

**Helpful or Hurtful? Analyzing the Internet's Role in Minority and Indigenous Language
Actor-Networks**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Endangered languages make up “45% of the 6,901 [known] living languages in the world,” and researchers predict that up to 90% of languages spoken today will go extinct by the end of the century (Rogers & Campbell, 2015). Language’s links to cultural identity, traditions, and history mean that the threat of language extinction implies losses of those important elements of numerous communities around the world (Woodbury, n.d.). With the proliferation of the internet and social media platforms, some consider these technologies to be safe spaces where endangered languages can prosper, while others see them as weapons to further accelerate a language’s demise.

In this paper, I will be examining language actor-networks, or the actor-networks that minority and Indigenous languages are a part of, and will explain why the internet is such an important actor. Thus, I will use the Actor-Network Theory framework to study the high level of interconnection between different actors. This framework describes how an actor-network is made up of actors that are not necessarily alive, but are entities that have an effect on the other entities, with those interactions defining the connection’s network (Detel, 2001).

My research investigates the link between the internet and social media, government internet policy, and languages, focusing on minority and Indigenous languages. I analyze multiple case studies that explore how social media and the internet allow for cultivation of language communities online, and how the government plays a role in either supporting or oppressing them. In order to do this, I use past research and current news on the state of minority and Indigenous languages from around the world as examples of this phenomenon. Using this research, I will argue that in language actor-networks, the internet is an actor that wields considerable power in the hands of both language users and the governments that wish to support or oppress them.

The purpose of this paper is to explore and expose the nature of these relationships. I will delve into situations such as those in which national governments are attempting to influence language communities through social media and the internet, and cases in which the internet is an important medium for expression in those communities. The cases that this paper analyzes are those of the Uyghur, Irish, Maori, and Mayan language communities, and how they interact with the internet and the governments of their countries of origin. Each of these cases illustrate the impact that the internet as an actor has on facilitating interactions between the others in the network.

The Internet as a Tool of Both Communication and Oppression in the Uyghur Language Actor-Network in China

While the internet provides space for people to express themselves in their own language, countries with the intention of suppressing the use of a minority language and culture are able to do so through policy regulating internet use, such as content censorship. This is one way in which a government can weaponize the internet to influence language and culture. A current example of this occurring is in China, where the government is actively working to oppress the Uyghur language and culture. The government tries to forcibly linguistically and culturally assimilate minority groups in internment camps, as seen in the Xinjiang region of the country, home to the Uyghur people. These internment camps remove Uyghur people from their communities, punish them for speaking in their native language, and attempt to brainwash them with the government's propaganda in the name of re-education. This is part of a broader overall strategy to assert control over groups that might threaten the government's power. In order to properly explain this network, I will establish the importance of the internet in preserving

Uyghur language and culture, and then show how the ability to use the internet to do so is quashed by the Chinese government.

The internet is a place that facilitates the use of the Uyghur language for cultural communication, linguistic discussion, and networking. China is extremely hostile towards the expression of minority groups such as the Uyghur and Tibetan cultures. In response, the internet has been a space where Uyghur communities were able to meet, talk in their own language, and foster culture (Clothey & Meloche, 2022). Through monitoring the most active Uyghur-language websites with the help of Uyghur-speaking research assistants between 2014-2016, Clothey and Meloche found that “many posts also made cultural references and utilised idioms that would be familiar only to an Uyghur insider” and that “Uyghur language [was] being reinforced in the websites as the online community sometimes corrected a user’s written Uyghur if they noticed misspellings, incorrect word usages, or use of a Chinese word instead of the Uyghur equivalent” (2022, p. 382). If such sites were being used to uphold Uyghur cultural practices, then they must have been integral to the development of Uyghur identity in cyberspace at the time. With Clothley’s experiences living abroad and in China, and as American academics, the authors Clothey and Meloche recognize the importance of media and the internet in culture. Individual members of the Uyghur community use tools to communicate such as the Internet, social media sites, and computing devices, all of which are actors in this network. We can also see from this example that language can be considered an actor, since in the example above users are directly interacting with the language by doing things like correcting grammar and using idioms. Life has become even more digitized since this study occurred, further supporting the importance of a language’s presence online, which is a challenge in a country such as China that severely censors internet use.

In the past, Uyghur communities as actors have been able to use the internet for acts of resistance to the Chinese government's active oppression of their community. Uyghur individuals were able to use online forums and media sites to communicate with each other, and discuss the state of their culture as it related to the Chinese government's assimilation efforts. Clothey and Koku describe this phenomenon with the example that "as oppositional consciousness emerges through communication in the online Uyghur community forums, other posts build solidarity and mobilize Uyghurs by encouraging concrete but everyday acts of resistance" (2017, p. 361). One such post "explained that a privately run Uyghur language school had been shut down by the government" and mobilized Uyghur community members "to buy honey to support building another Uyghur language school even after the first one was shut down by the government [which] clearly demonstrates a form of resistance" (Clothey & Koku, 2017, p. 361). Clothey and Koku's roles as education and sociology professors, respectively, put them in a strong position to evaluate the network of Uyghur community members in regards to cultural education in China. The cause and effect of a post on the internet that led to community action taking place in a censored cyberspace, as the authors say, is a show of resistance to the government's ongoing oppression. The only viable alternative is spreading such ideas without the internet by word of mouth; however, the internet allows it to happen with unprecedented speed and scale, due to its ability to instantaneously connect users across vast geographies such as the Xinjiang region in China. This helps us better understand the role of the internet in this network of actors. Now that the importance of the internet to the Uyghur people and this network has been established, this paper will analyze how the government is using it as a tool to act upon the network by taking the internet away from the Uyghur people.

In this actor-network, the internet has morphed into a tool of oppression leveraged by the Chinese government to restrict Uyghur language use and intra-community communication through censorship. This development further solidifies the government's role as an actor in the network, and the internet's role in allowing it to happen. This can be seen in the way that China targets the Uyghur and Tibetan languages with internet censorship policies (The China Team, 2021). The China Team of Protocol, an American technology news site associated with Politico, reports that in 2021, "Talkmate, a language-learning app...had "temporarily" taken down Tibetan and Uyghur language classes", and that "days later, web users noticed that popular Chinese streaming service Bilibili had banned comments posted in Uyghur and Tibetan." These are not isolated incidents that happened to relatively unknown websites. Another instance of this blatant censorship of minority language in China is seen "on Douyin, TikTok's Chinese original," a massively popular app on which "whenever livestreamers speak an ethnic minority language and/or a dialect that the majority of Mandarin-speakers don't understand, they will receive a warning to switch to Mandarin" or else they will stop the stream (The China Team, 2021). These threats may at first seem like they only discourage the use of minority languages, but in encouraging the use of Mandarin over other languages, it makes it easier for government moderators to screen content for messages that the Chinese government would disapprove of. In other words, the government gets a two-for-one deal where they not only reduce the use of minority languages, but also can more effectively censor internet content. China has been working for some time now to forcibly assimilate the Uyghur people with the country's dominant culture, and these happenings are evidence that they have found that the internet is an effective means to put pressure on the network to achieve that end.

These actions of the Chinese government have caused the Uyghur-language internet to lose users. Shortly after the founder of one of the most popular Uyghur-language websites “was swept up in a mass detention campaign” in 2016, “popular Uyghur websites...permanently stopped updating” and “the vast majority of independent Uyghur-run websites ceased to exist” (Borak, 2022). This was not a temporary shutdown of some websites, but rather the removal of all the digital content created by Uyghur users over the years. While WIRED is an American technology reporting magazine that is more likely to publish with a western perspective of the issue, Borak, a journalist with extensive experience reporting on technology in China, in her article reports that specifically in Xinjiang, “authorities have also expanded the list of blocked websites from Google and other Western social media platforms to GitHub and Stack Overflow, popular developer tool platforms that remain available to coders in the rest of China” (2022). Any software developer will be familiar with these websites, and must realize that without such tools, it would be an extreme challenge to build and manage any software. This is evidence that not only is China working to prevent the Uyghur people from using the internet for content, but it is taking away the people’s ability to build their own space, rendering them unable to simply move to another website as the fall of the Uyghur-language internet continues. Looking at this from the point of view of our network, the Chinese government is attempting to limit their abilities to be actors in it.

The Internet’s Support of Indigenous Languages in the Language Actor-Networks in Ireland and New Zealand

Unlike the Uyghur case, some language actor-networks have the benefit of governments that have codified their protection into law, and are able to freely build online communities of language users on the internet without government interference. Two such examples of

governments that are benevolent actors in networks of language users can be found in Ireland and New Zealand. In this section, I will begin by describing said governments' interactions with Indigenous languages, and then go on to explain how internet and social media users of those countries have built language communities online, and what those networks look like.

In these countries, the internet and the government as actors go beyond simply allowing the use of Indigenous languages, instead promoting it by making it easy for their citizens to use the languages in dealings with the state. Both of these countries' Indigenous languages were dominated by English due to colonization and criminalization of the use of Irish (Gaeilge) and Maori (te reo Maori) languages. As the most influential language on the internet, English dominates the digital sphere; however, the Irish and Kiwi governments have taken approaches that promote the use of their Indigenous languages on the internet. One specific example of this in Ireland is the availability of all official documents and forms in both Irish and English languages as part of the government's effort to enable "the public to use Irish in dealings with the State and with other bodies" and facilitate the "encouragement and support to transmit Irish to the next generation as a living household language" (Government of Ireland, 2010, p. 4). This move highlights the Irish Government's commitment to an internet where the people are empowered to use the Irish language should they choose to do so. In a similar vein, the Maori Language Act of 2016 implemented by New Zealand solidified their support of the revitalization of the language (Government of New Zealand, 2016). Not only that, but the entire act's webpage can be used as an example itself, since it is written in Maori in addition to English. Even though the efforts by these governments may not have restored Maori and Irish as the majority language in their respective countries, the fact that they have made a strong and successful effort to codify their Indigenous languages shows the government's support for a continued effort at language

revitalization and cultural preservation. These actions are necessary to promote the use of Indigenous languages, and they highlight the national governments of Ireland and New Zealand as actors in their local networks of language users.

Not only do the governments use the internet to facilitate Indigenous language use, but the internet itself is an actor that facilitates digital Irish-language communities through user participation on social media. A large part of this is the role of social media sites in allowing a wide reaching audience to consume content in the Irish language. A digital content creator by trade, Loretta Gavin works at an advertising agency where a “big part of their strategy is using social media to spread the Irish language” (Fox, 2022). Not only is social media a space for people to use the Irish language, it is also a space in which people adapt the Irish language grammar and spelling to the internet, as described by Dr. Teresa Lynn, a computational linguist and Irish language researcher (2016). Social media allows people to connect through networks of Irish language users across different cities, countries, and even continents (Caulfield, 2013). As shown in these instances of evidence presented by Irish-language researching academics and an Irish-language content creator, social media is a vector for expression and community building in the Irish language. Some critics of this position may argue that an online community is not a real community, and while that may be true to some extent depending on one’s perspective, it does not negate the fact that people are indeed using the Irish language to communicate and express themselves, which is what a language is for in the first place. On that note, those that are learning the Irish language outside of Irish-speaking areas, or Gaeltacht, would have little to no access to native speakers of the language to talk with without the help of the internet. As a result, it is evident that the internet itself is an actor in the actor-network of Irish speakers, making it easier

for speakers of the languages as actors themselves to form more connections and further expand the network.

Similar to how we have seen with the use of the Irish language on social media, the same phenomenon of a linguistic and cultural actor-network propagated by social media is observable in use statistics of the Maori language in New Zealand. Back in 2014, Maori was the 12th most tweeted minority language with around 90,000 tweets and 345 users (Keegan, Mato, & Ruru, 2015, p. 65), and it currently sits at 17th place with 3,000 users and almost 350,000 tweets as tracked by IndigenousTweets.com (Scannell, 2024). With “86 per cent of Maori...using the Internet” around 2018, it serves as not only a space for language use, but also “a useful medium to promote Maori culture and identity and, in some instances, provide spaces for Maori cultural preservation and learning” (Keegan et al., 2018, p. 364). These Waikato University academics focused on the revitalization of the Maori language are right to argue so, since as we have seen in previous examples, the Internet is an extension of the abilities that we have to use our languages and spread our cultures. The growth in users and tweets compared to what the authors originally cited demonstrates the growth of the language network over time, which has undoubtedly been facilitated by the government. Without the internet, it is almost certain that these users would not have been connected due to circumstances such as geographical separation, further supporting that the internet is a key player in this network of language users.

The Internet’s Role in the Language Actor-Network of Mayan Languages in Central America

Beyond the previous examples of networks in which the government has a clear and strong position on influencing the way in which language is used are others that lie in a gray area. The Mayan communities in Central America fit this profile, highlighting the importance of

the internet for the development and revitalization of their languages and cultures. While the local and national governments of this region on paper legally recognize Mayan cultures, the protections are weakened by public social stigma to Mayan cultural practices and spoken languages. As a result, the internet is an extremely important actor in these language networks, providing spaces for communities to share culture safely in addition to teaching their languages, similar to the previous examples that are discussed in this paper. This section will begin by describing the realities that Mayan communities have faced and continue to face before moving into the internet's role in the region's language networks.

Mayan communities have faced many challenges to their existence due to Spanish conquest and colonization, and still face challenges to this day that define how the language actor-network operates. The Spanish conquest of the Americas and the imposition of Spanish language culture on the Mayan population had lasting impacts. Mayans were severely punished for passing on cultural knowledge, leading to tragedies for the culture such as the loss of the hieroglyphic writing system that they employed (Montejo, 2022). Currently, according to the Minority Rights Group, in Guatemala, "Indigenous peoples are underrepresented and excluded from political life and decision making across the country, despite representing at least 40 per cent of the population" (2018). It is evident that the network in which Mayan languages exist is not favorable to their prosperity. For centuries Mayan languages have been negatively affected and brushed aside in favor of the Spanish language in government, which we can see in the blatant lack of proportional Indigenous political representation. If the Guatemalan government, a weak democracy, felt the need to become an even more malevolent actor in this network by legally oppressing Indigenous languages and cultures in the region in the way that China does with the Uyghur language, then it may be able to do so with little political opposition. This

would be an alarming situation, and it goes to show the importance of the autonomy that the internet provides Mayan peoples in regards to the network in which their languages and cultures exist.

In the face of such traumatic pasts, the internet has found its place in promoting the use of previously suppressed Indigenous languages through the participation of individual users on social media without much government support. Developing Central American countries like Guatemala and Mexico see increasing access to the internet due to improvements in infrastructure and technology (Callison et al., 2016, p. 149). This means that more Indigenous peoples are gaining access to a space in which they are free to express themselves in whatever language they please, and communicate with other members of their communities. According to Cru, a sociolinguistics and Spanish lecturer from the U.K., in the Yucatan Peninsula, “aside from mostly timid government language policies...it is through particular and individualistic efforts that the promotion of Maya is usually undertaken” (2014). Cru also describes how Facebook, for example, is a place where “grassroots [movements] rather than institutional language management prevail” (2014). Here we can see how weak government action in support of Indigenous languages defines use of those languages on social media platforms. Promotion of the use of Mayan languages is unofficially delegated to individual users, thus standard language forms can be modified by the individuals that communicate with them. As a result, it is evident that this network of languages, language speakers, the internet, and government, is similar to the other networks that we have discussed through deviation from the linguistic norm online, and different in that the government plays a lesser role. Government support or not, people find a way to leverage the internet to express themselves in their language.

Not only is the internet a sandbox in which Mayan languages and cultures can be preserved and built upon by individual users, but also a place that provides the tools for people to learn the languages in educational settings, expanding the network of speakers. According to thesis research conducted by a master's degree in Teaching graduate at the University of Nebraska, "two [Guatemalan] professors agreed that new technologies that are emerging to learn a language can help them improve their teaching methodologies," but challenges are faced due to "the lack of online resources in Mayan language and lack of time to include technology when teaching a Mayan language" (Palala, 2019, p. 49). The adoption of technology in education is not specific to this topic, as it can be used for educational purposes in a wide variety of subjects in institutions around the world, but it is worth mentioning due to its relevance to Mayan language education in a region where the rate of use of technology is growing. In terms of the language's network of speakers, teachers, as actors in this network, make decisions about the use of technology in the classroom that will ultimately affect how students learn. If the Guatemalan government chooses to be a benevolent actor in this network, it will have the opportunity to provide technology to empower learners of Mayan languages.

Conclusion

In comparing these examples, it is clear that the common thread is that the internet is a space that allows interaction between language users in global communities, and cultural presence in the digital world. National governments have the ability to promote or suppress minority language use on the internet, so digital language communities are strongly affected by how the government decides to treat them. Language users can attempt to protest their government's actions on the internet. Together, each of these actions is performed by an actor, which enables us to see the full construction of the actor-network.

The implications of this network are that internet policy is extremely important to consider when talking about language and culture, knowing that control over the internet allows governments to shape a nation's language culture. Keeping this in mind can allow policymakers to make informed decisions about how technology policy can affect their countries' languages and cultures, and can allow engineers to design online social platforms in ways that intentionally protect minority languages and cultures from harm.

These implications are limited, however, in that this paper does not consider the cases of so many other minority languages that do not have the size of an internet presence that the discussed languages have. There are many other Indigenous and minority languages around the world that are in danger of going extinct, and do not have sufficient digital communities. Further research should investigate these language actor-networks and how the internet and social media as actors might influence and support their revitalization.

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