP
 (she who) had been the younger sister of Snake's wife.' (H.MT.55)
- (65) *[mih ʔǎn nɔʔ-ʔɛp]*
 Mih 1sg.OBJ give-PERF-DEP
 '(This is one that was) given to me by Mih.' (showing off a fishhook) (OS)

It is not entirely clear why such *Vp*-marked clauses occur so rarely as headless relatives; however, this is probably due to the fact that the Dependent marker can also function as a marker of a default adverbial clause (and does so quite often, as discussed in detail in §18.2.4.1 below), as illustrated in example (66). This dual function of dependent clauses

marked by *-Vp* is reminiscent of the synchronically dual function of the ‘adjoined relative clause’ found in many Australian languages (Hale 1976), which can be interpreted as either a relative or an adverbial clause.

- (66) *[cəʔ cæŋ-æp]=mah tɪh hám-áh*
 shrimp net-DEP=REP 3sg go-DECL
 ‘She was going along netting shrimp, it’s said.’ (I.M)

A second nominalization strategy for relative clauses involves the Plural marker *=d’əh*. As is consistent with Hup’s system of ‘split plurality’ (cf. §4.4.1), only relative clauses referring to animate entities may be overtly marked as plural with *=d’əh*. In these cases, *=d’əh* essentially fills the role of head nominal, on a par with a bound noun (i.e. forming a relative clause that is intermediate between headed and headless). However, it also takes the place of the Dependent marker *-Vp*, which is otherwise required on the relativized verb preceding all head nominals (whether bound or full). Apparently, given that Plural *=d’əh* is *only* grammatical with nominals in Hup, the additional default nominalizer *-Vp* is unnecessary. Relativization with *=d’əh* is illustrated in the following example:

- (67) *ʔecáp cóʔ híd næn-ay-áh, [hɪd=n’añ mæh]=d’əh-əh*
 tomorrow LOC 3pl come-INCH-DECL 3pl=PL.OBJ kill=PL-DECL
 ‘The next day they arrived, those who (would) kill them.’ (E-SB.2)

Note that while Plural *=d’əh* typically takes the place of the [*-Vp* + Head.nominal] unit in the relative clause, it may also follow it. Both of these options ([Verb=*d’əh*] and [Verb-*Vp* + Head.nominal=*d’əh*]) are possible for most animate plural referents, as example

(68) illustrates; however, the masculine/ gender-neutral bound noun = *ʔh* is virtually never followed by =*d'əh* (whether in a relative clause or in a compound noun, see §4.4.1.A).

- (68) a) *tā ʔāy=n'āñ tih məh-əy, [tʔh ní=]n'āñ-áh*
 woman=PL.OBJ 3sg beat-DYNM 3sg be=PL.OBJ-DECL
 'He hits the women, those with whom he stays.'
- b) *[tʔh ní-ip]=ʔāy=n'āñ tih məh-əy*
 3sg be-DEP=FEM=PL.OBJ 3sg beat-DYNM
 'He hits the women with whom he stays.' (EL)

Hup's third strategy for creating a relative clause relies on nominalization via a case marker (Object -*āñ* or Oblique -*Ví*). These relative clauses are fully headless, and (like those nominalized by Plural =*d'əh*) they lack the Dependent marker -*Vp*. They are nominalized by the addition of the case marker directly to the verb stem, with the Filler syllable -*Vw*- (cf. §15.2.4) appearing obligatorily in the middle. Crucially, these relative clauses *must* occupy the object or oblique position within the main clause in order to receive the corresponding case marker. Headless relative clauses are extremely common in object or oblique positions within the main clause (more common, in fact, than are headed clauses in these positions), whereas they are very rare in subject position (where they are nominalized by -*Vp* only, as discussed above).

A headless relative clause nominalized by the Object marker is given in example (69). Significantly, the use of the Object marker in headless relative clauses is irrespective of the animacy or number of the referent, whereas differential object marking (whereby singular inanimate nouns are never Object-marked; see §4.3.1.2) applies to

most other nouns in Hup. Elsewhere in Hup, the Object marker *-ǎñ* appears only as a case marker on nominals (but cf. the directional oblique form *-an*, used both for nominals and in adverbial clauses; see §18.2.6.2).

- (69) [*ʔǎh wɔn'-ʔé*]-*w-ǎñ* *yũ* *təh-yĩʔ-ĩy*
 1sg mingau-PERF-FLR-OBJ João break-TEL-DYNM
 'John broke the one (i.e. a stick) with which I was making mingau.' (EL)

A headless relative clause nominalized by the Oblique marker is provided in example (70). Note, however, that the Oblique suffix used with relative clauses is a variant of the more standard vowel-copying Oblique form *-Vĩ*; it appears obligatorily as *-ĩ*.²⁰⁰ Some speakers pronounce it consistently as nasal (regardless of the nasality of the stem); others as oral. Elsewhere in Hup, both variants of the Oblique marker (*-Vĩ* and *-Vw-ĩ*) attach to the verb stem and form adverbial-type clauses relating to location, time, and manner (see §18.2.6.2 below).

- (70) *tĩh* *hɔhteğ-ét* *hám-áy*, [*tĩh=báb'* *bĩʔ-ʔé*]-*w-ĩ*
 3sg canoe-OBL go-DYNM 3sg=sibling work-PERF-FLR-OBL
 'He's going in the canoe, in the one his brother made.' (EL)

Like the Plural marker *=d'əh* in Plural-marked relative clauses, a case marker can also follow the (full or bound) head nominal in a headed relative clause (rather than attach directly to the verb), as in (71). The case suffix may also follow the Plural marker *=d'əh* (which, as noted above, can be considered a sub-type of head nominal akin to a bound noun); the Plural *=d'əh* + Object *-ǎñ* combination usually appears in the fused

form =*n'an* in a relative clause, just as it does generally on nouns in Hup (cf.

§4.3.1.2.F) (see example 68 above).

- (71) *yũ* *g'õg* [*ʔāh káy-ep*]=*ʔh-ǎñ* *mæh-yĩʔ-ĩy*
 João titi.monkey 1sg see-DEP=MSC-OBJ kill-TEL-DYNM
 'John killed the titi monkey, the one I saw.' (EL)

Other features of the relative clause in Hup apply regardless of nominalization strategy or headedness. Constituent order is generally like that of the declarative clause, but is consistently verb-final (whereas the declarative clause is more variable), with no tacked-on arguments external to the main part of the clause permitted. The order of subject and object in transitive relative clauses depends on their topicality, just as it does in declarative clauses, and subjects are frequently dropped. Most Inner Suffixes can occur in a relative clause (preceding the Dependent marker, plural morpheme, or case marker), e.g. Future/purpose *-teg-* / *-te-*, Habitual *-bíg-* / *-bĩ-*, and Ventive *-ʔay-*.

In keeping with their nominal identity, relative clauses pattern like nouns within NPs, as well as within the clause. A headless relative clause (here nominalized by *-Vp*) can—like any noun—precede an adjective modifier to form an adjective NP:

- (72) [*ʔāh nɛ-ɛp*] *póg* *ʔāh tɔñ-ɔh*
 1sg say-DEP big 1sg hold-DECL
 'I have a lot to say' (T.PN.23)

In daily discourse, relative clauses are very common. One useful function they serve is to facilitate reference to nameless entities, or provide alternative ways to talk about something. For example, some speakers use the term *ʔñ cák-ap=teg* (1pl climb-

²⁰⁰ It is possible that the variant *-ĩ-* is a hold-over from an earlier form of the Oblique marker, that has since

DEP=THING) ‘the thing we climb’ in reference to a ladder (in place of the borrowed Portuguese name), and a speaker who wants to keep a bag of candy secret from the children might refer to it as *g’əh náw-āp=ʔuç* (sweet good-DEP=sack) ‘the tasty sack’.

The remainder of this discussion presents examples of relative clauses according to the role of the relativized noun within the relative clause—as subject, object, or oblique. Because the different strategies for nominalizing the relative clause also depend on its role within the main clause (again as subject, object, or oblique) these distinctions will also be reflected in the presentation.

A. Relativized noun is the subject of the relative clause

The examples in this section illustrate the relativized noun’s role as the subject of the relative clause. In (73-75), the relative clause is also the subject of the main clause. Note that these examples are headed; headless relative clauses in main-clause subject position (i.e. nominalized by *-Vp* only) are rare, as discussed above.

- (73) *ʔam=tóg tæh huħ-j’əm-túʔ-úh,*
 2sg=daughter offspring hold-bathe-go.into.liquid-DECL
 ‘Your daughter is bathing her child,

[ʔam mæh-wən-d’əh-ham-ʔəp]=ʔáy-āh
 2sg beat-follow-send-go-PERF-DEP=FEM-DECL
 (she’s) the girl that you beat and drove away.’ (E.SB.4)

- (74) *[həp=kək=cúk d’oʔ]=d’əh, híd bíʔ-ih*
 fish=pull=pole take=PL they make-DECL
 ‘Those who take (use) fishing poles, they make them.’ (P.FP.123)

Note that the Diminutive Intensifier enclitic *=mæh* can come between the relative clause and Plural *=d'əh*, which acts as the head nominal:

- (75) *tɪh=dóʔ=mæh=d'əh*, [*ʔp pǎ*]=*mæh=d'əh*, *hid ʔəh-yiʔ-ɪh*
 3sg=child=DIM=PL father NEG:EX=DIM=PL 3pl sleep-TEL-DECL
 'The little children, the little fatherless ones, they fell asleep.' (I.M.45)

In examples (76-78), the relativized noun is the subject of the relative clause and the object of the main clause. Headless variants (in which the verb is nominalized by [Filler + case marker]) such as (76) and (78) are common in this main-clause position.

- (76) [*ba ʔɪb' ham-ʔe ʔ-ní*]-*iw-ǎñ* *ʔám-ǎñ ʔǎh ʔid-té-h*
 spirit go-PERF-INFR2-FLR-OBJ 2sg-OBJ 1sg speak-FUT-DECL
 'I'll tell you the one about the evil spirit that was going along.'
 (lit. the evil-spirit-going-along one) (P.TB.1)

- (77) *tɪw bʔʔ=n'ǎñ tɪh mæy-nʔʔ-ɔw-ay*
 path work=PL.OBJ 3sg pay-give-FLR-INCH
 'He began to pay those who worked on the road.' (H.txt.64)

Note that when a headless relative clause has its own internal animate object, this can result in embedding of object-marked nominal forms within the larger utterance:

- (78) *[[tɪh=tǎh=d'əh-ǎñ] cɪw-ʔé-w-ǎñ] mæh-mæy-yóʔ=mah...*
 3sg=offspring=PL-OBJ cook-PERF-FLR-OBJ kill-payment-SEQ=REP
 'Having killed in revenge the one who had cooked his children...' (P.BY.92)

Also note that the headless (obligatorily object-marked) relative clause and the noun to which it refers may both appear in the main clause as independent, appositional NPs, as in (79). This is clearly not a headed relative clause, which would appear in the form [*pæm-ní-ip həhəh*], with the head nominal following the Dependent-marked verb phrase.

- (79) *həhəh, [pæm-ní]-iw-ǎñ, məh-d'o ʔ-yó ʔ=mah...*
 toad sit-be-FLR-OBJ beat-take-SEQ=REP
 'Having whacked the toad that was sitting there...' (P.BT.93)

In example (80), the relativized nouns are the subjects of the relative clauses and the direct object and recipient, respectively, of a ditransitive main clause:

- (80) *g'áj ya ʔám wəy-əh, [g'áj wəh]-əw-ǎñ-áh,*
 cutivara jaguar hold.back.from-DECL cutivara follow-FLR-OBJ-DECL
 'The jaguar protects the cutivara, from the one that follows the cutivara,
ya ʔambóʔ-ǎñ-áh; [təh-ǎñ kəwəʒ d'o ʔ-tu ʔ-ʔé]-w-ǎñ-áh
 dog-OBJ-DECL 3sg-OBJ eye take-go.into.liquid-PERF-OBJ-DECL
 from the dog; (the jaguar protects) the one who put his eyes in for him.'
 (H-CO.79)

Finally, the relativized nouns in (81-82) are the subjects of the relative clauses and predicate nominals in the main clauses:

- (81) *ʔāh [bɪʔ-hipǎh-ǎp]=ʔh*
 1sg work-know-DEP=MSC
 'I'm one who knows how to do (this).' (OS)
- (82) *[ʔinəh ʔɪd ʔɪd-ɪp]=ʔáý tɪh=tiʔ, nəyóʔ...*
 1pl.POSS speech speak-DEP=FEM 3sg=EMPH.TAG say-SEQ
 'Having thought, "this is one who speaks our language!"...' (T.PN.27)

B. Relativized noun is the object of the relative clause

In (83-86), the relativized noun is the object of the relative clause and the subject of the main clause. As expected (vis-à-vis the discussion above), case marking on the relative clause (whether headed or headless) corresponds to its role within the main clause, not its role within the relative clause.

- (83) *yúp [hop-yæh-æp] deh=bɔʔɔʔ=mah wægyɔh d'oʔ-ɔ́y-áh*
 that.ITG immerse-send-DEP water=spider=REP sand take-VENT-DECL
 'So that water-spider who had been sent into the water came up with some sand.'
 (LG-O.13)
- (84) *[ʔāh ʔey-ep]=ʔh wíd-yé-éh*
 1sg call-DEP=MSC arrive-enter-DECL
 'The one I called entered.' (EL)

Either object (direct object or recipient/ beneficiary) of a ditransitive relative clause can be relativized:

- (85) *[picána ya ʔamboʔ-āh d'oʔ-ham-ʔɔp] bɪʔ na ʔ-yíʔ-ɔ́y*
 cat dog-OBJ take-go-PERF-DEP rat die-TEL-DYNM
 'The rat [which the cat brought to the dog] is dead.' (EL)
- (86) *[yúð ʔm j'ek-ʔɔp]=ʔáy na ʔ-yíʔ-ɔ́y=mah*
 clothes 1pl steal-PERF-DEP=FEM die-TEL-DYNM=REP
 'The woman [from whom we stole clothes] has died, it's said.' (EL)

In (87), the relativized noun is not only the object of the relative clause, but also the object of the main clause; it appears as headless and Object-marked:

- (87) *tɪh yɔhɔy-ɔp hídnih hɔhɔh, [híd key-ʔé]-w-āh*
 3sg search-DEP 3pl.POSS toad 3pl see-PERF-FLR-OBJ
 'He's looking for their toad, the one they had been looking at.' (FS.3)

Note, however, that while case marking is obligatory when the headless relative is the main-clause object (as in 88), case marking is *not* required (although it is preferred) when the relative clause in this position is *headed* (and the referent is non-human; recall that Object-marking is elsewhere required only on human objects, see §4.3.1.2):

- (88) *[ʔāh du-ʔɔp] hɔhtɛg(-āh) tɪh b'uy-d'ɔh-yíʔ-ɔ́y*
 1sg trade-PERF-DEP canoe(-OBJ) 3sg throw-send-TEL-DYNM
 'He lost the canoe I had bought.' (EL)

In example (89), the relativized noun is the object of the relative clause and the oblique in the main clause; the head nominal is case-marked accordingly:

- (89) *wǎn' wót-óy=cud [j'uǵ-an yũ d'o-ye-ǵ-p] tegd'uh tǎh-ǎ*
 mingau stir-DYNM=INFR forest-DIR João take-enter-PERF-DEP tree small-OBL
 'She's stirring mingau with the stick that John brought from the forest.' (EL)

C. Relativized noun is oblique in relative clause

Examples of a relativized noun that is an oblique in the relative clause are given in (90), in which it is also the subject of the main clause, and in examples (91-92), in which it is the object of the main clause. Again, case-marking on the relative clause corresponds to its main-clause role.

- (90) *[tǎh=dó? muhũ?bǵp] ya ǵambo? bahad-nǎh*
 3sg=child play-HAB-DEP dog appear-NEG
 'The dog with which the child always plays has disappeared.' (EL)
- (91) *tǎh ǵǵg-ay-áh, yú-uw-ǎh, wǎd-hup-cǵp,*
 3sg drink-INCH-DECL that.ITG-FLR-OBJ eat-RFLX-COMPL
 'He drank it, after (he'd) finished eating,
- yúp [hǐd kow'ow'-tu ǵ-y'ǎ-yiǵpog-ǵé]-w-ǎh-áh*
 that.ITG 3pl squeeze-go.into.liquid-lay-TEL-EMPH1-PERF-FLR-OBJ-DECL
 that into which they had squeezed and left (the timbó juice)!' (M11)
- (92) *tǎh=dó? [tǎh muhũ?]-ũw-ǎh, picána-ǎh, mǎh-ǎy*
 3sg=child 3sg play-FLR-OBJ cat-OBJ beat-DYNM
 'The child hit the one with which he was playing, the cat.' (EL)

In (93), the relativized noun is both an oblique in the relative clause and an oblique in the main clause:

- (93) *[teǵ ǵam huǎh-ǵay-ǵ-p] b'ǎ-ǎ*
 wood 2sg carry-VENT-PERF-DEP roça-OBL
 '(She's) in the roça from which you carried wood.' (OS)

Finally, in example (94) the relativized noun is an oblique in the relative clause and a predicate nominal in the main clause:

- (94) *[ʔin wæd-æp]=teg yúw-úh*
 1pl eat-DEP=tree that.ITG-DECL
 ‘That’s the tree that we eat from!’ (OS)

18.2.3.1. Other constructions with a relationship to relative clauses

The [relative clause + head nominal] construction in Hup corresponds to the [N1 (modifier) + N2 (head)] structure of a nominal compound. In keeping with this fact, headed relative clauses resemble a sub-type of nominal compound in Hup, in which a bare verb stem (i.e. lacking a Dependent marker) acts as N1 and combines with a noun—often a bound noun—as N2; e.g. *wǎ̌ hod* (boil hole) ‘Boiling Hole’ (cf. §5.1).

Headed relative clauses and [verb + noun] compounds are both functionally and formally similar. Both are nominalizations formed from a verb stem (with or without a Dependent marker) followed by a noun, and both mean, essentially, ‘one who does Verb’. However, the tighter formal integration of the [verb + noun] unit in the compound construction, and its more lexicalized nature, iconically reflect a tighter semantic integration. While a relative clause construction indicates ‘one who does/is doing Verb’, thus reporting a (perhaps incidental) state of affairs involving the head noun, the [verb stem + noun] compound concerns the identity of the head noun: ‘one who always does/ is characterized by doing Verb’. Note that a participant that appears as a subject within the relative clause cannot occur within the noun phase in the [verb + noun] compound (and

may appear externally only as a possessor). These two constructions are compared in (95-96).

- (95) (a) *[tɬh g'ét-ep]=mɔy*
 3sg stand-DEP=house
 ‘The house where she stays/lives’ (EL)
- (b) *tɬh g'et̚=mɔy*
 3sg.POSS stand=house
 ‘The house where she always stays’ (EL)
 (i.e. someone, such as an old lady, who stays home all day, every day)
- (96) a) *[mɔy hɛp-ɛp]=wa*
 house sweep-DEP=old.woman
 ‘Woman who is sweeping the house’ (EL)
- b) *mɔy hɛp=wa*
 house sweep=old.woman
 ‘Woman who is always sweeping the house’ (OS; uttered as a joke)

Note, however, that if a [verb + noun] compound is *inalienably* possessed (in which case the nominal possessor is not followed by the Possessive marker *nɬh*; compare the alienably possessed form in 95b), the only formal difference between it and a headed relative clause is the lack of the Dependent marker:

- (97) *ɬɬn=[ní=wag] j'ɔb tɬh way-ní-h*
 1pl=be=day night 3sg go.out-INFR2-DECL
 ‘On the night of the day that we were there (lit. ‘our being-day’) he came out.’
 (S.PN.16)
- (98) *núp cɔ̃hdeh wag, yɔk cɔ̃hdeh, tɬh=[hám=wag]*
 this rainy.season day otter rainy.season 3sg=go=day
 ‘This rainy season time, the Otter Rain, its going-days’ (across the sky; referring to a constellation) (H.51)

Hup has one additional construction that should be mentioned here for the similarity it bears to the headed relative clause. This is the use of the Dynamic suffix -Vý

as an attributive marker in a small, apparently closed set of semi-frozen nominal compounds, which are formed from the combination of an adjective (or in a few cases another noun) and a noun (see §5.1.4 and §12.2), as in examples (99-100). This results in a construction that is not unlike a relative clause, except that the Dynamic *-V̄y* occurs in place of the Dependent marker, and the dependent non-verbal predicate has no accompanying arguments (whereas the relative clause typically has at least a subject within the dependent clause). The use of the Dynamic, an intrinsically verbal morpheme, as an attributive marker may be rather like the ‘verbalizing’ of a noun or adjective modifier, whereas in a relative clause one ‘nominalizes’ a verb.

- (99) *cā-wag ʔāh hɔ-ní-íy, [w'éh-éy]=ʔāy mř? j'ám...*
 other=day 1sg liver-be-DYNM far-DYNM=FEM UNDER DST.CNTR
 ‘Sometimes I think: although I am a woman who comes from far away (I am nevertheless living here like this).’ (T.PN.21)

- (100) *[nu-cá ʔ-áy]=n'añ ʔāh hup-ʔid-muħuʔ-ũti?*
 this-side-DYNM=PL.OBJ 1sg RFLX-speak-play-EMPH.TAG
 ‘I am scolded and teased by those who are from around here.’ (T.PN.21)

18.2.4. Dependent marker *-Vp*

The vowel-copying Boundary Suffix *-Vp* is Hup’s most versatile, all-purpose subordinating morpheme. As discussed in §18.2.3 above, it attaches to verb stems and acts as the default nominalizer in relative clauses. In addition to this function, the inflection of a verb stem with Dependent marker *-Vp* can create a dependent clause that functions as an adverbial modifier to the main clause. Finally, *-Vp* can also attach to both predicates and nominal arguments in main clauses, where it functions as a discourse

marker relating to general emphasis or topic (cf. §7.1.5). The adverbial and discourse-marking functions of *-Vp* are discussed in the following sub-sections.

18.2.4.1. Dependent marker and dependent clauses: adverbial function

The use of the Dependent marker to form a dependent clause contributing adverbial information is illustrated in examples (101-103) below. This may be better considered clause chaining (i.e. cosubordination), rather than subordination proper, because the dependent clause is not clearly embedded in the main clause, and the TAM values and/or illocutionary force of the verb in the main clause typically apply to that in the dependent clause. Note that the clause lacks any conjunction bearing temporal or circumstantial information. The dependent clause, which is usually fronted, normally has the same subject as the main clause, and this subject is stated only in the main clause. As the examples below illustrate, this clause-combining strategy with Dependent marker *-Vp* usually expresses coordinated, simultaneous events, in which the dependent clause provides a contextual frame for the main event.

- (101) [dēh hɔ́n-ɔ̃p]=mah, tɪh kéy-éy tɪh-áñ-áh
 water vomit-DEP=REP 3sg see-DYNM 3sg-OBJ-DECL
 ‘While (ritually) vomiting water, he saw her (reflected in the water), it’s said.’
 (M.KTW.99)

- (102) yɪkán nɛ́ [cɔkw’ə ʔid-nɪh-ɪp]
 over.there NEG:R Tukano speak-NEG-DEP
 ‘There, neither speaking Tukano

nɛ́ [portugés wiʔ-nɪh-ɪp], yɪkán ʔāh wɪd-ham-ní-h
 NEG:R Portuguese hear-NEG-DEP over.there 1sg arrive-go-INFR2-DECL
 nor understanding Portuguese, there I arrived.’ (T-PC.1)

- (103) *d'úʔ ʔāh ʔʔ-ʔh, [b'ʔ-an g'et-g'óʔ-**op**] ʔāh ʔʔ-ʔh*
 afternoon 1sg cry-DECL roça-DIR stand-go.about-DEP 1sg cry-DECL
 'I cry in the afternoon, I cry while walking in the roça.' (T.PN.20)

The subordinated clause may also relate to purpose. In such cases, the coordinated events may be conceived as involving succession (with temporal overlap), rather than strict simultaneity:

- (104) *tih cák-áy, [cadakaʔ=tip d'óʔ-**op**]*
 3sg climb-DYMN chicken=egg take-DEP
 'He climbed up to get the chicken egg.' (EL)

- (105) *tih=tāh ʔp=b'ay [hǎp kǎk-**ap**] hám-áh*
 3sg=child.father=AGAIN fish pull-DEP go-DECL
 'As for her husband, (he) went fishing.' (T.C)

This adverbial dependent-clause function of the Dependent marker may in fact be related historically to its function in relative clauses. As the discussion in §18.2.3 above illustrates, Dependent-marked relative clauses occasionally, but very rarely, appear as headless when the nominal referent is obvious from the pragmatic or discourse context. It is plausible that the Dependent-marked clause was once used exclusively as a headless relative, but over time developed a function as an adverbial clause, and that this new function has all but supplanted the earlier one.

Several features of Hup grammar provide evidence that the headless relative clause of the form [Verb-*Vp*] is indeed historically related to the adverbial use of the same construction. First, such a transition would explain the otherwise puzzling fact that headless relative clauses are extremely rare as *subjects* of the main clause (where they must take the form [Verb-*Vp*]), but are ubiquitous as objects (and to a lesser extent as

obliques) in the main clause (where they are directly inflected with the nominalizing case-markers Object *-ǎn* and Oblique *-#*; see §18.2.3 above).

Second, clauses having a plural-marked subject (usually animate entities only, cf. §4.4.1) are formed differently from those with singular subjects in adverbial clauses, as well as in relative clauses. As discussed in §18.2.3 above, relative clauses—which are nominals by definition—can be formed via the addition of the Plural marker *=d’əh* directly to the verb stem. The Plural marker accordingly acts as a kind of (pseudo-) head nominal (akin to a bound noun), and can completely replace both the Dependent marker and any head nominal that would be present in the singular form.²⁰¹ This pattern is essentially carried over to the adverbial clauses: where the adverbial clause with a singular subject is formed via [Verb-*Vp*], the adverbial clause with a plural (animate) subject is formed via [Verb=*d’əh*].

Moreover, the interpretation of the *plural*-marked dependent clause may be ambiguous between a relative clause and an adverbial clause. Both readings are easily available in example (106). In (107-108), the adverbial-type interpretation is preferable, but the relative clause interpretation is also possible if understood as non-restrictive.

- (106) [*deh=hi-wáy* *hám=d’əh*] *yúp*, *həpkəʔk*, *məmb’əʔk* *híd tən-hám-áh*
 water=FACT-go.out go= PL that.ITG fish.pull iron.pot 3pl hold-go-DECL
 ‘Going out in the igapó, they bring along fishhooks and pots.’
 ‘Those who go out in the igapó, they bring along fishhooks and pots.’ (P.F)

²⁰¹ For example (as discussed in §18.2.3), the singular relative clause *kéy-ep=ʔh* ‘a man/person who sees’ would become the plural *kéy=d’əh* ‘those who see’.

- (107) *ʔín wíd-ham-bí-ay-áh, [j'ák=b'ók kəd=d'əh], koʔap b'ók*
 1pl arrive-go-HAB-INCH-DECL buriti=mud pass=PL two swamp
 'We always arrive (there), (after) passing the buriti-swamps, two swamps.'
 'We always arrive (there), we who pass the buriti-swamps, two swamps.' (S.PN)
- (108) *mǎy m'æc-yíʔ-ǎy j'ám ʔín-ih, [tíh-ǎn tɔʔəh-wíd-d'ób=d'əh]-ay*
 house stuff-TEL-DYNM DST.CNTR 1pl-DECL 3sg-OBJ run-arrive-go.to.river=PL-INCH
 'We all squeezed into the house, (after) fleeing from him toward the river.'
 'We all squeezed into the house, we who had fled from him toward the river.'
 (P.Sp.11)

This kind of ambiguity between a relative clause and an adverbial was probably once available in the singular [Verb-*Vp*] dependent clauses as well. Over time, however, Hup speakers presumably came to favor the adverbial interpretation, and came close to abandoning the relative clause interpretation, possibly motivated by a desire to avoid such ambiguity. However, perhaps because of the lower frequency of the plural construction in discourse, the ambiguity remained in those clauses inflected with the plural marker—which are freely used both as relative clauses and as adverbials. Moreover, as mentioned in §18.2.3 above, there is cross-linguistic precedent for this kind of ambiguity between an adverbial clause and a relative clause; the 'adjoined relative clause' found in a number of Australian languages exhibits much the same kind of phenomenon (Hale 1976).

While this interpretation of a historical relationship between the adverbial and the relative-clause uses of the Dependent marker accounts for most of the data, it is worth noting that speakers do occasionally use the -*Vp* Dependent marker on adverbial-type dependent clauses even when these have a plural subject, as in example (109). The most likely explanation for this apparent discrepancy is that the adverbial-marking function of the Dependent marker—while deriving both synchronically and diachronically from its

function as a marker of a relative clause—has nonetheless grammaticalized (at least marginally) into an autonomous adverbial, independent of the relative clause. In fact, as the following discussion (§18.2.4.2) will illustrate, the grammaticalization has not stopped there, but has moved beyond the bounds of the sentence and into the discourse.

- (109) *j'əb-tæ-yi? d'oʔ-g'et-d'óʔ-op, nút hid hi-cʔp-ʔh*
 night-still-TEL take-stand-take-DEP here 3pl FACT-COMPL-DECL
 '(After) setting it in (the pot to cook) in the morning, they finish here' (points to sky to indicate noon). (M.C.74)

18.2.4.2. Dependent marker and main clauses: emphasis and purpose

Verbal predicates marked with the *-Vp* Dependent marker are not limited to dependent clauses, but can also function as main clauses. The choice of the Dependent marker form over another Boundary Suffix is not yet fully understood, but it appears to mark the clause as emphatic vis-à-vis the discourse, and can also relate to purpose or intention.

Examples of the use of *-Vp* in main clauses are given in the following examples.

Example (110) is a statement of purpose, vis-à-vis the speaker's present activity of walking down to the stream; examples (111-12) are emphatic statements relating the utterance to the discourse or pragmatic context (in (111), the statement relates to some Hup girls' wanting to accompany me to the US; in (112), to a young man's failure to participate in the rush to prepare vines for sale to an approaching river boat).

- (110) *j'ʃm-ɔp, ʔǎh-ǎh*
 bathe-DEP 1sg-DECL
 'I'm going for a bath.' (OS)
- (111) *nǎŋ-ǎn tǎh tɔn-ham-pog-té-p, cún'! ham-pog-tég nǎŋ-áh ?!*
 2pl-OBJ 3sg hold-go-EMPH1-FUT-DEP INTERJ go-EMPH1-FUT 2pl-FOC
 'She really will take you all along! Would you all really go?!' (B.Cv.1-3)

- (112) *nĩŋ j'ĩp-d'oʔ-yĩʔ nĩŋ=hin! tĩh=pæcæw mĩʔ ʔam j'ĩp-nĩh-ĩp!*
 2pl tie-take-TEL.IMP 2pl=also 3sg=youth UNDER 2sg tie-NEG-DEP
 'You all tie up (the cipó vines), you all too! Even though you're young you're not
 tying (them) up!' (TD.Cv04.43)

The most likely explanation for this dual function of the Subordinated verb phrase in both dependent and main clauses is a historical one: the Dependent-marked clause has probably migrated out of the sentence and into the discourse. This development has precedent in other Native American languages; as Mithun (1999: 267) notes, “a not uncommon historical change is a gradual increase in the use of dependent verb forms in independent sentences.” Mithun gives the example of the subordinative suffix in Central Alaskan Yup'ik, which is prevalent in connected speech, especially narrative, where it marks *pragmatic* (rather than syntactic) linkage among clauses within the higher-level discourse unit.

In Hup, the discourse-level use of the Dependent suffix has developed somewhat differently from that in Yup'ik. It is relatively infrequent in narrative, but very common in conversation. Use of this form in main clauses is probably an extension of its use to mark adverbial clauses (see §18.2.4.1 above); in this context, the adverbial dependent clause is typically framed by the event referred to in the main clause. In conversation, however (as opposed to narrative), this ‘framing’ activity is normally recoverable from the pragmatic context; in other words, the frame is already obvious to the addressee and does not need to be explicitly stated. Over time, speakers’ choice to leave the main clause implicit and state only the dependent clause would have led to reanalysis of the Subordinated verb form as appropriate in main clauses. Functionally, too, there is still some overlap; compare the similar purpose-related uses of the *Vp*-marked main clauses in

examples like (110) with those of the *Vp*-marked adverbial clauses in examples (104-105) above.

With a plural subject, the Dependent marker is typically replaced by the Plural suffix =*d'əh* (as in example 113, which also relates to purpose), as it is in dependent (adverbial and relative) clauses (see discussion in §18.2.4.1 above). It is possible that such a historical transition, whereby relative clauses taking the plural marker move step by step out of a dependent relationship and into the discourse where they function as main clauses, could be one of the mechanisms by which languages develop number agreement on verbs.

- (113) *hám-áy, kéy=d'əh !*
 go-INCH.IMP see=PL
 'Come on, we're going to see!' (OS)

Clauses marked with the *-Vp* suffix and acting as main clauses can themselves occur in a coordinated relationship—as opposed to a (co)subordinated relationship—with another main clause. In this case, the conjunction *minʔh* 'also' signals that the combination is one of coordination, rather than (co)subordination of a *Vp*-marked dependent clause.²⁰² Examples of this conjunction are very few in my corpus, and are limited to this context only.

- (114) *pátima b'óy-op hám-áy, bóda tác-ap minʔh*
 Fatima learn-DEP go-DYNM ball kick-DEP ALSO
 'Fatima is going to to study (i.e. to school), and she will also (i.e. afterwards) play ball.' (EL)

²⁰² A possible etymology of *minʔh* is a deverbalization of *mi-*, which currently exists as a dialectal variant of the Factitive prefix *hi-*, and the verb root *nʔh-* 'be like'.

- (115) *hám-áy, yúb d'up-ʔay-nǝŋ, dōǵ b'ǝ=d'ǝh minǝ*
 go-INCH.IMP cipó pull.vines-VENT-COOP vapisuna cut.down=PL ALSO
 'Let's go, we'll pull cipó vines, and also cut down vapisuna (to get the fruit).'
 (EL)

In addition to occurring on the predicate of a main clause, the Dependent marker can also occur on a clause-final subject of a main clause. As discussed in §17.2, subjects that follow the verb in the declarative clause are obligatorily marked with a suffix, most commonly the Declarative *-Vh*, but also frequently the Dependent *-Vp*. When the clause-final subject NP takes the Dependent marker, this always requires a marker of focus or contrast (i.e. Focus *-áh* or related forms) as a marker on the preceding predicate (cf. §15.2.3). Note that the Dependent marker *-Vp* is stressed when it appears on clause-final subjects, whereas in most other environments it is unstressed. Again, the function of the Dependent marker in this context appears to be one of emphasis.

- (116) *náw=yiʔ tok-póg=hǝʔ, cǝc,*
 good=TEL pound-EMPH1=TAG2 INTERJ
 'Pound (the coca) carefully, darn it,
ʔǝg-na ʔ-pó-y=cud-áh ʔám-áp!
 drink-lose.consciousness-EMPH1-DYNM=INFR-FOC 2sg-DEP
 'you're drunk!' (B-Conv.2.4)

- (117) *n'íp g'ét-ep=wǝd-áh cǝw-ǎp*
 that stand-DEP-RESP-FOC other-DEP
 'That other old fellow standing there' (serve drink to him!) (B-Cv.2.4)

- (118) *yǝ-nǝh-pó-y j'ǎh ʔǝn-ǝp!*
 that.ITG-be.like-EMPH1-DYNM DST.CNTR 1pl-DEP
 'It was thus for us too!' (TD.Cv.98)

The Dependent marker *-Vp* occurs not only as a clause-final marker on main clauses, but also appears on individual nominal arguments (examples 119-120). These can appear within the clause, but are often fronted and even marginally removed from the

main clause by a slight pause; as such they may be restated in the main clause as a

pronoun. Here the Dependent marker is apparently acting as a topic marker, as discussed in §7.1.5.

- (119) *g'æḡ=tæh-ǎp, taḥ wæḏ=hɔb-ɔt=mah tḥ hib'áh-atḥ*
 bone=son-DEP tapir food=HOLLOW-OBL=REP 3sg be.created-EMPH2
 'So as for Bone-Son, they say he was born in a cow-trough' (M.KTH)

- (120) *ḥāh-ǎp ḥīd-ān=yi? nɔɔ j'ám-ti?*
 1sg-DEP 3pl-OBJ=TEL say-DYNM DST.CNTR-EMPH.TAG
 'As for me, I said (so) to them.' (TD.Cv.102)

The highly promiscuous nature of the Dependent marker is such that in certain cases it can actually appear on every constituent of a clause, producing a strongly emphatic utterance:

- (121) *ḥāh-ǎp ḥəg-naʔ-m'uy-nḥ j'ám-áp,*
 1sg-DEP drink-lose.consciousness-do.a.lot-NEG DST.CNTR-DEP
 'As for me, I didn't get very drunk on that occasion,
- nī-d'ḥ-ǎp dóʔ=d'ḥ-ǎp ḥəg-naʔ-áy j'ám-áp!*
 this-PL-DEP child-PL-DEP drink-lose.consciousness-DYNM DST.CNTR-DEP
 but as for those children, they did get drunk then!' (TD.Cv.97)

As a final note to this section, an idiosyncratic form *-áp* (with a fixed lexical vowel [a]) is encountered in the Tat Deh dialect (in addition to the Dependent marker *-Vp*, which also exists). The form *-áp* may bear a relationship to the Dependent marker, and could perhaps be a reduced form of Focus *-áh* + Dependent *-Vp* (although at this point this is purely speculative). Speakers from Barreira say that the equivalent emphatic form in their dialect is *páh-áp* (Proximate contrast particle + Dependent marker *-Vp*):

- (122) a) Tat Deh dialect:
ḥāh-ǎp ham-tég-áp
 1sg-DEP go-FUT-FOC.DEP?
 'I'm going (too)!'

b) Barreira dialect:

ʔáɦ=hin ham-tég páh-áp!
 1sg=also go-FUT PRX.CNTR-DEP
 'I'm going too!' (EL)

18.2.5. Nominalizer *-n'ɦ* and complementation

The nominalizing Boundary Suffix *-n'ɦ*²⁰³ attaches to verb stems and produces a dependent clause. This clause typically acts as a complement, but can also function as an adverbial clause.

Although they are nominalizations, clauses formed by *-n'ɦ* do not take nominal morphology in general, such as distinctions of case and number. Other than the Declarative marker (in its capacity relating to clause coordination), *-n'ɦ* is not followed by other Boundary Suffixes; however, it can be preceded by certain Inner and consonant-initial Boundary Suffixes, such as Perfective *-ʔeʔ-*, Negative *-nɦ*, and Future/purpose *-teg*. Clause combinations involving *-n'ɦ* demonstrate no particular sensitivity to switch-reference; the two clauses may have either the same subject or different subject, with no special indication of either.

The following examples illustrate the use of *-n'ɦ* to form a complement clause. As in these examples, complements involving *-n'ɦ* almost always act as objects of the main clause; however, they can in a few cases act as subjects (see below). In (123-24) *-n'ɦ* produces a nominalization relating to the action or state described by the verb:

²⁰³ The suffix *-n'ɦ* takes rising tone; both it and the preceding syllable of the stem are stressed.

- (123) *ʔāh hipāh-nʔh, [nāw ʔam ʔid-nʔh]-ʔh*
 1sg know-NEG good 2sg speak-NMZ-DECL
 ‘I didn’t know you spoke (Portuguese) so well!’ (OS)

- (124) *[tʔh tɔʔh-nʔh] ʔāh tuk-nʔh=hɔ*
 3sg run-NMZ 1sg want-NEG=NONVIS
 ‘I don’t want him to run (away).’ (EL)

In addition to forming action/state nominalizations, complement clauses with *-nʔh* can also denote entities or objects that participate in the nominalized clause (examples 125-26), and in this usage they are semantically like headless relatives. These constructions function much like Hup’s other headless relative clauses in object position, which have the form [Verb + Filler *Vw* + Object *-aʔh*] (cf. §18.2.3 above). The main difference between these two strategies is that the object-marked headless relative clauses must be specific and are usually also definite, and they refer to a particular entity and encode animacy and number (in keeping with the general use of the object marker in Hup, see §4.3.1). Complements with *-nʔh* functioning as headless relatives, on the other hand, typically have generic referents; the speaker need not clarify animacy and number, and the complement can refer to an idea, a way of doing something, a mass or generic entity, etc.

- (125) *[ʔāh wiʔ-ʔéʔ-nʔh], ʔāh ʔid-té-h*
 1sg hear-PERF-NMZ 1sg speak-FUT-DECL
 ‘That which I heard, I will tell.’ (LG-O9)

- (126) *[dóʔ=dʔəh, yaʔamhoʔ=dʔəh yʔəʔ-nʔh], bʔuy-dʔəh-yiʔ*
 child=PL dog=PL defecate-NMZ throw-send-TEL.IMP
 ‘What dogs or kids defecate, throw (it) out (of the living area).’ (EL)

Note that a sentence may involve multiple, embedded complements marked with *-nʔh*:

- (127) *[[hĩ-ní-n'ḥ] ʔam tən-næn-ʔéʔ-n'ḥ], ʔam pahá-áh*
 only-be-NMZ 2sg hold-come-PERF-NMZ 2sg share-DECL
 'Whatever it was you brought, you shared.' (I-HM3)

When they stand in for a nominal referent, *-n'ḥ* nominalizations can be followed by a bound or classifying noun in a nominal compound construction, as in (128). In this case, *-n'ḥ* forms a headed relative clause, in which it acts much like (and is often interchangeable with) the Dependent marker *-Vp*.

- (128) *[ʔāh d'óʔ-n'ḥ]=g'æt=yĩʔ tĩh d'óʔ-óh*
 1sg take-NMZ=LEAF=TEL 3sg take-DECL
 'He took the same book that I took.' (EL)

In addition to acting as objects of the matrix clause, as in the examples above, clauses nominalized with *-n'ḥ* can also act as subjects. However, this function is much more limited. The most common context for such subject nominalizations is a negative clause in which the predicate is the Negative Existence particle *pǎ*, which occurs strictly with nominal subjects in Hup:

- (129) *hṣpkǎk d'óʔ-g'ět=d'əh, híd ham-yĩʔ-ḥ,*
 fish.pull take-stand=PL 3pl go-TEL-DECL
 'Those who set down fishhooks, they go (along),
- ʔayup mĩnḥṣ=yĩʔ, [cǎʔāh ham-tég-n'ḥ] pǎ=yĩʔ*
 one straight=TEL other.side go-FUT-NMZ NEG:EX=TEL
 just straight ahead, there is no going from side to side.' (P-F.125)

- (130) *[nɔ-tég-n'ḥ] pǎ, núp mandukodí-iw-ih*
 say-FUT/PURP-NMZ NEG:EX this Mandukori-FLR-DECL
 'He has nothing like that to say, that Mandukori.' (B.Cv.99)

However, nominalizations formed with *-n'ǝh* also occasionally act as subjects in other contexts, such as the following predicate adjective clause:

- (131) *ʔám=báb' dǝb-tǝǎ, dǝb dǝʔ=mǝǎh [ʔám d'oʔ-ye-tǝǎʔ-n'ǝh]*
 2sg-sibling many-COND much VDIM=DIM 2sg take-enter-CNTRFCT-NMZ
 'If you had many siblings, what you bring in would be a lot.' (C-Dab)

In addition to acting as a core argument of the main clause, a *-n'ǝh* nominalization can also occur outside the clause or on its periphery. In (132), for example, *-n'ǝh* creates a preposed nominal topic, which is restated as an oblique (pronoun) in the main clause:

- (132) *[ʔǝn key-hipǎh-n'ǝh-n'ǝh], tǝh-ǝ nɔʔ-nǝh bǝǝ ʔǝn n'uǝh-úh*
 1pl see-know-NEG-NMZ 3sg-OBL give-NEG HAB 1pl CNTR-DECL
 'Our not being able to read, with this (it) doesn't go right (give) for us.' (P-Sp.13)

While nominalizations with *-n'ǝh* usually appear in the place of nominal arguments, they can also form adverbial clauses relating to manner or time, as in (133-35). The use of *-n'ǝh* with an adjective root in (133) is consistent with the generally verb-like nature of adjectives in Hup (cf. §10.1).

- (133) *[cǝpm'ǝh-n'ǝh] yok-hi-g'et-yóʔ=mah, tǝh=tǝh pǝǝ-ót tǝh yók-ay-áh*
 little-NMZ poke-FACT-stand-SEQ=REP 3sg=string big-OBL 3sg poke-INCH-DECL
 'Having poked him out in a small way, he poked him with a big strand (of thorns)!' (P.BY.91)
- (134) *[ʔám hám-n'ǝh], hǝhtǝǝg-ét hám*
 2sg go-NMZ canoe-OBL go.IMP
 '(Since) you're going, go by canoe.' (EL)

- (135) *yúp huỹ ʔah [j'əb næn-n'ɬh], [wædɔ nɔh-cud-yé-ay-n'ɬh]=mah,*
 that.ITG after night come-NMZ sun fall-be.inside-enter-INCH-NMZ=REP
 'So after this, at nightfall, when the sun was going down, they say,

tɬh-ǎn ba ʔɬb' ye-yɬʔ-ay-áh
 3sg-OBJ spirit enter-TEL-INCH-DECL
 an evil spirit came to her (place.)' (P.BT.93)

Nominalizations with *-n'ɬh* are also found in appositional expressions with nouns, typically forming independent, sub-clausal units like those in (136-38). This strategy is used when providing an explanation or additional information about an entity, particularly when the addressee is not familiar with the referent when it is first named.

- (136) *mũh, [hu' mæh-n'ɬh]*
 arrow animal kill-NMZ
 'An arrow; what animals are killed with' (EL)

- (137) *mɬh, [híd g'íg-n'ɬh]*
 inambu 3pl shoot.arrow-NMZ
 'An inambu; what they shoot' (OS)

- (138) *ya ʔám cɬhdeh, [híd nɔ-n'ɬh]*
 jaguar rainy.season 3pl say-NMZ
 'Jaguar-rain, as they call it' (OS)

Finally, the nominalizer *-n'ɬh* also occurs as a bound element with demonstratives, especially those referring to mass or generic nouns (see §6.3): *nɬ-n'ɬh* 'this (mass), these'; *n'í-n'ɬh* 'that (mass), those'; *yɬ-n'ɬh* 'that (mass), those (intangible)'; *hɬ-n'ɬh* 'what'; *cǎ-n'ɬh* 'another (mass)'.

18.2.6. Dependent clauses contributing adverbial information

While the discussion in the preceding sections has focused mainly on Hup's strategies for creating dependent clauses that can function as core arguments of the verb, this section

deals with the range of dependent clauses that act as adjuncts. There is a considerable emphasis on temporality in Hup, by which dependent clauses relate to the simultaneity or sequence of events. However, a number of these adjunct strategies are multifunctional; several have spatial as well as temporal functions, and a few also act to relate the proposition to the wider discourse context. In addition, Hup has a dependent clause construction for expressing the reason for an event.

Several other types of dependent adverbial-type expressions have been discussed earlier in this chapter or in previous chapters. As we saw above, the Dependent marker *-Vp* can form adverbial clauses relating to simultaneous, coordinated events (§18.2.4), and the Nominalizer *-n'ʔh* can convey information in a dependent clause relating to time or manner of event (§18.2.5). Conditional expressions with the verbal suffix *-taʔn* (§14.1) also function as dependent (adjunct) clauses, as do purpose adverbials involving *-teg* (§13.1). Finally, Hup's simple adverbial expressions that do not involve clause linking are discussed in §10.2.

The verbal suffixes to be discussed in this section, all of which are used to form adverbial-type dependent clauses, are summarized in Table 18.2:

Table 18.2. Adverbial clause markers in Hup

Function	Form	Gloss
Simultaneity:		
same time/place	- <i>Vt</i>	Oblique case marker
prolonged duration	- <i>an-ay</i>	Object? marker + Inchoative
at moment of	- <i>kamí</i>	moment of
at time of, physically/conceptually separate	- <i>mĩ?</i>	‘Under’ (also appears as a locative postposition)
Sequential	- <i>yó?</i>	Sequential
Spatial:		
at place of	- <i>Vt</i>	Oblique case marker
under	- <i>mĩ?</i>	‘Under’
in direction/at place of	- <i>an</i>	Directional case marker
Reason	<i>keyó?</i>	Cause
General adverbial function (marginal)	= <i>yĩ?</i>	‘Telic’ (elsewhere a marker of telicity on verbs)

18.2.6.1. Adverbial (Telic) =*yĩ?* with adverbial clauses

The adverbial function of the form =*yĩ?* (elsewhere a Telic suffix on verbs (§12.6) and a contrastive emphasis marker on nominals (§7.1.2)) has already been discussed in §10.2. As addressed in §10.2, =*yĩ?* appears on a number of adverbial clauses—including, but not limited to, those that have no other morphological indicator of their adverbial status—but in most cases is at least semi-optional.²⁰⁴ This section examines the use of =*yĩ?* in marking an entire clause as an adverbial, whereas §10.2 focuses on its use on non-clausal adverbial expressions.

²⁰⁴ Note that -*yĩ?* appears to be sensitive to word-level stress patterns; it is unstressed when it follows a stressed syllable, but stressed following an unstressed syllable.

Telic =*yíʔ* can optionally follow the Dependent marker -*Vp* on an adverbial clause (cf. §18.2.4.1), as in examples (139-140). In these examples, =*yíʔ* apparently contributes emphasis semantics to the adverbial expression, much as it does when associating with nominal arguments within the clause:

- (139) [*tɪh-ǎn ʔéy-ep*]=*yíʔ* *tɪh* *wid-ye-yíʔ-ɪh*
 3sg-OBJ call-DEP=TEL 3sg arrive-enter-TEL-DECL
 ‘He entered, calling her.’ (EL)

- (140) *ʔdia=b’ay* [*ʔəg-náʔ-ap*]=*yíʔ* *hám-áh*
 Elias=FOC drink-lose.consciousness-DEP=TEL go-DECL
 ‘Elias went while drunk.’ (B.Cv.136)

When the adverbial clause marked with the Dependent marker *follows* the main clause—a non-canonical position (in contrast to the above examples, where it precedes the main clause)—it is usually marked with Telic =*yíʔ*, and some consultants even judge this extra adverbial marker as near-obligatory here. In this context, =*yíʔ* apparently functions to mark the dependent clause as adverbial vis-à-vis the preceding main clause, despite their atypical order. This is the case in example (141) (in which =*yíʔ* also occurs on several other adverbial expressions within the same utterance).

- (141) *yíʔ=yíʔ ʔam hǎʔah=yíʔ ʔam=ʔin nɪh b’ǎ-ǎh, [ʔam kéy-ep]=yíʔ*
 thus=TEL 2sg beyond=TEL 2sg=mother POSS roça-DECL 2sg see-DEP=TEL
 ‘Thus in front of you will be your mother’s roça, as you’ve seen it (before).’
 (H.TY.83)

The marker =*yíʔ* has a similar adverbial-marking function in (142), in which it occurs on (otherwise morphologically unmarked) adverbial expressions that *follow* the main clause, including an adverbial formed from the predicative negative particle *pǎ*.

- (142) *hɔ̃pkəʃk d'oʔ-g'et=d'əh, hid ham-yiʔ-ɦ, [ʔayup mɪnɦɪŋ]=yiʔ,*
 fish.pull take-stand=PL 3pl go-TEL-DECL one straight=TEL
 'Those who set down fishhooks, they go (along),

[cãʔãh ham-tég-n'ɦ pã]=yiʔ
 other.side go-FUT-NMZ NEG:EX=TEL
 'just straight ahead, without going from side to side.' (P-F.125)

Finally, the form =*yiʔ* also occurs (though is not obligatory) on adverbial expressions involving negation. This is especially common in negative imperative expressions, in which the imperative mood and the negation cannot be expressed in the same clause; usually, therefore, the negative must be realized as an adverbial clause, and the imperative is marked on the 'dummy' verb *ni-* 'be', as in (143) (cf. §17.5.1). However, =*yiʔ* can mark a variety of other negative adverbial expressions as well, as in (144-45). (Note that =*yiʔ* also appears in its verbal telic function elsewhere in these examples.)

- (143) *ham-nɦ=yiʔ niɦ !*
 go-NEG=TEL be.IMP
 'Don't go!' (OS)

- (144) *bɪg-nɦ=yiʔ b'uy-d'əh-yiʔ*
 long.time-NEG=TEL throw-send.away-TEL.IMP
 'Throw it out right away.' (EL)

- (145) *ham-nɦ=yiʔ ni-tubud-yiʔ-ɦy!*
 go-NEG=TEL be-EMPH-TEL-DYNM
 '(I) never go at all!' (AL.PN)

18.2.6.2. The case-marked clause as an adverbial

As the discussion in §18.2.3 above illustrates, Hup's Object and Oblique case markers can combine directly (together with the Filler syllable) with verb stems to form headless

relative clauses. This section focuses on the similar ability of verb stems to take either of the two oblique case markers ($-V\acute{t}$ and Directional $-an$) to form adverbial clauses relating to the place, time, or even manner of the event. Such an adverbial clause is not switch-reference sensitive; it and the main clause may have either the same or different subjects.

Unlike oblique headless relative clauses (which take the combination of Filler $-Vw-$ and the Oblique variant $-ḥ$), most adverbial clauses involving the generic Oblique marker use the standard form $-V\acute{t}$, which occurs elsewhere on nouns to indicate comitative, locational, or instrumental relationships (cf. §4.3.4). Consultants do not often accept the $-Vw-ḥ$ form with adverbial clauses, whereas it is the only form possible with oblique headless relatives (§18.2.3). However, the $-Vw-ḥ$ variant is optionally possible for adverbials in some cases, as the examples below illustrate; the factors governing the different patterns of use of these two forms ($-Vw-ḥ$ vs. $-V\acute{t}$) in this context are at this point not well understood. It may be that a historical connection exists between the two types of Oblique-marked dependent clause—the headless relative in oblique position in the main clause and the adverbial clause relating to time and location—just as a connection appears to exist between the headless relative in main-clause subject position (marked with $-Vp$) and the formally identical adverbial clause, as discussed above (§18.2.4.1).

Adverbial clauses formed from the combination of the generic Oblique marker $-V\acute{t}$ (or $-Vw-ḥ$) and a verb stem are quite common in Hup. One function of these relates to location, as examples (146-48) illustrate; this is in keeping with the locative function of

-*V́t* as a case marker on nouns. In the following examples, the -*Vw-#* variant chosen by the speaker in (146) is judged to be interchangeable with -*V́t* by consultants, but they claim -*V́t* to be the only possibility in (147-48).

- (146) *tĩh wɔn-hám-ay-áh, té [tod pǒg g'et-pó-ow-#]=mah*
 3sg follow-go-INCH-DECL until hollow big stand-EMPH1-FLR-OBL=REP
 'He followed (it), to (the place) where a big hollow tree stood, it's said.' (P.TB.2)
- (147) *cɔp-yóʔ, té [ciwĩb nɔwá=mí híd nɔʔ], ʔĩn tuh-d'oʔ-bɛh*
 go.from.river-SEQ until bacaba sprout=creek 3pl say-OBL 1pl pause-take-HAB-DECL
 'We went up from the river, until we stopped to rest, as always, at (the place which) they call Bacaba-sprout Creek.' (S.PN.15)
- (148) *hɔ̃p pɔʔ-ɛ ʔāh g'āʔ-g'oʔ-ʔɛh, [húp pā-áʔ], j'ũg kakāh-an*
 fish dabacuri-OBL 1sg be.suspended-go.about-PERF-DECL person NEG:EX-OBL forest between-DIR
 'I used to live in (the place called) Fish-Dabacuri, where there are no people, in the middle of the forest.' (T.PN.26)

Examples (149-52) illustrate the use of the [Verb-*V́t*] construction to form temporal adverbials relating to simultaneity. This use presupposes not only the same time, but also the same location, and may plausibly represent an extension of the locative function of the case-marker -*V́t*.

- (149) *yúp=mah [tĩh cɛg-pɛ-ɛ]=mah,*
 that.ITG=REP 3sg net-go.upriver-OBL=REP
 'Thus, it's said, (at the time) when she was going upstream netting (shrimp),
- d'ób=n'ān tĩh kək-w'ob-pɛ-ní-h, húp=ʔĩh-ĩh*
 acará=PL.OBJ 3sg pull-set-go.upriver-INFR2-DECL person=MSC-DECL
 he was fishing acará fish and setting them out for her, a man.' (I.M.43)
- (150) *[j'ík tĩh cĩh-wĩʔ-#]=mah tĩh naʔ-yĩʔ-ĩh*
 smoke 3sg scent-hear-OBL=REP 3sg die-TEL-DECL
 '(At the moment) when she smelled the smoke, it's said, she died.' (E.SP.5)

- (151) [*wəh=d'əh ʔǎñ híd ʔǐd-ǎ*] ʔǎh ʔíd-bǐh
 River.Indian=PL 1sg.OBL 3pl speak-OBL 1sg speak-HAB
 'I always speak (Tukano) (at the times) when the River Indians speak to me.' (int)
- (152) *təh=n'ǎñ* [*ʔǎh kéy-ét*], *g'íg-íy*
 pig=PL.OBJ 1sg see-OBL shoot.arrow-DYNM
 'I shot pigs (at the times), when (I) saw them.' (A.int.52)

The Oblique adverbial construction can also relate to manner and purpose, as in (153-56).

Both the *-Vw-ǎ* and the *-Vt* variants of the Oblique marker are used in these examples.²⁰⁵

- (153) [*yúp=yíʔ nǐh-ǎw-ǎ*] *tǐh ʔey-yəhəy-ní-h*
 that.ITG=TEL be.like-FLR-OBL 3sg call-search-INFR2-DECL
 'In this way he went calling and searching.' (FS.4)
- (154) [*yúp tǐh ʔəg-ná ʔaw-ǎ*]=*yíʔ=mah tǐh ʔəh-kədham-yíʔ ní-ay-áh*
 that.ITG 3sg drink-die-FLR-OBL=TEL=REP 3sg sleep-pass.go-TEL be-INCH-DECL
 'So, in his drunkenness (poisoned state), he fell immediately to sleep.' (I.M.12)
- (155) [*nukán híd hitoyʔ-d'óʔ-ót*], *hǐd-ǎñ g'əʔ-tuk-yóʔ=mah*,
 over.here 3pl FACT:carry.on.head-take-OBL 3pl-OBJ bite-want-SEQ=REP
 'So that they would carry him on their heads, since he wanted to bite them,
- yǐ tǐh=báb'=n'ǎñ, yǐ tǐh ʔǐd-ǐh*
 thus 3sg=sibling=PL.OBJ thus 3sg speak-DECL
 he spoke thus to his kinsmen.' (H.R.107)
- (156) *ʔəg-ǎ híd dóh-op*, [*hup-hipāh-nǐh híd ní-té*]-*t*
 drink-OBL 3pl enchant-DEP RFLX-know-NEG 3pl be-FUT-OBL
 'They put a spell into the drink, so that they would be (made) senseless.'
 (H.YP.74)

Hup's second oblique marker *-an* 'Directional' (an unstressed form that is probably related historically to the Object marker *-ǎñ*; see §4.3.2) also combines with verb stems to form dependent clauses, as in the following examples. In keeping with its function with lexical nouns, *-an* with dependent clauses indicates a location or directional

²⁰⁵ Their potential for interchangeability here is not clear.

goal. As in the case of the Oblique-marked clauses above, the Filler syllable -Vw- is not required, and is in fact ungrammatical here.

- (157) *té [tĩh ní-an]=mah híd d'oʔ-wíd-yé-éh*
 until 3sg be-DIR=REP 3pl take-arrive-enter-DECL
 'They led (him) to the place where he (evil spirit) lived, it's said.' (H.BY.88)

- (158) *teghẽ ʔǎy=wa j'ám ʔĩn-ǎñ b'oy-cum-ni-yǎñ-ǎñ,*
 fire=FEM=old.woman DST.CNTR 1pl-OBJ teach-begin-be-FRUST-DECL
 'A non-Indian woman began to teach us (in vain),

[n'ikán ʔĩn ní-an], [yíyĩw deh-an ʔĩn ní-an]
 over.there 1pl be-DIR ant.sp. water-DIR 1pl be-DIR
 there where we lived, where we lived at Yíyĩw Ant Creek.' (P.B.7)

- (159) *[tĩw deh híd nʒan], bíʔ-g'oʔ-ʔay ní-pĩd-ĩh*
 Brazil.nut water 3pl say-DIR work-go.about-VENT be-DIST-DECL
 'We went to work at the place they call Rio Castanha.' (P.B.12)

What is apparently the same form (Directional marker *-an*) also occurs in a number of extended expressions in Hup (see §4.3.3), two of which can appear with dependent clauses in an adverbial function. The more common of these is the form *-an-ay*, which combines Directional *-an* and the Inchoative aspect suffix *-ay*,²⁰⁶ and—like adverbial *-an* on its own—attaches directly to the verb stem. It indicates simultaneity where events are concurrent for a relatively long period of time (i.e. 'during, while'), and it implies that the event described in the main clause is initiated during the course of the event described in the adverbial clause. The focus of this construction is on the *duration* of the event or state, and it is therefore inherently Dynamic (compare *kamí* 'at the moment of', which focuses on a point in time and is inherently perfective; §18.2.6.5 below). Adverbial clauses with *-an-ay* are illustrated in examples (160-61):

- (160) *yíkáń bǵ [ǵáh ní-an-ay] yúp, yĩ-n'ĩh wĩǵ-yó? ǵáh ǵíd-ay-áh*
 over.there long.time 1sg be-DIR-INCH that.ITG that.ITG-NMZ hear-SEQ 1sg speak-INCH-DECL
 ‘During the long time I was there, having heard these (Portuguese and Tukano), I began to speak (them).’ (T-PC)

- (161) *kək-w'ob-pæ-yó? [té tĩh=g'æt ǵóh-an-ay]=mah,*
 pull-set-go.upriver-SEQ until 3sg=end-DIR-INCH=REP
 ‘Having fished while going upriver, as she was reaching the end,

tiyĩǵ=b'ay key-d'ob-g'et-ní-ay-áh
 man=AGAIN see-go.to.river-stand-be-INCH-DECL
 a man was standing (on the bank) looking down at her.’ (I-M.1)

Another adverbial expression involves the combination of *-an*²⁰⁷ and the Emphatic Coordinator *=nih*. This form signals a goal on which another action is dependent, but its use is not well understood (it is extremely limited in my corpus):

- (162) *[ǵĩn kək-d'óǵ-ǵñ=nih], ǵĩn hám-áh*
 1pl pull-take-DIR=EMPH.CO 1pl go-DECL
 ‘When we catch something (while fishing), we’ll go (home).’ (EL)

18.2.6.3. Sequential -yó?

The Sequential marker *-yó?* creates a dependent clause and indicates a temporal succession of events. It is almost always followed by a main clause; only under extremely limited circumstances can a Sequential clause stand alone in relation to the wider discourse context. Clause combination with the Sequential is switch-reference-sensitive; the same subject is strongly preferred for both clauses. This strategy is probably best considered to involve cosubordination, and specifically clause-chaining (or perhaps incipient clause-chaining), rather than subordination.

²⁰⁶ The combination of nasal and oral morphemes yields the pronunciation [anday].

Formally, Sequential *-yóʔ* is a consonant-initial Boundary Suffix, and can be preceded by most Inner Suffixes. Other Boundary Suffixes are ungrammatical in combination with *-yóʔ*, including the verbal Negative suffix *-nʔh*; thus when Sequential *-yóʔ* occurs with a negative predicate, it requires a copular host (cf. 172 below).

Use of the Sequential is very common in Hup, particularly in narrative (although less so in the Umari Norte dialect). In the conventional narrative strategy, a dependent Sequential clause is commonly followed by a main clause, in which the verb takes the Inchoative plus Declarative inflection *-ay-áh* (i.e. progressive-like aspect). In the following sentence, this main clause may be resummarized with the Sequential, and the next event introduced as the new main clause (see also discussion in §12.3).

Clause combination involving the Sequential is illustrated in the following examples:

- (163) “*həʔʔ*”, *nɔ-yóʔ*, *tʔh-ǎn* *tʔh* *yók-ay-áh*
 OK say-SEQ sg-OBJ 3sg poke-INCH-DECL
 ‘Having said ‘all right’, he poked him.’ (P.BY.90)

- (164) *yí-cóʔ* *tʔh=təʔh ʔp-ǎn* *məʔh-yíʔ-yóʔ*, *wíd-c ʔp-ʔw-ay=mah*,
 that.ITG-LOC 3sg=child.father-OBJ kill-TEL-SEQ arrive-go.from.river-FLR-INCH=REP
 ‘Having killed the husband, he came up from the river, it’s said,

tʔh=təʔh ʔn-ǎn=b’ay *tʔh* *məʔh-b’ay-áh*
 3sg=child.mother-OBJ=AGAIN 3sg kill-AGAIN-DECL
 and then he killed the wife!’ (P.BY.91)

²⁰⁷ It is not clear whether this is the Object or the Directional marker, but the question may be essentially meaningless if the two are in fact historically related (see §4.3.3).

- (165) *yúp wíd-yé-ay-yóʔ* “*húptok níŋ bíʔ!*
 that.ITG arrive-enter-INCH-SEQ person.belly 2pl work.IMP
 ‘(The jaguars) having entered, “you all make caxiri!’

ʔəg níŋ bíʔ!” híd nɔ-píʔ-íh
 drink 2pl work.IMP 3pl say-DIST-DECL
 make drink!” they all were saying.’ (H.73)

In narrative, a new event is often simply introduced with the formulaic *yí-níh-yoʔ*

(that.ITG-be.like-SEQ), as in (166). In example (167), a child used this formulaic expression to prompt her distracted grandmother to go on with a story.

- (166) *yí-níh-yóʔ* “*hí-níh-íy tíh?*” *nɔ-yóʔ=mah j’áíh*,
 that.ITG-be.like-SEQ Q-be.like-DYNM 3sg say-SEQ=REP DST.CNTR
 ‘So with that, having said “what happened?”

tíh ʔɔ-kədcɔp-yíʔ-ay-áh
 3sg cry-pass.go.from.river-TEL-INCH-DECL
 she came quickly up from the river crying.’ (H.txt.46)

- (167) *yí-níh-yóʔ* *táʔʔ*
 that.ITG-be.like-SEQ REL.INST
 ‘And after that?’ (OS)

While dependent Sequential clauses are almost always followed by a main clause of some kind, this may be no more than the ‘light’ or ‘dummy’ verb *ní-* ‘be’. This verb forms a kind of default main clause when no other verb is readily available to the speaker (cf. §18.2.2):

- (168) *yawaç tíh w’ób-óh, toʔ cɔʔ-d’oʔ-kədcɔp-yóʔ ní-íy tíh w’ób-óh*
 titi.monkey 3sg set-DECL belly gut-take-pass.go.from.river-SEQ be-DYNM 3sg set-DECL
 ‘She placed the monkey (on the jirau), after having gutted it and come up from the river she placed it...’ (D-BWB.3)

The dependent Sequential clause is almost always followed by the main clause; however, there are one or two examples in my corpus of the reverse order, as in (169).

While this would seem to be an argument against normal clause-chaining, this reversal of clause order involving the Sequential is quite rare in Hup, and it is possible that the very few examples like (169) could be explained as an afterthought on the part of the speaker.

- (169) *tĩh péʔ-éy, húptok ʔəg-yóʔ*
 3sg sick-DYNM person.belly drink-SEQ
 ‘He’s sick, after drinking caxiri.’ (OS)

As noted above, use of the Sequential also usually requires the same subject for both clauses. However, there seem to be a few exceptions to this rule as well:

- (170) *naʔ-hipāh-nĩh g’āʔ-hi-ham-yóʔ*
 die-know-NEG be.suspended-FACT-go-SEQ
 ‘(The old man) having lain for a long time in his hammock without knowing how
- pāĩç=wəd tĩh-āñ... d’ũç g’ǝp-ay-áh*
 paternal.uncle=RESP 3sg-OBJ timbó serve-INCH-DECL
 to die, Uncle served him timbó (poison).’ (P.B.9)

The Sequential can occur in Interrogatives, although examples of this usage are limited. For example, the Sequential form ‘having wanted what’ is used to mean ‘for what reason?’ in (171) (also see the use of causal *keyóʔ* (*key-yóʔ* [see-SEQ]) in interrogatives; §18.2.6.6 below).

- (171) *ʔeckóda ham-yĩʔ-ĩy pah-áp hǎy-ǎh, hocinéa-áh,*
 school(PT) go-TEL-DYNM PRX.CNTR-DEP um-DECL Rosinea-DECL
 ‘That what’s-her-name, Rosinea, went to school;
- hĩ-n’ĩh tuk-yóʔʔ nɔ-kǎm*
 Q-NMZ want-SEQ say-IMP2
 For what reason, say?’ (P.Sp.107)

Example (172) illustrates the incompatibility of the dependent Sequential clause with verbal negation; negative predicates require copular *ni-* ‘be’, as a coordinated predicate, to host the Sequential.

- (172) *wiʔ-nʔ ni-yóʔ ʔin b'ay-té-ay-áh*
 hear-NEG be-SEQ 1pl return-FUT-INCH-DECL
 ‘Having understood nothing, we’d return.’ (B.Cv1.82)

Like negative clauses, predicate nominal clauses also require copular *ni-* to host the Sequential, which cannot attach directly to the predicate nominal itself (cf. §17.3.3.1; compare the negative clauses above). However, there is at least one exception to the primarily verbal identity of Sequential *-yóʔ*: it can follow nominal forms that take the Oblique case (as a locative), to mean ‘having gone to/ been at X’:

- (173) *tát deh-ét-yóʔ cãw yucá-an tʔh ham-té-h*
 taracua.ant water-OBL-SEQ São José-DIR 3sg go-FUT-DECL
 ‘Having been at Tat Deh, he’ll go to São José.’ (EL)

18.2.6.4. Simultaneity and concession with *-mʔʔ*

The Boundary Suffix *-mʔʔ*, like Sequential *-yóʔ* and other forms discussed in this chapter, attaches to verb stems to form dependent clauses, and may be better considered to involve clause-chaining rather than subordination. Where Sequential *-yóʔ* favors the same subject in the linked clauses, use of Simultaneous *-mʔʔ* reveals a strong preference for different subjects; this appears semantically natural, since two simultaneous actions are normally more likely to be performed by two different people than by the same person.

As a Boundary Suffix on verbs, the form *-mĩʔ* contributes the adverbial sense of temporal simultaneity (‘at the same time as’) or concession (‘even though, in spite of’). As a marker of concession, it can also occur as a free particle, and can appear in main clauses and even associate with predicate nominals. The same form *mĩʔ* also occurs as a locative postposition with nouns, where it has the spatial sense ‘under’ (see §10.2.3); note that it is glossed ‘UNDER’ in its verbal use as well.

As an indicator of temporal simultaneity, the verbal Boundary Suffix *-mĩʔ* entails that the simultaneous events be relatively dissociated from one another; this distinguishes *-mĩʔ* from the other verbal markers relating to simultaneity discussed in this chapter. This dissociation of events is often physical—i.e. the events are interpreted as occurring in different locations—but it can also be conceptual, relating to a lack of cooperation or coordination between the actors despite the simultaneity of the action. For example, *-mĩʔ* is used when an event is kept secret from someone by virtue of that person’s involvement in a distinct and simultaneous event—as in (174) below, where the mother kept the fact that she had taken a deer spirit as a husband secret from her children, by sending them out to bathe in the morning so that her husband could leave the house unseen. Similarly, the children later take advantage of their mother’s bathing to beat *timbó*, in order to make the poison that they will use to get rid of their unwanted stepfather (example 175).

- (174) *yĩ-n-ĩh-mĩʔ=mah* *tĩh* “*nĩŋ j’om-láy* *tæh*” *nɔ-d’əh-d’ob-yiʔ-pĩl-ĩh*
 that.ITG-be.like-UNDER=REP 3sg 2pl bathe-VENT.IMP offspring say-send-go.to-river-TEL-DIST-DECL
 ‘While this happened (i.e. her husband the deer spirit left the house), it’s said, she would always send them to the river, saying “go bathe, children.”’ (I-M.5)

- (175) *j' ʃm-ɔp tɪh kədd'əb-mɪʔ=mah, d'uʃ hɪd tətəd-d'óʔ-óy=mah*
 bathe-DEP 3sg pass.go.to.river-UNDER=REP timbo 3pl beat.timbo-take-DYNNM=REP
 'While she (their mother) went down to bathe, they beat the timbó (to release the
 poison), it's said.' (I-M.10)

The physical dissociation of the events is also apparent in example (176), where the speaker is setting up a virtual map (in the dirt) to describe the location of a town:

- (176) *nút ʔúhníy cɪʔ deh hayám ní-mɪʔ,*
 here maybe slug creek town be-UNDER
 'While Slug Creek Village is about here,

nu-cóʔ ʔúhníy-ay yúw-úh, wáʔah cóʔ
 here-LOC maybe-INCH that-DECL other.side.of.water LOC
 it (Avocado Creek Village) is about here, on the other side.' (B.Cv.132)

The 'concessive' use of *-mɪʔ* (cf. Thompson and Longacre 1985: 198)—

apparently an extension of its temporal function into the discourse context (see below)—
 creates adverbial-type clauses meaning 'in spite of, although':

- (177) *nɪ báb'=d'əh hɪd ní-mɪʔ, ʔāh pæ-yɪʔ-ɪh*
 1sg.POSS sibling=PL 3pl be-UNDER 1sg go.upriver-TEL-DECL
 'Although my brothers were there, I went (back) upstream.' (JM-PN.61)

Formally, the concessive use of Hup *-mɪʔ* is considerably more flexible than the simultaneous use of *-mɪʔ*. In particular, the concessive clause marked by *-mɪʔ* need not be fully dependent on an accompanying main clause. In (178), for example (reportedly said when someone is seen eating something that they have claimed to habitually not eat), although the *-mɪʔ* clause is adjacent to a main clause, it marks a concession vis-à-vis the larger discourse context. That is, it seems to be acting not so much as a dependent clause

marker, but rather as an adversative conjunction strategy meaning ‘nevertheless, in spite of this’.

- (178) *tih tih-ŷ=cud, wǎd-mǝʔ=cud!*
 3sg lie-DYNM=INFR eat-UNDER=INFR
 ‘She’s lying, apparently; she’s eating (it) nonetheless, apparently!’ (RU)

Similar uses of *-mǝʔ* are illustrated in examples (179-80). In (179), a young girl was responding to my question, ‘your father’s not here?’; in (180), the narrator of a tale makes a meta-comment about her stumbling over the Tukano words spoken by the Deer Spirit, when this character is first introduced:

- (179) *pǎ ... tih ní-mǝʔ*
 NEG:EX 3sg be-UNDER
 ‘(He’s) not here... he’s around, though.’ (OS)

- (180) *yúp ʔǎh d’əh-d’əh-ham-nǎh dǝʔ-kodé,*
 that.ITG 1sg send-send-go-NEG VDIM-VDIM2
 ‘I didn’t manage that very well,

wǎh ʔǎd-mǝʔ=cud ʔǎhníy yǎh yúw-úh
 River.Indian speak-UNDER-INFR.EPIST FRUST that.ITG-DECL
 but he did speak Tukano, apparently.’ (I-M.4)

In other uses, concessive *mǝʔ* appears as a free particle, rather than as a verbal Boundary Suffix, and again is not limited to dependent clauses. In (181), it occurs in a main clause and *follows* the Dynamic marker, whose Boundary Suffix slot in the verb it would normally occupy:

- (181) *hám-áy mǝʔ ʔǎh-ih, ʔam káy-tǎh*
 go-DYNM UNDER 1pl-DECL 2sg see-COND
 ‘We’re making progress, although it’s hard to tell’ (OS)

As a particle, concessive *mĩʔ* in both main and dependent clauses can even

follow a predicate nominal:

- (182) *tĩh=pæcæw mĩʔ ʔam j'ʔp-nĩh-ʔ!*
 3sg=youth UNDER 2sg tie-NEG-DEP
 'Even though you're young you're not tying (the vines) up!' (TD.Cv04.43)
- (183) *cā'-wag ʔāh hɔ-ní-íy, [w'éh-éy]=ʔāy mĩʔ j'ám...*
 other=day 1sg liver-be-DYNM far-DYNM=FEM UNDER DST.CNTR
 'Sometimes I think: although I am a woman who comes from far away (I am nevertheless living here like this).' (T.PN.21)
- (184) *doh ʔāy mĩʔ=cud=mah, tĩh-ān yʔ nĩh-ní-h!*
 Curupira UNDER=INFR=REP 3sg-OBJ that.ITG be.like-INFR-DECL
 'However, it was apparently Curupira that did this to her, it's said!' (T.C)
- (185) *núh b'ʔyĩʔ-ay mĩʔ=mah, tĩh ʔĩd-ĩh*
 head only-INCH UNDER=REP 3sg speak-DECL
 'Although only a head, he spoke.' (H.R.108)

Finally, *-mĩʔ* (used as a verbal Boundary Suffix) also has an additional, distinct

idiomatic function: it occurs in a main clause, together with the Distributive form *pĩd* (a marker of iterative or durative aspect, see §12.9.1), and the resulting construction implies that the activity (usually one involving goal-oriented movement) requires a relatively long time to carry out. While it is not really clear whether this idiomatic use is linked more directly to the temporal or the concessive realizations of *-mĩʔ*, the expression of doing a single activity for a long time may include a sense of the potential for numerous other events to occur during this period, and thus bear some relation to simultaneity.

- (186) *ʔéw' hɔy ʔɪn wɪd-d'ób-óh, ʔɪn pæ-mɪʔ pɪd,*
 bird.sp. pool 1pl arrive-go.to.river-DECL 1pl go.upriver-UNDER DIST
 'We went down (from the forest) to Bird-Pool; we took a long time coming

cínku ʔóra ʔɪn bahád-áh
 five(Pt) hour(Pt) 1pl appear-DECL
 upstream, at 5:00 we appeared (home).' (S-PN.2)

- (187) *wag-hi-yæʔ tɪh=hayám-an wæcnɔhg'ā ʔ-yæh-æw-æh, mmm, teʔ!*
 day-FACT-lie 3sg=town-DIR encounter.a.path-FRUST-FLR-DECL (going noise) until
 'At dawn we would go out into the city, (going noise), until!

hayám hæyɔ ʔɪn hám-mɪʔ pɪd, kədham-yɪʔ-ay-áh
 town middle 1pl go-UNDER DIST pass.go-TEL-INCH-DECL
 we'd eventually go through the whole center of the town, and pass through
 it.' (JO.Cv.41)

The simultaneous and concessive uses of *-mɪʔ* are almost undoubtedly a case of polysemy. Such an overlap is highly plausible typologically; for example, English exhibits a similar overlap between concession and simultaneity in the adverbial expression 'while'. Furthermore, examples can be found in Hup in which the temporal and concessive uses overlap; here the semantics of *-mɪʔ* as 'during' or 'in spite of' is vague or ambiguous, as in (188-89). The use of *-mɪʔ* to mark simultaneity was probably historically prior to its use as a marker of concession, as suggested by the relative formal flexibility of the latter use.

- (188) *páy-mɪʔ cak-yóʔ...*
 bad-UNDER climb-SEQ
 'Having climbed up, despite/while feeling bad...' (H-CO.3)

- (189) *deh d'ɔʔ-mɪʔ, kəd híd táw-áy*
 water rain-UNDER bench 3pl carry.together-DYNM
 'They were carrying a bench while it was raining/despite the rain.' (OS)

As noted above, the form *mǝʔ* has an additional use as a locative postposition

with the spatial sense ‘under’ (cf. §10.2.3):

- (190) *hɔhtěg mǝʔ*
 canoe under
 ‘under the canoe’

This spatial use is probably also related historically to the temporal and concessive uses of this form. Such a link among spatial and temporal (as well as more abstract) meanings already has considerable precedence in Hup. For example, certain other locative postpositions double as time adverbials, such as *hũy ʔah* ‘behind’ and ‘after’, and *kót ʔah* ‘in front’ and ‘before’; also compare the use of Distributive *pǝl* as both a quantifier (relating to quantities of entities) and a marker of verbal aspect (relating to repeated instances of an event) (cf. §6.5.2 and §12.9.1), and the use of the Oblique case marker *-Vt* to mark both location (of entities) and adverbial clauses relating to time (simultaneity) (cf. §4.3.4 and §18.2.6.2). Moreover, a connection between spatial ‘under’ and temporal simultaneity is arguably semantically motivated: if time and space are both viewed linearly, then two things that are placed one atop the other are occupying the same point in space (from a two-dimensional, horizontal perspective). Likewise, two activities going on simultaneously are occupying the same slot in time.

18.2.6.5. Simultaneous temporal adverbial *-kamí*

The form *-kamí* produces a dependent clause meaning ‘at the moment of’. Like most of the other bound forms discussed here, it occurs as a verbal Boundary Suffix, although it is not limited to verbal hosts.

The verb phrase marked with *-kamí* indicates a specific point in time that has been reached when the main clause event begins to take place, as examples (191-93) illustrate. The event in the dependent clause is thus viewed perfectly, rather than as a state with a prolonged duration or a dynamic event with internal structure. Note that verbs marked with *-kamí* typically receive no other inflection (including Inner Suffixes).

- (191) *cé g'í ?āh tən-kamí, ?āh= ?n ?ān na ?-yi?-ní-h*
 six(Pt) summer 1sg hold-moment.of 1sg=mother 1sg.OBJ die-TEL-INFR2-DECL
 ‘When I was six years old, my mother died on me.’ (T-PC.1)

- (192) *tih cog-kamí=mah yúp “kót ?ah ?āh d’ob-yu-té-h,*
 3sg gather.in-moment.of that.ITG in.front 1sg go.to.river-wait-FUT-DECL
 ‘When she was putting (manioc) into her basket, “I’ll go ahead down to the river and wait,

‘má-y!’ nót-ty=mah
 (go).INCH.IMP say-DYNM=REP
 let’s go!” he said.’ (T-C.3)

- (193) *nút ?āh ni-kamí=mah, ?āh= ?n ?ān b’uy-d’ ?h-?h; ?āh cípm’æh=tæn*
 here 1sg be-moment.of=REP 1sg=mother 1sg.OBJ throw-send-DECL 1sg little=MEAS2
 ‘When I was this size, my mother abandoned me; when I was small.’ (P.int.132)

In addition to occurring with verbs, *-kamí* can occur with a noun to form an adverbial phrase, as in *medénda-kamí* ‘at school lunch time’ (from Portuguese *merenda escolar* ‘school lunch’), or even with an interrogative:

- (194) *hín’ih-kamí ?am dapúh j’íp-í ?*
 Q-NMZ-moment.of 2sg hand tie-INT
 ‘On what date did you get married?’ (OS)

18.2.6.6. Reason adverbial *keyóʔ*

Hup forms adverbial clauses expressing reason with the particle *keyóʔ*, which follows a fully inflected verb (i.e. one that receives a Boundary Suffix, usually Dynamic -Vý). This ‘Reason’ adverbial is clearly derived from the Sequential form of the verb ‘see’, *key-yóʔ* ‘having seen’ (i.e. a dependent clause), but it appears to be grammaticalizing into a single fused particle. This particle is now (at least marginally) morphosyntactically associated with the preceding verb, and can no longer be considered a normal dependent clause.

The particle *keyóʔ* itself marks an adverbial clause (formed from the inflected verb + *keyóʔ*), which relates to the reason behind an event. This unit is dependent on a main clause, which expresses the event itself, as in examples (195-97). It also occurs in the interrogative expression *hññkeyóʔ* (*hññ-ññ-ññ key-yóʔ* [Q-be.like-DYMN see-SEQ]) ‘why, for what reason?’.

- (195) *yñ [tññ ʔá-ý keyóʔ]=mah tññ=ʔp tññ-áñ háyʔah cóʔ d’oʔ-way-g’et-yíʔ-ññ*
 thus 3sg cry-DYMN CAUSE=REP 3sg=father 3sg-OBJ outside LOC take-go.out-TEL-DECL
 ‘So [because (the child) cried] her father put her outside, it’s said.’ (E-SB.1)
- (196) *[yí-nññ-ññ] keyóʔ=cudʔññ híd d’ob-yíʔ-ay-ʔññ*
 that.ITG-be.like-DYMN CAUSE=INFR.EPIST 3pl go.to.river-TEL-INCH-MS
 ‘[Because of this], apparently, they went down to the river.’ (I-M.12, etc.)
- (197) *[tññ wíç-ý keyóʔ]=mah, “ññ cáp ùñ tññ ʔá-ý ʔá-ý*
 3sg whistle-DYMN CAUSE=REP who INTS1 EPIST man NEG:EX-OBL
 ‘[Because/ seeing that he had whistled], “who can it be, while I am without a man,
ʔáñ wíç-g’et-g’óʔ-oʔ páh?” nñ-ý=mah
 1sg.OBJ whistle-stand-go.about-INT PRX.CNTR say-DYMN=REP
 that is going about whistling for me?” she said, it’s said.’ (I-M.2)

In an adverbial phrase involving a noun, the ‘Reason’ particle does double duty as a true verbal form *key-yóʔ* (‘having seen’), and the noun is inflected as the object of the clause—evidence that the distinction between Reason adverbial and Sequential verb form is minimal. An example is ‘because of you’:

- (198) *páti, ʔám-ǎn keyóʔ ʔín ni-yíʔ-íh*
 Pattie 2sg-OBJ CAUSE 1pl be-TEL-DECL
 ‘Pattie, because of you we stayed.’ (lit. ‘having seen you we stayed.’) (R-UN.60)

Similarly, to express ‘because of seeing’, use of the additional verb ‘see’ is optional:

- (199) *dóʔ=n’ǎn (kéy-éy) key-yóʔ tʰ təw-wáy-áh*
 child=PL.OBJ (see-DYNM) see-SEQ 3sg scold-go.out-DECL
 ‘Because he saw the children, he became angry.’ (EL)

This ‘Reason’ adverbial use of *key-* ‘see’ is largely limited to the Sequential form of the verb, but not completely; for example, an annoyed person said (200)—using the subordinated form of ‘see’ in a ‘reason’ sense—to an intruding dog:

- (200) *hí-n’íh kéy-ep ʔam yé-eʔ?!*
 Q-NMZ see-DEP 2sg enter-INT
 ‘What did you come in for?!’ (lit. ‘What did you come in to see?’) (OS)

18.2.6.7. Temporal/spatial adverbial particle *té*

Hup has only one adverbial particle that precedes the clause, while the rest all follow it and usually appear as verbal suffixes. This is the temporal/ spatial adverbial *té*, ‘until, up to’, which marks a point that is reached when describing movement through space or time. A free particle, *té* typically precedes either a place name or a dependent clause:

- (201) *kəd-yiʔ ní-ty, ʔin kəd-kədham-yiʔ-bʔay-áh, té nút wædhɔ ní-nʔh*
 pass-TEL be-DYNM 1pl pass-pass.go-TEL-HAB-INCH-DECL until here sun be-NMZ
 ‘We passed beyond it, (as) we always pass it, until the sun was here.’ (S.PN.15)

In narrative, Hup speakers frequently pronounce *té* with special emphasis, usually involving higher intensity and pitch, a dramatic pause following the word, and often an emphatic final glottal stop:

- (202) *yʔ hi-gʻet-yóʔ híd ham-ní-ip=bʻay, téʔ! bedné!*
 thus FACT-stand-SEQ 3pl go-be-DEP=AGAIN until(EMPH) Belem
 ‘So having stayed there, they went on again, until! (they got to) Belém!’
 (H.txt.30)

The particle *té* is almost certainly a borrowing from Portuguese *até* ‘until’, and probably entered Hup via Tukano. One consultant who is reasonably fluent in Portuguese sometimes uses Portuguese *até* interchangeably with *té*. The same form *te* also occurs in Tariana (cf. Aikhenvald 2003) and Tukano (Ramirez 1997b: 187).

Appendix I: Summary of Hup grammatical formatives

Form	Morphological formative type	Identity / word-class of host ²⁰⁸	Function	Other relevant functions of same form	Section reference
-an	Boundary Suffix	Nouns	Directional oblique case (direction, location)		§4.3.2 §18.2.6.2
		Verbs	Adverbializer (in direction/place of)		
-ǎn	Boundary Suffix	Nouns	Object case		§4.3.1 §18.2.3
		Verbs	Relative clause (object of main clause)		
-and'əh	Nominal suffix	Nouns	Associative plural		§4.4.6
-áh	Boundary Suffix	Various hosts	Focus		§15.2.3
-ay	Boundary Suffix	Verbs	Inchoative aspect		§12.3 §7.1.1
		Nouns, various hosts	Inchoative focus		
báʔ	Particle	Clauses	Protestive		§15.3.5
-b'ay- =b'ay	Enclitic, Inner Suffix	Verbs	Repetition or return to a state; 'again'	Verb <i>b'ay</i> - 'return'	§12.9.2 §7.1.3
	Enclitic	Nouns	Topic-switch marker		
bé	Particle	Clauses (?)	Acquiescence		§15.3.8
bǵ -bǵ	Particle, Inner Suffix	Verbs	Habitual aspect	Adjective <i>bǵ</i> 'old'; adverbial 'a long time'	§12.8
cáp	Particle	Various hosts	Intensifier	Noun <i>cáp</i> 'body'	§15.1.1
-Vcáp	Boundary Suffix	Verbs			
-cǵp- -cǵw-	Inner Suffix	Verbs	Completive aspect	Verb <i>cǵp</i> - 'finish basket'	§12.5
cóʔ	Particle	Various hosts	Locative; shift of attention among entities		§7.9
=cud -cud-	Enclitic Inner Suffix	Predicates Verbs	Inferred evidential	Verb <i>cud</i> - 'be inside'	§14.9.3 §7.3
		Nouns	Deceased referent marker		
-d'ǎh	Boundary Suffix	Verbs	'Acting alone' marker		§15.3.7

²⁰⁸ As noted in §3.1, predicate adjectives pattern like verbs except where otherwise noted.

Form	Morphological formative type	Identity / word-class of host	Function	Other relevant functions of same form	Section reference
=d'əh	Enclitic	Nouns	Plural, collective		§4.4 §18.2.3
		Verbs	Relative clauses (plural)		
diʔ	Particle	Verbs	Verbal diminutive, 'do V a little'	Verb diʔ 'remain'	§12.10
-Vhəʔ	Boundary Suffix	Verbs	Interactive tag	Affirmative word həʔ 'yes, all right'	§15.3.4
=həʔ	Enclitic	Various hosts			
=hə	Enclitic	Imperative verbs			
=haʔ	Enclitic	Various hosts	Interrogative alternative, doubt		§17.4.4
hi-	Prefix	Verbs	Factitive		§11.4
=hin	Enclitic	Nouns, adverbials	Parallel comparison		§7.7
=hɔ̃	Enclitic	Predicates	Nonvisual evidential	Cf. verb hɔ̃h- 'make noise'	§14.9.2
-hɔ̃	Inner Suffix	Verbs			
hup-	Prefix	Verbs	Reflexive (passive voice)	Noun húp '(Hup) person'; Adj. húp 'good, new, beautiful'	§11.1
=hup	Enclitic	Nouns	Reflexive intensifier		§7.1.4
hũy	Particle	Nouns (animate)	'Following' marker	Locative postpositions: hũy ʔah 'after, behind'; hũyan 'in water'	§7.10
j'ám j'ǎh	Particle	Various hosts, predicates	Contrast: distant past	Adverb j'ám 'yesterday'	§13.4.2
kǎh	Particle	Predicates	Adversative conjunction		§18.1.4
-kamí	Boundary Suffix	Verbs Nominals	Temporal adverbial		§18.2.6.5
-kǎm	Boundary Suffix	Verbs	Imperative (strong)		§17.5.2
-kéʔ	Boundary Suffix	Verbs	'Acting alone' marker		§15.3.7
keyóʔ	Particle	Verbs (Object-case nouns)	Cause	Verb 'see' + Sequential: key-yóʔ	§18.2.6.6
-kǎd-	Inner Suffix	Verbs	Elative (comparative & superlative)	Verb kǎd- 'pass'	§10.2.2.2 §15.1.3.3
-kǎd	Suffix	Adjectives			
-kodé	Boundary Suffix	Verbs	Verbal diminutive, 'do verb a little'	Cf. Tukano kure	§12.10

Form	Morphological formative type	Identity / word-class of host	Function	Other relevant functions of same form	Section reference
= <i>mah</i>	Enclitic	Various hosts	Reportive evidential		§14.9.4
- <i>mah</i> -	Inner Suffix	Verbs			
<i>m'æ'</i>	Particle	Nominals	Measure (comparable time, size, or distance)		§10.2.2.1
= <i>mæh</i>	Enclitic	Various hosts	Diminutive intensifier: (unimportance, smallness, closeness)	Noun <i>mæh</i> 'younger sister'	§15.1.4
- <i>mæh</i> -	Inner Suffix	Verbs			
- <i>mĩʔ</i>	Boundary Suffix	Verbs	Adverbial: simultaneous events (different actors); concessive	Locative postposition <i>mĩʔ</i> 'under'	§18.2.6.4
	Particle	Various hosts	Concessive		
<i>mún</i> <i>muhún</i>	Particle	Negated verbs Adjectives	Intensifier		§15.1.2
<i>næ'</i>	Particle	Free	Reinforced negation		§16.1.7
- <i>ni</i> -	Inner Suffix	Verbs	Inferred evidential	Verb <i>ni</i> - 'be, exist'	§14.9.6
= <i>nih</i>	Enclitic	Various hosts, clauses	Emphatic Coordinator		§18.1.3
- <i>nĩh</i>	Boundary Suffix (Inner Suffix)	Verbs	Clausal negation		§16.1
<i>nĩh</i>	Particle	Nouns	Possessive (alienable)	Verb <i>nĩh</i> - 'be like'	§5.2
- <i>n'ĩh</i>	Boundary Suffix	Verbs	Nominalizer, complementizer		§18.2.5
- <i>nĩŋ</i>	Boundary Suffix	Verbs	Cooperative	2pl pronoun <i>nĩŋ</i>	§18.2
<i>n'uĩh</i>	Particle	Nouns	Contrast between entities		§7.8
<i>páh</i>	Particle	Various hosts, predicates	Contrast: temporally proximate		§13.4.1
<i>pã</i>	Predicative particle	Nouns	Negation of existence or presence		§16.2
<i>pĩd</i>	Particle	Nouns	Quantifier		§6.5.2
- <i>pĩd</i> -	Particle, Inner Suffix	Verbs	Repetition, iterativity, durativity		§12.9.1

Form	Morphological formative type	Identity / word-class of host	Function	Other relevant functions of same form	Section reference
= <i>pog</i>	Enclitic	Various hosts	Emphasis	Adjective <i>póg</i> ‘big’	§15.2.1
- <i>pog</i> - - <i>po</i> - - <i>wo</i> -	Inner Suffix	Verbs			
<i>táʔ</i>	Particle	Nouns	Related instance marker		§7.6
<i>tán</i>	Particle	Various hosts, predicates	Contrast: future	Adverb <i>tán</i> ‘later’	§13.4.3
<i>tæʃ</i>	Particle	Verbs, other predicates	Ongoing event		§12.11
- <i>tǎñ</i>	Boundary Suffix	Verbs	Conditional		§14.1
= <i>tæn</i>	Enclitic	Nouns	Comparable amount; size or time	Factitive <i>hi-tǎñ</i> can act as a free verbal predicate with comparative function	§10.2.2.1
- <i>tǎʔ</i>	Inner Suffix	Verbs	Counterfactual, avertive	Cf. verbs <i>hitǎʔ</i> ‘imitate’; <i>tǎʔ</i> <i>key</i> ‘weigh’, etc.	§14.2
<i>té</i>	Particle	Free	Spatial / temporal adverbial ‘until’	Cf. Portuguese <i>até</i> ‘until’ (space/time)	§18.2.6.7
- <i>tég</i>	Boundary Suffix, Inner Suffix	Verbs	Future (main clauses) Purpose (subordinate clauses)	Generic ‘thing’ bound noun = <i>teg</i> ; noun <i>těg</i> ‘stick, wood’	§13.1
- <i>te</i> -	Inner Suffix	Verbs	Future		
<i>tí</i>	Particle	Subordinate clauses	Emphasis		§15.3.1.2
<i>tĩ</i>	Particle	Interrogative clauses	Interrogative emphasis		§15.3.1.1
= <i>tíʔ</i>	Enclitic	Nouns	Emphatic tag		§15.3.1.4
- <i>Vtiʔ</i>	Boundary Suffix	Verbs			
<i>tíh</i>	Particle	Clauses	Emphasis		§15.3.1.3
= <i>tih</i>	Enclitic	Verbs	Counterfactual		§14.3
<i>t#h</i> =	Proclitic or bound nominal	Nouns, Adjective NPs	Default bound noun, Adjective nominalizer	3sg pronoun <i>t#h</i>	§5.4 §6.6
- <i>tuk</i> - - <i>tu</i> -	Inner Suffix	Verbs	Volition, proximative (imminent future)	Verb <i>tuk</i> - ‘want’	§13.2
= <i>wəd</i> = <i>wa</i>	Enclitic	Nouns	Respect markers (male/gender-neutral and female)	Bound nouns <i>wəhəl</i> ‘old man’; <i>wá</i> ‘old woman’	§7.4

Form	Morphological formative type	Identity / word-class of host	Function	Other relevant functions of same form	Section reference
<i>yǎ</i>	Particle	Interrogative clauses	Interactive tag		§15.3.3
<i>yá</i>	Particle	Affirmative clauses			
<i>-Vyá</i>	Boundary Suffix	Verbs in affirmative clauses			
<i>yǎh</i>	Particle	Verbs, predicate nominals	Frustrative mood	Verb <i>yǎh-</i> ‘request, order’	§14.4
<i>-yǎh-</i>	Inner Suffix	Verbs			
<i>-yíʔ</i>	Inner Suffix	Verbs	Telic aspect		§12.6
<i>=yíʔ</i>	Enclitic	Nouns	Contrastive emphasis		§7.1.2
		Adverbs, clauses	Adverbializer		§10.2 §18.2.6.1
<i>-yóʔ</i>	Boundary Suffix	Verbs (Oblique case nouns)	Sequential		§18.2.6.3
<i>ǎp</i>	Particle	Predicate nominals; clauses	Negation of identity		§16.3
<i>ǎp</i>	Particle or bound form	Nouns, numerals	Quantifier		§6.5.3
<i>-ǎy-</i>	Inner Suffix	Verbs	Ventive (spatial dislocation in event)		§12.7
<i>-ǎe ʔ</i> <i>-ǎe-</i>	Inner Suffix	Verbs	Perfective aspect		§12.4
<i>-ǎe ʔ</i>	Nominal suffix	Predicate nominals			
<i>=ǎh</i>	Enclitic	Various hosts	Emphasis	Masculine / gender-neutral bound noun	§15.2.2
<i>-Vǎh</i>	Boundary Suffix	Verbs			
<i>ǎo</i>	Particle	Free	Clause linking (usually disjunction)	Cf. Portuguese <i>ou</i> ‘or’	§18.1.5
<i>ǎh-</i>	Prefix	Verbs	Reciprocal/pluractional interaction	Noun <i>ǎh</i> ‘sibling of opposite sex’	§11.2
<i>-ǎh-</i>	Inner Suffix	Verbs	Applicative		§11.3
<i>-ǎh</i>	Boundary Suffix	Verbs	Optative mood		§14.7
<i>ǎh</i>	Particle	Various hosts	Epistemic modality		§14.8
<i>-ǎy</i>	Nominal suffix	Noun + Directional or Object case	Indefinite associative ‘one from X place; associated with X’	Interrogative pronoun <i>ǎy</i> ‘who’	§7.5

Form	Morphological formative type		Identity / word-class of host	Function	Other relevant functions of same form	Section reference
- <i>Ŧh</i>	Boundary Suffix		Clause-final constituents	Declarative mood		§17.3.2
- <i>Vp</i>	Boundary Suffix		Verbs, clauses	Dependent marker		§18.2.4
			Nouns, various hosts	Topic marker		§7.1.5
- <i>Ŧt</i>	Boundary Suffix		Nouns	Oblique case (location, instrument, etc.)		§4.3.4
			Verbs, clauses	Adverbializer (place or time of) Relative clauses		§18.2.6.2 §18.2.3
- <i>Vw-</i>	Inner Suffix		Various hosts	Emphasis Clause-combining		§15.2.4 §18.1.2 §18.2.3
- <i>Ŧy</i>	Boundary Suffix		Verbs (Nouns and a few particles)	Dynamic aspect (Attributive marker)		§12.2 §5.1.4
- <i>VyŦk</i>	Boundary Suffix		Clause-final constituents, esp. verbs	Exclusive (relates to one participant alone)		§15.3.6
- <i>V?</i>	Boundary Suffix		Verbs	Interrogative mood		§17.4
			Various hosts	Interrogative focus		
Bare verb stem + high (falling) tone			Verbs	Imperative mood		§17.5.1
Bare verb stem			Verbs	Apprehensive mood		§14.6

Appendix II: Do Kakua and Nukak belong in the Nadahup family? A comparison of basic vocabulary. (Lexical items in Kakua/Nukak that resemble those in the Nadahup family are highlighted in red.)

	HUP	Umari Norte HUP	YUHUP	DÂW	NADĚB	KAKUA	NUKAK
jaguar	<i>ya ʔám</i>	<i>ya ʔám</i>	<i>ya ʔam</i>	<i>yamhĩʔ</i>	<i>awad</i>	<i>hiw daka</i>	<i>hio / hiu be ʔ</i>
hammock	<i>yág</i>	<i>yág</i>	<i>yǎg</i>	<i>yæǵ</i>	<i>yág</i>	<i>maʔ</i>	<i>ʔimdzi/ há/ cajat</i>
canoe	<i>hɔhtěg</i>	<i>hɔhtěg</i>	<i>hɔh</i>	<i>hɔ:</i>	<i>h'ɔɔh</i>	<i>hāh tfo</i>	<i>tina aa</i>
knife/machete	<i>wán</i>	<i>miyáh</i>	<i>wǎn</i>	<i>wán</i>	<i>maliy</i>	<i>ʔb-at dob ʔ</i>	<i>ibm-at da ʔ</i>
axe	<i>mǎm</i>	<i>mǎm</i>	<i>mǎm</i>	<i>ma:m</i>	<i>mĩm</i>	<i>tǣc da ʔ</i>	<i>ʔe ʔ ni</i>
fat/ grease	<i>nájɲ</i>	<i>nájɲ</i>		<i>næǵ</i>		<i>yii</i>	<i>yii</i>
tobacco	<i>huĩ</i>	<i>huĩ</i>	<i>huĩ</i>	<i>huĩ</i>	<i>úhta</i>	<i>hĩp</i>	<i>jüp/ nina/ hĩp</i>
butterfly	<i>b'e ʔb'ěp</i>	<i>b'e ʔb'ěp</i>	<i>totóh</i>	<i>méb</i>	<i>totódn</i>	<i>dádáh</i>	<i>neytip</i>
deer	<i>mɔhɔy</i>	<i>mɔhɔy</i>	<i>mɔhɔy</i>	<i>tʃahɔ:w</i>	<i>kuyád, möriho</i>	<i>wā</i>	<i>wāā</i>
fish	<i>hǎp</i>	<i>hǎp</i>	<i>hǎp</i>	<i>hǎ:p</i>	<i>tah' ʔb</i>	<i>kej'</i>	<i>ákayii</i>
flea	<i>n'an kɔb</i>	<i>kɔb</i>	<i>cěb</i>	<i>dæd</i>		<i>kolo ʔ</i>	
			(compare Hup <i>tah-ceb</i> 'tick' [tapir-flea])				
mosquito	<i>g'í</i>		<i>k'ĩ</i>		<i>gĩy</i>	<i>yü'bü'</i>	
pig	<i>tɔh</i>	<i>tɔh</i>	<i>tɔh</i>	<i>tɔh</i>	<i>tɔɔh</i>	<i>ñúmúh</i>	
rat	<i>bĩʔ</i>	<i>bĩʔ</i>	<i>bĩʔ</i>	<i>nuʔ</i>	<i>gaw' ʔing</i>	<i>tʃaw</i>	
tukano	<i>cɔkw' ɔt</i>	<i>cɔg' ɔt</i>	<i>cɔkɔt</i>	<i>cɔkwɨt</i>	<i>coked</i>	<i>nij</i>	<i>nijbeh/ pidip</i>
traira fish	<i>b'óy</i>	<i>b'óy</i>	<i>b'óy</i>	<i>bóy</i>	<i>bói</i>	<i>düh</i>	<i>dü'</i>
turtle	<i>mĩh</i>	<i>mĩh</i>	<i>mĩh</i>	<i>mĩc</i>		<i>tüj</i>	
blood	<i>biyĩw, bihiw</i>	<i>biyĩw</i>	<i>yíw</i>	<i>yĩw</i>	<i>mayĩw</i>	<i>mep'</i>	<i>mep'/ mæʔæp</i>
eye	<i>kəwǎg</i>	<i>kəwǎg</i>	<i>təʔbǎg</i>	<i>tɔb(=Hup 'penis')</i>	<i>matɨm</i>		<i>enat/ kib</i>
hand/ finger	<i>dap ʔuĩ</i> (<i>cob</i> 'finger')	<i>dap ʔuĩ</i>	<i>pɔh</i>	<i>cob</i>	<i>mooh</i>	<i>teícaa</i>	<i>teídit</i>
nose	<i>tóɲ</i>	<i>cukuĩ/ toɲ</i>	<i>tóɲ</i>	<i>tóɲ</i>	<i>pɔɔh</i>	<i>wĩk</i>	<i>wĩk/ wĩg</i>
tongue	<i>nɔg' æd</i>	<i>nɔg' æd</i>	<i>nɔk' æd</i>	<i>nɔkæd</i>	(<i>yi</i>) <i>nakád</i>		<i>nük</i>
head	<i>núh</i>	<i>núh</i>	<i>núh</i>	<i>nú</i>	<i>nu/ nuuh</i>	<i>waw'tib</i>	
sun/moon	<i>wædɔ/ wædhɔ</i>	<i>widɔ</i>	<i>wædhɔ</i>	<i>xɨɨb</i>	(<i>'sun'</i>) <i>txoku</i> (<i>'moon'</i>) <i>kamaráb</i>	<i>wid</i> <i>küi</i>	<i>widna'</i> <i>wid</i> <i>küi</i>
star	<i>wædɔʔm' æh</i> (Hup <i>mæh</i> = 'Diminutive')	<i>widɔmæh-tæh</i>	<i>wædhɔ m' æh</i>	<i>mæh</i>			

	HUP	UN. HUP	YUHUP	DÂW	NADĚB	KAKUA	NUKAK
egg	<i>tĩp</i>	<i>tĩp</i>	<i>tĩp</i>	<i>tĩp</i>	<i>tĩb</i>		<i>bipip/ tĩp</i>
forest	<i>j'ũg, (hay)</i>	<i>j'ũg</i>	<i>háy</i>	<i>xáy</i>	<i>həəy</i>	<i>jiaa [hiaa]</i>	<i>jiaa</i>
fruit	<i>ʔag</i>	<i>ʔag</i>		<i>ʔæg</i>	<i>ag</i>		<i>igii</i>
thorn	<i>ʔũt</i>		<i>út</i>	<i>ʔut</i>	<i>cötyögn</i>		<i>ûi/ ut</i>
water	<i>děh</i>	<i>děh</i>	<i>déh</i>	<i>nǎ:c</i>	<i>na ĩng</i>		<i>kandæ</i>
son	<i>tǎh</i>	<i>tǎh</i>	<i>tǎh</i>	<i>tæ:</i>	<i>t'aah</i>	<i>weh/ wüh</i>	<i>weh/wüh</i>
grandfather	<i>ʔũ</i>	<i>dú</i>	<i>ʔu</i>	<i>xéd</i>	<i>ɔɔw</i>	<i>nüaoh</i>	
Pronouns:							
1sg	<i>ʔǎh</i>	<i>ʔǎh</i>	<i>ʔǎh</i>	<i>ʔǎh</i>	<i>ĩh</i>		<i>wem'</i>
2sg	<i>ʔám</i>	<i>ʔám</i>	<i>ʔǎm</i>	<i>ʔám</i>	<i>õm</i>	<i>mem'</i>	<i>mem'</i>
3sg (m/f)	<i>tĩh</i>	<i>tĩh</i>	<i>tĩh</i>	<i>tí</i>	<i>(ta-)</i>	<i>(nin)</i>	<i>kan' (nin)</i>
1pl	<i>ʔĩn</i>	<i>ʔĩn</i>	<i>ʔĩn</i>	<i>ĩd</i>	<i>əəl/ āah</i>	<i>wít</i>	<i>wiwi</i>
2pl	<i>nĩŋ</i>	<i>nĩŋ</i>	<i>nĩŋ</i>	<i>nĩg</i>	<i>bəəh</i>		<i>? ñĩh</i>
3pl	<i>hĩd</i>	<i>hĩd</i>	<i>hĩd</i>	<i>hid</i>	<i>(la-)</i>		<i>ket'</i>

Evaluation of previous arguments for a relationship:

1) Martins and Martins (1999): Propose that Kakua-Nukak share 35% cognate with Hup-Yuhup, but say that “the lexical data are scanty... and these figures are provisional” (1999: 254); 35% may be no more than a complete guess. (Data source for K-N not given; may be Koch-Grunberg 1906b.)

	Hup	Yuhup	Dâw	Nadëb	Kakua	Nukak
father	<i>ʔĩp</i>	<i>ʔĩp</i>	<i>ʔĩp</i>	<i>ĩb</i>	<i>ip</i>	<i>ip</i>
mother	<i>ʔĩn</i>	<i>ʔĩn</i>		<i>əən</i>	<i>in</i>	<i>in</i>
tooth	<i>təg</i>	<i>təg</i>	<i>təg</i>	<i>təg</i>	<i>maw/ cemooh</i>	<i>mau</i> [M&M claim <i>təg</i> for Kakua/Nukak, but this is not corroborated by other word lists.]
water/stream	<i>mi</i> (stream)	<i>mi</i>	<i>mi</i>	<i>[mĩʔ]</i>	<i>mah</i> (water)	[But compare Tukano <i>ma</i> ‘river’]
				(=inside liquid or fire; compare Hup <i>mĩʔ</i> ‘under, inside’)		
house	<i>məy</i>	<i>məy</i>	<i>məy</i>	<i>mĩĩ</i>	<i>mĩĩ</i>	
				(=temporary hut)		

2) Koch-Grünberg (1906b: 882): Proposes a short list of correspondences between Kakua and Yuhup to claim that they are related.

1. KG's notation
2. My (Yuhup) and Martins & Martins' (Kakua-Nukak) notation

	Yuhup:	Kakua:
foot	1. <i>tib</i>	<i>hitib</i>
	2. <i>c'ib</i>	(Nukak: <i>cüiat</i>)
flesh	1. <i>dap</i>	<i>dep</i>
	2. <i>d'ap</i>	<i>dèp</i>
carbon	1. <i>dû</i>	<i>tâu</i>
	2. <i>moy</i>	<i>mîi</i>
house	1. <i>moi</i>	<i>mî</i>
	2. <i>moy</i>	<i>mîi</i>
japu (bird)	1. <i>dá(u)b</i>	<i>dap</i>
	2. <i>dop</i>	
inambu	1. <i>mō</i>	<i>mîu</i>
	2. <i>moh</i>	
grass	1. <i>yîi</i>	<i>yili</i>
	2. <i>cih</i>	
banana	1. <i>uhîd</i>	<i>huda</i>
	2. <i>wîhî</i>	<i>jîhni</i>
pepper	1. <i>ko(u)</i>	<i>kāũ</i>
	2. <i>kow</i>	<i>kāw</i>

Conclusion: Out of a long list of basic vocabulary (of which the above is a sample), the only potential cognates that can be identified are ‘egg’, ‘thorn’, ‘mother’, ‘father’, ‘house’, ‘flesh’, ‘japu bird’, ‘sun/moon’, and ‘hot pepper’. There is no evidence for basic sound correspondences, and the above look-alikes could be due to chance and/or contact (probably between Hup and Kakua).

A demonstrable genetic relationship between Kakua-Nukak and the rest of the Nadahup family seems highly unlikely, although the final conclusion will have to await more and better data on Kakua and Nukak.

(Sources for data: Hup, Umari Norte Hup, and Yuhup: my fieldnotes; Dâw: V. Martins 1994 and my fieldnotes; Nadëb: Rivet, Kok, and Tastevin 1925, Schultz 1959, Weir 1984, 1986, 1990, 1994; Kakua and Nukak: Cabrera et al. 1994, Huber and Reed 1992, Marie-Claude Mattei-Müller p.c.).

APPENDIX III:

A comparison of shared and innovated vocabulary from different semantic domains across the Nadahup family (and Tukano and Baniwa)

CULTURALLY BASIC VOCABULARY and USEFUL NON-CULTIVATED PLANTS

	(Nadahup family)					(E. Tukanoan)	(Arawak)	
	HUP	Umari Norte	HUP	YUHUP	DÂW	NADĚB	TUKANO	BANIWA
deer	<i>mɔhɔy</i>	<i>mɔhɔy</i>	<i>mɔhɔy</i>		<i>tʃahɔːw</i>	<i>kuyád, möriho</i>	<i>yamá</i>	<i>néeri</i>
fish	<i>hɔ̃p</i>	<i>hɔ̃p</i>	<i>hɔ̃p</i>		<i>há:p</i>	<i>ta-h' ĩb</i>	<i>wa ʔi</i>	<i>kóphe</i>
rat	<i>bĩʔ</i>	<i>bĩʔ</i>	<i>bĩʔ</i>		<i>nũʔ</i>	<i>gaw' ĩng</i>	<i>bi ʔi</i>	<i>hĩiri</i>
blood	<i>biyĩw, bihiw</i>	<i>biyĩw</i>	<i>yíw</i>		<i>yíw</i>	<i>mayíw</i>	<i>dĩi</i>	<i>-iiránaa</i>
tooth	<i>tɔg</i>	<i>tɔg</i>	<i>tɔg</i>		<i>tɔg</i>	<i>tɔg</i>	<i>upika</i>	<i>-eétsha</i>
son	<i>tæh</i>	<i>tæh</i>	<i>tæh</i>		<i>tæː</i>	<i>t'aah</i>	<i>mak-, pō ʔra</i>	<i>-eenípe, -íri</i>
grandfather	<i>ʔú</i>	<i>dú</i>	<i>ʔú</i>		<i>xéd</i>	<i>ɔɔw</i>	<i>pakĩroho</i>	<i>-wheri</i>
bacaba	<i>ciwĩb</i>				<i>wĩ:b</i>	<i>siwöb</i>	<i>yumû</i>	<i>póoperi</i>
buriti	<i>j'æk</i>			<i>ca ʔak</i>		<i>čögi</i>	<i>iitewi</i>	
cipó vine	<i>yúb</i>				<i>yúb</i>	<i>yúb</i>	<i>misî</i>	<i>dápi</i>
cotton	<i>cuwũk</i>	<i>cuwũk</i>	<i>wúk</i>		<i>wúk</i>	<i>söwög, köwadn</i>	<i>(yuta) bu ʔsa</i>	<i>ttáawaali</i>
pupunha	<i>j' ĩw</i>	<i>j' ĩw</i>	<i>c' ĩw</i>		<i>s ĩw</i>	<i>yö</i>	<i>ĩê</i>	<i>pĩpiri</i>

Cognate Cognate Dâw-Nadëb only Built from native parts Borrowed or calqued

- Most basic vocabulary is shared across entire Nadahup family, very little is borrowed from Tukano.
- Early Nadahup peoples presumably knew all these items, and usually kept their words for them over time.

CULTIVATED PLANTS

	(Nadahup family)					(E. Tukanoan)	(Arawak)	
	HUP	Umari Norte	HUP	YUHUP	DÂW	NADĚB	TUKANO	BANIWA
banana	<i>pʰhʃ</i>	<i>pʰhʃ</i>	<i>wʰhʃ</i>	<i>sélʔ</i>	<i>masææɫ</i>	<i>ohô</i>	<i>palána</i>	
	[brought by Portuguese 1502] (Hup: wild ‘banana’: <i>pʰhʃ</i> , <i>hay’ay pʰhʃ</i>)							
cará	<i>j’ǎh</i>	<i>j’ǎh</i>	<i>c’ǎh</i>	<i>ĩn/ ɛ:n</i>	<i>mana iĩn</i>	<i>ya ʔmû</i>	<i>áaxi</i>	
corn	<i>pʰhʃ yúm</i>	<i>pʰhʃ yúm</i>	<i>hóka</i>	<i>w’ǎt</i>		<i>ohôka</i>	<i>káana</i>	
	(= ‘banana-plant seed[v.]’)							
manioc	<i>kayak tɔʔ</i>	<i>kiyak tɔʔ</i>	<i>yak tɔʔ</i>	<i>yák</i>	<i>bɔɔg</i>	<i>kií</i>	<i>káini</i>	
	(tɔʔ ‘tuber’)							
hot pepper	<i>kɔw</i>	<i>kɔw</i>	<i>kɔw</i>	<i>xɔw</i>	<i>pohó</i>	<i>biâ</i>	<i>áati, mítsa</i>	
pineapple	<i>canǎ</i>	<i>canǎ</i>	<i>yɔy</i>	<i>wǎ:n</i>	<i>mawaadn</i>	<i>sěrá</i>	<i>máawiro</i>	
	<i>yɔy</i> (type of pineapple)							
potato	<i>pɪʔ</i>	<i>pɪʔ</i>	<i>c’ǎh</i> (= ‘cara’)	<i>yɔʔ</i>	<i>karöra</i>	<i>yǎpî</i>	<i>kalíri</i>	
tobacco	<i>huĩ</i>	<i>huĩ</i>	<i>huĩ</i>	<i>huĩ</i>	<i>úhta</i> (cognate?)	<i>mɪʔrô</i>	<i>dzéema</i>	

Cognate Cognate Dâw-Nadëb only Built from native parts Borrowed or calqued

- Few or no (?) words shared across family: Early Nadahup peoples may not have known most of these plants.
- Did early Nadahup peoples have tobacco?
- Split between Hup-Yuhup and Dâw-Nadëb – suggests family had undergone at least one major division before encountering these plants.
- Some borrowing from Tukano: The Hup-Yuhup peoples may have learned about these plants from them.

MANIOC PRODUCTS AND PROCESSING

	(Nadahup family)					(E. Tukanoan)	(Arawak)	
	HUP	Umari Norte	HUP	YUHUP	DÂW	NADĚB	TUKANO	BANIWA
manioc meal	<i>kǎñ</i> (= ‘toast[v.]’)	<i>cíh</i> (=DRgrass)		<i>cak pój</i> (=‘mash-toasted’)	<i>súk</i>	<i>masuuk</i>	<i>poʔká</i> (pieces, bits in general)	<i>matsóka</i>
manioc bread	<i>b’ǎʔ</i>	<i>pǎñ’</i> (Middle Tiquié: =any non-manioc flat cake)		<i>k’õy</i>	<i>baːʔ</i>	<i>madáo</i>	<i>ãhû</i> (<i>baʔá</i> ‘eat’)	<i>peéthe</i>
roça	<i>b’ǎ</i> (= v. ‘chop down trees’)			<i>b’ǎ</i>	<i>kaw</i>	<i>gǎw</i> (= v. ‘chop down trees’)	<i>wesé</i>	<i>keníke</i>
sifting basket	<i>cǎm’</i>	<i>cǎm’</i>		<i>cǎm’</i>	<i>bɔy líg</i>	<i>yerata, napíd</i>	<i>siʔapahá</i>	<i>dopítsi,</i>
tipiti	<i>yǎñ</i>			<i>yǎñ</i>		<i>horúbm</i>	<i>wãti-kẽʔewa</i>	<i>ttirolípi</i>
tripod	<i>mɔhɔy</i> (= ‘deer’)						<i>yamá</i> (=deer)	<i>mháitsi</i>
grater	<i>hǎp</i>	<i>hǎp</i>		<i>hǎp</i>	<i>hǎp</i>	<i>hǎp</i>	<i>sõʔkôro</i> (v. <i>oé</i>)	<i>áada</i>

Cognate Cognate Dâw-Nadëb only Built from native parts Borrowed or calqued

- Few words shared across family: Early Nadahup peoples may not have known many of these concepts.
- But did early Nadahup peoples use graters? If not for manioc, then for something else?
- Some borrowing from Tukano: indicates likely source of these agricultural items.

CULTURAL VOCABULARY (RITUAL AND MATERIAL)

	(Nadahup family)					(E. Tukanoan)	(Arawak)	
	HUP	Umari Norte	HUP	YUHUP	DÂW	NADĚB	TUKANO	BANIWA
hammock	yág	yág	yág	yǎg	yǎg	yág	pũŋgí	piéta
blowgun	caʔb'ak			b'ák		c'ɔw (Hup cɔw- shoot with dart)	buxpú-wö (paxiuba pole)	
canoe	hɔh=těg	hɔh=těg	hɔh	hɔ:	h'ɔh	h'ɔh	yukísí	íta
axe	mǎm	mǎm	mǎm	ma:m	mím	mím	komêga (iron)	dzóoka
shaman	cɔw			cɔw	cɔ:w	síw	yaî (=‘jaguar’)	malíri
River Indian	wɔh	wɔh		wɔ:h				
Non-Indian	teg-hɔ-ʔh (=fire-MS)			kadiwa	buy	mís	pekasíhí (pekame ‘fire’)	yalánawi (LgGeral ‘yala’)
dabacuri (ritual)	pəʔ (= ‘pour out’)						poʔó (= ‘pour out’)	pódaali (NOT ‘pour’)
caapi	kapiʔ (hallucinogenic plant; ayahuasca)						kapi	kaâpi
coca	pũʔk (= ? + ‘scoop’)			cohó		patóo	paâtu	hiipáto
principal deity/ culture figure (‘Bone-Son’)	g'æg tǎh					kapíra	o ʔá-kó (‘Bone-Son’)	ñapirikuli (‘One on the Bone’)

Cognate Cognate Dâw-Nadëb only Built from native parts Borrowed or calqued

- Early Nadahup peoples may have had hammocks, blowguns, canoes, axes, and shamans.
- Shared word for ‘River Indian’ (generic for agriculturalist groups): interaction may predate at least the later divisions of the Nadahup family.
- Ritual and religious elements: possible Arawak source? Or Tukanoan?

(Sources for data: Hup, Umari Norte Hup, and Yuhup: my fieldnotes; Dâw: V. Martins 1994 and my fieldnotes; Nadëb: Rivet, Kok, and Tastevin 1925, Schultz 1959, Weir 1984, 1986, 1990, 1994; Tukano: Ramirez 1997b; Baniwa: Ramirez 2001).

Appendix IV: Texts

Text 1: Narrative

The Spirit Who Fished for Traira

Baktǎb' b'ǒy=n'ǎn kǎk-ǎp pǎnǎŋ

Isabel Salustiano (Kǎk), Tat Deh

Yúp=mah yúp baktǎb'=ǎy-ǎn=mah ǎyǔp=ǎh yǎh-ní-íy.
 that.ITG=REP that.ITG spirit=FEM-OBJ=REP one=MSC affine-be-DYNM
 ‘So, it’s said, there was a man who had taken a spirit woman as a wife.

Yúp ǎyǔp=ǎh, yǎh-ní-ip=mah yúp, tǎh hám-áh, tǎh=yǎh=n'ǎn
 that.ITG one=MSC affine-be-DEP=REP that.ITG 3sg go-DECL 3sg=affine=PL.OBJ
 That man, the one who was thus affinally related, it’s said, he went

wát-ap. Yúp tǎh=yǎh=d'ǎh mǎh-an wat-hám-ap=mah yúp,
 go.visiting-DEP that.ITG 3sg=affine=PL near-DIR go.visiting-go-DEP=REP that.ITG
 visiting his affinal relatives (spirits). He went visiting to where his affinal relatives lived,

hǎy mǎh yúw-úh, baktǎb' mǎh-an wíd-hám-áh. Baktǎb'=ǎy-ǎn=mah
 um near that.ITG-DECL spirit near-DIR arrive-go-DECL spirit=FEM-OBJ=REP
 he arrived to where the, um, where the spirits were. He had a spirit woman

yúp tǎh tǎn-ǎh, húp-up=ǎh-íh.
 that.ITG 3sg hold-DECL person-DEP=MSC-DECL
 as a wife, this man (did).’

Yúp=mah yúp “b'ǒy ǎn kǎk-ǎy-nǎŋ” nǎ-yóǎ=mah, tǎh=yǎh-ǎn tǎh
 that.ITG=REP that.ITG traira 1pl pull-VENT-COOP say-SEQ=REP 3sg=affine-OBJ 3sg
 ‘So, it’s said, having said “Let’s go fish for traira together!” he (the spirit relative) took

tǎn-hám-ah, yúp húp-up=ǎh-ǎn, baktǎb'-íh, tǎh=yǎh-ǎn.
 hold-go-DECL that.ITG person-DEP=MSC-OBJ spirit-DECL 3sg=affine-OBJ
 his affinal relative along, (took) that man, the spirit (did), (took) his affinal relative.

yǎkán=mah b'ob'ǎd-ót=mah yúw-úh, b'ob'ǎd-ót=mah yúp
 over.there=REP forest.clearing-OBL=REP that.ITG forest.clearing-OBL=REP that.ITG
 It was out there in a forest clearing²⁰⁹, in a forest clearing, it’s said,

²⁰⁹ A *b'ob'ǎd* is a naturally occurring forest clearing, caused by a certain species of tree (*b'ob'ǎd=teg*) that poisons the ground around it, killing the neighboring plants.

b'ōy=n'āñ tñh kək-əh. Bĩʔ=n'āñ=mah yúp tñh hāʔ-ʔě-h,
 traíra=PL.OBJ 3sg pull-DECL rat=PL.OBJ=REP that.ITG 3sg search.inside-PERF-DECL
 he fished for traíra. He (the spirit) searched out rats (for bait)²¹⁰ with his hands,

cāʔ-át hāʔ-ʔě-h, yúp baktñb'-ñh. “B'ōy=n'āñ ʔñ kək-nñ-ay!”
 root.clump-OBL search.inside-PERF-DECL that.ITG spirit-DECL traíra=PL.OBJ 1pl pull-COOP-INCH
 searched (them) out in clumps of roots, (did) that spirit. “Let’s go fish for traíra!”

Yúp=mah yúp yí-d'əh, hāy=d'əh, yaʔám=d'əh yǎñ=mah ʔñ-āñ-āw-ǎñ!
 that.ITG=REP that.ITG that.ITG-PL um=PL jaguar=PL FRUST=REP 1pl-OBJ-FLR-DECL
 ‘So, it’s said, those (the spirit’s traíra fish) were, um, jaguars for us (humans)!

Yññ-mĩʔ=mah yúp tñh-āñ-āp, baktñb'-āñ-āp, b'ōy=d'əh g'əh-ní-h.
 that.ITG-be.like-UNDER=REP that.ITG 3sg-OBJ-DEP spirit-OBJ-DEP traíra=PL be-INFR2-DECL
 At the same time, it’s said, for him, for the spirit, they were traíra fish.

“Tñh=tǎñ=d'əh j'ǎñ wídnæn-kəcət-bĩp,” nɔɔy=mah. Yúp=mah
 3sg=small=PL DST.CNTR arrive.come-first-HAB-DEP say-DYNM=REP that.ITG=REP
 “The little ones always arrive first,” (the spirit) said, it’s said. So he fished;

tñh kək-əh, tñh b'uy-yæt-d'əh-píd-ñh, tñh=tǎñ=n'āñ=mah
 3sg pull-DECL 3sg throw-lie.on.ground-send-DIST-DECL 3sg=small=PL.OBJ
 he kept pulling (them) out and throwing them on the ground, he kept pulling out

tñh kək-d'əp-píd-ñh. Yúp=mah tñh=nuhuý tñh tǎñ-əp=mah yúp,
 3sg pull-take-DIST-DECL that.ITG=REP 3sg=neck 3sg break-DEP=REP that.ITG
 the little ones. Then, it’s said, he broke their necks,

kúnunununu tñh nɔɔpíd-ñh. Yñ b'ýyíʔ píd=mah, yñ tñh nñh-ñ=yíʔ=mah.
 IDEO 3sg say-DIST-DECL thus only DIST=REP thus 3sg be.like-OBL=TEL=REP
 kununununu was the sound it made. Just like this, over and over, thus he (the spirit) did.

J'əb hæyɔ tñh=pöğ=d'əh wídnæn-ay-áh; ʔñ-āñ-āp
 night middle 3sg=big=PL arrive.come-INCH-DECL 1pl-OBJ-DEP
 And in the middle of the night the big ones began to arrive; for us (humans)

yaʔám=d'əh tñh=pöğ=d'əh yǎñ=mah yúp=hin-íp.
 jaguar=PL 3sg=big=PL FRUST=REP that.ITG=also-DEP
 they were big jaguars.

²¹⁰ Traíra fish of course do not eat rats.

Yính-yóʔ=mah yúp, tñh mæh-hũʔ-yíʔ-ñh, tñh=hupáh=mæh=yíʔ=mah
 that.ITG-SEQ=REP that.ITG 3sg kill-finish-TEL-DECL 3sg=back=DIM=TEL=REP
 ‘So after that, it’s said, he (the spirit) finished killing them all, (while)

yúp húp-up=ñh wíʔwíʔ-d’ák-áh, tñh=yñh hupáh máh=yíʔ=mah,
 that.ITG person-DEP=MSC tremble-be.against-DECL 3sg=affine back near=TEL=REP
 that person was trembling right up against his (the spirit’s) back, against his affine’s back,

ya ʔám=n’añ ʔám-ɔp. Tñh-añ-ãp b’õy=d’əh=mah, tñh=põg=d’əh=mah.
 jaguar=PL.OBJ fear-DEP 3sg-OBJ-DEP traíra-PL=REP 3sg=big=PL=REP
 afraid of the jaguars. For him (the spirit) they were traíra, big ones, it’s said.

“Tñh=põg=d’əh wæd-d’oʔ-næn-yíʔ-cñw-ñy,” nɔɔy=mah;
 3sg=big=PL eat-take-come-TEL-COMPL-DYNM say-DYNM=REP
 “The big ones have already arrived to eat (the bait),” (the spirit) was saying;

hih-næn-æy ʔín nɔ-nñh-ñw-ñh.
 jaguar.roar-come-DYNM 1pl say-be.like-FLR-DECL
 they came jaguar-roaring, we would say.

Yí nɔ-yóʔ=mah yúp tñh mæh-æh; kawag d’əh-næn-tég kɔʔah=mæh=mah
 that.ITG say-SEQ=REP that.ITG 3sg kill-DECL dawn send-come-FUT before=DIM=REP
 ‘Having said this, it’s said, he killed (the big fish); it was just before dawn arrived

hũʔ-nəh-g’ét-ay-áh yí-d’əh-əh. “Ya ʔãp=yíʔ ʔín mæh-æh.
 finish-fall-stand-INCH-DECL that.ITG-PL-DECL all.that=TEL 1pl kill-DECL
 that they finished. “That’s all we’ll kill.

Háý, b’õy=n’añ cuh-ʔáy! Tñh=tãñ cúh tñh-yíʔ, tñh=põg cúh
 um traíra=PL.OBJ string-VENT.IMP 3sg=small string.IMP 3sg-TEL 3sg=big string.IMP
 Um, come string up the traíra! String the small ones and the big ones

tñh-yíʔ bíʔ!” tñh nɔɔh. Yñ tñh nɔɔy keyóʔ=mah yúp,
 3sg-TEL make.IMP 3sg say-DECL thus 3sg say-DYNM CAUSE=REP that.ITG
 separately!” he (the spirit) said. Upon his saying this,

cuh-d’oʔ-hipãh-nñh tñh g’et-g’óʔ-óh, húp-up=ñh-ñh.
 string-take-know-NEG 3sg stand-go.about-DECL person-DEP=MSC-DECL
 he (the man) just stood around without knowing how to string them, (did) the person.

Yúp cuh-d'oʔ-hipāh-n̄h t̄h g'et-g'óʔ-óy keyóʔ=mah yúp,
 that.ITG string-take-know-NEG 3sg stand-go.about-DYMN CAUSE=REP that.ITG
 Because he was standing around not knowing how to string them,

“yĩ n̄h-ĩ bĩg j'āh ʔāh-āh, b'ōy ʔāh cuh-tāh-āh,”
 that.ITG be.like-DYMN HAB DST.CNTR 1sg-DECL trairst 1sg string-COND-DECL
 “This is how I always do it, when I string trairst,”

nɔ-yóʔ=mah, t̄h cuh-d'oʔ-yĩʔ-ay-áh. T̄h=təg cáʔ-át cuh-d'əh-cák,
 say-SEQ=REP 3sg string-take-TEL-INCH-DECL 3sg=tooth box-OBL string-send-climb
 (the spirit) said, it's said, and he strung them all up. (He) strung (one) up by the chin,

t̄h=təg cáʔ-át cuh-d'əh-cák t̄h ní-mah-áh.
 3sg=tooth box-OBL string-send-climb 3sg be-REP-DECL
 strung (the next) up by the chin (and so on), thus he did, it's said.

Ym̄h-yóʔ=mah yúp t̄h=pōg=n'ān t̄h cuh-d'oʔ-yĩʔ-b'ay-áh.
 that.ITG.be.like-SEQ=REP that.ITG 3sg=big=PL.OBJ 3sg string-take-TEL-AGAIN-DECL
 ‘Having done this, it's said, he then strung up the big ones.

“Hám, yo-d'oʔ-ʔáy,” nɔ-ʔy=mah. Yĩ=mah t̄h yo-d'oʔ-hipāh-n̄h
 go.IMP dangle-take-VENT.IMP say-DYMN=REP thus=REP 3sg dangle-take-know-NEG
 “Go on, carry them,” (the spirit) said. Then, it's said, he (the man) was standing around

g'əh-g'et-g'óʔ-op=b'ay. “ʔāh b'ōy=n'ān núp=yiʔ
 be-stand-go.about-DEP=AGAIN 1sg trairst=PL.OBJ this=TEL
 again, not knowing how to carry (them). “I always carry trairst

yo-d'oʔ-kədhām-n̄h-ĩ bĩg j'āh ʔāh-āh, b'ōy=n'ān
 dangle-take-pass.go-be.like-DYMN HAB DST.CNTR 1sg-DECL trairst=PL.OBJ
 and go like this, I do; you don't know how to carry trairst, apparently!”

yo-hipāh-n̄h=cud ʔām-áh!” nɔ-ʔy=mah, t̄h yo-d'oʔ-kədhām-yĩʔ-ay-áh.
 dangle-know-NEG=INFR 2sg-DECL say-DYMN=REP 3sg dangle-take-pass.go-TEL-INCH-DECL
 (the spirit) said, and he carried them quickly off dangling from his hand.

Yo-d'oʔ-kədhām-yóʔ=mah, deh=mi t̄h-āh, “ʔm̄ toġ cɔʔ-ʔe-h!”
 dangle-take-pass.go-SEQ=REP water=creek small-OBL 1pl belly gut-PERF-DECL
 Having carried them quickly off, at the stream he said, “let's

t̄h nɔ-ay-áh. Yúp=mah yúp “pēc kój!” nɔ-yóʔ=mah t̄h-ĩh,
 3sg say-INCH-DECL that.ITG=REP that.ITG scale scrape.off say-SEQ=REP 3sg-DECL
 gut them!” So then, it's said, “scrape off the scales!” he (the spirit) said;

“*ʔǎh hipāh-nʔh ʔǎh-ǎh,*” *nʔ-ʔy=mah húp-up=ʔh cóʔ-óy=bʔay-áh.*
 1sg know-NEG 1sg-DECL say-DYNM=REP person-DEP=MSC LOC-DYNM=AGAIN-DECL
 “I don’t know how!” the man said in his turn.

“*ʔh-íp yí-nʔh=nʔh hipāh-nʔh yǎh tih!*” *Ya ʔám=dʔh=mah*
 1pl-DEP that.ITG-NMZ=PL.OBJ know-NEG FRUST EMPH2 jaguar=PL=REP
 “We don’t know anything about those things!” They were jaguars

ʔh-ǎh-ǎw-ǎh. Yúp=mah tih tok hihit-bʔuy-dʔh-ham-yíʔay-áh.
 1pl-OBJ-FLR-DECL that.ITG=REP 3sg belly scrape.repeatedly-throw-send-go-TEL-INCH-DECL
 for us (humans), it’s said. So, it’s said, he (the spirit) cut open the bellies (of the fish) and
 threw out (the innards).

Tok hihit-bʔuy-dʔh-ham-yóʔ=mah tih háy-ay-áh, tih=pěc
 belly scrape.repeatedly-throw-send-go-SEQ=REP 3sg um-INCH-DECL 3sg=scale
 Having opened the bellies and thrown out the innards, he um, he scraped off

tih kój-ay-áh. Tih koj-yóʔ, yínih-yóʔ tih tok cóʔ-húʔ-yóʔ,
 3sg scrape-INCH-DECL 3sg scrape-SEQ that.ITG.be.like-SEQ 3sg belly gut-finish-SEQ
 the scales. (The spirit’s) having scraped off the scales, and after that having finished
 gutting them,

híd yo-dʔoʔ-yíʔay-áh, té yínih-yóʔ=mah yúp
 3pl dangle-take-TEL-INCH-DECL until that.ITG.be.like-SEQ=REP that.ITG
 they went off carrying (the fish) dangling from their hands, until after that, it’s said,

tih wídye-yíʔay-áh.
 3sg arrive.enter-TEL-INCH-DECL
 he (they) arrived home.

Ya ʔǎp=yíʔ ʔǎh ʔíd-té-ay-áh; húʔ-ay ʔúhníy yúw-úh, pǎ-ay.
 all.that=TEL 1sg speak-FUT-INCH-DECL finish-INCH maybe that.ITG-DECL NEG:EX-INCH
 ‘That’s all I’m going to tell; I guess it’s finished, that’s all there is.’

Text 2: Narrative

A Story of Curupira

Doh ʔǎy Pínɪŋ

Teresa Monteiro Socot (Mũn), Tat Deh

Nút doh ʔǎy pínɪŋ ʔǎh pínɪŋ-té-h. Nút ʔínɪh j'áh-át,
 here Curupira story 1sg tell.story-FUT-DECL here 1pl.POSS land-OBL
 Now I'll tell a story about Curupira. Here in our land,

deh-g'æt-yǎh=d'əh nɪh j'úg-út, yúp doh ʔǎy ní-ty, nɔ́yha?
 water-leaf-flood.area=PL POSS forest-OBL that.ITG Curupira live-DYNM INTERJ
 in the forest of the people of the headwaters of the streams, lives Curupira, say.

Pǎt bɔ́ɔ́y=mah doh ʔǎy-ǎh. Tínɪh j'ib=hin hǔy ʔah cóʔ=mah,
 hair long-DYNM=REP Curupira-DECL 3sg.POSS foot=also behind LOC=REP
 He has long hair, it's said, has Curupira. His feet also point backwards, it's said,

tɪh y'æt-d'óʔ-yíʔ-ɪh. Húp-ǎn tɪh wæd-tú-ay, pík-ty=mah,
 3sg leave-take-TEL-DECL person-OBJ 3sg eat-WANT-INCH shriek-DYNM=REP
 as he puts them down. When he wants to eat people, he shrieks (to lure them near), it's

ya ʔambo? tǎh pík=yíʔ nɔ́-nɪh-ty=mah, doh ʔǎy-ǎh;
 dog small shriek=TEL say-be.like-DYNM=REP Curupira-DECL
 said, he always shrieks just like a puppy, it's said, does Curupira;

yěh=yíʔ pík-nɔ́-nɪh-ty=mah. Mǎh-ǎn=mah cǎp tɪh hitǎʔ-ǎh,
 jacamim-TEL shriek-say-be.like-DYNM=REP inambu-OBJ=REP other 3sg imitate-DECL
 he shrieks like a jacamim bird, it's said. The inambu bird, it's said, is another that he imitates,

doh ʔǎy-ǎh. Yúp=mah yúp j'úg-út g'et-g'óʔ=d'əh wíʔ-hipāh-nɔ́ɔ́h.
 Curupira-DECL that=REP that.ITG forest-OBL stand-wander=PL hear-know-say-DECL
 does Curupira. Thus, it's said, those who go wandering in the forest tell about how they hear and recognize him.

Hú=d'əh ni húʔ=mah tɪh hitǎʔ-ǎh, tɪh hitǎʔ-ǎw-ǎh; yíʔ nɔ́ɔ́y
 animal=PL all=REP 3sg imitate-DECL 3sg imitate-FLR-DECL thus say-DYNM
 He imitates all the animals, it's said, he imitates (them); so say

wíʔ=d'əh n'úh-úh.
 hear=PL CNTR-DECL
 those who have heard him.

ʔayũp=ʔǎy=mah j'ǎh b'ǎ-an hám-áh. Deh=mí pǒg-ót wáʔah cóʔ=mah
 one=FEM=REP DST.CNTR roça-DIR go-DECL water=river big-OBL other.side.of.water LOC=REP
 'A woman, it's said, once went to her roça. She went across to

tǎh b'ǎ hám-áh, tǎh b'ǎyǐ? Yǎh-mǐʔ=mah tǎh=tǎh ʔip=b'ay hǎp
 3sg roça go-DECL 3sg alone that.ITG.be.like-UNDER=REP 3sg=child.father=AGAIN fish
 the her roça on the other side of the river, it's said, she alone. At the same time her
 husband went

kǎk-ǎp hám-áh. Deh=mí-an ham-yóʔ=mah, hǎhtǎg-ét ham-yóʔ=mah, tǎh
 pull-DEP go-DECL water=river-DIR go-SEQ=REP canoe-OBL go-SEQ=REP 3sg
 fishing. Having gone by the river, having gone by canoe, it's said, she went

cǎp-ǎh, tǎh b'ǎ-an hám-aw-áh. Yǎkán bǎg wǎdcǎp-yoʔ,
 go.from.river-DECL 3sg.POSS roça-DIR go-FLR-DECL over.there long.time arrive.go.from.river-SEQ
 up the bank, going to her roça. After having spent a long time coming up (to reach her

ní-íy=mah, tǎg tǎh tǎʔ-ǎh, j'áh hǎp-té-p=mah tǎh tǎʔ-ǎh.
 be-DYNM=REP wood 3sg light.fire-DECL earth sweep-FUT-DEP=REP 3sg light.fire-DECL
 field), she lit a fire, she would sweep the ground (and burn the weeds), so she lit a fire.

Yúp tǎh=yǐʔ hǎp-hup-cǎp=mah, ʔayũp=ʔh tǎh-ǎn wǎdnǎn-ay-áh.
 that.ITG 3sg=TEL sweep-RFLX-COMPL=REP one=MSC 3sg-OBJ arrive.come-INCH-DECL
 'Then when she had finished sweeping up, it's said, a man arrived to her.

Tǎh=tǎh ʔip=yǐʔ key-nǎh-ǎy=mah; dohʔǎy mǐʔ=cud=mah tǎh-ǎn yǎ
 3sg=child.father=TEL see-be.like-DYNM=REP Curupira UNDER=INFR=REP 3sg-OBJ that.ITG
 He looked like her husband, it's said; however, it was Curupira,

nǎh-ní-ih. Yǎ wǎdnǎn-yóʔ=mah yúp, g'ǎ wag g'ǎ-ǎy=nih,
 be.like-be-DECL thus arrive.come-SEQ=REP that.ITG hot day be-DYNM=EMPH.CO
 apparently. So having arrived, it's said—it was a hot dry-season day—

“ʔám-ǎn nǎm=d'ǎh ní-íy hǎdʔ?” nǎ-yóʔ=mah, tǎh-ǎn tǎh ʔih-kéy-éh.
 2sg-OBJ louse=PL be-DYNM 3pl say-SEQ=REP 3sg-OBJ 3sg ask-see-DECL
 “are there lice on you?” he asked her, it's said.

“Nǎm ʔám-ǎn ʔǎh key-nǎh,” nǎ-ǎy=mah. Tǎh=tǎh ʔip=yǐʔ key-nǎh-ǎy=mah.
 louse 2sg-OBJ 1sg see-COOP say-DYNM=REP 3sg=child.father=TEL see-be.like=REP
 “I'll check you for lice,” he said, it's said. He looked like her husband, it's said.

Hǎʔ, key-ʔay-kǎm, ʔǎn cícid-icáp=hǎ, yí-d'ǎh-ǎh, *nǎ-yóʔ=mah yúp,*
 yes see-VENT-IMP2 1sg.OBJ itch-INTS1=NONVIS that.ITG-PL-DECL say-SEQ=REP that.ITG
 “All right, come look, they’re making me itch a lot.” Having said this,

tǎh yu-ham-pǎm-ay-áh, nǎm key-yǎh-ǎw-ay-áh.
 3sg wait-go-sit-INCH-DECL louse see-request-FLR-INCH-DECL
 she sat down and waited for him to check for lice.

Yúp yu-ham-pǎm-yóʔ=mah yúp, yúp key-tǎh-íp=yíʔ, tǎh-ǎn tǎh
 that.ITG wait-go-sit-SEQ=REP that.ITG that.ITG see-lie-DEP=TEL 3sg-OBJ 3sg
 Having sat down and waited, it’s said, that one was lying about looking (for lice); he

ʔun'-yíʔ-ní-h, tǎmǎh núh cǎwǎh=mah tǎh ʔun'-yíʔ-ní-h.
 suck-TEL-INFR2-DECL 3sg.POSS head brain=REP 3sg suck-TEL-INFR2-DECL
 sucked her, he sucked out her brain, it’s said.

Yúp=mah yúp, “pǎ, yí-d'ǎh-ǎh. Kayak tǎʔ g'ǎʔ-ʔáy-áy!”
 that.ITG=REP that.ITG NEG:EX that.ITG-PL-DECL manioc tuber pull.manioc-VENT-INCH.IMP
 ‘So with that, “There aren’t any. Go pull manioc!”

nǎ-ǎy=mah yúp doh ʔǎy-ǎh. Tǎh=tǎh ʔip=yíʔ key-nǎh-ǎy=mah yúw-úh.
 say-DYNM=REP that.ITG Curupira-DECL 3sg=child.father=TEL see-be.like-DYNM=REP that.ITG-DECL
 said that Curupira. He looked like her husband, it’s said.

Yúp=mah yúp, “hǎʔ, g'ǎʔ-d'ǎʔ-ʔay-ǎh,” nǎ-yóʔ=mah, tǎh g'ǎʔ-ǎh.
 that.ITG=REP that.ITG yes pull.manioc-take-VENT-PERF-DECL say-SEQ=REP 3sg pull.manioc-DECL
 So, it’s said, having said “all right, I’ll go pull (it),” she pulled (manioc).

Tǎh cog-kamí=mah yúp, “kǎʔah ʔǎh d'ob-yu-té-h, máy!”
 3sg gather.up-moment.of=REP that.ITG before 1sg go.to.river-wait-FUT-DECL go.INCH.IMP
 As she was gathering it into her basket, “I’ll go ahead and wait, let’s go!” (he) said,

nǎ-yóʔ=mah, tǎh kǎdd'ob-yíʔ-ay-áh, dehd'óʔ cóʔ, tǎh cǎp-ǎʔ
 say-SEQ=REP 3sg pass.go.to.river-TEL-INCH-DECL water.take LOC 3sg go.from.river-PERF
 and he went quickly down to the river, to the port, from whence she had come, it’s said,

cóʔ=mah, tǎh d'ob-yíʔ-ay-mah-ǎh.
 LOC=REP 3sg go.to.river-TEL-INCH-REP-DECL
 he went down to the river, it’s said.

Yñ-yí? hæŋæí=yí? g'ɔʔ-d'oʔ-yóʔ=mah, tñh cog-d'oʔ-yóʔ=mah,
 thus-TEL fast=TEL pull.manioc-take-SEQ=REP 3sg gather.up-take-SEQ=REP
 Thus having quickly pulled manioc, it's said, having gathered it into her basket,

tñh d'ob-yíʔ-ay-áh. D'ob-yóʔ=mah yúp, tñh widd'ob-key-yæh-æh.
 3sg go.to.river-TEL-INCH-DECL go.to.river-SEQ=REP that.ITG 3sg arrive.go.to.river-see-FRUST-DECL
 she went down to the river. Having gone down to the river, it's said, she arrived down
 and looked around in vain.

Næ húp pǎ=mah, tñh key-widd'ób-óh, næ húp pǎ=cud=mah.
 NEG:R person NEG:EX=REP 3sg see-arrive.go.to.river-DECL NEG:R person NEG:EX=INFR=REP
 There was no one there, it's said; she looked around as she went down, there was no one
 there.

“Hĩ-cóʔ yæh tñh ham-pog-yæh-æʔ tĩʔ! Núp=mæh=yíʔ tñh
 Q-LOC FRUST 3sg go-EMPH-FRUST-INT EMPH.INT this=DIM=TEL 3sg
 “Where could he have gone?! He just now went

kædd'ób-otíh!” nɔ-yóʔ=mah, tñh key-yɔhɔ-yæh-æh. Pǎ=mah.
 pass.go.to.river-EMPH2 say-SEQ=REP 3sg see-search-FRUST-DECL NEG:EX=REP
 down here!” she said, it's said, and looked all around in vain. He was not there, it's said.

Yññh-yóʔ=mah yúp kayak tɔʔ w'ob-d'oʔ-yóʔ=mah, tñh
 that.ITG.be.like-SEQ=REP that.ITG manioc tuber set-take-SEQ=REP 3sg
 ‘So with that, it's said, having placed her manioc (in the canoe), it's said, she

b'eh-hí-ay-áh. B'eh-yóʔ, yíkán tññh dehd'óʔ-an
 cross.water-descend-INCH-DECL cross.water-SEQ over.there 3sg.POSS water.take-DIR
 crossed the river, going downstream. Having crossed the river, she arrived there

widham-yíʔ ní-íy=mah yúp. Tññh kayak tɔʔ j'id-yóʔ=mah,
 arrive.go-TEL be-DYNM=REP that.ITG 3sg.POSS manioc tuber wash-SEQ=REP
 at her port. Having washed her manioc, it's said,

tñh cɔp-yíʔ-ay-áh, mɔy-an. Wídcɔp-yíʔ ní-íy,
 3sg go.from.river-TEL-INCH-DECL house-DIR arrive.go.from.river-TEL be-DYNM
 she went up from the river, to her house. She arrived and

tññh kayak tɔʔ tñh y'æt-yíʔ-ñh.
 3sg.POSS manioc tuber 3sg lay-TEL-DECL
 set down her manioc.

Yúp t̃h wídcɔp-hũy ʔah d̃ɣiʔ=mah, t̃h=t̃ɛh ʔip h̃ɔp
 that.ITG 3sg arrive.go.from.river-before VDIM=REP 3sg=child.father fish
 ‘Then shortly after she had arrived, her husband, who had gone

mæh-ʔay-ʔe ʔ-ní-p, wídb’áy-ay-áh. Dəb=mah h̃ɔp t̃h mæh-ní-h.
 kill-VENT-PERF-INFR2-DEP arrive.return-INCH-DECL many=REP fish 3sg kill-INFR2-DECL
 to kill fish, returned. He had killed a lot of fish.

“Cíw-ʔáy, nĩ ỹh=n’ǎn ʔāh g’et-wæd-ñɣ!” ñɔ-ɣy=mah,
 cook-VENT.IMP 1sg.POSS affine=PL.OBJ 1sg stand-eat-COOP say-DYNM=REP
 “Come cook (these fish), I’ll offer food to/ eat with my affinal relatives!” (he) said, it’s

t̃h=t̃ɛh ʔip-íh. Yúp=mah t̃h cíw-íh; cíw-yóʔ=mah yúp,
 3sg=child.father-DECL that.ITG=REP 3sg cook-DECL cook-SEQ=REP that.ITG
 said, her husband. So, it’s said, she cooked (them); having cooked them, it’s said,

cíw-hup-c̃ɣp=mah yúp, “g’et-wæd-ʔáy-áy, ʔám=ỹh=n’ǎn,”
 cook-RFLX-COMPL=REP that.ITG stand-eat-VENT-INCH.IMP 2sg=affine=PL.OBJ
 when she finished cooking them, “come offer food to your affinal relatives,”

ñɔ-ɣy=mah. Yúp=mah t̃h g’et-wæd-æh, yúp=mah yúp,
 say-DYNM=REP that.ITG=REP 3sg stand-eat-DECL that.ITG=REP that.ITG
 she said, it’s said. So, it’s said, he offered food to (them), and then,

g’et-wæd-yóʔ=mah yúp, t̃ā ʔāy=n’ǎn t̃h g’et-wæd-æp=b’ay-áh.
 stand-eat-SEQ=REP that.ITG woman=PL.OBJ 3sg stand-eat-DEP=AGAIN-DECL
 having fed them, it’s said, he fed the women.

G’et-wæd-yóʔ=mah yúp, núp d̃ɣʔ=n’ǎn, h̃ɔp=n’ǎn, póh wáb-át w’ob-yóʔ,
 stand-eat-SEQ=REP that.ITG this remain=PL.OBJ fish=PL.OBJ high jirau-OBL set-SEQ
 Having fed (them), it’s said, the remaining ones, the fish, having put them up high on the
 jirau,

“H̃h-yíʔ tán,” ñɔ-ɣy=mah. “H̃ɣʔ,” ñɔ-ɣy=mah, yúp t̃ā ʔāy-āh.
 smoke-TEL.IMP later say-DYNM=REP yes say-DYNM=REP that.ITG woman-DECL
 “Later smoke them,” he said, it’s said. “All right,” she said, the woman.

Yúp=mah yúp h̃ɔp=n’ǎn w’ob-yóʔ, t̃ɛg t̃əʔ-d’ak-yóʔ=mah, h̃ɔp=n’ǎn
 that.ITG=REP that.ITG fish=PL.OBJ set-SEQ wood kindle-be.against=REP fish=PL.OBJ
 So, it’s said, having put those fish up, having lit a fire, she put up

tĩh w'ób-óh. Yúp təʔ-d'ák-ap=yĩʔ=mah, tẽg-hod máh tĩnĩh yág
 3sg set-DECL that.ITG kindle-be.against-DEP=TEL=REP wood-hole near 3sg.POSS hammock
 the fish. As she lit a fire, it's said—her hammock was right next

ni-g'ĩh-ĩh=nih=mah; cak-g'āʔ-ní-ay-áh, hup-hipāh-nĩh
 be-be2-DYNM=EMPH.CO=REP climb-be.suspended-be-INCH-DECL RFLX-know-NEG
 to the fireplace—she climbed into (her hammock), and lay there

tĩh g'āʔ-yiʔ-ní-h.
 3sg be.suspended-TEL-INFR2-DECL
 unconscious.

Yúp=mah yúp tĩh=yĩh=d'əh máh-an ham-ʔáy-ap, tĩh=tāh ʔip
 that.ITG=REP that.ITG 3sg=affine=PL near-DIR go-VENT-DEP 3sg=child.father
 'Then, it's said, her husband returned from his affinal

widb'áy-áh. Hĩ ʔám nĩ g'ā-āyúp ?! Amĩh hĩp d'əh-əw-ay
 arrive.return-DECL Q 2sg this be.suspended-(V)that.ITG 2sg.POSS fish rot-FLR-INCH
 relatives' place. "What are you doing lying in the hammock like this? Your fish must be

yāh tĩh !” tĩh nĩ-ʔy=mah, tĩh-ān-áh. “Āh péʔ-éy=hō páh !
 FRUST EMPH2 3sg say-DYNM=REP 3sg-OBJ-DECL 1sg be.sick-DYNM=NONVIS PRX.CNTR
 spoiling!" he said to her. "I'm sick!

Péʔ-widnāh ní-íy=hō páh ʔān-áh !” nĩ-ʔy=mah,
 sick-arrive.come be-DYNM=NONVIS PRX.CNTR 1sg.OBJ-DECL say-DECL=REP
 I have a fever!" she said, it's said,

yúp=ʔāy-áh, tĩh=tāh ʔin-ih, tĩh-ān-áh. Yúp=mah yúp,
 that.ITG=FEM-DECL 3sg=child.mother-DECL 3sg-OBJ-DECL that.ITG=REP that.ITG
 that woman, his wife, (said) to him. Then, it's said,

“hĩ-n'ĩh cáp ʔám-ān péʔ-yāh-āh? tĩ ?!” nĩ-ʔy=mah . Yúp=mah yúp
 Q-NMZ INTS1 2sg-OBJ sick-FRUST-INT EMPH.INT say-DYNM=REP that.ITG=REP that.ITG
 “what in the world could be making you sick?” he said. Then, it's said, she told

tĩh-ān tĩh ʔid-ay-áh, “ʔám=yiʔ key-nĩh-íp, ʔān b'ĩ-an
 3sg-OBJ 3sg speak-INCH-DECL 2sg=TEL see-be.like-DEP 1sg.OBJ roça-DIR
 him, “Someone who looked like you came to me

widway-ʔáy-áh. ʔÁm=yiʔ widway-ʔáy-aʔ, yĩkán?” nĩ-yóʔ=mah,
 arrive.go.out-VENT-DECL 2sg=TEL arrive.go.out-VENT-INT over.there say-SEQ=REP
 in the roça. Was it you that went out there?” (she) said, it's said,

tɪh=tæh ʔin tɪh-ǎn ʔih-kéy-éh. “ǎh ham-nɪh-ɪy=nih-áp,”
 3sg=child.mother 3sg-OBJ ask-see-DECL 1sg go-be.like-DYNM=EMPH.CO-FOC.DEP?
 his wife asked him. “I didn’t go,”

nɔ-ɔy=mah, tɪh=tæh ʔip-ih. “Cǎ-n’ ʔh=ʔh=yɪʔ=cud, ʔám-ǎn bahad-ʔay-ní-h!”
 say-DYNM=REP 3sg=child.father-DECL other-NMZ=MSC=TEL=INFR 2sg-OBJ appear-VENT-INFR2-DECL
 (he) said, her husband. “It must have been some other man, who appeared to you!”

nɔ-yóʔ=mah, tɪh=tæh ʔip tɪh-ǎn ʔid-ɪh. “ʔÁm=yiʔ key-nɪh-ɪy páh!
 say-SEQ=REP 3sg=child.father 3sg-OBJ speak-DECL 2sg=TEL see-be.like-DYNM PRX.CNTR
 (he) said, it’s said, her husband told her. “But it looked like you!

ʔÁm-ǎn nǎm ʔāh key-nɪʔ, ʔǎn nɔ-ɔy páh yúw-úh!”
 2sg-OBJ louse 1sg see-COOP 1sg.OBJ say-DYNM PRX.CNTR that.ITG-DECL
 ‘I’ll check you for lice,’ that one said to me!”

nɔ-yóʔ=mah, tɪh ʔid-ɪh. “ʔǎn poʔ-key-kǎm,” nɔ-ɔy=mah.
 say-SEQ=REP 3sg speak-DECL 1sg.OBJ open-see-IMP2 say-DYNM=REP
 she told him. “Open (my hair) and look,” (she) said (to her husband).

Yúp=mah yúp tɪnɪh núh kætdóh cípmæh=yɪʔ=mah
 that.ITG=REP that.ITG 3sg.POSS head end small=TEL=REP
 And there on the top of her head (something) was

j’ũʔ-g’et-mæh-ǎy=mah; hɔm ni-g’et-mæh-ǎy=mah. “Ám-ǎn doh ʔǎy
 ooze-stand-DIM-DYNM=REP sore be-stand-DIM-DYNM=REP 2sg-OBJ curupira
 oozing slightly, it’s said; a little sore was there, it’s said. “Curupira has

ʔun’-yɪʔ-ɪy=cud,” nɔ-ɔy=mah, tɪh=tæh ʔip-ih, tɪh-ǎn-áh.
 suck-TEL-DYNM=INFR say-DYNM=REP 3sg=child.father-DECL 3sg-OBJ-DECL
 sucked you (your brain), apparently!” he said, her husband, to her.

Yúp j’ǎb, wag hiyǎt=yiʔ=mah tɪh naʔ-yɪʔ-ɪh. Doh ʔǎy tɪh-ǎn
 that.ITG night day FACT.lie=TEL=REP 3sg die-TEL-DECL curupira 3sg-OBJ
 And that night, just before dawn, it’s said, she died. Curupira had

ʔun’-ní-p, maca-nɪh-ay=mah, naʔ-tubúd-yɪʔ-ay=mah.
 suck-INFR2-DEP come.to.senses-NEG-INCH=REP die-INTS3-TEL-INCH=REP
 sucked her (brain); she could not recover, and died completely, it’s said.

Text 3: Narrative

The Spirit of the Pineapple Thicket

Cană Pó Baktĭb'

Elias Andrade Pires, Barreira Alta

Yĭ=mah, tĭh=dó? ?ĭ-ĭh. Yĭ tĭh ?ĭ-ĭy keyó? =mah, tĭh=ĭp
 thus=REP 3sg=child cry-DECL thus 3sg cry-DYNM CAUSE=REP 3sg=father
 'So, it's said, a child was crying (at night). Because she cried, it's said, her father

tĭh-ăñ háy?ah có? d'o? -way-g'et-yĭ? -ĭh. Yĭ tĭh d'o? -way-g'et-yĭ? -ĭh=mah
 3sg-OBJ outside LOC take-go.out-stand-TEL-DECL thus 3sg take-go.out-stand-TEL-OBL=REP
 put her outside. Then when he put her outside, it's said,

yĭy cană pó baktĭb' d'o? -ham-yĭ? -ĭh. Yĭ=mah ĭid ĭĭh-toh-hám-áh,
 pineapple.sp. pineapple thicket spirit take-go-TEL-DECL thus=REP 3pl RECP-steal-go-DECL
 a yĭy pineapple-thicket spirit took (her) off. With that, it's said, they (the other spirits)
 went chasing after each other to steal (the girl),

"Nĭ=mah páh yúw-úh! Nĭ=mah páh yúw-úh!"
 1sg.POSS PRX.CNTR that.ITG-DECL 1sg.POSS=REP PRX.CNTR that.ITG-DECL
 saying, "But she's mine! But she's mine!"

Yĭy cană pó baktĭb', "Nĭ=mah, nĭ=mah páh yúw-úh!"
 pineapple.sp. pineapple thicket spirit 1sg.POSS=REP 1sg.POSS=REP PRX.CNTR that.ITG-DECL
 (And) that yĭy pineapple-thicket spirit said, "Mine, no, she's mine!"

?Uĭ-nĭ-hám-áy=mah, yĭ-d' ĭh-ĭh, yúp=ĭăy-ăñ ĭĭh-toh-hám=d' ĭh.
 RECP-say-go-DYNM=REP that.ITG-PL-DECL that.ITG=FEM-OBJ RECP-steal-go=PL
 They all went saying (thus) together, all going after that girl to steal her.

Yĭy cană pó-ĭ n'íp=ĭh=mah tĭh-ăñ d'o? -ye-yĭ? -ĭh,
 pineapple.sp. pineapple thicket-OBL that=MSC=REP 3sg-OBJ take-enter-TEL-DECL
 That one took her into the yĭy pineapple thicket, it's said,

té yúp pó-an.
 until that.ITG thicket-DIR
 all the way to that thicket.

Yĭ=mah tĭh tăĭh-ni-yĭ? -ĭh, yúp=ĭăy-ăñ. Tăĭh-ni-yó?, ní-íy=mah,
 thus=REP 3sg offspring-be-TEL-DECL that.ITG=FEM-DECL offspring-be-SEQ be-DYNM=REP
 'Then she had a child, it's said, that woman (did). Having had a child, it's said,

tɪh huɪh-j'əm-ay-áh, tɪh d'oʔ-d'ób-b'ay-áh. Yúp d'oʔ-d'ób-op=mah
 3sg carry-bathe-INCH-DECL 3sg take-go.to.river-AGAIN-DECL that.ITG take-go.to.river-DEP=REP
 she took him down to the river to bathe him. As she was taking him down to the river,
 it's said,

yúp, tɪnɪh mɔ̃y-ɬ kək-g'ãʔ-d'oʔ-kədway-ay-áh; yɬ=mah tɪh=dóʔ
 that.ITG 3sg.POSS house-OBL pull-be.suspended-take-pass.go.out-INCH-DECL thus=REP 3sg=child
 she swung him against the house (rafter) as she went quickly out (bumping him
 accidentally), and the child

ʔɬ-ɬ. "Tú=mæh=yɪʔ ʔám=ʔp mɔyók ní-ip=mæh yúw-úh," tɪh-ǎn
 cry-DECL low=DIM=TEL 2sg=father rafter be-DEP=DIM that.ITG-DECL 3sg-OBJ
 cried. "They are so low, the rafters of your father's house," she

nɔ̃ɔ̃y=mah yúw-úh. Yɬ=mah yúp húp=wəd wɪʔ-g'ét-éy,
 say-DYNM=REP that.ITG-DECL thus=REP that.ITG person=RESP listen-stand-DYNM
 said to him. So, it's said, there was a man standing there listening,

mɬh g'íg-ip=ɬh. Yɬ=mah tɪh huɪh-j'əm-ɬ, mɬh-ɬ.
 inambu shoot.arrow-DEP=MSC thus=REP 3sg carry-bathe-DECL lake-OBL
 one who was out shooting inambu. So, it's said, she bathed (the child), in the lake.

Huɪh-j'əm=yɪʔ ní-íy=mah, tɪh d'oʔ-cɔp-ɬ, mɔ̃y-an.
 carry-bathe=TEL be-DYNM=REP 3sg take-go.from.river-DECL house-DIR
 She bathed him, it's said, and took him back up to the house.

Yúp=mah yúp tɪh=ʔp-ǎn ʔid-widyé-éh. Yɬ, "ʔám=tóg tǎh
 that.ITG=REP that.ITG 3sg=father-OBJ speak-arrive.enter-DECL thus 2sg=daughter child
 'So, it's said, (he) went back and told her father. "Your daughter

huɪh-j'əm-túʔ-úh, ʔám mæh-wɔn-d'əh-ham-ʔé-p=ʔǎy-ǎh," tɪh-ǎn
 carry-bathe-immense-DECL 2sg beat-follow-go-PERF-DEP=FEM-DECL 3sg-OBJ
 is bathing a child, the girl you beat and drove away," (he) said to him

nɔ̃-widyé-éh. Yɪnɪh-yóʔ=mah yúp ʔecáp cóʔ hɪd nǎh-ay-áh,
 say-arrive.enter-DECL that.ITG.be.like-SEQ=REP that.ITG tomorrow LOC 3pl come-INCH-DECL
 as he entered. 'So with that, it's said, the following day they went out,

hɪd-ǎn mæh=d'əh-ɬ. hɪ́=mah hɪd-ǎn hɪd maç-wɔn-yé-éh.
 3pl-OBJ kill=PL-DECL only=REP 3pl-OBJ 3pl chop.out-follow-enter-DECL
 in order to kill them. They just entered chopping down (the plants), following them (the
 spirits).

Yúp pɔ-an maç-hũʔ-yĩʔ, hĩd-ǎn mæh-hũʔ-yĩʔ=mah hĩd ní-ih.
 that.ITG thicket-DIR chop.out-finish-TEL 3pl-OBJ kill-finish-TEL-REP 3pl be-DECL
 They chopped everything down in the thicket, and killed them all.

Y# maç-hũʔ-yóʔ, yúp pɔ hæhɔ yúp=ʔǎy ni-ní-h, nɔyhaʔ,
 thus chop.out-finish-SEQ that.ITG thicket middle that.ITG=FEM be-INFR2-DECL INTERJ
 Then having chopped everything down, there in the middle of the thicket was the woman,
 say,

yúp pɔ hæhɔ-an.
 that.ITG thicket middle-DIR
 there in the middle of the thicket.

Yǎwǎc-yóʔ=mah t#h-ǎn hĩd d'oʔ-yé-éh, mɔy-an. Mɔy-an d'oʔ-ye-yóʔ,
 encounter-SEQ=REP 3sg-OBJ 3pl take-enter-DECL house-DIR house-DIR take-enter-SEQ
 'Having encountered her, they took her back to (their) house. Having entered the house,

hĩd d'oʔ-widyé-ét=mah, yúp=ʔǎy naʔ-yĩʔ-ih. Naʔ-yoʔ ní-íy,
 3pl take-arrive.enter-OBL=REP that.ITG=FEM die-TEL-DECL die-SEQ be-DYNM
 at the moment that they brought her in, that woman lost consciousness. Having lost
 consciousness,

hĩd bi ʔd-ít=mah t#h macá-b'ay-áh, yúp=ʔǎy-ǎh.
 3pl bless.w/spell-OBL=REP 3sg gain.consciousness-AGAIN-DECL that.ITG=FEM-DECL
 when they blessed her, it's said, she regained consciousness, (did) that woman.

J'ík t#h c#wĩʔ-ĩ#máh t#h naʔ-yĩʔ-ih, j'ík t#h c#wĩʔ-ĩ#.
 smoke 3sg smell-OBL=REP 3sg die-TEL-DECL smoke 3sg smell-OBL
 (But) at the moment she smelled the smoke, it's said, she died, at the moment she smelled
 the smoke.²¹¹

Ya ʔǎp-ay yúw-úh.
 all.gone-INCH that.ITG-DECL
 That's all.

²¹¹ The woman had already become a spirit herself, and spirits fear and avoid smoke.

Text 4: Conversation: The fight at Santa Atanasio

Tat Deh

This topic of this conversation is the fight that had occurred the previous year (2003) in the Hup village of Santa Atanasio (also known as Serra dos Porcos or ‘Pig Hill’), which already had a reputation among other Hupd’əh for being a violent place (cf. 1.6). Unlike most Hup fights (which are usually limited to drinking parties) this one was quite serious and lasted for weeks, resulting in several deaths. This conversation took place at night, among a small group of women.²¹²

J: *J’ám, háy, j’ám-áp nút ʔam næn-ʔay-hũy ʔah, híd ʔũh-kʰ-píd-ʔh!*
 DST.CNTR um DST.CNTR-DEP here 2sg come-VENT-after 3pl RECP-cut-DIST-DECL
 ‘A while back, um, a while ago after you came here, they were cutting each other!’

Tʰh-an-ʔũy=d’əh. Nám-át, ʔũh-g’íg=d’əh, mǝm=teg-ét ʔũh-g’íg=d’əh,
 pig-OBJ-who=PL poison-OBL RECP-shoot.arrow=PL iron=THING-OBL RECP-shoot.arrow=PL
 Those of Serra dos Porcos. Shooting each other with poisoned arrows, shooting each other with metal-tipped arrows,

ní-íy bǝg=mah yí-d’əh-əh.
 be-DYNM HAB=REP that.ITG-PL-DECL
 those ones are always like that.’

P: *ʔũh-g’íg=d’əh, nǝ-kǝm!*
 RECP-shoot.arrow=PL say-IMP2
 ‘Shooting each other with arrows, say!’

PLE: *híníy-keyó? híd ʔũh-mǝh-ǝ??*
 Q.be.like.DYNM-CAUSE 3pl RECP-beat-INT
 ‘Why do they fight?’

J: *ʔũh-mǝh-ǝy! hí híd ʔũh-mǝh-yíʔ-ǝy=nih. J’am-yíʔ-ǝy=d’əh*
 RECP-beat-DYNM just 3pl RECP-beat-TEL-DYNM=EMPH.CO DST.CNTR-TEL-DYNM=PL
 ‘They fight! They just really fight. The people of long ago

híd ʔũh-mǝh-ʔě-y=mah, yǝ ʔũh-mǝh-tǝw-əh.
 3pl RECP-beat-PERF-DYNM=REP thus RECP-beat-anger-DECL
 fought, it’s said, thus they are full of fighting rage.

Mǝ tuj-d’ak-yíʔ-ǝy=mah! Mǝ b’ɔ-hi-d’əh-yíʔ-ǝy
 house set.alight-be.against-TEL-DYNM=REP house chop.down-FACT-send-TEL-DYNM
 They burned down houses, it’s said! They chopped down houses

²¹² Because I was also involved in the conversation, my contributions are transcribed as PLE. These lines should of course not be confused with the native-speaker utterances.

pʰɪd=mah, yɪ-d' əh-əh!
 DIST=REP that.ITG-PL-DECL
 'too, it's said!'

PLE: *Na ʔ-yɪʔ-ʰy hɪd ?*
 lose.consciousness-TEL-DYNM 3pl
 'Did they die?'

J: *Na ʔ-yɪʔ-ʰy=mah!*
 lose.consciousness-TEL-DYNM=REP
 'They died, it's said!'

P: *Kæʔ-yɪʔ-ʰy=mah!*
 bury-TEL-DYNM=REP
 'They were buried, it's said!'

J: *Hɪ ʔap=n'əñ=mah hɪd mæh-yɪʔ-ɪʔ j'əñ ?*
 Q-QTY=PL.OBJ=REP 3pl kill-TEL-INT DST.CNTR
 'How many was it that they killed?'

P: *Ka ʔap=n'əñ.*
 two=PL.OBJ
 'Two.'

J: *Ka ʔap=n'əñ... tiyʔ, tã ʔäy, ya ʔap=n'əñ=mah hɪd mæh-yɪʔ-ɪh.*
 two=PL.OBJ man woman that's.all=PL.OBJ=REP 3pl kill-TEL-DECL
 'Two... a man, a woman, that's who they killed, it's said.'

PLE: *Hɪd g'ig-ɪʔ ?*
 3pl shoot.arrow-INT
 'They shot (them) with arrows?'

J: *Hɪd g'ig-ɪh! Toʔ-ót, núť, toʔ-ót, nukán=mah toʔ-ót*
 3pl shoot.arrow-DECL belly-OBL here belly-OBL over.here=REP belly-OBL
 'They shot (them) with arrows! In the belly, here, in the belly, right here in the belly, it's

hɪd g'ig-tod-d' əh-næñ-æh!
 3pl shoot.arrow-pierce-send-come-DECL
 'said, they shot (them) right through!'

P: *Núť=mah.*
 here=REP
 'Here, it's said.' [gestures to belly]

J: *ʔayũp=ʔh-añ=mah nút híd g'íg-íh, nukán, tñh ham-g'et-yĩʔ-ñh,*
 one=MSC-OBJ=REP here 3pl shoot.arrow-DECL over.here 3sg go-stand-TEL-DYNM
 'They shot one man here [gestures], it's said, up to here [gestures to the back], it

ʔayũp=ʔh-añ.

one=MSC-OBJ

(the arrow) went and stuck in, to one man.'

PLE: *Ka ʔñ-ñ?*

neck-OBL

'In the neck?'

J: *Ka ʔñ-an, nukán təg-cáʔ-an. Cãp=ʔh-an=mah nút hɔ mñĩŋ*
 neck-DIR over.here tooth-box-DIR other-MSC-OBJ=REP here liver direct
 'In the neck, up here in the jaw. Another man, here right through the liver

híd g'íg-b'uy-d'əh-ye-yĩʔ-ñh, n-i-n'ñ mñĩŋ!

3pl shoot.arrow-throw-send-enter-TEL-DECL this-NMZ direct

they shot an arrow right into him, right through this part! [gestures]'

PM: *Na ʔ-yĩʔ-ñy=mah-áʔ?*

lose.consciousness-TEL-DYNM=REP-INT

'He died, they say?'

J: *Na ʔ-yĩʔ-ñy=mah!*

lose.consciousness-TEL-DYNM=REP

'He died, they say!'

P: *Hup-hipãh-nñh y-i-d'əh-əh, nɔ-kæm!*

RFLX-know-NEG that.ITG-PL-DECL say-IMP2

'Those folks have no sense, say!'

J: *Hup-hipãh-nñh; tñh-an-ʔũy=d'əh híd ʔəg-tãñ, hup-hipãh-nñh=mah! ʔũh-mæh-póg!*

RFLX-know-NEG pig-OBJ-who=PL 3pl drink-COND RFLX-know-NEG=REP RECP-beat-EMPH1

'They have no sense/ self-control; when the people of Serra dos Porcos drink, they have no sense, it's said! They're big fighters!'

P: *Nutãñ táʔ?*

today REL.INST

'What about nowadays?'

J: *ʔũh-mæh-æy ʔũhníy nutãñ=hin, wiʔ-nñh tæ.*

RFLX-beat-DYNM maybe today=also hear-NEG YET

'They might be fighting nowadays too, I haven't heard yet.'

P: *Ní-íy híd ?*
 be-DYNM 3pl
 ‘Are they there (in the village)?’

J: *Ní-íy=mah. ʔOpíd na ʔ-yíʔ-ǵy píd=mah, yí-d’ǵh-ǵh,*
 be-DYNM=REP immediately lose-consciousness-TEL-DYNM DIST=REP that.ITG-PL-DECL
 ‘They’re there, it’s said. They start dying right away, it’s said,

híd ʔũh-mǵh-ǵp.
 3pl RFLX-beat-DEP
 when they fight.’

P: *M’ǵh híd wǵd-ǵy, híd hup-hipǵh-nǵh-ǵh, nǵ-kǵm.*
 snake 3pl eat-DYNM 3pl RFLX-know-NEG-DECL say-IMP2
 ‘When they eat snake, they lose all self-control, say.’

J: *M’ǵh híd wǵd-ǵy=mah, híd hup-hipǵh-nǵh-ǵh.* [Laughs.]
 snake 3pl eat-DYNM=REP 3pl RFLX-know-NEG-DECL
 ‘When they eat snake, it’s said, they lose all self-control.’

P: *Yí nǵ-ǵy=mah j’ám yí-d’ǵh-ǵh, yí nǵ-ǵy j’ám*
 that.ITG say-DYNM=REP DST.CNTR that.ITG-PL-DECL that.ITG say-DYNM DST.CNTR
 ‘That’s what they say, that’s what

ʔǵh=hũtǵh n’ũh-úh.
 1sg=nephew CNTR-DECL
 my nephew told.’

J: *Yí nǵ-ǵy=mah...*
 that.ITG say-DYNM=REP
 ‘That’s what (they) say...’

P: *ʔǵh=hũtǵh=mǵh, pah-áp Penandu, yǵkán, Manáw-an n’ikán*
 1sg=nephew=DIM PRX.CNTRDEP Fernando over.there Manaus-DIR over.there
 ‘My little nephew, that Fernando, the father of that girl they apparently cut

híd hǵk-yíʔ-ǵp=ʔǵy=cud nǵh ǵp n’ũh-úh.
 3pl saw-TEL-DEP=FEM=INFR POSS father CNTR-DECL
 there in Manaus.²¹³

J: *Yí-yíʔ. nǵ-n’ǵh-ǵh píd=mah híd kǵ-j’ap-d’ǵh-hám-áh,*
 thus-TEL this-NMZ-OBL DIST=REP 3pl cut-divide-send-go-DECL
 ‘That’s right. They chopped off right here,

²¹³ The girl was reportedly taken to Manaus for an operation and died.

Patí, núh g'ætdóh tíh, núh g'ætdóh nút kít-j'ap...
 Pattie head end EMPH2 head end here cut-divide
 Pattie, the top of (one man's) head, the top of his head they chopped...

núh b'ǝ? kít-b'ah-d'ǝh-hí-íy píd=mah, yí-d'ǝh-ǝh!
 head cuia cut-split-send-descend-DYNM DIS=REP that.ITG-PL-DECL
 they split right through his skull, it's said!

P: *Yǝ=mah=nih! Yǝ=mah=nih, tǝh núh hi-kop-g'et-g'ó?óy...*
 thus=REP=EMPH.CO thus=REP=EMPH.CO 3sg head FACT-wrap.up-stand-go.about-DYNM
 'That's it, they say! That's it, they wrapped up his head in a cloth...

J: *Yǝ=mah yúw híd kít-cǝg-nǝh-yǝí-ǝw-ǎh, nút, tǝh nuh-uy-túk*
 thus=REP that.ITG 3pl cut-make.piece-fall-lie-FLR-OBJ here 3sg head-DYNM-face.down
 'Then, they say, that piece they had chopped off, here, they stuck it

wob-d'o?kǝdham-yí?ǝh! [Laughs.]
 rest.on-take-pass.go-TEL-DECL
 back on like a hat!

Others: *Tínǝ boné=cud ǝúh!* [Laughter]
 3sg.POSS cap(Pt)=INFR.EPIST
 'Like his cap, apparently!'

PLE: *Na?yí?ǝ-ǝ tǝh?*
 lose.consciousness-TEL-DYNM 3sg
 'Did he die?'

J: *Na?yí?ǝ-ǝ=mah.*
 lose.consciousness-TEL-DYNM=REP
 'He died.'

P: *ǝh'-ǝ=mah yúw-úh, nǝ-kǝh.*
 live-DYNM=REP that.ITG-DECL say-IMP2
 'They say he's alive, say.'

J: *ǝh'-ǝ=mah yúw-úh, macá-áy=mah! Macá-áy=mah*
 live-DYNM=REP that.ITG-DECL regain.consciousness-DYNM=REP regain.consciousness-DYNM=REP
 'He's alive, they say, he got well! He got well,

yúw-úh, yí nǝh-ǝé-p=ǝh. Dǝb-ay=hǝ j'ǎh, yí-d'ǝh,
 that.ITG-DECL that.ITG be.like-PERF-DEP=MSC many-INCH=NONVIS DST.CNTR that.ITG-PL
 the man that that happened to. There are a lot of them, I think,

híd ñh-mæh-póg=hō tíh! Na ʔ-yíʔ=d'əh, dəb-ay=hō!
 3pl RECP-kill-EMPH1=NONVIS EMPH2 lose.consciousness-TEL=PL many-INCH=NONVIS
 they fight a lot! Lots of people died, I think. There was one woman, um,

ʔAyup=ʔáy-ǎn, háy-ǎn, ní-íy, yúp híd cǐʔ g'ig-ʔe ʔ-ní-p=ʔáy-ǎh.
 one=FEM-OBJ um-OBJ be-DYNM that.ITG 3pl calf shoot.arrow-PERF-INFR2-DEP=FEM-DECL
 that woman they shot in the calf of the leg.

Nút ní-ih, ʔadamádu máh, ní-íy n'ít, ʔmñh mǔy-ǎ.
 here be-DECL Armando near be-DYNM there 1pl.POSS house-OBL
 She was here, in Armando's house, there, in our house.

Ní-n'ñh-ñh tñh-ǎn híd g'ig-ní-h, ní-n'ñh-ñh, j'am-áp=ʔáy-ǎn tíh,
 this-NMZ-OBL 3sg-OBJ 3pl shoot.arrow-INFR2-DECL this-NMZ-OBL DST.CNTR-DEP=FEM-OBJ EMPH2
 In this part (calf) they shot her, in this part, that woman,

ʔIdá=tæh ʔñ-ǎn. Nu-cóʔ j'ǎh tñh-ǎn tñh kadye-ní-həʔ.
 Idario=child.mother-OBJ this-LOC DST.CNTR 3sg-OBJ 3sg pass.enter-INFR2-TAG2
 Idario's wife. It (the arrow) entered her right here.

Nukán tñh kadye-ep=mah j'ǎh, nukán. G'əg kakǎh-an yúp b'əní
 over.here 3sg pass.enter-DEP=REP DST.CNTR over.here bone between-DIR that.ITG hole.through
 It went in all the way to here, to here. Right between the bones, it made a hole

kədway-ní-íy tíh! Nu-cóʔ ñhñíy ñh-mæh=d'əh híd háy,
 pass.go.out-be-DYNM EMPH2 here-LOC maybe RECP-beat=PL 3pl um
 right through to the other side! She was standing about here watching as the fighters, um,

híd ní-mǐʔ=cud ñhñh tñh key-g'ét-e ñhñ. ʔǎn pñiñ-ʔě-y j'ǎh tñh-ǎ.
 3pl be-UNDER=INFR.EPIST 3sg see-stand-MS 2sg.OBJ tell.story-PERF-DYNM DST.CNTR 3sg-EXCL
 as they were there (fighting), apparently. She herself told me the story.

Yúp=pog=mah j'ǎh yú-uw-úc, hí b'uñ ʔñ-ǎn g'əç-d'ə ʔ-b'ǎyíʔ
 that=EMPH1=REP DST.CNTR that.ITG-FLR-EXCL just horsefly 1pl-OBJ bite-take-only
 It happened like this, just like when a horsefly bites us,

nñh-ǎy=mah, cǐñ ni-kəd-hám-áy=mah, nút tab'ah-d'ə ʔ-pǎd-ay-áh,
 be.like-DYNM=REP electric be-pass-go-DYNM=REP here slap-take-DIST-INCH-DECL
 it was like an electric (eel) shock; she slapped her leg here [gestures slapping leg],

nu-cóʔ tñh tab'ah-d'ə ʔ-ní-h, d'apúñ g'odhç cóʔ tñh-ǎn
 here-LOC 3sg slap-take-INFR2-DECL hand palm LOC 3sg-OBJ
 she slapped, um, right here, and then she got another wound in the palm

hɔm-ní-íy=b'ay=cud tíh, nút tɪh tab'ah-d'óʔ-ót! Cɪʔ cóʔ!
 sore-be-DYNM=AGAIN=INFR EMPH2 here 3sg slap-take-OBL calf LOC
 of her hand, apparently, where she had slapped! In the calf of the leg!

Tɪh=ʔn-ǎn=b'ay nɪ-n'ɪh-ɪ, nɪ-n'ɪh-ɪ híd kɪ-b'ah-yiʔ ní-b'ay-áh.
 3sg=mother-OBJ=AGAIN this-NMZ-OBL this-NMZ-OBL 3pl cut-split-TEL be-AGAIN-DECL
 Her mother too, right here, they split her right here [gestures to skin between thumb and fingers]!

Kinɪm cóʔ, núp mumuɣ kɪ-g'aʔwah-d'əh-hí-íy=cud!
 upper.hand LOC this arm cut-spread.out.in.sections-send-descend-DYNM=INFR
 On her hand, like this her arm was cut and spread out, apparently!

ʔũh-mǎh=d'əh tɪh-ǎn kɪ-tég=d'əh híd næn-kamí=mah, tɪh cóʔ-óy,
 RECP-beat=PL 3sg-OBJ cut-FUT=PL 3pl come-moment.of=REP 3sg LOC-DYNM
 When the fighters came to cut her, it's said, she,

nút mɔy tɪh hi-cuʔ-d'əh-ɛ, hǎy mɔyɔ tɪh hi-cuʔ-hi-d'ak-kamí=mah,
 here house 3sg FACT-grab-send-OBL um door 3sg FACT-grab-FACT-be.against-moment.of=REP
 as she was closing up the house like this, um, at the moment she was pulling the door
 shut, they say,

tɪh-ǎn tɪh kɪ-b'uy-d'əh-ye-hɔ-ay-áh. Tɪh b'ah-kədhi-yiʔ-ay-áh!
 3sg-OBJ 3sg cut-throw-send-enter-NONVIS-INCH-DECL 3sg split-pass.descend-TEL-INCH-DECL
 they cut right through (it) and pushed it in, I think. It (the door) split and fell down!

Kéy-éy nɪɣ j'ǎm tɪ, j'ǎm-ǎp?
 see-DYNM 2pl DST.CNTR EMPH.INT DST.CNTR-DEP
 Did you all see (her), that time?'

P: *Kedé=wa-ǎn?*
 Clementia=old.woman-OBJ
 'Clementia?'

J: *Kedé=wa-ǎn.*
 Clementia=old.woman-OBJ
 'Clementia.'

P: *Key-nɪh! Key-nɪh!*
 see-NEG see-NEG
 'I didn't see! I didn't see (her)!

J: *Nɪɣ pǎ ʔũhníy j'ǎh híd wiðnæn-ʔay-ʔe-h...*
 2pl NEG:EX maybe DST.CNTR 3pl arrive.come-VENT-PERF-DECL
 'You all weren't here, maybe, when she arrived.'

Others: *ʔñ pǎ, ʔñ pǎ=cud ʔũhníy.*
 1pl NEG:EX 1pl NEG:EX=INFR.maybe
 ‘We weren’t here, we weren’t here, apparently.’

P: *Hǎy-ǎn tíh, j’am-ǎp b’óŋ híd nǎ-póg-owa-ǎn,*
 um-OBJ EMPH2 DST.CNTR-DEP (name) 3pl say-EMPH1-old.woman-OBJ
 ‘What’s-her-name, that one they call B’óŋ, they call (her),

híd nǎ-pó=wa-ǎn, ʔũy tǎh ʔñ=mah yúp j’am tí?
 3pl say-EMPH2=old.woman-OBJ who child.mother=REP that.ITG DST.CNTR EMPH.INT
 whose wife is she, do they say?’

Others: *paditó tǎh ʔñ.*
 (name) child.mother
 ‘Parito’s wife.’

P: *Yúp=po-ǎn ʔũh nukán híd kít-d’ǎh-nǎn-ní-h...*
 that.ITG=EMPH1-OBJ EPIST over.here 3pl cut-send-come-INFR2-DECL
 ‘It must have been that one they came to cut, right here [gestures to shoulder].’

P: *Tíh=tǎh=d’ǎh=yíʔ=mah!*
 3sg=offspring=PL=TEL=REP
 ‘It was her son, they say!’

J: *Tíh=hũtǎh=d’ǎh=mah j’ǎh yúw-úh.*
 3sg=nephew=PL=REP DST.CNTR that.ITG-DECL
 ‘It was her nephews, they say.’

P: *Tíh=hũtǎh=d’ǎh=mah j’ǎh yúw-úh, hutóg’.*
 3sg=nephew=PL=REP DST.CNTR that.ITG-DECL niece
 ‘(OK,) it was her nephews, niece.’

Nukán! Nukán=cud ʔũhníy tíh pǎpǎʔ-hi-g’ǎʔ-ʔéʔ=cud ʔũhníy.
 over.here over.here=INFR.maybe 3sg be.rolled.over-descend-hang-PERF=INFR.maybe
 Right here! Right here, apparently, the skin hung down!’

J: *Pííí... Peʔ=wá-acáp=pog=cud ʔũhníy!*
 INTERJ pain=old.woman-INFR1=EMPH=INFR.maybe
 ‘Ooooh... That’s a woman who has suffered a lot, apparently!’

PLE: *mumuʔ=cúm-uʔ?*
 arm=begin-INT
 ‘(It was) her upper arm?’

P: *Mumuŷ=cúm tíh! Mumuŷ=cúm nút tǎh-ǎn tǎh kǎ-nǎn-d'ǎh-ní-h!*
 arm=begin EMPH2 arm=begin here 3sg-OBJ 3sg cut-come-send-INFR2-DECL
 'Her upper arm! Here on her upper arm they cut!'

Núp pupuŷ-út! "Pǎh! Hǎm g'ayye-ŷe-y=cud ǎam=wa-atíŷ,"
 this round.fleshy.part-OBL INTERJ sore have.wound-PERF-DYNN=INFR 2sg=RESP-
 EMPH.TAG
 Here on the fleshy part! "Oooh! You got wounded?"

ǎah nǎ-ǎp.
 1sg say-DEP
 I said (to her).

J: *Mǎm cúŷ=d'ǎh, g'ig-, hǎy, muŷ cúŷ=d'ǎh, teghǎ=teg cúŷ=d'ǎh,*
 axe grab=PL shoot.arrow um arrow grab=PL fire=THING grab=PL
 'Grabbing axes, shoot- um, grabbing arrows, grabbing guns,

wǎn cúŷ=d'ǎh ní-íy bǎg=mah, híd ǎh-mǎh-tǎn, yǎ-d'ǎh-ǎh, Patí!
 knife grab=PL be-DYNN HAB=REP 3pl RECP-beat-COND that.ITG-PL-DECL Pattie
 grabbing machetes, thus they always do, when they fight, Pattie!

Yǎŷm bǎg=mah, yǎ-d'ǎh-ǎh!
 dangerous HAB=REP that.ITG-PL-DECL
 They're always dangerous, it's said!'

P: *Nǎm, nǎ-kǎm!*
 poison say-IMP2
 'Poison, say!'

J: *Yǎŷm-icáp bǎg=mah, páy=mah.*
 dangerous-INTS1 HAB=REP bad=REP
 'Always really dangerous, they say, (they're) rotten.'

P: *cǎp nút tǎh-ǎn híd hǎk-, híd kǎ-d'ǎh-hi-pog-ní-b'ay-áh, nút!*
 other here 3sg-OBJ 3pl saw 3pl cut-send-descend-INFR2-AGAIN-DECL here
 'Another, here they sawed- they cut her, here!'

J: *Cǎŷ-ǎ=b'ay.*
 calf-OBL=AGAIN
 'In the calf of the leg.'

P: *Cǎŷ-ǎ=b'ay. Nút=pog ǎh j'ǎh cǎw-ǎh, nút, muŷ-út;*
 calf-OBL=AGAIN here=EMPH1 EPIST DST.CNTR other-DECL here arrow-OBL
 'In the calf of the leg. Here maybe was another, here, with an arrow;

hǎm b'ǎi? = pog j'ǎh yú = wa = pow-óh!
 sore only=EMPH1 DST.CNTR that.ITG=old.woman=EMPH1=DECL
 'That woman was completely covered with wounds!'

J: *Hǎm b'ǎi? j'ǎh yú = wa = pow-óh!*
 sore only DST.CNTR that.ITG=old.woman=EMPH1=DECL
 'That woman was covered with wounds!'

P: *Yúp tǎh = tǎh = d'ǎh kǎh-íp mǎy = yǎ? = mah;*
 that.ITG 3sg=offspring=PL cut-DEP payment=TEL=REP
 'That was her (B'ǎh's) sons' revenge, it's said;

hǎy-ǎh, cadád-ǎh cakáya-át hid cǎh-ǎh.
 um-OBJ (name)-OBJ fish.spear-OBL 3pl stick.spear-DECL
 they stuck um, Sadád with a fish-spear.²¹⁴

PLE: *ǎh'-ǎh tǎh?*
 live-DYNM 3sg
 'Did she live?'

J: *ǎh'-ǎh = mah. N'ikán yǎh = d'ǎh yǎh-ni-macá-áy = mah.*
 live-DYNM=REP over.there medicine=PL medicine-be-regain consciousness-DYNM=REP
 'She lived, they say. The doctors healed her over there.'

P: *Hǎh-an, nǎh!*
 rapids-DIR say.IMP
 'In São Gabriel, say!'

J: *Hǎh-an.*
 rapids-DIR
 'In São Gabriel.'

PLE: *B'ay-yǎ? -ǎh tǎh?*
 return-TEL-DYNM 3sg
 'Has she returned home?'

P: *B'ay-yǎ? -ǎh = mah, hid b'ay-yǎ? -ǎh.*
 return-TEL-DYNM=REP 3pl return-TEL-DYNM
 'She's returned, they say, they've returned.'

J: *Tǎh hayám-an. Nút = mah, teghǎ = teg-ét hid teghǎ-tǎh,*
 pig town-DIR here=REP fire=THING-OBL 3pl fire-COND
 'To Serra dos Porcos. Here, they say [gestures to thigh], when they shot with a gun,

²¹⁴ Sadád's sons had cut B'ǎh; B'ǎh's sons retaliated by wounding Sadád.

nút híd teghɔ-d'əh-hám-áh, tɔk-ɔ. ʔib'-yɪʔ-ɪy=mah yi-d'əh-əw-əp.
 here 3pl fire-send-go-DECL thigh-OBL live-TEL-DYNM=REP that.ITG-PL-FLR-DEP
 here they shot, in the thigh. They're alive, it's said.

Ní-n'ih-ĩ-ũy=d'əh=mah na ʔ-yɪʔ-ih.
 this-NMZ-OBL-who=PL=REP lose.consciousness-TEL-DECL
 Those shot here [gestures to torso] died.'

P: *Hãwíg-an-ũy=d'əh=mah na ʔ-yɪʔ-ih.*
 heart-OBJ-who=PL=REP lose.consciousness-TEL-DECL
 'Those (shot) in the heart died, it's said.'

J: *ʔín-íp ʔib'-nɪh káh, nu-có ʔ-óy=d'əh-əw-əp. Hĩ-ní=n'ǎn híd wæd-æh, hãý=hín...*
 1pl-DEP live-NEG ADVR here-LOC-DYNM=PL-FLR-DEP only-be=PL.OBJ 3pl eat-DECL um=also
 'As for us, we don't survive, the people from here. They (in Serra dos Porcos) eat any old thing, um...

P: *Căý=n'ǎn...*
 centipede=PL.OBJ
 'Centipedes...'

J: *Căý... căý=n'ǎn=mah híd, hãý-an, həb-kæd-yó?*
 centipede centipede=PL.OBJ=REP 3pl um-OBJ dry-dry.in.heat-SEQ
 'Centipedes... having dried centipedes out, in the whatchamacallit,

yu ʔ-yóʔ=mah híd ʔəg-pó-tíh!
 burn-SEQ=REP 3pl drink-EMPH1-EMPH2
 having burned them (to ashes and mixed with water), they drink them!'

P: *Na ʔ-nɪh híd ni-tég.*
 lose.consciousness-NEG 3pl be-FUT/PURP
 'So that they won't die.'

J: *Na ʔ-nɪh híd ni-tég, n'i-d'əh n'ũh. Hãý nɪh, Kɔk nɪh tæh=d'əh*
 lose.consciousness 3pl be-FUT/PURP that-PL CNTR um POSS (name) POSS offspring=PL
 'So that they won't die, those folks. What's-her-name's, Kɔk's children

yɪ nɪh-pó-y j'ám tíh... hãý... N'ít wædɔg'ɔw' hohód-ót
 that.ITG be.like-EMPH1-DYNM DST.CNTR EMPH2 um there jacu.sp. clearing-OBL
 do this... um... (Those things) that are always there in

ni-pó-y yæh=nih j'ǎh tíh, hãý=d'əh-etíh... húp-ǎn
 be-EMPH1-DYNM FRUST=EMPH.CO DST.CNTR EMPH2 um=PL-EMPH2 person-OBJ
 that Jacu-bird Clearing, whatchamacallit... those things that

nəh-d'ak-tuk-d'o ʔ-bɛg=n'ǎn... hɿ-n'ɦ=pog=d'əh=mah yúw j'ǎh?
 fall-be.against-face.down-take-HAB=PL.OBJ Q-NMZ=EMPH1=PL=REP that.ITG DST.CNTR
 always fall onto people... What the heck are those things?

Bɔyɔʔ=pog=d'əh tíh, póh wayd'o ʔ-g'ǎ ʔ-g'o ʔ-bɛg=d'əh,
 spider=EMPH1=PL EMPH2 high fly-be.suspended-go.about-HAB=PL
 Spiders! Those that always fly around and hang around up high,

cəcəc-póg-n'ɦ=d'əh, yí-n'ɦ=n'ǎn=mah yúp n'ũh póh
 spider.walk-EMPH1-NMZ=PL that.ITG-NMZ=PL.OBJ=REP that.ITG CNTR high
 that walk in a spidery way, (those people) always take those and

d'o ʔ-kæd-g'ǎ ʔ-yiʔ-píd-ɦ. Kɔw máj-ǎt
 take-dry.in.heat-be.suspended-TEL-DIST-DECL hot.pepper basket-OBL
 hang them up (above the fire) to dry out. In the basket (used for drying) hot peppers,

hĩ caca ʔ-yiʔ-ɦy=mah tíh.
 just interlock-TEL-DYNN=REP EMPH2
 they say it's just a mass of interlocking (spider's legs).

P: *Híd ʔəg-tég.*
 3pl drink-FUT/PURP
 'For them to drink.'

J: *yɔʔɔm...*
 dangerous
 'Dangerous...'

PM: *ʔɦn-ǎn híd mǎh-ǎt, na ʔ-nɦ híd ni-tég.*
 1pl-OBJ 3pl kill-OBL lose.consciousness-NEG 3pl be-FUT/PURP
 'So that they won't die when they kill us.'

J: *Tā ʔǎy=d'əh-ǎt=mah híd ʔũh-mǎh-bɛh.*
 woman=PL-OBL=REP 3pl RECP-beat-HAB-DECL
 'They always fight with the women.'

Tā ʔǎy=d'əh=hin wǎn tɔn=d'əh híd ni-bɛg=mah, cɔc tɔn=d'əh ní-íy bɛg.
 woman=PL=also machete hold=PL 3pl be-HAB=REP hoe hold=PL be-DYNN HAB
 The women too are always holding machetes, they say, always holding hoes.

Híd tǎh ʔp=d'əh-ǎt=yiʔ híd ʔũh-mǎh-bɛh! Yɦɦy=mah yúp
 3pl child.father=PL-OBL=TEL 3pl RECP-beat-HAB-DECL that.ITG.be.like.DYNN=REP that.ITG
 They always fight with their husbands! That's why

tã ʔǎy=n'an=hin híd mæh-yiʔ-bʔh.
 woman=PL.OBJ=also 3pl beat-TEL-HAB-DECL
 they always hit/kill the women too.'

W: *ʔayũp=ʔǎy, ka ʔǎp=ʔǎy=d'əh teghʔ=teg-ét náʔ-ap,*
 one=FEM two=FEM=PL fire=THING-OBL lose.consciousness-DEP
 'One woman, two women died from being shot with guns,

ʔayũp=ʔǎy, muh-út híd g'ig-ip=ʔǎy, ʔayũp=ʔǎy...
 one=FEM arrow-OBL 3pl shoot.arrow-DEP=FEM one=FEM
 one woman, one they shot with an arrow, one woman...

teghʔ=teg-ét, ʔayũp=ʔǎy-ǎn d'oʔ-yayag-yiʔ-ǎy.
 fire=THING-OBL one=FEM-OBJ take-full.of.holes-TEL-DYNM
 with a gun, (they) filled one woman full of holes.

J: *Hó mǎnǎy=mah híd teghʔ-yiʔ-ǎh, yúp=ʔǎy-ǎn-áh, ʔayũp=ʔǎy-ǎn, tã ʔǎy-ǎn.*
 liver direct=REP 3pl fire-TEL-DECL that.ITG=FEM-OBJ-DECL one=FEM-OBJ woman-OBJ
 'They shot her right through the liver, it's said, that woman, one woman, a woman.'

Others: *Ta ʔacáw-ǎn!*
 adolescent.girl-OBJ
 'A girl!'

J: *Ta ʔacáw-ǎn. Naʔ-yiʔ-ǎy! Deh-an=mah híd teghʔ-b'uy-tuʔ-yiʔ-ǎh,*
 adol.girl-OBJ lose.consciousness-TEL-DYNM water-DIR=REP 3pl fire-throw-immersed-TEL-DECL
 'A girl. She died! They shot her and she fell into the water,

deh=mi tǎh-an. Nút tǎh tuk-nəh-túʔ-út=yiʔ=mah tǎh naʔ-yiʔ-ǎh.
 water=stream small-DIR here face.down-fall-immersed-OBL=TEL=REP 3sg lose.consciousness-TEL-DECL
 into the stream. She fell like this face down into the water, it's said, and she died.

Tiyiʔ-ǎn=hin yǎ-yiʔ pǎd=mah. Hǎy, cam-ǎp hamé j'á=wa tǎh
 man-OBJ=also thus-TEL DIST=REP um DST.CNTR-DEP (name) black=old.woman 3sg
 It was the same for a man too. That what's-her-name, Dark Amelia, she

pǎnǎy-íp n'ũh. Hǎy=mah j'ǎh híd ʔũh-mæh-d'əh-cak-kamí=mah,
 tell.story-DEP CNTR um=REP DST.CNTR 3pl RECP-beat-send-climb-moment.of=REP
 told us the story. Um, they say, when they got up to fight,

cǎp=ǎh muh wæwæ-nəh-yǎǎ, cǎp=ǎh muh wæwæ-nəh-yǎǎ,
 other=MSC arrow stick.out-fall-lie other=MSC arrow stick.out-fall-lie
 a man fell with an arrow sticking out of him, another fell with an arrow sticking out of

cāp=řh muň wæwæ-nɔh-yæť, ni-pó-y=mah j'ăh yí-d'əh-ətíh !
 other=MSC arrow stick.out-fall-lie be-EMPH1-DYNM=REP DST.CNTR that.ITG-PL-EMPH2
 him, another fell with an arrow sticking out of him, that's how it was!

Hid năh-póg=mah j'ám tíh...
 3pl be.like-EMPH1=REP DST.CNTR EMPH2
 That's how it was for them, it's said...

J: *tăh ná? =wíg, nř mřy tú-an híd muň wæwæ-næn-yæť-æp,*
 pig lose.consciousness=seed 1sg.POSS house near-DIR 3pl arrow stick.out-come-lie-DEP
 'Like pig-corpses, they lay stuck with arrows all around my house,

nɔ-ɔy j'ăh yúw-up tíh... híc-ih-năh=mah tíh! Năm, hăy-ăť,
 say-DYNM DST.CNTR that.ITG-DEP EMPH2 FACT.tire-NEG=REP EMPH2 poison um-OBL
 that one told it... lots of them! Poison, with um,

măm=teg híd g'íg-ip... papad-næn-yæť-ăy=mah yí-d'əh-əh,
 metal=THING 3pl shoot.arrow-DEP moan-come-lie-DYNM=REP that.ITG-PL-DECL
 they shot them with metal-tipped arrows... they were lying around moaning,

híd g'íg-póg=d'əh tíh! Yúp-yí? năh-ř key-tăť-ăy řám-ăp ! ?
 3pl shoot.arrow-EMPH1=PL EMPH2 that.ITG-TEL be.like-OBL see-CNTRFCT-DYNM 2sg-DEP
 those who they'd shot! Would you have the courage to see that?

P: *řăh-ăp key-tuk-năh=hă.*
 1sg-DEP see-want-NEG=NONVIS
 'As for me, I don't want to see it.'

J: *řăh-ăp key-tuk-năh mún-úh! D'apúh-út řăh-măh=n'ăn n'úh,*
 1sg-DEP see-want-NEG INTS2-DECL hand-OBL RECP-beat-PL.OBJ CNTR
 'As for me, I don't want to see it a bit! Even when they fight with hands,

híd řăh-tab'ah-hi-d'əh-ăť=yí?, tɔɔh-kəðham-yí?-icáp bř řăh-ăw-ăp...
 3pl RECP-slap-FACT-send-OBL=TEL run-pass.go-TEL-INTS1 HAB 1sg-FLR-DEP
 when they are slapping each other, I always run away as fast as I can...

yɔɔm=pog j'ăh řăh-măh-ăh...
 dangerous=EMPH1 DST.CNTR RECP-beat-DECL
 Fighting is really scary...'

P: *Wăh-át řăy=d'əh, muň-út-řăy=d'əh, năm muh-út-řăy=d'əh...*
 knife-OBL-who=PL arrow-OBL-who=PL poison arrow-OBL-who=PL
 'Those with machetes, those with arrows, those with poison arrows...

yĩ nɔɔ j'ǎh ʔāh=hũtǎh n'uĩh-úh. Hĩ kadaw-yĩʔ-ỹ
 that.ITG say-DYNM DST.CNTR 1sg=nephew CNTR-DECL just form.clump.of.sticks-TEL-DYNM
 that's how my nephew told it. (They're) always just one

bĩg d'apb'uy=teg-éh.
 HAB flesh.throw=THING-DECL
 big crowd of weapons.'

J: *Mmmm... ʔamĩh hayám-an-ʔỹ=d'əh ʔũh-mǎh-key-nĩh-ay-hĩʔ-?* *Patí ?*
 2sg.POSS town-OBJ-who=PL RECP-beat-see-NEG-INCH-NONVIS-INT (name)
 'Mmmm... I guess the people of your town/country don't fight much, Pattie?'

PLE: *ʔũh-mǎh-ǎy !*
 RECP-beat-DYNM
 'They fight!'

J: *ʔũh-mǎh-ǎy hĩd ?*
 RECP-beat-DYNM 3pl
 'They fight?'

PLE: *Teghĩ=teg-ét...*
 fire=THING-OBL
 'With guns...'

J: *Teghĩ=teg-ét? Key-ʔě-y ʔám=b'ay?*
 fire=THING-OBL see-PERF-DYNM 2sg=AGAIN
 'With guns? Have you seen it?'

PLE: *Key-nĩh.*
 see-NEG
 'I haven't seen it.'

J: *Kǎʔ-yĩʔ-ỹ hĩd?*
 bury-TEL-DYNM 3pl
 'Do they (die and) get buried?'

PLE: *Kǎʔ-yĩʔ-ỹ.*
 bury-TEL-DYNM
 'They (die and) get buried.'

P: *Tedevicǎw-ǎt ʔín káy=d'əh n'uǎh, mǎtʔah, Manáw-ǎt ʔín káy=d'əh n'uǎh,*
 television-OBL 1pl see=PL CNTR downriver Manaus-OBL 1pl see=PL CNTR
 'We saw it on the television, downriver, we saw it in Manaus,²¹⁵

naw-nǎh mún ʔũh-mǎh-pó-y j'ǎh yí-d'əh-əp tǐh !
 good-NEG INTS2 RECP-beat-EMPH1-DYNM DST.CNTR that.ITG-PL-DEP EMPH2
 there were loads of them fighting!'

J: *Teghǎ=d'əh=yíʔ kǎd-əh! Teghǎ=d'əh=yíʔ kǎd-əh!*
 fire=PL=TEL pass-DECL fire=PL=TEL pass-DECL
 'Loads of non-Indian people! Loads of non-Indian people!'

P: *Bómba-át ʔũh-yu ʔ-yíʔ=d'əh, ní-íy yí-d'əh-əh.*
 bomb(Pt)-OBL RECP-burn-TEL=PL be-DYNM that.ITG-PL-DECL
 'They were burning each other up with bombs.'

J: *ʔámǎh hayám-át bómba ní-íy=mah tǎh j'ǎh, Patí ?*
 2sg.POSS town-OBL bomb(Pt) be-DYNM=REP 3sg DST.CNTR Pattie
 'Are there bombs in your town/country, Pattie?'

PLE: *Hǎ-n'ǎh "bómba-áʔ" ?*
 Q-NMZ bomb-INT
 'What's "bomba"?''

J: *Nǎm tǐh, híd ʔũh-mǎh-yíʔ-n'ǎh nǎm.*
 poison EMPH2 3pl RECP-beat-TEL-NMZ poison
 'Poison, poison they use for fighting.'

PLE: *Key-nǎh, ní-íy ʔũhníy.*
 see-NEG be-DYNM maybe
 'I haven't seen (them), maybe (they) exist.'

J: *Ní-íy ʔũhníy.*
 be-DYNM maybe
 'Maybe they exist.'

[General laughter.]

PLE: *Ní-íy=cud.*
 be-DYNM=INFR
 'I guess they exist.'

J: *Ní-íy=cud. ʔAm key-nǎh=cud-uh. ʔAm key-nǎh híd bíʔ-ʔũhníy.*

²¹⁵ The speaker had recently been taken to Manaus for medical treatment.

be-DYNM=INFR 2sg see-NEG=INFR-DECL 2sg see-NEG 3pl work-maybe

‘They probably do exist. You just haven’t seen them, apparently. While you’re not seeing, maybe they are making them.

Yíkán-áy=d’ əh=yĩʔ=mah j’ǎh ʔũh-mæh-tubud-icáp=pog bíg-ĩh !
 over.there-INCH=PL=TEL=REP DST.CNTR RECP-beat-INTS3-INST1=EMPH1 HAB-DECL
 The people from there always really fight a lot, they say!’

P: *Manáw-ǎt ʔũh-mæh-æcáp=pog yĩ-d’ əh-əh !*
 Manaus-OBL RECP-beat-INTS1=EMPH that.ITG-PL-DECL
 ‘In Manaus they really fight a lot!’

Manáw-ǎt hid ʔũh-mæh-æcáp=pog yĩ-d’ əh-əh.
 Manaus-OBL 3pl RECP-beat-INST2=EMPH that.ITG-PL-DECL
 In Manaus they really fight a lot.

Yəh=mæh=yĩʔ tedicǎw-ǎt hid bahád-ap...
 above=DIM=TEL television-OBL 3pl appear-DEP
 They appear on the surface of the television...²¹⁶

²¹⁶ The speaker makes little distinction between what actually goes on in Manaus and what appears on the television in Manaus. Note that ‘on the surface of the television’ (rather than in/on the television) is considered the more appropriate expression.

Text 5: Spell

Curing spell

Bi Ĩd Ĩd

Mandu, Barreira Alta

At one point during my stay in Barreira, I fell sick with a rash and fever. Mandu (Manuel), a *kəd= Ĩh* (i.e. a person who is not a shaman, but has skill in healing and possesses a repertoire of spells for different occasions; cf. Tukano *kumu*, see discussion in §15.1.3.3) treated me in the following manner: after mashing ingá bark with water in a cup, he sat by himself in a corner of the house for about ten to fifteen minutes while he quietly murmured a spell over the cup. When this was completed, he proceeded to rub the wet bark over my arms and legs. This procedure was repeated three or four times over the course of a few days, until I was well. Later, I asked him to repeat the spell he had used to cure me for the tape recorder, and he agreed. The text of this spell is given here.²¹⁷

Bi Ĩd Ĩd-ĩp, yúp= Ĩw... Ĩw mæh-w'ob-d' əh-hí-íy... yúw-ǎñ dəh
 blessing speech-DEP that.ITG=swarm swarm kill-set-send-descend-DYNM that-OBJ water
 'The curing-spell, that swarm²¹⁸ ... (I) send (the words of the spell) down onto the swarm to kill (the sickness)... (the words) go down to break through the water²¹⁹

j'ap-g'et-w'ob-d' əh-hí-íy... Yúw-ǎñ huĩ-d' əh-ham-yó?, huĩ-d' əh-ham-yó?, núp,
 snap-stand-set-send-descend-DYNM that-OBJ end-send-go-SEQ, end-send-go-SEQ this
 (on the victim)... Having finished sending that (water) away, having finished sending (it) off, this,

b'ab'ǎ? = Ĩw-ǎt, b'ab'ǎ? = teg hi-bǎg = d' əh, yĩ-d' əh nĩh, yĩ-d' əh nĩh dəh,
 embauba=swarm-OBL embauba=tree FACT-swarm=PL that.ITG-PL POSS that.ITG-PL POSS water
 with the embauba swarm, the ones that swarm around the embauba trees, their, their water,

yĩ-d' əh nĩh nɔæw deh, dəh j'ap-g'et-d' əh-hí-íy j'ám-ǎh.
 that.ITG-PL POSS saliva water water snap-stand-send-descend-DYNM DST.CONTRAST
 their saliva, (the words) go down to break through the water.

²¹⁷ The quiet, mumbling delivery that is conventional when uttering spells makes transcription difficult. There are therefore a number of short gaps in this text (indicated by [...]), marking passages which my consultant and I were unable to transcribe.

²¹⁸ It is *tĩh=pé Ĩw*, the 'sickness-swarm', which causes the illness; the curer sends the words of the spell via the substance used for treatment (in this case, mashed bark) to kill or expel the swarming insect-like beasts.

²¹⁹ The swarming sickness-beasts have put their illness-bringing water (saliva) onto the victim.

Yí-d'ǎh nǎh hǎy'=b'ah, ʔid-cod-g'et-d'ǎh-hí-icáp, tǎh-ǎh ʔǎh nǎh.
 that.ITG-PL POSS snip=SPLIT speak-untie-stand-send-descend-INTS1 3sg-OBJ 1sg say-DECL
 Their scissors,²²⁰ (I) send the speech down strongly to untie,²²¹ I said to it (the illness or its embodiment).

Yúw-ǎh hūʔ-ham-yóʔ, kapíʔ pɔ mǐʔ hi-b'ah-ní-iw-ǎh, hǐd=n'ǎh
 that-OBJ end-go-SEQ caapi thicket under FACT-split-be-FLR-OBJ 3pl-PL.OBJ
 Having sent those off, to the one who came to exist under the *caapi* thickets,²²² to them

ʔǎh ʔǐd-ǎh... Yí-d'ǎh nǎh deǎh, yí-d'ǎh nǎh nɔɔw deh,
 1sg speak-DECL that.ITG-PL POSS water that.ITG-PL POSS saliva water
 I spoke... to them. Those ones' water, their saliva,

ʔǎh ʔǎw mǎh-w'ob-d'ǎh-hí-íy, ʔǎh mǎh-w'ob-d'ǎh-hí-íy ...
 1sg swarm kill-put.onto-send-descend-DYNM 1sg kill-put.onto-send-descend-DYNM
 I send down (spell) to kill that swarm, I send (it) down to kill (it) ...

naw-cáp-áh ... ʔid-mǎh-w'ob-d'ǎh-hí-íy ... tǎh-ǎh ʔǎh nǎh.
 good-INTS1-DECL speak-kill-put.onto-send-descend 3sg-OBJ 1sg say-DECL
 it's very well done... (I) send my words down to kill (it)... I say to it (the sickness).

Yí-d'ǎh-ǎh hūʔ-ham-yóʔ, yí-d'ǎh-ǎh tukcǐʔ=n'ǎh ʔǎh dɔʔ-ǎh,
 that.ITG-PL-OBJ finish-go-SEQ that.ITG-PL-OBJ ant.type=PL.OBJ 1sg count-DECL
 Having sent all of these (the swarm of bee-like insects) away, I count those ants,²²³

tukcǐʔ=d'ǎh yí-d'ǎh nǎh deǎh, yí-d'ǎh nǎh hǎy'=b'ah,
 ant.type=PL that.ITG-PL POSS water that.ITG-PL POSS snip=SPLIT
 the stinging-ants', their water, their scissors,

yí-d'ǎh nǎh yǔd, ʔid-wɔ-key-mí j'am-ǎh... tǎh-ǎh ʔǎh nǎh.
 that.ITG-PL POSS clothes speak-pull.off-see-? DST.CTRST 3sg-OBJ 1sg say-DECL
 their clothes,²²⁴ (I) spoke to pull (the clothes) off... I said this to it (sickness).

Yúw-ǎh hūʔ-ham-yóʔ, ní-d'ǎh nǎh, tǎ=d'ǎh nǎh, yí-d'ǎh nǎh deǎh
 that-OBJ finish-go-SEQ this-PL POSS ant.type=PL POSS that.ITG-PL POSS water
 Having sent that away, these ones', the *tǎ* ants', their water,

²²⁰ The sickness-beasts have scissors ('snipping-things') that inflict sores on the victim.

²²¹ Someone has 'tied up' the victim with a sickness-inducing curse; the healer 'unties' the victim with the words of the spell.

²²² To a spirit and/or swarm of sickness beasts that embody the illness.

²²³ A type of ant that comes out at night and has a painful sting.

²²⁴ The sickness covers the victim with burning 'clothes' of fever and pain.

ɽāh nɔʃ. Yɪ-d'əh nñ hǎy'=b'ah ɽāh nɔʃ, yɪ-d'əh nñ yũd,
 1sg say-DECL that.ITG-PL POSS snip=SPLIT 1sg say-DECL that.ITG-PL POSS clothes
 I said. Those ones' scissors, I said, those ones' clothes,

yɪ-d'əh nñ nuh-uy-túk=teg g'ɪ... miŋ-j'ap-w'ob-d'əh-hí-ty...
 that.ITG-PL POSS hat-DYND=be.face.down=THING heat dizzy-break.in.two-set-send-descend-DYND
 their hat of heat²²⁵ ... (I send the spell to) break the dizziness (of the illness)...

tñ-ǎn ɽāh nɔʃ. Huɽ-d'əh-ham-yɪɽ-ñ, yñ-ñ, huɽ-d'əh-ham-yó?
 3sg-OBJ 1sg say-DYND finish-send-go-TEL-DECL thus-DECL finish-send-go-SEQ
 I said to it. (The spell) finished sending it all away, thus, having finished sending it all away,

bɔg, kǎk b'ák-át hi-bɔg bɪg=d'əh, yɪ-d'əh nñ bɔg j'á=d'əh,
 bee maniware.ants nest-OBL FACT-swarm HAB=PL that.ITG-PL POSS bee black=PL
 bees, the ones that always swarm in the maniware nests, their black bees,

yɪ-d'əh nñ hǎy'=b'ah, ɽāh nɔʃ, yɪ-d'əh nñ deh, ɽāh nɔʃ,
 that.ITG-PL POSS snip=SPLIT 1sg say-DECL that.ITG-PL POSS water 1sg say-DECL
 their scissors, I said, their water, I said, their

yɪ-d'əh nñ tát=n'ǎn ɽāh huɽ-d'əh-ham-yɪɽ-ñ. Tát=n'ǎn
 that.ITG-PL POSS ant.type=PL.OBJ 1sg finish-send-go-TEL-DYND ant.type=PL.OBJ
tat ants, I sent them all away. Having sent off

ɽāh huɽ-d'əh-ham-yɪɽ-yó? naw-cáp-áh tñ-ǎn, naw-cáp-áh tñ-ǎn,
 1sg finish-send-go-TEL-SEQ good-INTS1-DECL 3sg-OBJ good-INTS1-DECL 3g-OBJ
 all the *tat* ants, it was really good for her (victim), really good for her;

yǎ deh, yúp kud'úp, yǎ deh, cab'ǎd-át, cab'ǎd-át
 medicine water that pain.end medicine water leg.strip-OBL leg.strip-OBL
 medicine water, that pain-diminisher,²²⁶ medicine water, with a leg-strip, with a leg-strip²²⁷

ɽíd-tu-g'et-muhún-icáp... tñ-ǎn ɽāh nɔʃ...
 speak-descend.into-stand-INTS2-INTS1 3sg-OBJ 1sg say-DECL
 (I) speak (the sickness) all the way down into the ground... I said this to it...'

²²⁵ A 'hat' of heat and pain is set down on the victim by the illness and/or curse.

²²⁶ *kud'úp* normally refers to the bitter sap that makes an unripe banana taste bad; here *ɽíd-kud'úp-uy* is said to be spell-language for the gradual ending of pain through the curing process.

²²⁷ A *cab'ǎd* is a woven fiber strip traditionally tied below the knee to plumpen the calf of the leg (plump calves are considered a sign of health). Because no such strip was actually used in the curing process, reference to it here is presumably a metaphor for restoring health.

Text 6: Songs

As described in §1.4, the Hupd'əh normally sing only on days of caxiri-drinking, and then it is usually the women who do most of the singing. However, the two songs transcribed here were actually sung to me on the morning after a drinking day, when people had more or less sobered up. I had wanted to record some songs, but found it nearly impossible to get a good recording in the context of the drinking party (mainly because of the background noise and slurred speech of the singers). Despite having been sung somewhat out of their normal context, these are both good examples of the typical Hup song.

Hup songs are composed of improvised, somewhat stylized texts set to a set of standard, repetitive melodies. Typical motifs include the singer's frequent reference to herself in the third person, and the heavy use of discourse particles (particularly relating to emphasis). Repetition of words and syllables is also a common device; repeated syllables are here glossed RS (Repeated Syllable). The songs normally stress the singer's identity—with a focus on clan membership—and, in some cases, her relationship to the person to which the song is addressed. The singer often portrays herself as alone and 'mixed in' to the local group, to which she feels she does not really belong. These themes are likewise common in the songs of the River Indians (see Chernela 1988); the Hup and River Indian songs are also very similar in their melodies, performance style, etc., and this singing style is probably a widely shared regional practice.

In Song 1, the singer refers to the fact that her father was actually a member of the Dâw group, who came upriver long ago while working for a river merchant; he married a Hup woman and settled in the region.²²⁸ The singer and her siblings—who grew up speaking Hup and Tukano—were given 'honorary' Hup clan membership and were incorporated into the Hup community.

Song 1

Ana, Tat Deh

Núp j'ǎh ʔǎh-ǎp-ǎh, núp j'ǎh ʔǎh-ǎp-ǎh, núp j'ǎh ʔǎh-ǎp-ǎh,
 this DST.CNTR 1sg-DEP-DECL this DST.CNTR 1sg-DEP-DECL this DST.CNTR 1sg-DEP-DECL
 'Here I am, here I am, here I am,

núp= ʔǎy=mǎh-ǎp-ǎh.
 this=FEM=DIM-DEP-DECL
 this little woman.

²²⁸ This is the only such case of Dâw-Hup intermarriage that I encountered.

Hĩ g'et-g'ó-op=ʔǎy=mæh j'ǎh, kamá húp=ʔǎy=mæh-ǎp-ǎh,
 only stand-go.about-DEP=FEM=DIM DST.CNTR Dâw person=FEM=DIM-DEP-DECL
 (I am) a woman who is just passing through, a little Dâw woman,²²⁹

nɔɔp húp=ʔǎy=mæh j'ǎh.
 say-DEP person=FEM=DIM DST.CNTR
 so says this little woman.

Cɔkw'ət-nɔg'od-tæh=ʔh n̄h tæh ʔn=mæh-ǎp-ǎh, ʔǎh-ǎtiʔ-tiʔ-tiʔ,
 toucan-mouth-offspring=MSC POSS child.mother=DIM-DEP-DECL 1sg-EMPH.TAG-RS-RS
 'I am the little wife of a Toucan's-Beak Clansman, I am,

núp j'áh-át-ha-hát hikakuỹ næn-g'ét-éy=hɔ̃ j'ǎh,
 this land-OBL-RS-RS mix.in come-stand-DYNN=NONVIS DST.CNTR
 I've only come and mixed in (among the others) in this land, I feel,

ʔǎh=hin-ih báʔ, nɔɔp, húp=ʔǎy=mæh j'ǎh j'ǎh ʔǎh=tiʔ,
 1sg=also-DECL PROTST say-DEP person=FEM=DIM DST.CNTR RS 1sg=EMPH.TAG
 But I too say this, I'm just a little Hup ('Maku') woman,

ʔǎh=tiʔ-tiʔ.
 1sg=EMPH.TAG-RS
 I am.

Nĩ ʔn=d'əh hũyʔah, núp j'áh-ah-át ni-nɔh-g'ét-éy=hɔ̃ páh
 1sg.POSS mother=PL after this land-RS-OBL be-fall-stand-DYNN=NONVIS PRX.CNTR
 'After my mother and mother's sisters, I think about how I've ended up living here

ʔǎh=hin-ih báʔ-báʔ.
 1sg=also-DECL PROTST-RS
 in this land too.

Núp j'ǎh-j'ǎh-j'ǎh nĩ ʔnác=d'əh hũyʔah ni-nɔh-g'ét-éy=hɔ̃
 this DST.CNTR-RS-RS 1sg.POSS mother's.sister=PL after be-fall-stand-DYNN=NONVIS
 In this land, after my mother's sisters, I guess I've wound up living here too,

²²⁹ Uses *hup* here in a general 'Nadahup (Maku) person' sense, i.e. as opposed to River Indians or non-Indians.

j'ǎh ǎh=ti? ǎh=ti?-ti?
 DST.CNTR 1sg=EMPH.TAG 1sg=EMPH.TAG-RS
 I have.

Bab' ǎy ní-ip ǎp, bab' ǎy ní-ip ǎp, núp j'áh-át,
 younger.sister be-DEP NEG:ID younger.sister be-DEP NEG:ID this land-OBL
 'One with no younger sister, one with no younger sister, in this land,

cəkʷ'ət-nɔg'əd-tǎh=d'əh nǎh j'áh-át ni-nɔh-g'ét-éy=hɔ́ páh
 toucan-mouth-offspring=PL POSS land-OBL be-fall-stand-DYNN=NONVIS PRX.CNTR
 I think about how I'm living here in the land of the Toucan's Beak Clansmen.

ǎh=ti? ǎh=ti?-ti?
 1sg=EMPH.TAG 1sg=EMPH.TAG-RS
 I am.

Nǎ ǎy=dó?-n'ǎn key-d'əh-ham-yó?-yó?, nǎ tǎh=d'əh...
 1sg.POSS FEM=child=PL.OBJ see-send-go-SEQ-RS 1sg.POSS offspring=PL
 I go about seeing my daughters, my sons...²³⁰

nǎ ǎh nɔh-g'ét-éy=hɔ́ j'ǎh ǎh=ti? ǎh=ti?-ti?
 this 1sg fall-stand-DYNN=NONVIS DST.CNTR 1sg=EMPH.TAG 1sg.EMPH.TAG-RS
 thus I think about how I'm living here, I am.

ǎh=ti? ǎh=ti? nǎ ǎh=n'ǎn núp j'áh-ah-át
 1sg=EMPH.TAG 1sg=EMPH.TAG 1sg.POSS oppos.sex.sibling=PL.OBJ this land-RS-OBL
 'I, I, having brought my brothers to live

kək-næn-g'et-yó?, cəkʷ'ət-nɔg'əd-tǎh=d'əh nǎh j'áh-át
 pull-come-stand-SEQ toucan-mouth-offspring=PL POSS land-OBL
 in this land, I'm thinking about how I am living in the land of

ni-nɔh-g'ét-éy=hɔ́ páh ǎh=ti? ǎh=ti?-ti?
 be-fall-stand-DYNN=NONVIS PRX.CNTR 1sg=EMPH.TAG 1sg=EMPH.TAG-RS
 the Toucan's Beak Clansmen, I am, I am.

Nǎ nɔɔp=ǎy j'ǎh ǎh=ti?-ti? nɔɔy=mah.
 this say-DEP=FEM DST.CNTR 1sg=EMPH.TAG-RS say-DYNN=REP
 I am one who is saying thus, I am, so they say.

²³⁰ That is, she has established a family here and is among kin.

Núp= ʔǎý=mæh-ǎp-ǎh, núp= ʔǎý=mæh-ǎp-ǎh, núp j'ǎh-j'ǎh-j'ǎh.
 this=FEM=DIM-DEP-DECL this=FEM=DIM-DEP-DECL this DST.CNTR-RS-RS
 'This little woman, this little woman, this one.

Dog-m' ǎh-tǎh= ʔǎý=mæh-ǎp-ǎh, nɔɔp húp= ʔǎý j'ǎh
 vapisuna-snake-offspring=FEM=DIM-DEP-DECL say-DEP person=FEM DST.CNTR
 A little Vapisuna-Snake Clanswoman, I'm a woman who says thus,

ʔǎh=ti? ʔǎh=ti? ʔǎh=ti? ʔǎh=ti? nɔɔy=mah-mah
 1sg=EMPH.TAG 1sg=EMPH.TAG 1sg=EMPH.TAG 1sg=EMPH.TAG say-DYNM=REP-RS
 I am. I, I, she says, they say,

tǎh-ǎp-ǎh, núp j'ǎh-j'ǎh-j'ǎh,
 3sg-DEP-DECL this DST.CNTR-RS-RS
 this,

tǎh g'ǎh-ǎy=nih nɔh-g'et-g'óʔ-óh, nutǎh tǎh g'ǎh-ǎy=nih
 3sg be2-DYNM=EMPH.CO fall-stand-go.about-DECL today 3sg be2-DYNM=EMPH.CO
 she is likewise thus, just passing through, today she is thus

nɔh-g'et-g'óʔ-óh. Nɔɔtiʔ-ti? núp= ʔǎý-ǎh, nɛ nɔh-g'et-ep=hɔ
 fall-stand-go.about-DECL say-EMPH.TAG-RS this=FEM-DECL this fall-stand-DEP=NONVIS
 just passing through.²³¹ Thus says this woman, thus thinking about just passing through,

j'ǎh-j'ǎh ʔǎh=ti? ʔǎh=ti?
 DST.CNTR-RS 1sg=EMPH.TAG 1sg=EMPH.TAG
 I am, I am.

Núp j'ǎh ʔǎh-ǎp-ǎh, ʔám key-tuk-tǎh-ǎw-ǎh,
 this DST.CNTR 1sg-DEP-DECL 2sg see-want-COND-FLR-DECL
 'Here I am, if you want to see,

núp j'ǎh-j'ǎh ʔǎh=ti? ʔǎh=ti? teghɔ= ʔǎý=mæh.
 this DST.CNTR-RS 1sg=EMPH.TAG 1sg=EMPH.TAG non.Indian=FEM=DIM
 Here I am, I am, non-Indian girl.

Núp j'ǎh ʔǎh-ǎp-ǎh, teghɔ=n'ǎh togtúg... nɛ nɔ-té-ep= ʔǎy
 this DST.CNTR 1sg-DEP-DECL non.Indian=PL.OBJ son.in.law this say-FUT-DEP=FEM
 Here I am, one who has non-Indians for son-in-laws, I am one who will say thus,

²³¹ Here she is probably referring to me, the visitor.

j'ãh *ʔãh-ãti ʔ-ti ʔ...*
 DST.CNTR 1sg-EMPH.TAG-RS
 I am...²³²

²³² Her two oldest daughters have traveled to São Gabriel and are living there (they are among the only Hupd'əh in the region who have done so for any length of time); Ana speculates that they will marry non-Indian men.

Song 2

Amélia, Tat Deh/ Cabari do Japu

ṽh=hin-ih nṽ-ṽy=nih=mah tih-íp tí
 1sg=also-DECL say-DYNM=EMPH.CO=REP 3sg-DEP DEP.EMPH
 ‘I too, she says, they say

j’uḡ hup=ṽy=mæh, j’uḡ hup=ṽy=mæh páh-páh-páh-páh
 forest person=FEM=DIM forest person=FEM=DIM PRX.CNTR-RS-RS-RS
 a little woman of the forest, a little woman of the forest

ṽh-āp-āti? nṽ-ṽy=nih=mah.
 1sg-DEP-EMPH.TAG say-DYNM=EMPH.CO=REP
 I am, they say.

Núp=ṽy-āp-āh, núp=ṽy-āp-āh, deh-g’ætyḡ húp=ṽy ṽh-āp-āh
 this=FEM-DEP-DECL this=FEM-DEP-DECL water-headwaters person=FEM 1sg-DEP-DECL
 This woman, this woman, I am a woman of the headwaters

deh-g’ætyḡ-an-ṽy=ṽy ṽh-ti?ti?, ṽm-ān ṽm-ān.
 water-headwaters-OBJ-who=FEM 1sg-EMPH.TAG-RS 2sg-OBJ 2sg-OBJ
 I am a woman from the headwaters, to you, to you (I tell this).

Deh=mi g’ætyḡ-an-ṽy=n’ān=nih páh-páh, ṽm wí?tú-uti?
 water=stream headwaters-OBJ-who=PL.OBJ=EMPH.CO PRX.CNTR-RS 2sg listen-want-EMPH.TAG
 You want to listen to the people from the headwaters of the streams,

ṽm nṽ-tæñ-æp, teghḡ=ṽy-āp nṽ-ṽy páh-páh.
 2sg say-COND-DEP non.Indian=FEM-DEP say-DYNM PRX.CNTR-RS
 if you say so, the non-Indian girl says so.

Nṽ-ṽy=nih=mah núp=ṽy-āp-āh, dog-m’æh-tæh=ṽy ṽh-ti-ti?
 say-DYNM=EMPH.CO=REP this=FEM-DEP-DECL vapisuna-snake-offspring=FEM 1sg-EMPH.TAG-RS
 This woman says, it’s said, I’m a Vapisuna-Snake Clanswoman,

g’et-g’ó-op=ṽy, g’et-g’ó-op=ṽy. Nĩ ṽn=ṽh=d’æh
 stand-go.about-DEP=FEM stand-go.about-DEP=FEM 1sg.POSS mother=oppos.sex.sibling=PL
 a woman who is just passing through, a woman just passing through, this is perhaps not

nñ j’áh-át ṽp ṽhniy páh-páh, núp=ṽy-āp yĩ nṽ-ṽw-ḡ.
 POSS land-OBL NEG:ID maybe PRX.CNTR-RS this=FEM-DEP that.ITG say-FLR-DECL
 my mother’s brothers’ land, this woman says thus.

nɔ̌-ɔ̌=nih=mah *tʰh-íp-ííʔ*, *cǎp=ʔǎy* *tóg=yíʔ*, *cǎp* *húp=ʔǎy*
 say-DYNM=EMPH.CO=REP 3sg-DEP-EMPH.TAG other=FEM daughter=TEL other person=FEM
 She says, it's said, another woman's daughter, another Hup woman's

tóg=yíʔ=mah-mah *g'et-g'óʔ-op=ʔǎy*, *g'et-g'óʔ-op=ʔǎy*
 daughter=TEL=REP-RS stand-go.about-DEP=FEM stand-go.about-DEP=FEM
 daughter, it's said, I am a woman who is just passing through, just

páh-páh-páh *ʔǎh-āp-ǎtiʔ*
 PRX.CNTR-RS-RS 1sg-DEP-EMPH.TAG
 passing through.

wǎ̌ç-y'ǎʔ-tǎh=ʔǎy, *wǎ̌ç-y'ǎʔ-tǎh=ʔǎy*, *nɔ̌-ɔ̌=nih=mah*
 dove-feces-offspring=FEM dove-feces-offspring=FEM say-DYNM=EMPH.CO=REP
 Dove-Feces Clanswoman, Dove-Feces Clanswoman,²³³ thus she

páh *tʰh-íp-ííʔ*
 PRX.CNTR 3sg-DEP-EMPH.TAG
 says, it's said.

²³³ This clan name was not recognized by my consultant; it may be an alternative or joke name for the Vapisuna-Snake clan, to which the singer belongs.

Appendix V: Glossary of regional terms²³⁴

<i>açaí</i>	palm species with edible fruit; <i>Euterpe precatoria</i>
<i>acará</i>	fish species
<i>arú</i>	cool period of the rainy season; lasts about a week
<i>aturá</i>	large basket manufactured exclusively by the Nadahup peoples; used by
other	peoples for carrying manioc and other goods
<i>bacaba</i>	palm species with edible fruit; <i>Oenocarpus bacaba</i>
<i>beiju</i>	flat bread made from bitter manioc
<i>benzamento</i>	healing or protective spell; ‘blessing’
<i>buriti</i>	palm species with edible fruit; <i>Mauritia flexuosa</i>
<i>caapi</i>	hallucinogenic drink made from the vine <i>Banisteriopsis caapi</i>
<i>caatinga</i>	area of Amazonian forest with extremely sandy soil; marked by smaller trees and certain specific plants and animals
<i>cabarí</i>	tree sp. with edible fruit
<i>cachaça</i>	Brazilian sugar-cane rum
<i>cará</i>	plant with edible tuber; <i>Dioscorea</i> sp.
<i>caraná</i>	palm species used for thatching roofs; <i>Mauritiella armata</i>
<i>carurú</i>	poke-weed (plant with edible leaves); <i>Phytolacca</i> sp.
<i>caxiri</i>	beer brewed from manioc
<i>cipó</i>	(cipó titica) vine used for basket-making and tying; <i>Heteropsis spruceana</i>
<i>coca</i>	plant whose leaves are powdered and eaten for a caffeine-like effect; also called ipadu; <i>Erythroxylum coca</i>
<i>cubiu</i>	plant with edible fruit; <i>Solanum sessiliflorum</i>
<i>cucura</i>	wild grape species; <i>Pourouma cecropiifolia</i>
<i>cuia</i>	gourd bowl or dipper
<i>cunurí</i>	tree with edible nuts; <i>Cunuria spruceana</i>
<i>curare</i>	arrow and dart poison; made from a vine
<i>Curupira</i>	malignant forest spirit with long red hair and feet attached backwards; lures people to him in order to eat them
<i>cutia</i>	Black Agouti; <i>Dasyprocta fuliginosa</i> (small animal)
<i>cutivara</i>	Green Acouchy; <i>Myoprocta pratti</i> (small animal)
<i>dabacurí</i>	region-wide reciprocal presentation ritual; most often involves wild fruit
<i>embauba</i>	tree species; <i>Cecropia sciadophylla</i>
<i>envira</i>	tree species whose bark is used for slings and basket tumplines
<i>farinha</i>	coarse dry meal made from bitter manioc
<i>igapó</i>	area of forest along the rivers that is flooded during the rainy season
<i>igarapé</i>	stream
<i>inambú</i>	tinamou (bird species)
<i>jacamim</i>	Grey-winged Trumpeter (bird species)
<i>jacundá</i>	fish species
<i>jandiá</i>	fish species

²³⁴ Most of these terms are of Nheengatú origin; some are Portuguese. Thanks to Pieter van der Veld for the Latin names of plants.

<i>japú</i>	Yellow-rimmed Cacique (bird species)
<i>japurá</i>	tree species with edible fruit; <i>Erismia japura</i>
<i>japurutú</i>	woodwind instrument, about 5 feet long, played with a reed
<i>jirau</i>	grid made from lashed sticks; suspended above fire for smoking meat and fish, or built inside house for placing belongings
<i>kapiwayá</i>	ritual song cycle, sung and danced by men; words are unintelligible and are passed down by memorization
<i>mamanga</i>	bee species
<i>mandí</i>	fish species
<i>manicuera</i>	sweet drink made from cooking the poisonous juice left over from processing bitter manioc
<i>maniwa</i>	manioc plants
<i>mawaco</i>	small tube-shaped whistle held vertically
<i>mingau</i>	thick morning drink made from tapioca, salt, and water; drunk warm
<i>mojeca</i>	thick, spicy fish stew
<i>mutum</i>	small turkey species, lives in holes in the ground
<i>mucucú</i>	tree species with large inedible brown nuts
<i>paca</i>	small animal; <i>Agouti paca</i>
<i>pajé</i>	shaman
<i>paraná</i>	shortcut across a river loop; usually via a small connecting waterway
<i>pium</i>	small biting fly species
<i>piraracú</i>	large fish species
<i>patauí</i>	palm species; <i>Jessenia bataua</i>
<i>paxiuba</i>	palm species whose trunk splits into flat sections like planks; <i>Socratea exorrhiza</i>
<i>puçanga</i>	love-charm
<i>pupunha</i>	palm species with edible fruit; <i>Bactris gasipaes</i>
<i>quinhapira</i>	broth made from hot peppers in which beiju is dipped, often flavored with fish, meat, or wild fruits
<i>roça</i>	slash-and-burn field; primarily for manioc but also bananas, hot peppers, etc.
<i>sauva</i>	species of large edible ants; a delicacy
<i>shibé</i>	drink made from farinha softened in water
<i>tapiri</i>	small temporary shelter made from poles and palm thatch; typically erected in forest camps and intended to last for a few days or weeks only
<i>taracuí</i>	ant species; makes a clicking sound
<i>timbó</i>	vine that is beaten in streams so that its poison will stun the fish; <i>Lonchocarpus sp.</i>
<i>tipití</i>	woven tube used to squeeze the poisonous juice out of bitter manioc mash
<i>tocandira</i>	ant species; extremely painful sting
<i>traira</i>	fish species
<i>tucumá</i>	palm species with edible fruit; <i>Astrocaryum aculeatum</i>
<i>tucunaré</i>	fish species
<i>tucupí</i>	poisonous liquid left over from manioc processing
<i>turí</i>	tree species whose wood is used for torches
<i>ucuqui</i>	tree species with edible fruit; <i>Pouteria ucuqui</i>

<i>umari</i>	tree species with edible fruit; <i>Poraqueiba serica</i>
<i>urucu</i>	plant whose seeds yield a bright red dye; used to paint the body and other things
<i>uacú</i>	tree species with edible fruit; <i>Monopteryx uacu</i>
<i>wirapisuna</i>	tree species with edible fruit; <i>Gnetum sp.</i>
<i>Yurupari</i>	region-wide ritual complex involving sacred trumpets forbidden to women and children

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