Water-Display and Meaning in the High Roman Empire

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## Abstract

This study examines public water-displays throughout the Early and High Roman Empire (first three centuries CE) to understand the meaning behind their placement in the built environment. There are two main goals of the dissertation: to explore ancient Roman perceptions of water and to investigate fully an individual's *interaction* and *reaction* to its display. In order to accomplish these goals, an approach that employs the framework of the archaeology of the senses, along with those of memory and identity. By laying the groundwork for understanding the sensorial pleasures that all humans gain from their encounters with moving water, we can begin to comprehend how both *memory* and *identity* are created in an architectural space. A wide variety of evidence is employed to gain a fuller understanding of exactly why Romans displayed water in certain locations. Ancient literary sources of both prose and poetry, particularly from the first century CE, demonstrate the Romans' fascination with water, due to its inherent pleasure, its necessity, and its related sensorial response. The archaeological evidence is based on 151 examples of public water-displays collected from throughout the High Roman Empire and located in 17 modern countries. Previous studies have excluded a number of examples of water-displays, based on modern terminologies (e.g., nymphaea and "monumental" fountains) that are predicated primarily on size. In an effort to cast the net as widely as possible, as many examples as possible of public fountains installed at least in part for display are included here.

By examining water-displays, that is structures that show water flowing into some sort of basin (allowing the water to serve a secondary function), this dissertation is able to tap into a wide variety of public fountains related to civic, religious, and entertainmentrelated settings. The three contexts help to illustrate the following: throughout the Empire, no matter the date, location, or context, water-displays were present; public fountains connect all individuals in the Empire, due to the omnipresence of water-displays, the sensorial experience related to moving water, and a sense of shared identities; fountains also *alter* the physical interaction an individual has with a particular space. The demonstration of moving water allows for sensory reactions in a built environment that all humans, regardless of their time or place, inherently and inevitably respond to in a positive way. By investigating the contexts of public water-displays, the meaning behind their placement is demonstrated, both in terms of the inherent experiences and the notion of identity that they created.

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## Abbreviations

Ancient authors and texts are abbreviated using the conventions found in the Oxford Classical Dictionary, Fourth Edition. *The abbreviations for periodicals and other resources in this study follow those of the* American Journal of Archaeology. *In addition, the following conventions are adopted in the text:* 

ASCSA	American School of Classical Studies at Athens.
BMC RE	Mattingly, H. 1923. Coins of the Roman Empire in the British Museum. London: British Museum.
BMC RR	Grueber, H.A. 1910. Coins of the Roman Republic in the British Museum. London: British Museum.
Daremberg-Saglio	Daremberg, C., and E. Saglio. 1873-1919. <i>Dictionnaire des antiquités grecques et romaines d'après les textes et les monuments</i> . Paris: Hachette.
DWhG	Deutsches Wasserhistorische Gesellschaft.
Ernout and Meillet	Ernout, A., and A. Meillet. 1932. <i>Dictionnaire étymologique de la langue latine: Histoire de mots</i> . Paris: Librairie C. Klincksieck.
Forma Urbis Romae	Lanciani, R. 1893-1901. Forma Urbis Romae. Milan: Hoepli.
IRT	Reynolds, J.M., and J.B. Ward-Perkins, eds. 1952. <i>The Inscriptions of Roman Tripolitania</i> . Rome: British School at Rome.
IvE	Wankel, H. 1979-1984. <i>Die Inschriften von Ephesos</i> . Bonn: Habelt.
LIMC	Ackermann, C., JR. Gisler, eds. 1981-present. Lexicon Iconographicum Mythologiae Classicae. Zurich: Artemis.
Malalas Chron.	John Malalas, Chronographia.
Migne PG	Migne, J.P. 1857-1866. <i>Patrologia Graeca</i> . Paris: Imprimerie Catholique.
New Pauly	Cancik, H., et al., eds. 2006-2011. Brill's <i>New Pauly</i> . Leiden: Brill.

1949. Lund: Gleerup.	
<i>OLD</i> <sup>2</sup> Glare, P.G.W., and C. Stray, eds. 2012. <i>Oxford L</i> <i>Dictionary</i> . 2 <sup>nd</sup> ed. Oxford: Oxford University Pr	<i>atin</i> ess.
PPMPugliese Carratelli, G. 1990-2003. Pompei: Pittu mosaici. Rome: Istituto della encyclopedia italian	<i>re e</i> 1a.
Roscher Roscher, W.H. 1884-1937. Ausfürliches Lexikon griechischen und römischen Mythologie. Leipzig Teubner.	<i>der</i> : B.G.
ThesCRABalty, JC., 2004-present. Thesaurus Cultus et R Antiquorum. Los Angeles: J. Paul Getty Museum	<i>ituum</i> Press.
Valentini and Zucchetti Valentini, R., and G. Zucchetti. 1940. <i>Codice top della città di Roma</i> . Rome: Tipografia del Senato	ografico

Translations in the study follow those of the Loeb Classical Library, unless otherwise indicated by a citation of a different translation or by the present author.

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Figure 146 Kolymbethra Reconstruction, Theater of Dionysus, Athens, Greece (Traversari 1960, Plate 1)

## Introduction

*Est enim maxime necessaria et ad vitam et ad delectiones et ad usum cotidianum.* "Water is very necessary for life, for delight, for daily use."<sup>1</sup>

"Water is the most vital of substances. It is the most essential element for survival, health, and wealth; the inspiration for metaphors of life, time, movement, and transformation; the source of powerful sensory and aesthetic experiences; and the fluid of social and spiritual identity."<sup>2</sup>

The power of water is well known and well appreciated. Because of its inherent necessity for living organisms, water is a common concern for all human beings. Today, water issues are particularly relevant and part of daily life in most areas of the world, with anxiety over water access, the commoditization of water, and the destructive properties associated with water.<sup>3</sup> Because of the necessity of water, humans have always been fascinated with the substance—on a variety of levels, from a basic need to a pleasurable element of life. And the quotation above from Vitruvius succinctly captures a feeling that was shared by most ancient Romans, too.

<sup>&</sup>lt;sup>1</sup> Vitr. De arch. 8.1.1 (Trans. F. Granger).

<sup>&</sup>lt;sup>2</sup> Strang 2008, 124.

<sup>&</sup>lt;sup>3</sup> The bibliography on modern issues associated with water is immense. One can easily consult the studies of Strang (2004; 2006; 2008; 2012), whose research investigates the not only humans' experience with water, but also the cultural significance of water in modern life. The water-related programs of UNESCO, such as the International Hydrological Program, seek to promote the management of natural water resources throughout the world (to secure necessary freshwater) and safeguard water security to ensure that all have access to water. (See: http://www.unesco.org/new/en/natural-sciences/environment/water/) The question of who owns water is especially divisive as water can be considered a commodity, which can limit the ability to retrieve water. One thinks of how some modern states, such as the Hellenic Republic, regulate the price of water to ensure that all have the ability to have access to affordable drinking water. Further, there have been conferences, such as in 2011 at the University of Pennsylvania, that explore the modern terrain of water. The Pennsylvania meeting explored the dichotomy of how water can be framed, not impacting land, or it can be everywhere, drastically altering landscapes and human lives (Mathur and da Cuhna 2014).

Water is transmutable and transformative. Humans' fascination with it can stem from the fact that water can change forms and states.<sup>4</sup> It has the ability to transform, both giving life and inflicting death.<sup>5</sup> Water is also an inherently shared, cross-cultural experience, as all humans must use it. Water has the ability to link "social groups physically and topographically," and can be interacted with in a variety of ways.<sup>6</sup> One needs to find clear and clean water for drinking and bathing. One can experience a waterscape, or all of the natural water features of the environment, including rivers, lakes, springs, and seas, along with the various forms of precipitation, such as rain and snow making water an integral part of one's interaction with the world.<sup>7</sup> Or one can find oneself in front of an artificial fountain, which displays water and demonstrates the power and grandeur of water that has been harnessed, even in the case of the smallest of waterdisplays. Regardless of an individual's encounter with water, however, there is always an associated *lived* experience with the element, given water's changing and life-giving nature.

The ancient Romans were fascinated by water. One only needs to think of the baths and aqueducts of the imperial period that incorporated new building techniques to create innovative and large structures. Further, there are the fountains of the Empire that not only provided potable water to the populace but also illustrated the water in some manner, usually by showing it gushing into a basin. In a sense, water permeated almost all aspects of life in the Roman Empire. While it is easy to understand the Roman

<sup>&</sup>lt;sup>4</sup> Strang 2005, 98; Oestigaard 2011, 38.

<sup>&</sup>lt;sup>5</sup> Chirassi Colombo 2004, 305; Strang 2005, 105. See especially Kamash (2008).

<sup>&</sup>lt;sup>6</sup> Strang 2005, 108.

<sup>&</sup>lt;sup>7</sup> Rogers 2013, 2, 6.

captivation with water in ways in which water is still used today, the reasons why Romans *displayed* water throughout the whole of the Empire remain poorly understood.

The key to understanding the meaning of Roman fountains is predicated on the experience an individual would have with that monument. Placing a fountain in the built civic landscape alters that area, which, in turn, helps to *construct* a new type of space. Situating water-displays in a cultic setting can inform one's religious experience of water, not least when water performs a purifying function. Similarly, adding water can enhance a person's entertainment, as with the addition of refreshing waters in the theater. These examples are all based in the human sensorial experience of the display of water, which, in turn, creates memories that are tied to place. And a community, the building block of organized social space, derives meaning from its collective sense of place. Thus the perception of water, originating from a shared experience, aids in the creation of identity across the Mediterranean and in the Roman Empire. This study examines Roman water-displays throughout the Empire to understand the meaning behind them in terms of the inherent experience and the notion of identity that they created.

#### I. State of the Question

The study of Roman water-displays has a rich and vibrant history, and one that is constantly evolving. Over the course of the last century, scholarship has moved away from strict typologies and catalogues, attempting to understand fountains in their placement in Roman society and the built environment. At this point, we are fortunate to be able to draw evidence from across the Empire, in order to put together a so-called 'bigger picture' of Roman water-display. This study builds upon the foundation of those before it while striving to understand the reasons behind the placement of water in the public sphere of the Romans.

First, there have been general archaeological publications of the various waterdisplays throughout the Empire. Monographs such as that of Renate Bol on the Nymphaeum of Herodes Atticus in Olympia (1984) and Betsey Robinson's magisterial study of the Peirene fountain of Corinth (2011) have reexamined monuments to alter our previous conceptions of those water-displays and their unique and complex histories. Current and ongoing research projects by groups of scholars, especially the field reports found in the publications of the *Cura aquarum* series of conferences, the most recent of which was held in Athens (2015), provide up-to-date excavation results and interpretations. Without the diligence of these field archaeologists, we would not have the proper data to mobilize within theoretical models.

Second, there is the great tradition of typologies of Roman water-displays. The two most important contributions are Neuerburg (1965) and Letzner (1990; 1999). Norman Neuerburg, studying the water features of the Italian peninsula, suggested six different types of fountains (*edicola, camera, facciata, grotta, semicircolare,* and *rotondi*), in addition to analyzing their placement in the structures they resided. Wolfram Letzner illustrated 458 water features in the western half of the Roman Empire. His extensive catalogue allowed him to offer a *Grobtypologie*, or a broad typology, of 19 variations of water features, placing the structures in a wider context.<sup>8</sup> Other briefer studies present similar typological discussions, including those by S. Meschini (1963), René Ginouvès (1969), Salvatore Settis (1973), and Pierre Aupert (1974).

<sup>&</sup>lt;sup>8</sup> Letzner (1999) is a second revised edition of the 1990 original publication. The present author has been told by Dr. Georgia Aristodemou, via her own personal contact with Prof. Letzner, that he is currently working on a full catalogue of water-displays of the eastern half of the Empire.

Third, there are catalogues of known water-displays, which are typically organized by regional geography. The fountains of Italy are gathered in the extensive catalogue of Neuerburg, which includes both public and private examples. The site of Ostia was supplemented in 1996 by the study of Maria Ricciardi and Valnea Scrinari. The western half of the Empire, already mentioned, was catalogued by Letzner. Our knowledge of North African water-displays was improved with the study of the minor fountains and nymphaea of Leptis Magna by Francesco Tomasello (2005) and the recent dissertation of Nicolas Lamare (2014) that catalogues the monumental fountains of Northern Africa. The eastern half of the Empire has also been represented by a series of regionally based catalogues, including Greece, with the studies of Susan Walker (1979), Franz Glaser (1983), and Sandrine Agusta-Boularot (2001), Asia Minor by Claudia Dorl-Klingenschmid (2001), Asia Minor and the Middle East by Julian Richard (2012), and the Middle East by Arthur Segal (1997).

Recently, the fountains of Roman Gaul have also received attention in secondary scholarship. Henri Lavagne, over the course of his career, has illustrated a number of Gallic water-displays (1990; 1992; 2012). Claude Bourgeois (1991; 1992a) presented the evidence for indigenous and Roman water cults and their monuments in the area of modern France. Agusta-Boularot, in her 1997 dissertation, illustrated the development and trends of water-displays throughout the Empire, incorporating examples from France. In a 2004 issue of *Dossiers d'Archeologie*, edited by Agusta-Boularot, a number of French archaeologists presented examples of fountains, including new reconstructions, from throughout Roman Gaul, making them accessible to a wider audience. One main reason that more Gallic examples are not part of the more widespread 'canon' of Roman

water-displays may be due to issues of terminology and misunderstandings of local trends in fountains in France.<sup>9</sup>

The proper discussion of the historical development of water-displays throughout the Empire has been greatly facilitated by the foundation of field reports, typologies, and catalogues. Pierre Gros (1996) offers one of the most succinct and well-informed discussions of how fountains changed over time, with attention to different contexts throughout the whole Empire. Dorl-Klingenschmid (2001) provides a diachronic narrative of how fountains changed in their urban contexts. Brenda Longfellow (2011) has recently examined the development of monumental fountains in Rome, Greece, and Asia Minor, attempting to place them in an Empire-wide progression.<sup>10</sup> Lamare also provides a succinct overview of how water-displays throughout the Empire developed.<sup>11</sup>

Work on domestic fountains, although they are not the focus of the present study, should be mentioned with regard to the state of the field. Again, Neuerburg is an earlier collection for examples in Italy, which has been supplemented by Ricciardi and Scrinari (1996) for Ostia, Marianna Bressan (2003) for examples throughout Italy, especially subterranean ones, and Dylan Rogers for Pompeii (2013). Helene Dessales has recently

<sup>&</sup>lt;sup>9</sup> Scholars note the difficulty in the appellation 'nymphaeum' to any water-display in France, which might have religious or monumental connotations (Bourgeois 1992a, 21; 1992a, 107-112; Lavagne 2012, 422). Lavagne himself wonders why more 'nymphaea' (i.e., what we might consider a 'monumental' fountain) in France are not given over to local religious worship (1992, 224); however, he also states that fountains in Gaul often adopt Italian models (1990, 137; 2012, 138). Even Agusta-Boularot states that 'monumental' fountains were rare in France before the second century CE (2004, 7). There are a number of examples, however, of fountains in Roman Gaul that use both local and Roman styles of design and display of water that make France a unique and important point of dialogue on Roman water-displays. When the adjective 'monumental' is used in this study, it only implies large-scale, without any of the connotations of past scholarship.

<sup>&</sup>lt;sup>10</sup> Criticism of Longfellow's work has focused in particular on her data set, which examines only examples dedicated to the emperor (either by the emperor himself, imperial officials, or members of the local élite). See Campagna (2011), Burrell (2012), and Lavagne (2012).

<sup>&</sup>lt;sup>11</sup> Lamare 2014, 1.93-127.

published an extensive monograph on domestic fountains of Roman Italy that fills the gaps in earlier research (2013).

Next, public water-displays have recently been studied in terms of their placement in water infrastructure systems. In the late 1990s, the "The Waters of the City of Rome" project, an online database and map of all the known fountains of ancient through modern Rome, was begun by Katherine Rinne at the University of Virginia, and it still serves as a constantly evolving resource for the water infrastructure of the city.<sup>12</sup> Gerda De Kleijn, in her 2001 study of the water supply of Rome, illustrates that the larger water system of Rome was crucial for the use of water by the Romans, and offers a series of water usage categories, including recreational, personal, domestic, operational, and aesthetic.<sup>13</sup> Richard (2007; 2012) has stressed that water-displays must be studied in terms of the wider water systems, since the displays cannot be properly understood without knowing how water reached them and just how much water might have been available. Cecelia Weiss has recently made the case to stress the role of geology on Roman water studies (2011), building upon the work of Dora Crouch on Greek water supply and usage (1993; 2003).

Finally, the study of water-displays now seeks to place ancient Roman fountains into wider-reaching contexts throughout the Empire, including aesthetic trends, urban contexts, and social considerations. In terms of aesthetics, the decoration of water features has been considered in different respects. Deena Berg (1994) illustrates the artistic development of fountains, from 700 to 30 BCE, providing a foundation for subsequent studies of Roman structures. The seminal work on Greek and Roman fountain

 <sup>&</sup>lt;sup>12</sup> Aquae Urbis Romae: The Waters of the City of Rome. http://www3.iath.virginia.edu/waters/
<sup>13</sup> See also the most recent work of Koloski-Ostrow (2015a), who examines water systems in relation to sanitation in the Roman Empire, challenging our notions of Roman hygiene.

sculpture is still that of Balázs Kapossy (1969). There are studies of sculptural programs of water-displays in the eastern half of the Empire, such as the monograph of Georgia Aristodemou (2012), and dissertations on sculptural groups that decorate nymphaea and other architectural complexes in Asia Minor (e.g., Chi 2002; Ng 2007; and Tabeck 2002). Dorl-Klingschmid, in her 2001 study, classifies the water-displays as *Prunkbrunnen*, or decorative fountains, and gathers examples based on their form and actual decoration, along with their placement in the cityscape.

The urban contexts of water-displays have provided fruitful results in the last two decades. Moving past simple typologies, scholars have studied fountains in their original contexts, understanding better how they function in urban spaces. The dissertation of Agusta-Boularot (1997) illustrates the importance that water-displays can have in Roman cities, particularly in the western half of the Empire. S. Ellis (1997) argues for the use of water infrastructure (including aqueducts and fountains) as a means for social control in Rome and in the provinces. Andrea Schmölder-Veit (2009) examines urban sites in Italy, North Africa, Spain, and Switzerland, placing fountains within the city, especially in terms of water supply. Nur Banu Uğurlu (2009) examines the placement of Roman fountains throughout Asia Minor. Longfellow (2011) explores expressions of patronage and identity with an emphasis on the examples in Asia Minor. Finally, Richard (2012) has been at the forefront of examining water-displays in terms of identity, attempting to place the structures in a socio-economic, socio-cultural, and socio-political context.

Water-displays are explored by scholars for their implications about Roman society and landscape, including their role as status symbols, products of patronage and
munificence, and as indicators of identity.<sup>14</sup> Walker (1979) is an early example of placing large-scale fountains in a wider architectural discussion that illustrates how Greeks in the Roman period employed water-displays as markers of their social standing in their communities. Brent Shaw (1991) demonstrates the need for approaching water usage at the regional level in his investigation of water in North Africa. Shaw shows the luxurious and utilitarian nature of water there, along with the desire of members of the local élite to use water there. Andrew Wilson (1995) explores the use of water in North Africa and shows that water in that large region was generally a marker of luxury and status, as some sites are not as well watered as others in the more northern parts of the Mediterranean basin. Susanna Piras (2000) has demonstrated that water-displays could potentially act as status symbols, simply a display of water without functional use, although this was probably not the case with most fountains throughout the Empire.

What is missing from these many studies is an exploration of how Romans would have themselves actually experienced their fountains. It is difficult, of course, to repopulate ancient spaces with bodies. Yet we can draw on studies of the fountains of more modern periods to begin to understand better just how our own interactions with water might mimic or differ from those of the ancient Romans. The fascination with the Baroque Trevi Fountain in Rome has been explored by John Pinto (1986), tracing its meaning and power from its construction until the modern period. Rinne in various publications has made the case for the visceral power of water and its special place in the fountains of Rome (1999; 2011). An exhibition at the Cooper-Hewitt National Design Museum in New York in 1998 explored the spectacle and pleasure of fountains from the

<sup>&</sup>lt;sup>14</sup> See also the very recent dissertation by Lytle (2015) for more on Republican and Early Augustan fountains in Rome (*non vidi*).

Renaissance to the modern period.<sup>15</sup> The architect Charles Moore has made the case for understanding the "*architecture of water*—what physical laws govern its behavior, how the liquid acts and reacts with our senses, and, most of all, how its symbolism relates to us as human beings."<sup>16</sup> It is this concept that allows us to unlock the mystique of water for humans, and how we over time have encountered and interacted with it.

## II. Aim, Evidence, and Chronology

The central issue of this study is: how did the Romans themselves perceive water, as a substance—and how might that have effected the construction of water features? How did an ancient Roman actually interact with a water-display? From this flow subsidiary questions: why were displays placed in certain locations? Can we draw meaning from these placements about either pan-Roman or local identities? How can a fountain alter the experience an individual has with the surrounding built environment?

In order to answer these questions, a wide-range of evidence is employed. To understand ancient Roman perceptions of water, literary sources of the first century CE are used, along with the writings of the later fourth-century Ausonius and Libanius, and the fifth-century John Malalas. Both prose and poetry authors are used, who, despite the inherent differences in their genres, provide a more complete insight into the Roman psyche that is absent from the archaeological record. Epigraphic sources also are incorporated throughout this study for a variety of purposes, including the reconstruction of the cult of the Roman nymphs, and identification of water-displays and the identity of their patrons. Given the pervasiveness of the so-called 'epigraphic habit' throughout the

<sup>&</sup>lt;sup>15</sup> Symmes 1998.

<sup>&</sup>lt;sup>16</sup> Moore 1994, 15. Moore is noted for designing the Piazza d'Italia in New Orleans, Louisiana, in 1978.

Empire, it is not the goal to provide all known examples of fountain inscriptions here, but an effort has been to include as many known and relevant ones as possible.<sup>17</sup> Furthermore, numismatic evidence is used when it aids in reconstructing water-displays, such as a now lost one in the theater of Antioch.

Turning to the archaeological evidence, 151 public water-displays of the firstthird centuries CE are collected and studied (**Tables 1-3**). While the chronology is limited to the first three centuries of the Common Era, occasional examples are brought into the discussion from the first century BCE to illustrate continuity from the late Republic to the Early Empire. The public fountains cited are found in civic, religious, and entertainmentrelated spaces. Examples are surveyed for their architectural form and decoration, their dedication (using inscriptions where possible), and their placement in the urban landscape, including how they interact with other surrounding built structures. In order to capture the full of experience of Roman water-displays, examples are gathered from throughout the Empire to include the following 17 modern countries: Algeria, Britain, Cyprus, Egypt, France, Germany, Greece, Israel, Italy, Jordan, Libya, Morocco, Portugal, Spain, Syria, Tunisia, and Turkey (Maps 1-8). This is the first time that many of these examples have been brought together and discussed comparatively, thus allowing us to gain insight into wider repercussions of public water-displays. In the text, the discussion of each successive example within a section is organized chronologically to allow the reader to see a progression in fountain construction. Water-displays in ancient baths have been totally excluded because their context makes them part of another form of waterdisplay, and because of the need to constrain the limits of this study. Domestic examples

<sup>&</sup>lt;sup>17</sup> For more on the 'epigraphic habit,' see see MacMullen (1982) and Meyer (1990). See also Curtius

<sup>(1859)</sup> for an early study of fountain inscriptions in Greece, which includes imperial Roman examples.

have also been omitted, as they bring a different set of issues and problems that are beyond the present focus. Further, water infrastructure systems (e.g., aqueducts, *castella aquae*, water distribution towers, etc.) are not discussed in the text, unless their presence is crucial to our understanding of the water-display and its meaning in that particular context.

In this study, the term 'water-display' is used to indicate that the structures being examined must feature some sort of water movement. In general, moreover, the characteristics of the examples include: they are in publically accessible areas; there is the element of water moving from a spout into basin; and there is a generally decorative or aesthetic element to the feature itself. The structures physically *alter* the spaces they occup, by providing refreshing coolness associated with the flowing water, or in the way fountains interact with other surrounding architectural buildings. Water-displays all have basins, naturally, to collect the moving water, and, in most instances, a visitor could collect the water for a secondary use (e.g., drinking or transporting the water elsewhere). There is no threshold in this study for a minimum or maximum size, as examples in the study range from the 1 m long Silenos statue used as a fountain on the *frons pulpitum* of the theater in Arles, France (App. No. 1.7), to the 90 m long façade of the Septizodium in Rome (App. No. 1.120). Appellations such as 'monumental' fountains, which disregard a large swath of available evidence that has yet to be tapped to demonstrate Empire-wide phenomena regarding the meaning of water-displays, are generally avoided.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> The adjective 'monumental' has been used recently in the studies of Longfellow (2011, 1-5), Richard (2012, 27-31), and Lamare (2014, 15-18). Richard's definition of 'monumental fountains,' which has been partially applied here, is: "a structure designed to contain and move water, in which water was exposed, had an aesthetic value and was integrated into an architectural and decorative frame adopting the shape of a façade, this frame being superfluous in the sense that it did not affect the functions of the installations" (30). These scholars use 'monumental' without defining the word properly, which is problematic. Monumentality is, of course, well attested in Roman architecture, as demonstrated most recently by

The ancient terminology of Roman fountains was ambiguous and variable even for the ancients. Therefore, unless a structure is specifically named in ancient literature or through epigraphy, terms without ambiguous ancient connotations are used here. Here, 'water-display' is an appropriate way to indicate that a structure or feature actually displayed water, often with a secondary use afforded by some sort of attached collection basin. 'Fountain' designates a man-made structure that exhibits water, unlike a naturally occurring spring or grotto. Because of the complicated nature of the ancient Latin word *nymphaeum*, it is only used in this study when it is the common name in the ancient sources (e.g., literature or inscriptions) and/or it is used widely in the modern excavation reports or in discussions of a given structure. Because of the various ancient and modern connotations of the term *nymphaeum*, it is best to limit its use in this study, as the Romans themselves seldom used the word to describe water-displays.

#### III. Methodology of the Study

In order to grapple with its research questions, this dissertation employs a combination of approaches. Given the number of past methods used to discuss waterdisplays, it is crucial to incorporate new scholarly approaches in an attempt to understand the lived experience of fountains. As explained below, the *archaeology of the senses* provides a strong groundwork. The nature of experience builds upon the senses, all of

Thomas (2007b) in the Antonine period, a monograph that Longfellow, Richard, and Lamare did not cite in their own studies. By not limiting our evidence to what could be considered 'monumental' we are able to gain a much better understanding from the examples themselves. Further, the issues surrounding whether a water-display is 'monumental' (and for some scholars, whether it is a 'nymphaeum,' in and of itself a difficult to define term), especially in French scholarship, have prevented a full understanding of the empire-wide trends of fountain construction. Thomas (2014) continues to advance the dialogue of understanding Roman building rhetoric, particularly in regards to 'monumentality' and the 'sublime.'

which are tied to the creation of *memory* from place.<sup>19</sup> Memories, which are constructed through embodied experiences in place, help to create a wider Roman identity.

Connecting *identity* to space illustrates the way in which we can construct a shared sense of self that was pan-Mediterranean—showing how water-displays across the Empire were constructed for similar reasons, often using a common architectural vocabulary, although on different scales.

# i. Archaeology of the Senses

Our understanding and experience of the world around us derives from our five senses. In the Aristotelian conception of the senses, sight and hearing were sometimes privileged over the other three senses, as sight and hearing were connected with the higher functioning of the human mind, unlike the other supposed carnal senses.<sup>20</sup> From an early time, a prejudice towards the dominance of these two senses, especially sight, has led scholars to examine evidence first and foremost in terms of viewership.<sup>21</sup> The primacy of sight also stems from the rise of the eighteenth-century German theory of aesthetics.<sup>22</sup> This seeks to understand of the bodily senses' reaction to beauty.<sup>23</sup> Building upon the work of Kant and Hegel, eighteenth-century aesthetics prioritized sight over the

<sup>&</sup>lt;sup>19</sup> The adjective 'sensorial' is employed throughout this study to indicate 'sensory.' 'Sensorial,' as in 'sensorial archaeology,' has been explained most effectively by Hamilakis (2013b).

<sup>&</sup>lt;sup>20</sup> E.g., Arist. *De an.* 2.6-12 (418a-424b), *Sens. passim.* Vigne (2009) discusses the theory of Aristotelian sensory perception, along with the works of subsequent ancient authors. While Aristotle wrote on the five senses, he was also a proponent of a 'common sense'—perceptions that are shared among all the senses. For more on the presentation of the senses in Aristotle, see: Sorabji 1971; Johansen 1997; James 2004, 525; Gregoric 2007; Modrak 2009; Butler and Purves 2013, 2; Porter 2013, 14; Hamilakis 2013b, 25-26. A sense such as smell was considered to be animalistic and carnal. For more on this notion of smell, see Bradley (2015b, 3-6) and Totelin (2015).

<sup>&</sup>lt;sup>21</sup> Rée 2000, 62; Betts 2011, 118; Day 2013, 4. See Howes and Classen (2014, 17-36) for a discussion of the visual experience of the modern museum.

<sup>&</sup>lt;sup>22</sup> See Rée (2000) for a brief overview of the development of the study of aesthetics. Porter (2010) examines 'aesthetic thought' in ancient Greece.

<sup>&</sup>lt;sup>23</sup> Baumgarten 1735, 1750; Kant 1790; Hegel 1835; Rée 2000, 58; Butler and Purves 2013, 1-2. See also, Porter (2013, 25-26).

other senses, in order to appreciate more fully the notion of the 'beautiful.' Aesthetics, too, then has the propensity to prejudice sight over the other senses, presenting a skewed understanding of the senses, by creating a 'sensorial hierarchy.'<sup>24</sup>

Sight is one of the more discussed of the senses. Much modern scholarship explores the role of sight, as part of the so-called 'culture of viewing' throughout the Greco-Roman world, perhaps because vision is our first line of perception of our world.<sup>25</sup> Sight can easily inform us of our surroundings, making it part of a shared experience among humans. Many vividly remember a first visit to the airy interior of the Pantheon of Rome, or a hike up to the top of Lykabettos Hill in Athens to view the sprawling city below with the Acropolis jutting out to the south. This was certainly the case for the ancients, too. In Achilles Tatius' first-second century CE romance *Leucippe and Clitophon*, Clitophon describes his arrival and subsequent sightseeing visit to Alexandria:

> Τριῶν δὲ πλεύσαντες ἡμερῶν εἰς Ἀλεξάνδρειαν ἤλθομεν. Ἀνιόντι δέ μοι κατὰ τὰς Ἡλίου καλουμένας πύλας, συνηντᾶτο εὐθὺς τῆς πόλεως ἀστράπτον τὸ κάλλος, καί μου τοὺς ὀφθαλμοὺς ἐγέμισεν ἡδονῆς. Στάθμη μὲν κιόνων ὄρθιος ἑκατέρωθεν ἐκ τῶν Ἡλίου πυλῶν εἰς τὰς Σελήνης πύλας: οὖτοι γὰρ τῆς πόλεως οἱ πυλωροί: ἐν μέσῷ δὲ τῶν κιόνων τῆς πόλεως τὸ πεδίον. Ὁδὸς δὲ διὰ τοῦ πεδίου πολλὴ καὶ ἔνδημος ἀποδημία. Ὁλίγους δὲ τῆς πόλεως σταδίους προελθὼν ἦλθον εἰς τὸν ἐπώνυμον Ἀλεξάνδρου τόπον. Εἶδον δὲ ἐντεῦθεν ἄλλην πόλιν καὶ σχιζόμενον ταύτῃ τὸ κάλλος. Ὅσος γὰρ κιόνων ὄρχατος εἰς τὴν εὐθυωρίαν, τοσοῦτος ἕτερος εἰς τὰ ἐγκάρσια. Ἐγὼ δὲ μερίζων τοὺς ὀφθαλμοὺς εἰς πάσας τὰς ἀγυιὰς θεατὴς ἀκόρεστος ἤμην καὶ τὸ κάλλος ὅλως οὐκ ἐξήρκουν ἰδεῖν. Τὰ μὲν ἔβλεπον, τὰ δὲ ἔμελλον, τὰ δὲ ἠπειγόμην ἰδεῖν, τὰ δὲ οὐκ ἤθελον παρελθεῖν: ἐκράτει τὴν θέαν τὰ ὀρώμενα, εἶλκε τὰ προσδοκώμενα.

<sup>&</sup>lt;sup>24</sup> For more on this hierarchy, see Butler and Purves (2013, 2). The field of Art History traditionally emphasizes vision (e.g., the approach of formalism) as the initial step towards a multi-sensory understanding of material culture. Reacting to formalism, scholars now call for a more nuanced reading of what is meant by concepts like the 'visual arts' and 'visual culture,' the latter of which is predicated in modern visual media. For more on this reaction, see the work of Summers (2003b). On 'visual culture' in Art History, see Mirzoeff (2002).

<sup>&</sup>lt;sup>25</sup> On the 'culture of viewing,' see Goldhill (1994) and Zanker (2004). See also Camerota (2002) and Small (2013) on *scaenographia* and ancient theories of viewing and, most recently, Molacek (2014), who explores the role of vision in Roman wall painting. Seminal for viewing in Roman culture is the work of Elsner (1995; 2007).

Περιάγων οὖν ἐμαυτὸν εἰς πάσας τὰς ἀγυιὰς καὶ πρὸς τὴν ὄψιν δυσερωτιῶν εἶπον καμὼν 'ὀφθαλμοί, ενικήμεθα.' (5.1.1-5)

After three days sailing we reached Alexandria. As I entered through the so-called 'gates of the Sun,' I was immediately confronted with the brilliant beauty of the city, and my eyes were filled with pleasure. Two opposing rows of columns ran in straight lines from the gates of the Sun to the gates of the Moon (these two deities are the city's gatekeepers). Between the columns extended the open part of the city. Many a road crisscrossed this part: you could be a tourist at home. When I had advanced a few stades into the city, I reached the place named after Alexander, where I saw another city altogether. Its beauty was dissected as follows: a row of columns ran in a straight line, traversed by another of equal length. I divided my eyes between all the streets, an insatiable spectator incapable of taking in such beauty in its entirety. There were sight I saw, sights I aimed to see, sights I ached to see, sights I could not bear to miss...my gaze was overpowered by what I could see before me, but dragged away by what I anticipated. As I was guiding my own tour around all these streets, love-sick with the sight of it, I said to myself wearily: 'We are beaten, my eyes.' (Trans. Morales 2004)<sup>26</sup>

The description of the city is an almost impressionistic jumble of excitement, on the part of Clitophon, making it difficult to understand just exactly how the city is laid out in space.<sup>27</sup> The experience follows the visual stimuli of the encounter. Indeed, the narrator's experience is akin to a description of a *thaumata* of Herodotus, Strabo, or Polybius, as autopsy confirms truth.<sup>28</sup> Ancient viewing of architecture can in fact be an emotional experience, as is evidenced by this passage, especially since monumental forms of the built environment can have a profound impact when one sees them for the first time.<sup>29</sup>

Perception is crucial in our experiencing and understanding of the world around us, through the medium of our senses. The Aristotelian 'common sense,' founded on the five other senses, is able to perceive certain common objects (e.g., movement, number,

<sup>&</sup>lt;sup>26</sup> For more on this passage, see Stambaugh (1974), Saïd (1994), Morales (2004), and Thomas (2007b, 116).

<sup>&</sup>lt;sup>27</sup> Morales 2004, 102.

<sup>&</sup>lt;sup>28</sup> Morales 2004, 101. For more on the role of autopsy, see the edited volume of Miles (2015).

<sup>&</sup>lt;sup>29</sup> Thomas 2007b, 116.

figure, size).<sup>30</sup> While not a sixth sense, this 'common sense' is a way in which the rest of the senses act together to provide sensation and recognition. Perception is grounded in *all* the experiences that an individual has with the world, through 'routinized social practices,' which is predicated on the fact that our bodies allow for these interactions.<sup>31</sup>

James Porter offers a condensed understanding of the complex relationship that ancient people (and even by modern people) had between the senses, aesthetics, and perception:

> what passes through the mind and senses in the face of vivid phenomena— [is]the primary features of sentience. Three things follow from this premise: (1) that aesthetics is fundamentally a question of sensation and perception; (2) that arts are genres of experience; (3) that both art and aesthetics are grounded in the ever-changing and ever-adapting aesthetic public sphere of antiquity. Such a sphere constituted by a pool of experiences that cut across boundaries of medium and genre.<sup>32</sup>

Sensation and perception are fundamental elements of understanding how the ancient mind processed the information that surrounds it. But of great importance, also, is the experiential nature of our own worldly interactions—and how the ancient theory impacts our understanding of sensory perception. It does not matter what we are doing, when we are doing it, or where we are doing it; however, the experience of sensing what is around binds us together as living beings. With shared interactions, we can relate to one another, forging social bonds.

Perception cannot be limited to one sense alone, as the senses do not act in isolation.<sup>33</sup> In Baumgarten's original formulation of aesthetics, he intended an equal-

<sup>&</sup>lt;sup>30</sup> Modrak 2009, 313-316; Vigne 2009, 107-111. See also Gregoric (2007).

<sup>&</sup>lt;sup>31</sup> James 2004, 525; Frieman and Gillings 2007, 8; Day 2013, 5; Hamilakis 2013a, 412; Howes and Classen 2014, 9. For more on Aristotelian perception, see the work of Sorabji, especially of 2013. See also, Johansen (1997), Magee (2000), Rée (2000, 64-65), and Porter (2013).

<sup>&</sup>lt;sup>32</sup> Porter (2013, 20). Italics are in original text.

<sup>&</sup>lt;sup>33</sup> James 2004, 528. For more on perception related to the senses, see in particular Merleau-Ponty (1945) and Serres (2008), with a word of caution from Hamilakis (2013a, 411).

sensory framework.<sup>34</sup> Thus, as the human body in its normal interactions with the world takes in and processes information using all five senses, studies that are grounded on the use of evidence from only one sense do not present the whole story. In recent scholarship, there has been a veritable 'call-to-arms' to re-consider *all* five senses together.<sup>35</sup> The condition of *synaesthesia*, in which "individuals who regularly experience one kind of sensory stimulus simultaneously as another," has been cited as a way to try to piece together the disparate evidence one can glean from all of the senses.<sup>36</sup> A synaesthetic approach could allow scholars to try to incorporate information from the five senses.

The development of the framework of the *archaeology of the senses* can help to illuminate ancient perceptions of the monuments of the past. Yannis Hamilakis explores the topic in his 2013 monograph, *Archaeology and the Senses: Human Experience, Memory, and Affect.* <sup>37</sup> The author makes the case for the investigation of ancient monuments through the complete incorporation of the perceptions of the senses, which impacts *memory* and perhaps even conceptions of one's self. Such a foundation has the ability to examine a variety of ancient experiences, such as a person's ephemeral interaction with a permanent monument. By reincorporating the five senses, we can actually understand how the structure was used and experienced.

<sup>&</sup>lt;sup>34</sup> Baumgarten 1750. See also Butler and Purves (2003, 1-2).

<sup>&</sup>lt;sup>35</sup> Frieman and Gillings 2007; Porter 2013, 14; Hamilakis 2013b.

<sup>&</sup>lt;sup>36</sup> Butler and Purves 2013, 1. See also: Hamilakis (2013b, 9).

<sup>&</sup>lt;sup>37</sup> Hamilakis 2013b, 14. Hamilakis uses the case studies of necropoleis and palaces of Bronze Age Crete to explain the archaeology of the senses. Sensorial experiences have been explored in a variety of disciplines in the social sciences, besides archaeology (Howes and Classen 2014, 11). For other sources on the archaeology of the senses, see Skeates (2010) and Day (2013). On a sensorial art history, see Kahn (1999), James (2004), Di Bello and Koureas (2010), and Quiviger (2010). For the role of the senses in the creation, or conception, of culture, see Howes (2003).

## ii. Memory

Perception of space by the five senses is required to form memories. And experiencing the built environment is a dynamic interaction that requires movement. Considering how ancient Romans would have viewed and physically interacted with religious structures, Richard Jenkyns suggests that humans have a sixth sense: our perception of our spatial experience.<sup>38</sup> Indeed, it is our physicality that informs us of what is around us and what we are encountering. The act of walking in and around a space allows us to incorporate the perceptions of all five senses, as this physical movement "plays a central role in our relationship with the world around us; it is essential to our experience of place, to the way we see and think, and to our assumptions about identity (of others and our own)."<sup>39</sup> There has been a recent trend in scholarship in both Classics and Classical Archaeology to begin integrating reconstructions of the complete sensorial experience one would have throughout the ancient city, which would allow for a complete understanding of how all levels of Greco-Roman society perceived their built environment, not just the highest echelons.<sup>40</sup>

In our perception and understanding of our surroundings, we can truly understand place and the material world around us. By engaging all of the senses, we are able to create a 'sensory envelope,' in which we seek "to identify the area around a given

<sup>&</sup>lt;sup>38</sup> Jenkyns 2013, 1. Jenkyns is arguing for a phenomenological approach to the ancient Roman experience of space. For more on phenomenology and landscape, a topic that cannot be treated in full in this study, see: Meinig 1979; Tilley 1994; Budd 2002; Cooper 2006; Hamilton and Whitehouse 2006; Spencer 2010; Hamilakis 2013b, *passim*.

<sup>&</sup>lt;sup>39</sup> O'Sullivan 2011, 3. The concept of the movement, especially walking, through Roman space has recently become a popular topic for discussion, including O'Sullivan's monograph (2011), along with Vout (2007), Betts (2011), and Jenkyns (2013, *passim*, but especially 143-192).

<sup>&</sup>lt;sup>40</sup> Betts 2011, 124. Recent volumes in the Routledge series, "The Senses in Antiquity," about smell (Bradley 2015) and *synaesthesia*'s relationship with the senses (Butler and Purves 2013) in the Greco-Roman world initiating dialogues, integrating new bodies of evidence to understand better how one would interact with the world around them. The series promises future volumes on the remaining senses.

location where all of the senses are engaged, thus framing and bounding vignettes and narratives."<sup>41</sup> Sensory experiences are then tied to notions of place—which can be defined loosely as the area that we perceive and experience with our bodies.<sup>42</sup> The landscape in which we experience life is then a synaesthscape, predicated on our variable and multi-sensual perception of our surroundings, in turn, a product of our environment and cultural upbringing.<sup>43</sup> It is only through our senses, then, that we can create reality.<sup>44</sup>

Place is where memories are created, which are made with the sensorial experiences that one has there.<sup>45</sup> And it is the senses that activate our memories (e.g., when one smells something that was only experienced in childhood), and vice versa (e.g., the feeling that one has remembering that smell in childhood).<sup>46</sup> Therefore, *memory* is an important factor of our sensorial experiences, which leads to notions of identity. Over the last few decades the study of the relationship between *memory* and archaeology has grown.<sup>47</sup> In terms of *memory* in the Roman sphere, a number of paradigms have been suggested, including popular, monumental, cultural, and collective memories.<sup>48</sup> No matter how one might conceive of *how* to read a monument or text, what belies *memory* 

<sup>&</sup>lt;sup>41</sup> Frieman and Gillings 2007, 10.

<sup>&</sup>lt;sup>42</sup> Strang 2006, 149; Hamilakis 2013a, 409. For the definition of 'place,' see Casey (1997, especially 16-17). Jenkyns (2013, vi) discusses the difference between 'place' and 'space,' choosing to define 'space' in his study as open areas, especially building interiors, that can be defined as contained areas, unlike open spaces associated with plazas and streets, which might be defined as 'place.' In this dissertation, 'place' is associated with the space that one attaches memories, while 'space' generally indicates architectural areas (i.e., the man-made built environment).

<sup>&</sup>lt;sup>43</sup> Frieman and Gillings 2007, 11-12.

<sup>&</sup>lt;sup>44</sup> James 2004, 533.

<sup>&</sup>lt;sup>45</sup> Edwards 1996, 1, 29; Hamilakis 2013b, 113, 127, 168.

<sup>&</sup>lt;sup>46</sup> For more on the senses activating memories, see Hamilakis (2013a, 413; 2013b, 90).

<sup>&</sup>lt;sup>47</sup> See the studies of Bergmann (1994), Van Dyke and Alcock (2003), Williams (2003), Renfrew et al. (2004), Yoffee (2007), Mills and Walker (2008), Barbiera et al. (2009), Borić (2010), Olsen (2012).

<sup>&</sup>lt;sup>48</sup> Hölkeskamp (2006) has suggested the idea of a 'collective' and 'monumental' memory. Wiseman (2014) argues for a 'popular' memory, going against Hölkeskamp's model of 'monumental' memory. In the same volume, dedicated to conceptions of Roman memory, Hölkeskamp (2014) offers a rebuttal to Wiseman's criticisms. Citroni's 2003 edited volume attempts to explore the relationship of Roman memory and identity.

is its catholic nature, in that all humans make memories. Experience and culture are inextricably tied, and how one interacts with a monument creates *memory*. There might be more 'official' memories that the Roman state wanted to create for a structure tied to a historical or mythological event, but it is the memories of ordinary Romans that provide the most insight into how individuals interacted with the world around them. The personal memories created by real Romans when experiencing a monument were usually not written down in the record and are thus hard to recreate. By connecting memories to sensory perceptions, however, we can approach how reality was actually experienced in the Roman Empire.

#### iii. Identity

The way in which the Romans interacted with their physical setting also constructed a shared *identity*. An architectural form, including a fountain, can be conceived as a social space "because it encloses and includes institutions; it is the means by which human groups are set in their actual arrangements," such as political institutions.<sup>49</sup> The relationship between a person and the place that architecture occupies has been further articulated in terms of a religious context of the Roman world:

Space and movement are of central importance in conjunction with the dimension of time. Human memory requires spatial concepts: objects or spaces gain a history of their own only through prolonged, continual use. This is why, in a larger circle of participants, places and their ornamental attributes have a stabilizing effect on the group; they help create a sense of identity. Venerable statues and cult objects reaffirm the cult community's distinctive tradition; its creation is associated with specific locations.<sup>50</sup>

<sup>&</sup>lt;sup>49</sup> Summers 2003a, 43. The physicality of the built environment articulating social behavior, movement, memory, and identity in the Greco-Roman world has recently been shown by Michael Scott (2013). <sup>50</sup> Eraphaef Gaiser 2007, 210

<sup>&</sup>lt;sup>50</sup> Egelhaaf-Gaiser 2007, 210.

Memories are created by individuals through their repeated interaction with a monument, and those memories are made by their perceptions of the structure. The shared experiences of the same monuments then create *identity*, in that members of a community have some sort of shared sense of connection with each other. Past studies of a similar or common Roman identity have attempted to employ a top-down model of its imposition throughout the Empire (e.g., Romanization), which is no longer tenable.<sup>51</sup> New models of acculturation and globalization have been offered by some scholars as a counterpoint to Romanization.<sup>52</sup> Janet DeLaine, in a study of urban sites throughout the Empire, points out that "local identity continued to provide a physical and emotional focus for civic, as well as religious, activity under the Empire," allowing for a "recognizably Roman global identity" to develop.<sup>53</sup> Louise Revell has recently argued for a much more nuanced reading of Roman identity in that "identity is multiple, fluid, and situational; practice forms the point of reproduction of individual identity; material culture is implicated in the internalization and expression of identity."<sup>54</sup> We cannot therefore impose a strict interpretation that the implementation and dissemination of water-displays throughout the Empire was wholly a result of action on the part of the capital. The variety of fountains throughout the Empire can also be explained by local tastes and needs. But their shared architectural vocabulary and context help to illustrate that Roman identity is indeed fluid, not a monumental, unchanging form.

<sup>&</sup>lt;sup>51</sup> Recent discussions on Roman identity that was tied to material culture are explored in the studies of Roth and Keller (2007), Revell (2009), Whitmarsh (2010), and Mattingly (2011). For a discussion of the problems associated with Romanization, see the essays in Merryweather and Prag (2002) and Revell (2009, 5-10; 2014).

<sup>&</sup>lt;sup>52</sup> On acculturation, see DeLaine (2008); for globalization, see Hingley (2005).

<sup>&</sup>lt;sup>53</sup> DeLaine 2008, 115.

<sup>&</sup>lt;sup>54</sup> Revell 2009, 7-8.

Even though individuals have idiosyncratic discernments of the reality around them, our common perception mechanisms as humans allow us to interact with stimuli cross-culturally.<sup>55</sup> Because water is a substance that all humans need and desire, we all have a shared experience with it. Water has the ability to stimulate *all* five of our senses, that provide humans with "intense sensory experiences: thirst, its relief and the taste of water; the pleasures of bathing, and the excitement or restfulness of immersion; the seductive sounds of water; and the mesmeric effects of gazing on its glittering surfaces."<sup>56</sup> While we may have different perceptions or meanings tied to water across the globe today, especially in its ability to aid in survival, there remains an inner desire to interact and sense water in some way.<sup>57</sup> In the Roman Empire, given the wide swath of geographical area, climatic conditions, and availability of water, there would have been a range of perceptions about the substance in Italy, Britain, North Africa, or Asia Minor. Nevertheless, we can posit a common Roman identity, as well as a shared connection to water, regardless of location. This is nowhere more apparent than in water-display. While the fountains are not exactly the same throughout the Empire, there are similarities in their use and contexts that connect these structures. In fact, people throughout the world use "water in material and metaphorical terms to create cultural 'fluidscapes' of social connection and difference."<sup>58</sup> There was a desire and a need to show the water that the advent of the Romans brought throughout the whole Empire.

<sup>&</sup>lt;sup>55</sup> Strang 2005, 97. There are caveats regarding the *archaeology of the senses*, outlined by Hamilakis (2013a, especially 410-411). The sensorium, or our cognitive facilities related to the senses, are tied to Western modes of organization and hierarchies, which in and of itself can be problematic.

<sup>&</sup>lt;sup>56</sup> Strang 2008, 124. This view, however, could be prejudiced against humans residing in more temperate climates, unlike those living in harsher, colder climates, who might associate water with the bitter cold, ice, and snow.

<sup>&</sup>lt;sup>57</sup> Rogers 2013, 7; Howes and Classen 2014, 9, 11.

<sup>&</sup>lt;sup>58</sup> Strang 2006, 124.

Using a shared architectural vocabulary that was predicated on a number of traditions, the Romans showed water in ways that were both practical and ornamental. In a variety of contexts—civic, religious, and entertainment-related—water-displays were employed to alter the experience of the passer-by. The sensorial experience of water is universal and manifold, as humans tend to interact with water in similar ways.<sup>59</sup> By changing the coolness of the air, adding easy access to refreshing and good tasting water (i.e., there are no bad tastes to indicate that they are unsanitary), and creating a spectacle of moving water, Roman water-displays would have allowed Romans to smell the freshness of circulating air and the feel of cold water as it splashes on a marble basin, sensations that would have not only delighted a Roman of any social class anywhere in the Empire due to our inherent pleasure of water, but would have also connected Romans regardless of their location. With an identity associated with water, whether because of its connections to the power of harnessing a natural force, the mythological and sacred connotations of particular waters, or the theatricality of its display, fountains were a crucial part of the Roman ethos. Of particular interest, however, is how the more traditional types of Roman architecture were combined with local forms to create new types of built structures. Yet a Roman, regardless of his location, still tapped into a Roman mode of displaying water, illustrating the fluid nature of identity in the Empire.

#### **IV. Discussion of the Chapters**

The present study is divided into six chapters that trace the significance of Roman water-displays. The first two chapters are based on literary and epigraphic evidence, while the last four integrate the archaeological evidence of public fountains in civic,

<sup>&</sup>lt;sup>59</sup> Moore 1994, 201-202; Strang 2005, 99-105; Strang 2006, 149; Strang 2008, 124; Rogers 2013, 6-16.

religious, and entertainment-related spaces. Chapter 1 provides a foundation for the reader of the breadth and nature of water-displays in the Roman world. In a survey of 21 ancient Greek and Latin terms associated with fountains, the ambiguity of the meanings of the words commonly associated with water-displays (e.g., *nymphaeum* or *lacus*) is demonstrated. <sup>60</sup> Although the confusions of modern terminology have already been mentioned in this introduction, the discussion of the ancient terms aids the reader to understand better the methodological problems those words pose when they are used by modern scholars. The ancient terms are divided into primary and secondary categories, predicated on the role of the actual display of water. For the most part, the primary features are public fountains. Only some of the secondary ones are found in public, while the rest are in domestic contexts, showing that public fountains generally had more demonstrable water movement. Appendix 2 lists all the *nymphaeum* inscriptions used in the chapter (**Map 9**).

In order to understand the meaning behind a water-display it is necessary to examine the available ancient perceptions of water. Chapter 2 uses a variety of ancient literary sources to explore how the Romans themselves actually *interacted* and *reacted* to the element of water in natural and artificial settings. The passages considered are primarily of the first century CE, with a mixture of prose (e.g., Vitruvius, Columella, Pliny the Elder and Younger, Seneca, and Frontinus) and poetry (e.g., Horace, Ovid, Vergil, and Statius). Prose sources help to reconstruct what Romans thought about the inherent properties of water, namely what were the good and bad qualities of water.

<sup>&</sup>lt;sup>60</sup> In this study, when an ancient Latin term is used for a water-display, especially in the context of ancient literary sources to understand better the structure itself, italics are employed, in order to differentiate for the reader a modern use of the word, such as appellations by modern archaeologists of water-displays as 'nymphaea.'

Poetic sources often present the awe-inspiring, sometimes personified, forms of water. With the foundation of the *archaeology of the senses*, the last section of the chapter explores the prevailing thoughts of Roman writers regarding all five of the senses and water. The substance is shown to have been regarded as transformative, malleable, and beneficial for all.

The civic spaces of the forum/agora and macellum are investigated in Chapter 3. The placement of water-displays in these spaces provides crucial water supply to those using the areas, as well as altering, with flowing water, the sensorial experience of moving through the built environment. Within the forum and agora, examples are given of water-displays in subsidiary areas (i.e., on the periphery of the space), near entrances, and as focal points, which draw the attention of the pedestrian to certain parts of the forum. The use of water-displays to construct identities in the fora of Corinth and Rome and the agora of Argos are also considered. The sites offer well preserved and well studied examples of water-displays, and these urban centers have a strong tradition of local and pan-Roman mythologies that are often related to water. These traditions then help to connect the meaning behind the desire to install fountains in these spaces—thus linking Romans in different parts of the Empire through water. Finally, the macellum and its use of water-displays are presented to show how water was used functionally in these contexts to preserve food, and to improve the space primarily used by élite Romans.

Chapter 4 considers the relationship of fountains and urbanism, seeking to understand the impact of water features on the way a city was used by individuals. First, the liminal spaces of the gate and arch show the ways in which water-displays create way stations in the urban fabric, often prompting the pedestrian to transition to a new type of spatial environment (e.g., from the country to the city). Fountains found at crossroads, like compital shrines, bring a sense of community, altering the way in which Romans would interact with the surrounding built environment and their neighbors. The discussion in these first two sections of the chapter draws on evidence from throughout the Empire, including Asia Minor, Greece, Italy, Libya, and Syria, to illustrate the far-reaching nature of such water-displays. Finally, five different urban centers in Asia Minor that are well preserved and well studied are considered to emphasize how water-displays can be added to an already built space, as well as how one interacts with that space through the creation of urban nodes.

The sacred nature of water and its placement in religious contexts is explored in Chapter 5. The inherent awe and power of water, also illustrated in Chapter 2, helps to explain the sacrality of water, a force that is still inexplicably transformative and renewing even as it can be rationalized as a natural element. A discussion of the cult of the Roman nymphs based on literary, epigraphic, and archaeological evidence throughout the Empire is presented to highlight how these deities informed the Romans' attitude towards water, especially in religious settings. Then, water-displays in a variety of contexts, including entrances to sanctuaries, source sanctuaries, sites of the imperial cult, and healing sites, are illustrated to show how the display of water in these locations not only emphasizes water's power that creates awe for its viewers, but also adds a functional aspect to the water, especially for religious ritual or as part of healing. The examples come from throughout the Empire, emphasizing the widespread importance of water in religious activity, particularly in regards to local cults grafted onto Roman practices. Finally, Chapter 6 explores how water-displays were used in Roman

entertainment complexes, with particular attention to the theater and its surrounding built environment. Water would have served a variety of purposes in the context of the theater: quick access for drinking; a cooling element to hot spaces (e.g., the *spartiones* that sprayed perfumed water into the air); and creating an architectural ensemble with the decorative program of the theater. Before examining the archaeological evidence, an excursus is made on the notions of theatricality and spectacle, which help to explain Roman water-displays in terms of illusion, power, memory, and place. Then follows a discussion of water on display in the theater of Antioch, which is illustrated through the writings of Libanius and John Malalas, in addition to numismatic and mosaic evidence. Next, water-displays on the stage and in the orchestra of the theater are discussed, followed by those located near to the theater (e.g., the *porticus postscaenium*), and the spaces associated with aquatic spectacles. While the examples presented are from across the Empire, most are relatively unknown in modern scholarship. Their integration into this study shows the importance of water in yet another Roman context.

To aid the reader in his or her navigation of the evidence compiled for this study, there are three appendices at the end of the text. Each of the fountains included in this study is catalogued in Appendix 1, which is arranged by ancient site name; the numbers of each example in the appendix is integrated into the text of the study for easy reference (e.g., **App. No. 1.1**). Accompanying maps at the end of the text are also included to place examples of water-displays in their physical context (**Maps 1-8**). Appendix 2 presents inscriptions that include some form of the Latin word *nymphaeum* that are cited in the study (e.g., **App. No. 2.1**), along with a supplemental map of all the sites in Appendix 2

(**Map 9**). Appendix 3 is a collection of tables related to the data presented in each chapter, in order to guide the reader in trends in water-display throughout the Empire. The tables will be referred to in the text by their number (e.g., **Table 1**). Within the individual discussions of the various contexts of the fountains in the body of the text, evidence is given chronologically. Regional trends in the display of water, then, are presented in the conclusions. For example, while Asia Minor is known for large-scale fountains, the western half of the Empire generally has smaller structures, the result of climatic conditions and local conceptions of identity.

Water was everywhere in the Roman Empire. But the placement of public waterdisplays in the built environment had a particular meaning. The pan-Roman fascination with water, not unlike our own, provides a wide body of evidence from across the Empire. This study attempts to interpret fountains within their civic, religious, and entertainment-related contexts, so that the sensorial experience of a water-display can be better understood. The shared experience with water, and this experience's ties to *memory* and place, ensured the creation of a Roman *identity* that had both local and pan-Mediterranean characteristics.

## **Chapter 1: Terminology of Water-Display**

Agrippa vero in aedilitate adiecta Virgine aqua ceterisque conrivatis atque emendatis lacus DCC fecit, praeterea salientes D, castella CXXX, complura et cultu magnifica, operibus iis signa CCC aerea aut marmorea inposuit, columnas e marmore CCCC, eaque omnia annuo spatio.

Agrippa, moreover, as aedile added to these the Aqua Virgo, repaired the channels of the others and put them in order, and constructed 700 *lacus*, not to speak of 500 *salientes* and 130 *castella*, many of the latter works being lavishly decorated. He erected on these works 300 bronze or marble statues and 400 marble pillars; and all of this he carried out in a year.<sup>1</sup>

Pliny's description of the aquatic activities of Agrippa, when he was aedile in 33 BCE, indicate that he installed a number of structures that distributed water throughout the city. He mentions the *lacus*, the *salientes*, and the *castella* that would have dominated the landscape of Rome, given that their numbers were in the hundreds. Furthermore, the features would have been well outfitted with statues and columns. But there is still today confusion over the actual physical structures that were constructed. How is the *lacus* different from the *salientes*? We can only tell here that there were more *lacus* than *salientes*.

The terminology of Roman water-display is fraught with difficulties. The ancients themselves were often not consistent as to the exact meaning of the terms that they used. Or, given the fluid and ever-changing nature of language, over time, terms could shift in their meaning. All of which gives pause to the modern scholar of Roman water usage. It is the goal here to survey the known Greek and Latin water-display terms employed by the Romans, of which there are 21 in total, in order to establish a foundation upon which we can build a greater understanding of the nature of Roman water-display.

<sup>&</sup>lt;sup>1</sup> Pliny *HN* 36.121. (Trans. D.E. Eichholz)

Because of the inconsistency among the ancient terms, it is beneficial to categorize them based on the following dichotomous system:

- Primary: Structures that both contain and display water through the actual movement of water; these structures are essential for water-display.
- Secondary: Containers of water, usually with very limited (if any) water movement; these structures were not essential for water-display.

While most ancient words satisfy either the primary or secondary system, there are inevitably those that can safely be placed in both, depending on the context. The distinctions presented here may not be ambitious, but they allow the reader to differentiate the various words and structures, along with presenting the notion that understanding these terms is still a difficult task. This discussion also warns the modern scholar of the problems associated with employing ancient terminology today.

# I. Primary

## i. fons

Although perhaps one of the most recognizable of the terms associated with water-display, given modern its derivatives (e.g., fountain, fontana, fontaine, etc.), *fons* is problematic. According to some ancient authors, *fons* is believed to be etymologically a place where water literally flowed (connected to *fundere*).<sup>2</sup> To the Romans, however, *fons* had a variety of meanings: natural spring and/or its source; the personified being associated with natural springs, Fons or Fontus; fountain.

The natural and religious associations with *fons* are also important. Some scholars liken the Latin *fons* to the Greek  $\pi\eta\gamma\dot{\eta}$ , which is generally thought to be a natural spring

<sup>&</sup>lt;sup>2</sup> Varro Ling. 5.123 (fons, unde funditur e terra aqua viva); Paul. Fest. 84 (fons a fundendo dictus); Isid. Orig. 13.21.5 (fons caput est aquae nascentis, quasi aquas fundens). See also Ernout and Meillet (359).

source.<sup>3</sup> It is notable that the *fons* is first connected to natural origins, while it is later associated with artificial structures, often found in a domestic context.<sup>4</sup> Also of note is that *fons*, unlike a *cisterna*, refers to naturally occurring water, not a collection of rainwater.

This type of water also had a strong religious connotation, given its awe-inspiring nature.<sup>5</sup> There is much evidence that natural springs were associated with nymphs, the female divinities of small water sources, particularly as nymphs often held the *numen fontis*, or the Power of the fountain.<sup>6</sup> The *fons* is more often than not paired with the adjective *sacer* to refer to a religious structure.<sup>7</sup> Indeed, the figure of Fons, the personification of natural springs, must be noted.<sup>8</sup> One can even find the festival of the Fontinalia on 13 October, in order to celebrate Fons and the benefits that his water brings to the Romans, a festival that included throwing wreaths into fountains and decorating these structures with garlands.<sup>9</sup>

*Fons* also refers to a fountain proper. From the ancient literature, it seems that the word *fons* was not strictly defined, as we cannot tell if there were crucial features that were necessary to term a structure of a *fons*.<sup>10</sup> For example, Pliny the Younger describes the features of his villas, especially the water-displays in two of his letters (*Ep.* 2.17; 5.6).

<sup>&</sup>lt;sup>3</sup> The *fons* is sometimes compared to the *lacus* in terms of form, along with parallels in Greek terminology. Some believe that the *lacus* is the equivalent of the κρηνή, a man-made structure (e.g., Berg, Gros); however, some assert that this no difference between  $\pi\eta\gamma\eta$  and κρηνή (e.g., Neuerburg). For more see: Wycherley (1937); Neuerburg (1965, 22); Berg (1994, 13); Gros (1996, 419).

<sup>&</sup>lt;sup>4</sup> Daremberg-Saglio 2.2: 1237 (s.v., Fons, G. Humbert)

<sup>&</sup>lt;sup>5</sup> See especially Campbell (2012, 30) for more on the Romans' perceptions on rivers.

<sup>&</sup>lt;sup>6</sup> Letzner 1999, 102. For more on the cult of the Greek nymphs, see Chapter 5 (pages 273-296).

<sup>&</sup>lt;sup>7</sup> Neuerburg 1965, 22.

<sup>&</sup>lt;sup>8</sup> Daremberg-Saglio 2.2: 1237-1239 (s.v., Fons, J.A. Hild)

<sup>&</sup>lt;sup>9</sup> Fowler 1916, 240-241; Scullard 1981, 192.

<sup>&</sup>lt;sup>10</sup> For a discussion of various water-displays associated with *fons*, see especially Daremberg-Saglio 2.2: 1233-1237 (s.v., Fons, G. Humbert). Here, Humbert describes *fons* by presenting different examples of what a modern audience might call a *fons*, although there is no ancient evidence to categorize these archaeological objects and structures as such. See also Richard (2012, 24).

While Pliny mentions the *fons* to mean a fountain in his villas, we have no real idea of the form of these structures. One wonders whether fons was a catch-all term for all waterdisplays in the domestic sphere, or if to the Romans, the form of a *fons* was self-evident.

Although *fons* is a well known term in later periods, especially because of its derivatives, it seems that it was first and foremost a term to describe naturally occurring water, along with the religious connotations associated with the natural sources. Over time, it is transferred to artificial, man-made structures.

## ii. hydreion/ὑδρεῖον

The ὑδρεῖον (hydreion) is a term that designates a container for holding water. In a basic sense, it can be employed in place of a *hydria*, a vessel for gathering and carrying water, but the use is uncommon.<sup>11</sup> By the first century BCE, the term *hydreion* could signify a reservoir or a basin, such as is the case with the *hydreion* of Serapieion C of Delos, known from an inscription.<sup>12</sup> While the inscription was not found on the building itself, its close proximity allows us to assign it to the Serapieion's reservoir. This particular container for water was probably used for some sort of religious rite that took place in most Egyptian sanctuaries, and may have had a similar function to nilometers that are found in Egypt that measure the depth of the annual Nile flood, in order to know how much to tax the population.<sup>13</sup> It has also been suggested that this *hydreion* could also be associated with the figure of Hydreios, a local deity.<sup>14</sup> After the first century, it is not

<sup>&</sup>lt;sup>11</sup> Daremberg-Saglio 3.1: 319-320 (s.v., Hydria, E. Pottier).

<sup>&</sup>lt;sup>12</sup> Délos 1.2617-2620 = Roussel 1915 175D.1-4. τοῦ ὑδρείου δωρε[ὰν] | δοὺς παρ ἐἀυτοῦ κα[ὶ] τὴν λιθειάν ăπασαν | τὴν οὖσαν ἐν τῶ(ι) ...Wild 1981, 38-39; Hellmann 1992, 417-421; Siard 2007; Hairy 2011. <sup>13</sup> For a discussion of the Nilometer, see Wild (1981, 25-34).

<sup>&</sup>lt;sup>14</sup> Hellmann 1992, 417-421; Siard 2007, 431-434.

uncommon to find *hydreion* or the Latinized *hydraeum* to refer to water pitchers connected to the cults of Isis and Serapis.<sup>15</sup>

On the other hand, by the third century CE, two large public fountains are associated with the term *hydreion* in Asia Minor. The Hydreion of Memmius of Ephesus, originally constructed in the first century CE, was renovated at some point in the Severan period, with the addition of an inscription that describes the structure as a *hydreion*.<sup>16</sup> The structure had a semi-circular basin, flanked by two smaller rectilinear niches, with an upper basin that flowed into a lower, easier to reach draw basin; there are traces of sculpture associated with the fountain. Thus, the *hydreion* here, while technically a reservoir, was also a decorative water-display. In the same fashion, the Hydreion of Aurelia Paulina (Nymphaeum F2) at Perge is dated to the Severan period (198-204 CE, **App. No. 1.90**). The decorative and utilitarian fountain, discussed in Chapter 4 was part of an urban node ensuring that the structure was in highly trafficked and visible of the city. Aurelia Paulina, while she kept the reservoir nature of the fountain intact, also incorporated an ornamental function to the monument.

<sup>&</sup>lt;sup>15</sup> Wild 1981, 39.

<sup>&</sup>lt;sup>16</sup> The inscription is published in Knibbe and Merkelbach (1978). [Αὐτοκράτ]ορι Καίσαρι [Λουκίφ Σεπτιμίφ Σεουήρφ Περτίνα] κι Σεβ. Εὐσεβεῖ καὶ Αὐτοκράτο[ρι Καίσαρι Μάρκφ Αὐρηλίφ Ἀντωνείνφ Σεβ. καὶ Αὐτοκράτο]ορι Καίσαρι [[Ποπλίφ Σεπ]τιμίφ Γέτα]] [καὶ Ἰουλία Δόμνα Σεβαστῆ καὶ τῷ σύμπαντι οἴ]κφ τῶν Σεβαστῶν καὶ τῷ [δἰς νεωκόρφ Ἐφεσίων πόλει Τι. Μέανδρος ὁ ἀσιάρχης] καὶ γραμματεὺς γενόμ[ε]νος τοῦ δήμου ἐκ τῶν ἰδίων καθὰ ὑπέσχετο τὸ ὑ[δ]ρεῖον τῆ γλυκυτάτῃ πατρίδι κατεσκεύασεν, πρυταωεύον[τος τοῦ ἀδελφοῦ υἰοῦ] αὐτοῦ Τι. Φλ. Λευκίου Ἱέρακος φιλοσεβάστου γραμματε[ύον]τος τοῦ δήμου Λ. Αὑ[φιδίο]υ Εὐφήμου. The structure is described by Dorl-Klingenschmidt (2001, cat. no. 23) and Richard (2012, cat. no. 33).

## iii. hydrekdocheion/ὑδρεκδοχεῖον

Comparable to the *hydreion*, the ύδρεκδοχεῖον (*hydrekdocheion*) is quite literally 'something that receives water.' The word is derived from δέχομαι, indicating that the structure receives the water and could have a role in the redistribution of water.<sup>17</sup> This definition can also be seen in the modern Greek δεξαμενή, which denotes a water reservoir or cistern. Most previous scholarship on the ancient word *hydrekdocheion* has asserted that the word is derived from δείκνυμι, indicating that a *hydrekdocheion* would be a 'water show.'<sup>18</sup> The verbal forms of δέχομαι, however, provide a clear connection to the *hydrekdocheion*, such as the future (δέξομαι).<sup>19</sup> While the ancient term appears at first glance to be rather simplistic (being just a container for water), its attestations on actual water-displays illustrate the showy nature of the structure.

Hydrekdocheion, however, is not widely used.<sup>20</sup> Two different water features in

Ephesus provide important examples to consider. The first is from the ὑδρεκδοχεῖον of

Gaius Laecanius Bassus, dated to about 80-82 CE, near the Upper Agora (App. No.

**1.50**). The inscription reads as follows:

Γάιον Λαικά|νιον Βᾶσσον | τὸν γενόμενον | ἀναθύπατον, | εὐεργετήσαντα πολλὰ τὴν πόλιν, | προνοήσαντα δὲ | κατασκευασθῆναι | καὶ τὸ ὑδρεγδοχῖον | καὶ τὴν εἰσαγωγὴν | [τ]ῶν εἰς αὐτὸ ὑδά|[τ]ων, ἐπιμμεληθέν|τος τῆς ἀναστάσε|ως τῶν τειμῶν | Λουκίου Ἐρεννίου | Περεγρείνου ἀγνοῦ | καὶ φιλαρτέμιδος,| τοῦ γραμματέως | τοῦ δήμου τὸ β', | ψη[φι]σαμένου δὲ | [καὶ κα]τασκευάσαν|[τος Φλ]αβίου Ἀσκλ[η|πιοδ]ώρου τοῦ | [γραμ]ματέως τοῦ | δήμου. (IvE 3.695)

<sup>&</sup>lt;sup>17</sup> Richard 2012, 21-22.

 <sup>&</sup>lt;sup>18</sup> Longfellow 2011, 77-95; Weiss 2011, 97-100. Dorl-Klingenschmid stresses the need for future study of the term (2001, 18-19). See also, Richard (2012, 21-22). Dr. William Furley of the University of Heidelberg has confirmed this refutation of 'water show' (personal communication, via Prof. J.E. Lendon).
 <sup>19</sup> See also, Richard (2012, 21-22). Dr. William Furley of the University of Heidelberg has confirmed this refutation of 'water show' (personal communication, via Prof. J.E. Lendon).

<sup>&</sup>lt;sup>20</sup> In addition to the two main examples used from Ephesus in this discussion, there is one more example from Laodikeia in Phrygia, which was a Flavian era fountain attached to the city's *castellum divisiorum*. For more, see Richard (2012, 21, n. 129).

[In honor of] Gaius Laecinius Bassus, the former proconsul, having made many benefactions to the city, having supervised the decoration of both the *hydrekdocheion* and of the leading of the water itself [the aqueduct]; Lucius Erennius Peregrinus, having supervised the erection of his honors, pure and a lover of Artemis, the secretary of the people for the second time, and Flavius Asklepiodorus, the secretary of the people, having voted and ornamented the honors. (Trans. author)

It is curious that this inscription, given by the Italian Bassus, is in Greek and not a bi-

lingual inscription as found on other structures in Ephesus, such as the Memmius

Monument and the Pollio Building.<sup>21</sup> Furthermore, Bassus also supervises not only the

construction of the hydrekdocheion, but also of the aqueduct. Also, given the placement

of the hydrekdocheion at the Upper Agora, it would have had a prominent position in the

city of Ephesus, especially for those entering at the upper part of the city or using the

structures at that part of the city.

The second instance comes from the Hydrekdocheion of Trajan (usually called

the Nymphaeum Traiani of Ephesus), dedicated to Trajan by Tiberius Claudius Aristion,

and dated between 102 and 114 (App. No. 1.51). Of note is this particular inscription,

which comes from the frieze of the architrave of the first story:

[Ά]ρτέμιδι Ἐφ[ε]σία κα[ὶ] Αὐ[τοκράτορι] Νέρουα Τρα[ιανῶι Κα]ίσα[ρι Σεβαστῶ]ι Γερ[μανικ]ῷ Δακικῶι καὶ τῇ πατρίδι Κλαύδιος Ἀριστίων τρίς ἀσιάρχης καὶ νεωκό[ρος] | [με]τὰ Ἰουλίας Λυδίας Λα[τερανῆς Ἐναρίλ]λη[ς] τῆ[ς γυναικός,] θυγα[τ]ρὸς Ἀσίας, ἀρχιε[ρείας καὶ πρυτά]νεως [...] ὕδωρ [εἰσ]αγαγὼν δι'οὖ κ[ατασκεύασεν ὀ]ετοῦ διακοσίων καὶ δέκα σταδίων καὶ τὸ ὑδρεκδοχῖον σὺν παντὶ τῷ κόσμῷ ἀνέθηκεν ἐκ τῶν ἰδί[ων]. (IvE 2.424)

To Artemis Ephesia and the Emperor Nerva Trajan Caesar Augustus Germanicus Dacicus and to the fatherland, Claudius Aristion, thrice Asiarch and Neokoros with his wife Julia Ludia Laterane Varilla, Daughter of Asia,<sup>22</sup> Archiereia (high-priest) and prytaneus [...], having led the water through a water-channel of 210 stades, which he furnished,

<sup>&</sup>lt;sup>21</sup> Weiss 2011, 99.

<sup>&</sup>lt;sup>22</sup> For more on the appellation "Daughter of Asia" over "Asian Archiereia," see van Bremen (1996, 287).

and the *hydrekdocheion* with all of its decoration he set up from his own money. (Trans. author)

Here, the hydrekdocheion is described as one σùν τῶ κόσμω, "with the decoration," indicating that this water feature was fully decorated.<sup>23</sup> Unlike a contemporaneous inscription in Syria with the first public use of the term *nymphaeum* (App. No. 2.28), this inscription employs the word *hydrekdocheion* instead of *nymphaeum*. This has prompted some scholars to question whether the term *nymphaeum* had a specific religious connotation in contrast to the somewhat generic hydrekdocheion.<sup>24</sup>

It is difficult to glean much from the word *hydrekdocheion*, although it certainly referenced the water that was received from an aqueduct. Because the term is clearly not popular throughout the Roman world, perhaps in Asia Minor we can posit that it was tied specifically to the decorative displays of water that the region was famous for in the Roman period.<sup>25</sup> It has been suggested that the word *hydrekdocheion* in the first two centuries CE was used more than *nymphaeum*, which later becomes more frequently attested in the epigraphic record.<sup>26</sup>

## iv. lacus

Perhaps even more problematic than fons, lacus is a term whose meaning shifts over time, from the notion of a simple container to a large-scale public fountain. As we have already seen, there is uncertainty associated with *lacus* and *fons*, especially between the natural and artificial nature of these structures. In addition, the confusion over the

<sup>&</sup>lt;sup>23</sup> Settis 1973, 712.
<sup>24</sup> Settis 1973, 712.

<sup>&</sup>lt;sup>25</sup> For more on this phenomenon, see, in particular: Dorl-Klingenschmid 2001; Longfellow 2011.

<sup>&</sup>lt;sup>26</sup> Richard 2012, 21.

term *lacus*, and its associations with *fons*, κρηνή, *labrum*, and *nymphaeum*, led Neuerburg to assert that we do not know anything for certain about the term *lacus*.<sup>27</sup> Thus, a brief survey the different meanings of *lacus* is presented here, in order to understand the term's complexity and its relation to water-display, before coming to a discussion of its general architectural form and function.

*Lacus* stems from the Greek  $\lambda \dot{\alpha} \kappa \kappa \kappa \varsigma$  (*lakkos*), which indicates a hollow cavity.<sup>28</sup> Etymologically, ancient authors report that the *lacus* is related to the *lacuna*, stressing the container-like nature of the *lacus*, where water could collect.<sup>29</sup> Thus the Latin *lacus* is immediately associated with its function as a container, whether a cistern or a reservoir for water, such as the *piscina*.<sup>30</sup> It is evident, however, that the term *lacus* was used prominently to denote an agricultural container, holding various materials, including wine, oil, fruit juices, brine, and water reserves.<sup>31</sup> Indeed, it is known that the term *lacus* could also be used for animal drinking troughs on farms.<sup>32</sup> There is also evidence that *lacus* were also part of baths, with an inscription revealing a *lacus balinearius* at Aletrium, which might have been a reservoir in the baths to hold water.<sup>33</sup> Regardless of

<sup>&</sup>lt;sup>27</sup> Neuerburg 1965, 19-25. On the connection with the *nymphaeum*, see Letzner (1999, 79), who suggests that perhaps *lacus* were indeed of a grotto-like appearance and form, although he does not completely develop this point with enough evidence to support it.

<sup>&</sup>lt;sup>28</sup> Daremberg-Saglio 3.2: 904 (s.v., Lacus, H. Thédenat).

<sup>&</sup>lt;sup>29</sup> Ernout and Meillet 491; Maltby 1991, 324 (s.v., Lacus); Dessales 2013, 54-55. Among the ancient authors are: Varro *Ling.* 5.26 (*lacus lacuna magna, ubi aqua contineri potest*); Serv. Aen. 8.74 (*lacus est quoddam latentis adhuc aquae receptaculum, dictus quasi lacuna*); Prisc. Gramm. 2.262.14 (*lacus a laquaeatu*); Cassiod. In Psalm 7.161.311 A (*lacus dicitur cuius fundus latet*); Isid. Orig. 13.19.2 (*dictus lacus quasi aquae locus*).

<sup>&</sup>lt;sup>30</sup> Del Chicca 1997, 232; Richard 2012, 22-24.

<sup>&</sup>lt;sup>31</sup> Ambrogi 2005, 17.

<sup>&</sup>lt;sup>32</sup> Ambrogi 1995, 11; Del Chicca 1997, 232; Ambrogi 2005, 17.

<sup>&</sup>lt;sup>33</sup> CIL 1.1166 = CIL 10.5807 = ILS 5348. L Betilienus L F Varus | haec quae infera scripta | sont de senatu sententia | facienda coiravit semitas | in oppido omnis porticum qua | in arcem eitur campum ubei | ludunt horologium macelm | basilicam calecandam seedes | lacum balinearium lacum ad | [p]ortam aquam in opidum adov]arduom pedes CCCX | fornicesq | fecit fistulas soledas fecit | ob hasce res censorem fecere (bis) | senatus filio stipendia mereta | ese iovsit populusque statuam | donavit censorino. For a discussion of this particular inscription, see Ambrogi (1995, 11) and Del Chicca (1997, 232-233). The inscription was

what exactly the *lacus* was holding, it is clear that the word was commonly used for containers.

While there is pre-Augustan evidence that there were perhaps *lacus* that acted as fountains in the city of Rome (e.g., the *lacus Curtius*), it was not until the Augustan period that the word *lacus* became popular in Rome.<sup>34</sup> With the advent of aqueducts in this period, there was the opportunity to install water features in the urban fabric.<sup>35</sup> Indeed, after the Augustan period, the *lacus* became associated with public (if not monumental) fountains. As we saw earlier, Pliny the Elder reports that Agrippa installed 700 *lacus* in 33 BCE (*HN* 36.24.121).<sup>36</sup> On the other hand, Frontinus communicates that at the end of the first century CE there were 591 *lacus* and 39 *munera* in Rome (*Aq.* 78.3). While there are discrepancies in the exact numbers, it is clear that there was a large number of these structures serving the city. With the increase of water into the city, distribution points were created and sufficiently adorned, raising the status of the *lacus* from a simple reservoir or cistern to a crucial point of water retrieval.

In the Julio-Claudian period, it is reported that Claudius installed 226 new and ornamental *lacus*, with the addition of two new aqueducts, the Aqua Claudia and the Aqua Anio Novus in 52 CE.<sup>37</sup> The popularity and number of *lacus* continued to grow over the centuries in the city of Rome, with 1352 *lacus* present there in the Regionary

put up by Lucius Betilienus Varo (134-90 BCE), who installed an aqueduct at Aletrium and also put up a *lacus* near the modern Porta S. Pietro.

<sup>&</sup>lt;sup>34</sup> See Livy (39.44.6) who discusses the censors of 184 BCE that restore *lacus* that have fallen into disrepair. For the rise of popularity of *lacus* in the Augustan period, see Daremberg-Saglio (3.2: 904 (s.v., Lacus, H. Thédenat)) and Del Chicca (1997, 233).

<sup>&</sup>lt;sup>35</sup> See Evans (1982), Aicher (1993), and Taylor (2000) for a more on the aqueducts of Augustan Rome.

<sup>&</sup>lt;sup>36</sup> See also Evans (1982), Tietz (2006), and Longfellow (2011, 19).

<sup>&</sup>lt;sup>37</sup> Suet. *Claud.* 20.1. "*plurimos et ornatissimos lacus.*" Frontinus (*Aq.* 86.3) reports the specific number of *lacus* here.

Catalogues of the fourth century CE.<sup>38</sup> While not much archaeological evidence of the *lacus* of Rome has been discovered, we know of 17 named *lacus* in Rome: *Iuturnae* (App. No. 1.112), *Orphei* (App. No. 1.113), *cuniculi, Fundani, Ganymedis, longus, Aretis sub aedes Fortunae, pastorum, restitutus, tectus, miliarius, Servilius* (App. No. 1.114), *Curtius* (App. No. 1.111), *Promethei, Fabricius, Esquilinus, [g]allin(a)es.*<sup>39</sup> Of these structures, the best known are probably the *lacus Iuturnae* and the *lacus Curtius* in the Forum Romanum and the *lacus Orphei*, situated near the *clivus Suburbanus* (Region 9). By the end of the second century CE, the term *lacus* is present outside of Rome, with a marble *lacus* in Leptis Magna (App. No. 1.70) and the construction of 12 *lacus* in Sabratha.<sup>40</sup>

While the term *lacus* is ambiguous, most scholars agree on the form of the *lacus*. Given the popularity of the structure after the Augustan period, the *lacus* seems to have taken on a canonical form, especially with its origins as a container in agricultural contexts. Indeed, before the first century CE, there was no Latin word for a 'monumental public fountain,' other than a *lacus* or a *saliens*.<sup>41</sup> By the time the *lacus* was deemed a public fountain, it took on a cavernous form, namely four rectangular stone slabs hewn together to make a hollow space, having no top covering, thereby leaving the structure open.<sup>42</sup> By the second century, the *lacus* form was seen in throughout the Western Empire, stemming from the Italian peninsula, in effect becoming part of the 'urban furniture' of the Roman city, part of a complex system of urban amenities to supply water

<sup>&</sup>lt;sup>38</sup> Nordh p. 105, 7.

<sup>&</sup>lt;sup>39</sup> For a discussion of each of the individual *lacus*, see Del Chicca (1997, 238-240), Ghiotto (1999, 74-75), Letzner (1999, 69-76). See also Longfellow (2011, 25-26) for more on the lack of archaeological evidence of *lacus* in Rome.

<sup>&</sup>lt;sup>40</sup> Ghiotto 1999, 74.

<sup>&</sup>lt;sup>41</sup> Ghiotto 1999, 78.

<sup>&</sup>lt;sup>42</sup> Del Chicca 1997, 234.

to the inhabitants there.<sup>43</sup> As has been mentioned, while Rome does not have significant archaeological remains of *lacus*, we know of the form of *lacus* from inscriptions, such as the *lacus balinearium* we saw above from Aletrium. It also appears that *lacus* could have been decorated, as we saw from ornament that Agrippa added to the water features of Rome he installed in 33 BCE. Presumably, however, each *lacus* would have a pillar, perhaps decorated in relief, from which the water poured forth, like the street fountains uncovered in Pompeii.<sup>44</sup>

The extent of the movement of water on a *lacus* is unclear, whether a light trickle or a more substantial flow. As the *salientes* seem to have gushing water, some scholars have equated the *lacus* with the *salientes*, stating that the *salientes* were part of the pillar of the *lacus*, creating a cohesive unit.<sup>45</sup> Indeed, while Pliny reports that *lacus* and *salientes* were constructed in the first century BCE, the fourth century Regionary Catalogues have no mention of *salientes*, only *lacus*.<sup>46</sup> Given the current state of the ancient evidence, it is impossible to state whether or not one can combine *lacus* and *salientes*. Nevertheless, it is clear that the *lacus* were artificial, man-made water basins situated within the urban fabric, complete with some limited water movement and fed by aqueducts, whose water comes from natural springs.<sup>47</sup>

<sup>&</sup>lt;sup>43</sup> Agusta-Boularot 2008.

<sup>&</sup>lt;sup>44</sup> Del Chicca 1997, 235-236.

<sup>&</sup>lt;sup>45</sup> Del Chicca 1997, 244; Ambrogi 2005, 58.

<sup>&</sup>lt;sup>46</sup> Del Chicca 1997, 244.

<sup>&</sup>lt;sup>47</sup> Interestingly enough, the *lacus Iuturnae* was originally known as the *fons Iuturnae*, until Ovid used the noun *lacus* in the *Fasti* (1.708). For more, see Del Chicca (1997, 240).

# v. Meta Sudans

The famous *Meta Sudans* was a conical fountain located in Rome near the Colosseum, completed in 80 CE (App. No. 1.115). In fact, the Flavians built their structure directly on top of an Augustan precursor, another conical fountain constructed at the intersection of four of the 14 regions of Rome (**Fig. 1**).<sup>48</sup> The name *Meta Sudans* is often translated as 'sweating goalpost,' referring to the *meta*, or turning point, found in Roman circuses (Fig. 2a). A meta, however, can be conical or pyramidal in form, meaning that there are a number of objects in the Roman world that were considered metae, such as the meta molendaria, the conical lower portion of a grinding mill.<sup>49</sup> Such confusion over the exact definition of a *meta* has led Longfellow to term them 'sweating conical markers,' in order to ensure clarity.<sup>50</sup> The conical form of the *Meta Sudans* also resembles a baetyl, an aniconic cult symbol native to the region surrounding Actium of Apollo Agyieus (who protects roads), seen on the terracotta plaques of the Augustan era Temple of Apollo on the Palatine Hill (**Fig. 2b**).<sup>51</sup> It seems that at the crossroads of four of the regions of Rome, along with the shrine of the Lares Augusti and the aniconic symbol invoking Apollo Aygieus, the fountain, in addition to being a water structure, would have taken on a religious significance.

There are only a few known instances of *Metae Sudantes* in the Roman world. It has recently been argued that the Roman *Meta Sudans*, through its visual dissemination through coins and medallions, would have been a form familiar throughout the Empire,

<sup>&</sup>lt;sup>48</sup> Longfellow 2011, 23. Ghiotto (1999, 75) states that the Flavian structure was the first public fountain of Rome, which is not correct. Rome had fountains certainly in the time of Augustus, if not earlier. See Chapter 4 (pages 249-250), which describes its position at a crossroad in the city.

<sup>&</sup>lt;sup>49</sup> New Pauly 8: 774 (s.v., Meta, I. Nielson)

<sup>&</sup>lt;sup>50</sup> Longfellow 2010, 276; Longfellow 2011, 23.

<sup>&</sup>lt;sup>51</sup> Longfellow 2011, 24-25.

allowing for provincial cities, such as Cuicul (Algeria), Corinth (Greece), Nikopolis (Greece), and Thugga (Tunisia), to evoke Rome by copying a fountain form.<sup>52</sup> The form and function of the *Meta Sudans* of Rome was rather simple, with a "tall cone tapering upward that was placed on a cylindrical base set in the middle of a round basin," which, according to the numismatic evidence, seems to be the same way that other *Metae Sudantes* were constructed.<sup>53</sup> The *Meta Sudans* also seems to have been an enduring structure in the urban fabric of Rome, as it is mentioned in the Regionary Catalogues.<sup>54</sup> Although the Roman *Meta Sudans* was torn down in 1936 by Mussolini in the construction of the via dell'Impero, there was enough photographic and archaeological evidence before its destruction that we know of its actual form. Thus, the *Meta Sudans* provides an important example of a water-display whose form we know of from a variety of ancient sources, including literary, archaeological, and numismatic, allowing for a better understanding of the structure.

#### vi. *munus*

The *munus* has a variety of meanings. Etymologically, the word contains the notion of exchange, and the idea of reciprocity does drive most interpretations of the *munus*.<sup>55</sup> *Munera* were often associated with ancient spectacles, which could range from funeral celebrations (*funeraria*) to gladiatorial games.<sup>56</sup> The *munus* was tied to

<sup>&</sup>lt;sup>52</sup> Longfellow 2010, 275; Longfellow 2011, 39-46. Like the Roman *Meta Sudans*, it must be noted that the examples in Cuicul and Thugga were located at crossroads.

<sup>&</sup>lt;sup>53</sup> Longfellow 2010, 276. For more on the numismatic evidence, see Letzner (1999, 87-88) and Longfellow (2005, 343-51), the latter of which provides a catalogue of coins depicting *Meta Sudantes*. See also: Price and Trell (1977) for a general treatment of the relationship between architecture and its depictions in numismatics.

<sup>&</sup>lt;sup>54</sup> Longfellow 2011, 33. See also: Valentini and Zucchetti p. 100 and 169.

<sup>&</sup>lt;sup>55</sup> New Pauly 9.300 (s.v., Munus, Munera, M. Corbier, A. Hönle)

<sup>&</sup>lt;sup>56</sup> Del Chicca 1997, 246; *New Pauly* 9.305-311.

administrative offices, as elected officials would often donate a *munus*, as a public obligation, to the town in order to curry favor among the town's citizens, which could include throwing spectacles or donating a public building, all of which was for the collective whole.<sup>57</sup> While the *munus* can be associated with private individuals, there is certainly evidence for the emperors constructing *munera*, as is the case with some of the monumental fountains of Rome.<sup>58</sup> *Munera* could in fact indicate a structure and its maintenance by a town, whether done by private or public funds, such as with the *pecunia publica* being used to build a nymphaeum in Urbino (*CIL* 11.6068, **App. No. 2.24**). Thus, *munera*, in terms of public buildings, could include aqueducts, baths, city gates, fountains, gymnasia, libraries, and theaters.<sup>59</sup>

In reference to water-related structures, *munera* had a variety of meanings. A *munus* could be a reservoir of water, with some sort of decoration.<sup>60</sup> More importantly, the *munus* could also be an ornamental fountain, with a small or large basin, water movement, and architectural decoration.<sup>61</sup> It is not until the imperial period, however, that *munera* can mean a water structure. Frontinus tells us that he will report on public works, *munera*, and street basins (*lacus*).<sup>62</sup> Given that *munera* are not equated with street basins, it seems appropriate to understand them as larger water-displays, despite the

<sup>&</sup>lt;sup>57</sup> Del Chicca 1997, 246-247; New Pauly 9.305-309.

<sup>&</sup>lt;sup>58</sup> Ghiotto 1999, 77.

<sup>&</sup>lt;sup>59</sup> Walker 1987, 64.

<sup>&</sup>lt;sup>60</sup> Del Chicca 1997, 248-249, 251. Del Chicca makes it clear that *munera* were not the same as *castella*, which were simple, undecorated holding tanks for water.

<sup>&</sup>lt;sup>61</sup> Del Chicca 1997, 251, 253; Ghiotto 1999, 77; Richard 2012, 24. Some have equated the *munus* with the *lacus* in form (Letzner 1999, 93). It also seems that the fifth-century CE writer, Paulinus of Nola, mentions a water-display in Nola, as a *munus aquarum*. See de la Portbarré-Viard (2013).

<sup>&</sup>lt;sup>62</sup> Front. Aq. 3.2. quot castella publica privataque sint, et ex is quantum publicis operibus, quantum muneribus—ita enim cultiores appellantur—, quantum lacibus, quantum nomine {Iulii} Caesaris, quantum privatorum usi<br/>bus> beneficio principis detur.
ambiguity of the term.<sup>63</sup> We must remember that Frontinus later reports that in Rome there are 591 *lacus* and 39 *munera* in the city of Rome by the end of the first century CE. Given the significantly larger number of *lacus*, this must mean that they were of a generally smaller size and structure, supplying water in basins to every part of the city, allowing for larger *munera* to be scattered throughout the city. Thus, it is clear that *munera* can actually indicate monumental fountains with architectural decoration.

# vii. nymphaeum/ νυμφαῖον

Perhaps one of the most well known terms associated with water-display is the *nymphaeum*. The *nymphaeum* was originally connected to nymphs, the deities that inhabited various parts of nature, including natural water sources, forests, and mountains.<sup>64</sup> Thus, one of the major aspects of the term *nymphaeum* was originally its religious undertones, present in the Greek  $vo\mu\phi\alpha$ iov and the early Roman examples. Ultimately the term *nymphaeum* comes to mean a large public monumental fountain. Another shift that emerges is how the *nymphaeum* changes from a natural grotto space, to one that was completely artificial. These modifications will be explored below after a brief overview of the usage of the terms  $vo\mu\phi\alpha$ iov and *nymphaeum*.

Based on etymology, it is evident that nymphaea were indeed connected to nymphs.<sup>65</sup> The Greeks and, later, the Romans attached nymphs and, sometimes, muses, to cave-like structures that had some sort of water feature.<sup>66</sup> Throughout the Greek world,

 <sup>&</sup>lt;sup>63</sup> Del Chicca 1997, 249, 252. In the same vein, Tölle-Kastenbein (1990, 187-188) indicates ambiguity concerning the term *munus*, as she uses it to describe fountains in both the private and public spheres.
 <sup>64</sup> Larson 2001, 8-11.

 $<sup>^{65}</sup>$  It should be noted that the Greek νῦμφα and the Latin *nympha* both not only mean 'nymph,' but also 'bride.' This distinction appears later in our discussion.

<sup>&</sup>lt;sup>66</sup> Sear 1977, 231; Richard 2012, 14. There is also strong connection in the iconographic record of the nymphs, in terms of their association with water. See *LIMC* 8.1 (s.v., Nymphai, M. Halm-Tisserant and G.

there are numerous examples of natural caves that were dedicated to nymphs.<sup>67</sup> Most of these places were natural, not man-made, and sometimes relatively inaccessible, since one would have to know either the exact way to the cave or have a guide. Caves associated with the nymphs generally had some element of water, such as calcium deposits, made from the trickle of water over time. Early Greek examples of the Classical period, unlike later Hellenistic and imperial Roman structures, were almost completely natural, without any special embellishment. Today these structures are recognized due to votive deposits left behind, such as at the Vari Cave in Attica.<sup>68</sup>

Originally, before the fifth century BCE, the term νυμφαῖον was not used alone. Instead, appositive phrases, such as νυμφαῖο ἰερὸ ὅρος (*nymphaio hiero horos*) and νυμφαῖον ἰερόν (*nymphaion hieron*), were employed to describe sacred spaces connected to the nymphs in the city of Athens.<sup>69</sup> It was at the end of the fourth century, however, on Delos, that an inscription records the Νυμφαῖον on the island as a structure dedicated to the nymphs.<sup>70</sup> The first literary attestation of the νυμφαῖον is in Menander's *Dyscolus*, dated to 317-316 BCE, in which Pan exits the νυμφαῖον of Phyle in Athens.<sup>71</sup> Further uses of νυμφαῖον into the third century continue to indicate the religious nature of the νυμφαῖον, such as equipment of the νυμφαῖον within the temenos of Bendis in Piraeus in the mid-third century, including a sponge, *lekanai*, water, and crowns.<sup>72</sup>

Siebert; nymphs as dispensers of water; cat. nos. 59-78; nymphs of fountains, springs, and rivers; cat. nos. 104-108)).

 <sup>&</sup>lt;sup>67</sup> Larson 2001, 226-229. See also: Elderkin 1941; Settis 1973, 662; Ustinova 2009, 55-68. Ustinova, in particular, examines the connection between nymphs and caves, including their connection to prophecy.
 <sup>68</sup> Larson 2001, 227-228.

<sup>&</sup>lt;sup>69</sup> Settis 1973, 694.

<sup>&</sup>lt;sup>70</sup> IG 11.2, 144, A. l. 91. See also: Settis 1973, 694; New Pauly 9.924 (s.v., Nymphaeum, I. Nielson).

<sup>&</sup>lt;sup>71</sup> Men. Dys. 1-2. For more, see Settis (1973, 696) and Richard (2012, 15).

<sup>&</sup>lt;sup>72</sup> *IG* 2/3.1<sup>2</sup>, 1283, 1. 18-9. ἐν τῷ νυμφαίῷ σφ(ό)γγους καὶ λεκάνας καὶ ὕδωρ καὶ στεφάνους. See Settis (1973, 699-701) for a few more examples until the beginning of the second century, including a νυμφαῖον and a ὕδρευμα on Crete built for Ptolemy IV Philopator and Arsinoë III.

Moving into the middle of the third century, Callixenus of Rhodes mentions that Ptolemy II Philadelphos built grotto-like structures termed  $\nu\nu\mu\varphi\alpha\bar{\imath}\alpha$ .<sup>73</sup> These grottoes were built in proximity to a larger decorated tent, dedicated to sympotic dining. The  $\nu\nu\mu\varphi\alpha\bar{\imath}\alpha$  were themselves decorated with statues, which were not necessarily of nymphs, and moving water, and the grottoes were separated by columns and tripods. What is interesting about this instance is that the  $\nu\nu\mu\varphi\alpha\bar{\imath}\alpha$  via clearly being associated with an architectural space that is not naturally occurring, given its man-made additions, along with the fact that there is not a completely religious association to the complex, as the  $\nu\nu\mu\varphi\alpha\bar{\imath}\alpha$  are not decorated with nymphs.<sup>74</sup>

The *nymphaeum* structure seems to have been popular among the Ptolemies. Grottoes were associated with Philadelphos, not only with his dining tents, but also carried on a cart in his famous procession in 279 for the Ptolemeia and on one of his ships.<sup>75</sup> Again, while these spaces had grottoes, they also contained much decoration, such as statues of members of the royal family. There is also an inscription from Crete of Ptolemy IV Philopator and his sister Arsinoë, between 217 and 209, which mentions a vvµφαĩov and a ὕδρευμα (*hydreuma*).<sup>76</sup> The archaeological record does not confirm what the actual structure looked like, nor whether the *hydreuma* was an aqueduct or a basin.

 <sup>&</sup>lt;sup>73</sup> *FGrH* 627 F 2, apd. Ath. 5.25-35, p. 196 A—203 B. See especially 5.26, p. 126. See also Settis (1973, 701-703) and Letzner (1999, 36). The most complete study and investigation of this *Symposion*, see the work of Studniczka (1914), which has been followed up recently by Calandra (2011, especially 104-110).
 <sup>74</sup> John Malalas shows that *nymphaea* do not have to be decorated with nymphs, but could include statues

of deities such as Tyche (*Chron.* 11.9; 275-276). See Settis (1973, 702-703). See also Chapter 6 (pages 369-372) for a discussion of the so-called 'nymphaeum in the *proscaenium*' of the theater of Antioch installed by Trajan, which included the statue of the Tyche (**App. No. 1.3**).

<sup>&</sup>lt;sup>75</sup> Ath. 5, p. 203d-206c. For more on the procession, see Rice (1983), Foertmeyer (1988), and Stewart (2006, 161-162).

 $<sup>^{76}</sup>$  *IC* 3.4.18 = *ILS* 9458. Βασιλεῖ Πτολεμαίωι Φιλοπάτορι | καὶ βασιλίσσηι Ἀρσινόηι | τὸ ὕδρευμα καὶ τὸ Νυμφαῖον | Λεύκιος Γαίου Ῥωμαῖος φρουράχων. See also Settis (1973, 700), Letzner (1999, 40), and Richard (2012, 16). For a Hellenistic list of the most beautiful fountains in the known world, see the publication of Diels (1904).

Furthermore, an epigram associated with either Arsinoë II Thea Philadelphos or Arsinoë III Thea Philopator, dated between 217-07 BCE, presents another grotto-like area.<sup>77</sup> A fountain is installed here, complete with a base of Parian marble, perhaps of a semi-circular form, Ionic columns, a frieze along with a stylobate and socle, the fountain basin and opening of Hymettian marble, along with three statues of members of the royal family (**Fig. 3**).<sup>78</sup> While this structure is not specifically called a voµ $\phi\alpha$ īov in the poem, Arsinoë is described as being like the nymphs, and was presumably depicted as a nymph in the structure, thus equating her with these deities.<sup>79</sup>

The association with the nymphs might indicate a connection to Dionysus, who was raised by nymphs in a cave at Nysa. In the procession of Philadelphos, one of the carts in the procession would have been dedicated to the birth and nursing of Dionysus in the cave by the nymphs, perhaps related to the famous automaton figure of Nysa in the same procession.<sup>80</sup> Philadelphos, with the emphasis on Dionysus in this procession, made a strong connection not only with Alexander (especially after his eastern campaigns, when he had taken on the guise of the *Neos Dionysus*), but also with Dionysus himself.<sup>81</sup>

<sup>&</sup>lt;sup>77</sup> Cairo Papyrus 65445 (VV. 140-154). Schweitzer (1938) publishes the full text, along with commentary by Settis (1965) and Ronchi (1968). For a complete bibliography of the epigram, see Settis (1973, 701, n. 301). See also, Letzner (1999, 38-39) and Zarmakoupi (2014, 176).

<sup>&</sup>lt;sup>78</sup> For more on the architectural context of the structure, see McKenzie (2007, 61-62). The use of two colored types of marble stems back to Dynastic Egypt, such as in the colonnade of Hatshepsut I (1473-1458 BCE) at Deir el-Bahri. Further, this semicircular basin used for a fountain is an early use of the shape to display water. This particular example could be one of the earliest examples of this form that becomes canonical in the High Roman Empire. See Chapter 3 (pages 136-138) for the 'Triumphal Fountain' of Glanum, which is believed to be the first use of the exedra in the design of Roman fountains (**App. No. 1.59**).

<sup>&</sup>lt;sup>79</sup> Papyrus Cairo 65445, 1. 152-3. μέσσην δ' ἥρμοσ[ε]ν Ἀρσινόην | σύγκληρον Νύμφαις κατὰ πᾶν ἔτος. See also Settis (1973, 700-701).

<sup>&</sup>lt;sup>80</sup> For the episode of the infant Dionysus, see Ath. 5, p. 200b-c; for the Nysa statue, see Ath. 5, p. 198f. On automata, see Schürmann (2002), especially on water pneumatic devices in private domestic examples in Pompeii.

<sup>&</sup>lt;sup>81</sup> Many of the Diadochi imitated Alexander's appearance after the eastern campaigns, but it was the Ptolemies who specifically were creating a relationship with the god, Dionysus. For more, see Rice (1983, 84) and Pàmias (2004, 192). It should be noted that Marc Antony continues this association with Dionysus, when he moves to the East. For more, see Zanker (1988, 46-47).

Thus, Arsinoë's association with the nymphs could potentially support the Ptolemaic connections with Dionysus—thus providing another outlet for the Ptolemaic desire to forge a relationship with the god, perhaps creating a religious association with these artificial nymphaea.

The first occurrence of *nymphaeum* in Latin is by Pomponius Mela in his *Chorographia* of the mid-first century CE, in the phrase *nymphaeo specu*.<sup>82</sup> There has been scholarly debate, however, on the use of *nymphaeum* here. Some argue that *nymphaeo* is an appositive, modifying *specu*, meaning 'a nymph cave;' or vice versa, the *specu* could modify *nymphaeo*, as a 'grotto-like *nymphaeum*.'<sup>83</sup> Regardless, it is important that this is the first time *nymphaeum* appears in Latin, and in a religious context.

Other later literary uses of νυμφαῖον and *nymphaeum* continued to describe them as religious spaces. Pliny the Elder, in the first century CE, depicts an episode in which a statue of the famed sculptor Butades of Sicyon is placed in the *nymphaeum* in Corinth, until it was removed during Mummius' destruction of the city in 146 BCE.<sup>84</sup> Of note, here, is that *nymphaeum* is employed alone, without any modifiers or modifying something else.<sup>85</sup> In the second century, Plutarch, in the *Life of Alexander*, reports a νυμφαῖον, a grotto-like structure in Mieza, Macedonia, that is used by Alexander the Great when he was being tutored by Aristotle.<sup>86</sup> Even two centuries into the Common

<sup>&</sup>lt;sup>82</sup> Pompon. 2.3. oppidum a Diana, si creditur, conditum et nymphaeo specu quod in arce eius nymphis sacratum est maxime inlustre.

<sup>&</sup>lt;sup>83</sup> Settis 1973, 704; Lavagne 1988, 286-287.

<sup>&</sup>lt;sup>84</sup> Pliny *HN* 35.151. *servatum in nymphaeo, donec Mummius Corinthum everterit, tradunt*. See also: Settis 1973, 704; Lavagne 1988, 289-95.

<sup>&</sup>lt;sup>85</sup> Lavagne 1988, 295.

<sup>&</sup>lt;sup>86</sup> Plut. Vit. Alex. 7.3: καὶ διατριβὴν τὸ περὶ Μίεζαν Νυμφαῖον ἀπέδειξεν, ὅπου μέχρι νῦν Ἀριστοτέλους ἕδρας τε λιθίνας καὶ ὑποσκίους περιπάτους δεικνύουσιν. See also: Settis 1973, 704-705; Lavagne 1988, 297-300.

Era, the *nymphaeum* still had religious associations, with Plutarch using a term for an audience that could understand its religious background.

Moving into the latter part of the Empire, *nymphaea* commonly refer to public fountains. The *Historia Augusta* reports that the emperor Gordian III (r. 238-44) built both nymphaea and baths during his short reign.<sup>87</sup> The Chronica Urbis Romae, from the time of Diocletian and Maximian (ca. 284-305), specifically mentions the 15 nymphaea of Rome, including the *nymphaeum Iovis*, *nymfea tria*, the *nymphaeum Alexandri* (App. No. 1.116), and the *Nymfeum divi Alexandri*, which appear to have been distinct.<sup>88</sup> Even the later *Codex Iustinianus* (ca. 529-534) mentions *nymphaea* in connection to legislation on aqueducts.<sup>89</sup> Although the *Codex* quotes legislation from earlier emperors, in the sixth century, the term *nymphaeum* was being used in conjunction with aqueducts, to distribute the abundance of water in the urban areas of the Roman world. As epigraphic evidence demonstrates below, by the second century *nymphaea* referred primarily to public fountains, completely divorced from their religious predecessors.<sup>90</sup>

Moving away from literary evidence, inscriptions throughout the Roman Empire offer an interesting glimpse into the meaning of the  $v \upsilon \mu \varphi \alpha \widetilde{\iota} o v / nymphaeum$ , bridging the gap between a religious structure and a water-display (Appendix 2, Map 9). We can divide the inscriptions into three different categories, in order to understand better the

<sup>&</sup>lt;sup>87</sup> SHA Gordian 32.5. qua<e>dam nymfia et balneas

<sup>&</sup>lt;sup>88</sup> Nordh 94.4 (Nymfea III), 104.10/11 (Nymphaea XV), 80.2 (nymfeum (divi) Alexandri), 82.17 (nymfeum *Iovis*); nymphea tria (Valentini and Zucchetti I p.279)

<sup>&</sup>lt;sup>89</sup> Cod. Iust. 2.11.43.5 (et amplissima tua sede dispositura, quid in publicis thermis, quid in nymphaeis pro abundantia civium convenit deputari, quid his personis, quibus nostra perennitas indulsit, ex aqua superflua debeat impertiri), 2.11.43.6 (Omnis servitus aquarum aquaeductus Hadriani sive domorum sive possessionum sive suburnanorum sive balneorum vel per divinos adfatus intimatos penitus exprobretur: maluimus etenim praedictum aquaeductum nostri palatii publicarum thermarum ac nymphaeorum commoditatibus inservire. [...] Etenim memoratas fistulas thermis tantum et nymphaeis, quibus eminentia tua deputaverit volumus inservire: facultate praebenda tuae sublimitatis apparitoribus circumeundi sine formidine domus suburbana balnea ad requirendum, ne qua deceptio vel suppressio vel insidiae contra *publicam utilitatem a quoquam penitus attemptetur.*) <sup>90</sup> See also, Ghiotto (1999, 79, 85) and Letzner (1999, 58-59).

ways in which the Romans conceptualized the spaces commonly connected to nymphs and water: phrases that indicated a religious structure or complex, although not necessarily a fountain; a *nymphaeum* proper; and alternative forms of the term *nymphaeum*.

The first category of epigraphic evidence includes phrases indicating the religious nature of water-features, specifically connecting them to the nymphs. There are various examples of temples and altars of the nymphs, using phrases such as templum nympharum, Νηοῦ Νυμφάων, and Βαιὸν Νύμφαις ἔργον, and aram Nymphis, which describe religious structures of the nymphs.<sup>91</sup> Other inscriptions reveal that structures, including aqueducts, fountains, and even statues, were dedicated to the nymphs themselves or their *numen*.<sup>92</sup> A few inscriptions describe places as belonging to the nymphs, such as the *nymphicum* on the Edict of Terracius Bassus in Rome (375-376 CE) (App. No. 2.10) and a rocky and watery place, believed to be a fountain, described as belonging to the nymphs in Africa (App. No. 2.19). Some of these inscriptions reveal that there is a religious aspect to water features, such as the case with the Baiov Núµqaic ἕργον, which was found on an aqueduct in Catania that was being restored in the late third century (App. No. 2.22). Again, while it seems that most water-features in the Roman Empire did not have religious connotations, there are occasional instances in which they did. In a sense, the 'nymphaeum' cannot be completely divorced from its religious background, always evoking the 'sacred' nature of water in the Roman world, as Chapter 5 demonstrates.

<sup>&</sup>lt;sup>91</sup> For the temples: **App. No. 2.1** (*templum*), **App. No. 2.2** (*aedem*), **App. No. 2.22** (*nymphaeum*, Βαιόν Νύμφαις), **App. No. 2.23** (*aedem*), **App. No. 2.26** (*aediculam*), **App. No. 2.31** (Νηοῦ Νυμφάων); for an altar: **App. No. 2.17**.

<sup>&</sup>lt;sup>92</sup> App. No. 2.18 (numini aquarum Augusto), App. No. 2.27 (ad splendorem nynfii sua).

There are many instances of the νυμφαῖον/*nymphaeum* proper in the epigraphic corpus. One of the first known examples of a νυμφαῖον is at Metz (France) in the first century CE, in which its *nymphaeum*, along with its accompanying ornament and aqueduct is singled out in an inscription (**App. No. 1.42, 2.26**). Other early inscriptions include examples in Syria from 106 CE, in which we find the first known public *nymphaeum* dedicated to an emperor, in this case Trajan (**App. No. 2.28**); a late Hadrianic *nymphaeum* at Argos (**App. Nos. 1.11, 2.30**); and a second century example at Gortyn, Crete (**App. No. 2.4**). The popularity of the term *nymphaeum* continues to be seen throughout the Empire, as in the numerous examples in North Africa dating from 222 to the era of Constantine (**App. Nos. 2.16, 2.18, 2.20**), along with one in Aquinicum (modern Budapest) in the early third century (**App. No. 2.3**), Correse (Italy) in the third to forth century (**App. No. 2.21**), and in Catania (late third century) (**App. No. 2.22**).

In the first two centuries of the Empire, the *nymphaeum* only appears epigraphically once in Rome, but in an alternative form—the *tetrastylum nymphaeum*—in the Sanctuary of Jupiter Dolichenus, dated to 191 CE (**App. No. 2.5**).<sup>93</sup> Other than this inscription, Rome does not have any other evidence for *nymphaea* until the late forth century, when sources refer to the *nymphaeum Alexandri* (**App. No. 2.8**) and the three inscriptions of the urban prefect Flavius Philippus (ca. 391 CE) (**App. Nos. 2.6, 2.7, 2.11**). The late date of the majority of the examples from Rome has prompted Settis to suggest that the word *nymphaeum* had a late appearance in the city, perhaps demonstrating that it was coming from other parts of the Empire (given its popularity abroad) to the capital.<sup>94</sup> Settis, however, does not seem to take into consideration the

<sup>&</sup>lt;sup>93</sup> For more on the cult of Jupiter Dolichenus, see Sanzi (2013).

<sup>&</sup>lt;sup>94</sup> Settis 1973, 727.

example from the Sanctuary of Jupiter Dolichenus. He does bring to light an interesting point, however, namely that the city of Rome does not see a burgeoning use of the *nymphaeum*, despite its popularity abroad. The reason for this is still unclear.

Finally, there are alternate forms of the *nymphaeum*. The *tetrastylum nymphaeum* from the Sanctuary of Jupiter Dolichenus indicates that the structure was arranged somehow in four parts, although there is still an element of ambiguity to it (App. No. **2.5**). For the most part, most inscriptions that name a *nymphaeum* do not indicate its appearance to the viewer, presumably because they would be looking directly at the structure when they were reading the inscription itself. There is also the curious undated inscription from Cherchell (Algeria) that, while not specifically mentioning a *nymphaeum*, describes the fountain itself, including a vine-like trellis, columns, statues, and moving water (App. No. 1.25). This is not the only instance of an inscription describing the physical elements of a water-feature. A Constantinian era inscription in Cirta (Algeria) describes the decoration and amenities of the *nymphaeum* there, including its golden lettered inscription, *skyphoi*, a cantharus, bronze statues, marble statues of Cupid, bronze fountainheads, and hand towels (App. Nos. 1.31, 2.18). The Cirta inscription reveals exactly what viewers would have seen decorating the structure and presumably the instruments that they could use to extract water from the *nymphaeum*, along with giving us, as a modern audience, a glimpse into the performativity of visiting a fountain.

It appears that even though most of these inscriptions deal with decorative waterfeatures, there can be religious undertones, such as the *nymphaeum* in Africa that includes an altar of the nymphs connected to its aqueduct (**App. No. 2.17**). Settis believes, however, that the inscriptions reveal over time that the cult of the nymphs was divorced from the *nymphaeum*, thus allowing the *nymphaeum* to become a truly secular structure.<sup>95</sup> As is demonstrated in Chapter 5, 'nymphaea' do not receive cult (e.g., votive objects) that would indicate that they are truly religious structures. Despite the fact that the structures do not receive votives, the inscriptions, from this brief survey, could potentially reveal that the cult of the nymphs was always associated with *nymphaea*, such as with the aforementioned *nymphicum* in the Edict of Terracius Bassus in Rome of 375-376, which implies a place that 'belonged to the nymphs' (**App. No. 2.10**).

As is often the case with inscriptions in the Roman Empire, there can be variations in the spelling of almost any word—and the *nymphaeum* is no exception. Epigraphic evidence shows that "*nymphaeum*" can be spelled in the following ways: *nymphaeum*, *nymphaeis opus* (with a shift in the ending of the word), *nymfium*, *nimfium*, *nimphaeum*, *nimphaeum*. Letzner has observed that the shift in the spelling of the *nymphaeum* comes in the middle of the third century, when this set of variations arises for some reason.<sup>96</sup> These variations in spelling might help to illuminate the trouble encountered when trying to understand the exact meaning of the *nymphaeum* throughout the centuries.

After the Roman period, the term *nymphaeum* continues to be used in various historical contexts, from the Early Christian, to the Medieval, to the Renaissance. In the Early Christian period, the term *nymphaeum* is totally divorced from its original cultic connotations, denoting a monumental fountain, as it had come to mean by the second century CE. In fact, the term *nymphaeum* was often used to refer to basins which would

<sup>&</sup>lt;sup>95</sup> Settis 1973, 713. See also Richard (2012, 20, 24-26).

<sup>&</sup>lt;sup>96</sup> Letzner 1999, 66.

hold water used for purification rites, such as the one erected near the oratory of S. Croce in Rome by Pope Hilarius (r. 461-68), which had a marble basin.<sup>97</sup> There are, in fact, a number of inscriptions that reveal the importance of water in new ecclesiastical contexts.<sup>98</sup>

During the Medieval period, the term *nymphaeum* could be used to refer to ancient nymphaea, such as the *Nymphaeum Alexandri* by the Anonymous von Einsiedeln (ninth century CE),<sup>99</sup> or by authors who were harkening back to the ancient period by invoking the older religious connotations of the word, as when Eustathius stated that a *nymphaeum* is a place for nymphs,<sup>100</sup> or a classical education, such as with an epigram of Luxurius, who describes the decoration of a *nymphaeum*.<sup>101</sup> The term, in short, did not fall out of use.<sup>102</sup> Finally, during the Renaissance, the notion of the grotto is grafted onto the term *nymphaeum* by Kaspar von Barth (1587-1658), with the definition:

> Nymphaea Romae fuisse naturalia antra fontibus nativis, ingenuisque sedilibus, velut ad habitationeum Nymphaeum connata, quae ars aemulata postea est ob amoenitatam rusticae mansionis. In etiam haec loca dicta, quia pictae, aut sculptae errant in Nymphaeis ipsae Deae.<sup>103</sup>

The nymphaea of Rome were natural caves with their own springs, with their own seats, just as if devised for the habitation of nymphs, which art was later emulated to enhance the pleasantness of country houses. For in these said places, because they are painted, or have sculpture, the goddesses themselves appear to wander into the nymphaea. (Trans. author)

<sup>&</sup>lt;sup>97</sup> *Liber Pontificalis* 48.4 = I.242. *nymphaeum et triporticum ante oratorium S. Crucis*. For more, see Settis (1973, 737).

 $<sup>^{98}</sup>$  SEG 7, 871 b = I Gerasa 296. 297; SEG 31, 1774= *IGLS* XXI 2, 135; *ILS* 9480. See also Cyr. scyth. v. Sabae 67; Eus. hist eccl. X 4, 40. The author thanks Prof. Rudolph Haensch of the Kommission für Alte Geschichte und Epigraphik of the Deutsches Archäologisches Institut for providing these citations. <sup>99</sup> Valentini and Zucchetti 1940 2.189, 194. See also Richardson (1992, xxi).

<sup>&</sup>lt;sup>100</sup> Eust. p. 652.

<sup>&</sup>lt;sup>101</sup> Luxurius AL 315 S.B. (320 R.)

<sup>&</sup>lt;sup>102</sup> Letzner 1999, 49. Letzner also includes more examples from this period.

<sup>&</sup>lt;sup>103</sup> Neuerburg 1965, 24-25.

From this point on, the *nymphaeum* is intimately associated with grottoes, especially during the Renaissance, with the surge of grotto water features built throughout the Italian peninsula and the rest of Europe.<sup>104</sup>

What is clear from the above discussion is the ambiguity of the ancient term νυμφαῖον/*nymphaeum*. The definition in the ancient period changed from a purely religious structure to that of a public fountain, and the word was used in a variety of ways in the Early Christian, Medieval, and Renaissance periods; the modern era has not been certain of how to deal with the term.<sup>105</sup> Many scholars have briefly presented the history of the term, without much analysis. Neuerburg himself stated that there was no great distinction between the 'fountain' and the 'nymphaeum,' reserving the latter term for more architecturally elaborate fountains.

This overview of the development of the term *nymphaeum* has afforded us the opportunity to understand how the term changed diachronically, from the natural to the artificial. Thus, we briefly turn to *nymphaea* as describing natural grottoes, natural grottoes with added decoration, and artificial structures, which show how the Greeks and Romans conceptualized the *nymphaeum* differently.

For the most part, the *nymphaea* that were natural grottoes or caves dedicated to the nymphs and used for their worship, were Greek. Such naturally occurring grottoes, with their moving water, along with calcium deposits in the form of stalactites and stalagmites, are numerous all over the Greek world.<sup>106</sup> As has already been indicated,

<sup>&</sup>lt;sup>104</sup> For more on the Renaissance grottoes, especially the associated fountain, see the collected volume of MacDougall (1978), in addition to MacDougall (1994) on the garden grotto fountains of Rome or to Miller (1977) on the fountains of France. For a more in-depth study of the garden grotto, see Miller (1982). Summers (2003b) examines the grotesque in modern art, analyzing its ancient past.
<sup>105</sup> See especially Lavagne's dismay (1988, 284).

<sup>&</sup>lt;sup>106</sup> Sear 1976, 231. There is also strong connection in the iconographic record of the nymphs, in terms of their association with water. See *LIMC* 8.6 (nymphs as dispensers of water; cat. nos. 59-78) and 8.8

most of these grottoes were completely natural, without any forms of embellishment, and often in inaccessible places, known to us only from their votive deposits.<sup>107</sup> Literary evidence shows that a  $vo\mu\phi\alpha$ iov in the Greek world could signify a cave-like structure, perhaps in the example found in Menander's *Dyscolus*, in addition to meaning the religious structures in sanctuaries, such as at Delos.

The next development for the *nymphaeum* was a natural grotto outfitted with embellishments.<sup>108</sup> In the Hellenistic period, the decorated *nymphaeum* became popular, such as the νυμφαῖον at Mieza in Macedonia and the νυμφαῖα of the Ptolemies. Archaeological evidence also corroborates the increase of decorated *nymphaea* found across the Mediterranean. At the Greek site of Locri in southern Italy, from the fourth to second centuries BCE there are 12 terracotta plaques documenting various stages of the history of this nymphaeum that was a natural grotto embellished with decorations, such as shells and lion protomes.<sup>109</sup> Such decorated *nymphaea* continued into the Roman period; the most famous of which is Tiberius' grotto at Sperlonga. Here, a natural cavelike location was exploited for dining, but it was adorned with magnificent sculptural groups and fishponds, an excellent example of the Hellenistic notion of forcing artificial elements onto nature.<sup>110</sup>

While there is evidence for the Romans using decorated caves and grottoes, theRomans were masters of creating completely artificial spaces that they called *nymphaea*.P. Mingazzini offers a brief typology of artificial grottoes constructed by the Romans,

<sup>(</sup>nymphs of fountains, springs, and rivers; cat. nos. 104-108). For the Greek examples of these νυμφαῖα, see Larson (2001, 226-229). See also: Elderkin 1941; Settis 1973, 662; Ustinova 2009, 55-68. <sup>107</sup> Larson 2001, 227-228.

<sup>&</sup>lt;sup>108</sup> See especially the discussion of Bressan (2003).

<sup>&</sup>lt;sup>109</sup> Neuerburg 1965, 32-33; Sear 1976, 231; Costabile 1991; Danner 2000; Larson 2001, 251-256.

<sup>&</sup>lt;sup>110</sup> Salza Prina Ricotti 1987, 168. For a relatively recent appraisal of past research on the Hellenistic sculpture of Sperlonga, see Ridgway (2000), along with Stewart (2014, 122-123). See also Higginbotham's discussion of the artificial fishponds of the Sperlonga grotto (1997, 159-163).

including semi-buried structures, spaces built above ground, and constructed grottoes.<sup>111</sup> The semi-buried spaces would have been *hypogea*, similar in form to the cryptoporticus, with fresh air and little humidity, such as the famous so-called "Auditorium of Maecenas" in Rome or the painted garden room discovered in Livia's villa at Primaporta.<sup>112</sup> There were also structures built completely above ground, such as the two *speluncae* described by Seneca in his letter to Lucilius at the villa of Servilius Vatia near Baia or the so-called Temple of Minerva Medica in Rome.<sup>113</sup> Finally, there were spaces organized like natural grottoes, often without windows or doors, although sometimes with couches, such as Pliny describes in the bedroom in his Tuscan villa, complete with garden paintings, a water feature, and a plane tree.<sup>114</sup>

The Romans, in fact, seem to have liked constructing artificial buildings that evoked grottoes. In addition to the *nymphaeum*, such terms as *Amaltheum*, *museum*, *specus (aestivus)*, and *spelunca* were all used to signify a cave-like space. We learn of the *Amaltheum* in various letters Cicero wrote to Atticus, describing the grotto-space that included a statue of Amaltheia, nurse of Zeus, who took care of him in a cave.<sup>115</sup> The µουσεῖοv/*museum* was a space devoted to the nine Muses, which could be an open-air sanctuary on a summit or near a spring, such as the famous Hippocrene fountain on Mt. Helicon in Greece.<sup>116</sup> In the Hellenistic period, the term µουσεῖοv/*museum* also extended to the Museum at Alexandria, a library established by Ptolemy I Soter (ca. 367- ca. 283

<sup>&</sup>lt;sup>111</sup> Mingazzini 1955, 158-161.

 <sup>&</sup>lt;sup>112</sup> Mingazzini 1955, 158. See Bressan (2003) for a complete discussion of these subterranean *nymphaea*.
 <sup>113</sup> Sen. *Ev.* 55.6. Mingazzini 1955, 158.

<sup>&</sup>lt;sup>114</sup> Pliny *Ep.* 5.6. Mingazzini 1955, 160-161. See Letzner (1999, cat. no. 217) for the Temple of Minerva Medica.

<sup>&</sup>lt;sup>115</sup> Cicero Att. 1.16.18; 2.1.11; 2.7.8. See also a discussion of this term in Lavagne (1988, 258-264).

<sup>&</sup>lt;sup>116</sup> New Pauly 9: 250 (s.v., Mouseion, A. Glock). See also Lavagne (1988, 270-275) for more on the Greek μουσεῖον, including the archaeological evidence that can indicate the religious nature of these structures. See Robinson (2012) for the most recent archaeological and literary appraisal of the museum and surrounding structures at Mt. Helicon.

BCE), as an institution for learning, which makes sense, given the purview of the nine Muses.<sup>117</sup> But despite these exceptions, a μουσεῖον/*museum* usually indicated a cave-like space, as is presented in literary works from Plato and Varro, to Pliny the Elder, the last of whom describes the *museum* as a place in which there is exposed pumice stone in a cave-like structure.<sup>118</sup> The term *museum* appears again in the works of Pliny the Elder, as a *museum* was built for Pompey's triumph of 61 BCE over Mithradates and subsequently incorporated into the *Porticus Pompeiana* in 55 BCE (**Figs. 4, 5; App. No. 1.118**).<sup>119</sup>

Further, the term *specus*, or cave/grotto, was used, often in conjunction with *aestivus* (summer-like), to indicate an artificial cave. Seneca mentions a *specus aestivus* being dug out of the ground, which suggests that this was an unusual term for artificial structures built by the Romans.<sup>120</sup> Finally, the *spelunca* denotes a cave. Seneca, again, cites two *speluncae* that are constructed by great labor, as large as great halls, with one *spelunca* hidden from the sun, while the other admits the sun's ray until sunset.<sup>121</sup> In the Roman context, what universally unites these terms is artificiality. Clearly, these structures have natural origins, but it is the addition of the artificial that makes them uniquely Roman. Probably drawing on the Hellenistic precursors, Mingazzini has in fact argued that the *museum*, as a structure that simulates the grotto, and the *specus aestivus*, another cave-like edifice, are entirely Roman inventions, given the propensity of the

<sup>&</sup>lt;sup>117</sup> Mingazzini 1957, 109; New Pauly 9: 250-251 (s.v., Mouseion, A. Glock).

<sup>&</sup>lt;sup>118</sup> Pliny HN 36.154. Non praetermittenda est et pumicum natura. Apellantur quidem ita erosa saxa in aedificiis quae musaea vocant dependentia ad imaginem specus arte reddendam. Pl. Phdr. 230b; Varro De legibus 2.3.7. See also Richard (2012, 24).

<sup>&</sup>lt;sup>119</sup> Plin. *NH* 37.14. For more on this particular *museum*, see Kuttner (1999c) and Beard (2007, 7-41). Pliny the Younger (*Ep.* 1.9.6) mentions a  $\mu\nu\sigma\sigma\epsilon$ iov, but in this case, it is the way in which the sea and shore act together to create a peaceful environment for him to study. See also Lavagne (1988, 275-278). <sup>120</sup> Sen. *Helv.* 11.9.2. See also Mingazzini (1955, 158).

<sup>&</sup>lt;sup>121</sup> Sen. Ep. 55.6. Speluncae sunt duae magni operis, cuivis laxo atrio pares, manu factae, quarum altera solem non recipit, altera usque in occidentem tenet.

Romans to graft the natural onto the artificial.<sup>122</sup> The relationship between the natural and the artificial, which becomes prevalent in the Hellenistic period, is constantly an issue with regards to Roman water-display, which shows water, a natural resource, in a man-made environment.

As this discussion has shown, the *nymphaeum* is a problematic term, with a complex history in not only the ancient Greek and Latin sources, but also in the modern period, especially starting in the Renaissance. Originally the *nymphaeum* was tied to religious spaces connected to the nymphs, but by the High Roman Empire, the term *nymphaeum* could be used to describe large-scale water-displays, although it does not seem to be a widespread moniker. What the preceding discussion has also shown is that the structures described by the term *nymphaeum* were multivalent, harkening back to religious origins, mimicking natural grottoes, or standing as large monumental fountains in the urban landscape. Regardless of their appearance, *nymphaea* were features that one experienced, considering their beginnings and appearance, while one physically stood in front of a nymphaeum.

## viii. saliens

Like the term *lacus* in its ambiguity, the *saliens* was associated with the 'jumping' or 'gushing' of a water-display. Stemming from the Latin *salire* or *salio*, the *saliens* is a water feature that implies some sort of show of water movement, allowing the water to pour out of a fountain within the urban fabric.<sup>123</sup> Originally, the adjectival forms of

<sup>&</sup>lt;sup>122</sup> Mingazzini 1955, 162.

<sup>&</sup>lt;sup>123</sup> Neuerburg 1965, 22; Berg 1994, 13; Del Chicca 1997, 240-244; Ghiotto 1999, 73; Letzner 1999, 80; Richard 2012, 24. For more on the etymology, see Ernout and Meillet (884-885, s.v., Salio), which

saliens were used to describe actual water movement, such as running water that comes out of tubes presented in the works of Columella and Pliny the Younger.<sup>124</sup> But we are more interested in the substantive use of *saliens*. In this instance, a *saliens* means some sort of water work, such as the jets of water described in Cicero's *Letter* to Quintus, although it is unclear if *saliens* is working with other water structures to create one large water feature, or if the *saliens* is a water-display all by itself.<sup>125</sup>

Other literary evidence also supports claims that the *saliens* was indeed its own form of water-display, not simply alluding to the movement of water. In Vitruvius' description of the tri-partite division of the *castellum aquae*, the public supply goes to both the *lacus* and the *salientes* in the city.<sup>126</sup> Pliny the Elder mentions the 500 salientes constructed by Agrippa (HN 36.24.121). Frontinus also mentions salientes a few times in his treatise on water management: the Agrippan installation of *salientes* in 33 (Aq. 9.9); the restoration of the Aqua Alsietina and its *salientes* in Trastevere (11.2); the appearance of illegal taps at *salientes* and *castella* in the water system (103.3); public *salientes* were to be turned off at night (104.1-2). It is evident, then, that by the imperial period, the saliens was a synonym for a public fountain, even though its actual form remains ambiguous.<sup>127</sup>

discusses the 'jumping' nature of the root salio. The  $OLD^2$  suggests that the saliens, in its derivation from salio, allows water "to be ejected with some force, gush, spurt, discharge" (s.v., salio<sup>2</sup>, 3).

<sup>&</sup>lt;sup>124</sup> Columella Rust. 1.6.11; Pliny Ep. 2.17.25; Dig. 33.7.12.24 (Ulpian); Dig. 50.16.79 (Paul.). For more on these authors, see Del Chicca (1997, 240-242). For more on moving water, see: Vitr. De arch. 8.3.1; Suet. Aug. 82.1; Dig. 19.17.9.1 (Ulpian); Dig. 30.41.11.10 (Paul.). Del Chicca (1997, 241-242) provides an exhaustive list of epigraphic evidence, too, of this moving or gushing water.

<sup>&</sup>lt;sup>125</sup> Cic. *Quint. fr.* 3.1.3. For more, see Del Chicca (1997, 242).

<sup>&</sup>lt;sup>126</sup> Vitr. De arch. 8.6.2. Ita in medio ponentur fistulae in omnes lacus et salientes, ex altero in balneas vectigal quotannis populo praestent, ex quibus tertio in domus privates, ne desit in publico; non enim *poterint avertere, cum habuerint a capitibus proprias ductiones.* <sup>127</sup> See also Ambrogi (2005, 61).

It is also clear, especially from inscriptions, that the *saliens* was a water feature that involved moving water, which could indeed be decorated. Inscriptions document how water from a *saliens*, working in tandem with another vessel, such as a *labrum*, would 'jump' into a basin.<sup>128</sup> There are indications in the epigraphic record that *salientes* were in fact public fountains, or in the very least, part of larger public water-displays, such as those in bath complexes. One example is a *vicomagistri* list from 133 CE, which lists a vico [...]ani salientis, indicating that one of the vici of Rome was named after a saliens there.<sup>129</sup> Another inscription mentions that after four years of inactivity, a saliens was restored by two aediles in Lambaesis.<sup>130</sup> It also seems that *saliens* could be part of the decorative scheme associated with a larger water-feature, such as in the apodyterium of baths in Lanuvium, in which a bronze labrum was newly outfitted with a saliens in the form of the *rostrum* of a ship.<sup>131</sup> Furthermore, a restored *salientes quadrifaria* in Aequiculum seems to imply an ornate four-cornered form.<sup>132</sup> What is particularly interesting about *saliens* inscriptions is the fact that most are restorations of older salientes, such as the restoration by the two aediles in Lambaesis.<sup>133</sup>

<sup>&</sup>lt;sup>128</sup> CIL 6.975 (p. 181), 8.23991, 10.6428, 11.1062.

<sup>&</sup>lt;sup>129</sup> CIL 6.975 (p. 181). There are also vici named that are related to the *lacus*, including the vico *laci tecti* and the vico *laci restituti*. For more, see Del Chicca (1997, 240).

<sup>&</sup>lt;sup>130</sup> CIL 8.2631. [...]isidi Aug L Figilius Secundus Fl Crispinus aediles lacum quod annis II II cessaverit ut saleret curaverunt.

 <sup>&</sup>lt;sup>131</sup> CIL 14.2119. [t]ate Luci Ocrae | municipi | [...]oratus et | pr[imi]genius ob | [honore]m sexviratus apodyterium | [ope]re tectorio quod vetustate de | [ficie]bat refecerunt [it]em piscinam ab no/[v]o fecerunt labrum [ae]neum cum salientibus | [r]ostris navalibus tr[ibu]s posuerunt. One of the exedra fountains in front of the theater of Ostia was also outfitted with a spout in the shape of a ship (App. No. 1.85).
 <sup>132</sup> CIL 9.4130. M M Lartieni Sabini Pater | et filius quinquennales aquam | in fanum sua inpensa

perduxerunt salien/tes quadrifaria suo loco restituerunt canales v[e]/testate corruptos et dissupatos restituerunt fistu/las omnes et sigilla ahenea poserunt tecta refec[e]/runt omnia sua inpensa fecerunt.<sup>133</sup> Another inscription to consider is from Amiternum, which reports that aquas arentani quas iam delapse fuerant civitati n(ostrae) additis lacis castellisq(ue) salientes restituit (see: Letzner 1999, 78, 83). The fact that a large majority of the inscriptions indicate restorations should not be surprising, given the Romans' epigraphic habit. For more specifically on rebuilding inscriptions in the western half of the Empire, see Thomas and Witschel (1992).

Modern scholarship has vacillated on the exact form of the *saliens*, given that the ancient evidence is not clear. There has been much debate as to whether the *lacus* and the *saliens* were indeed of the same form, with scholars on both sides of the argument, despite the fact that the terms are often listed separately.<sup>134</sup> Del Chicca suggests that while the *saliens* can be a solitary structure, as suggested by Frontinus (*Aq.* 104.1-2), it seems that a *lacus* and *saliens* can work in tandem to create a *gioco d'acqua*.<sup>135</sup> Indeed, it has been noted that while a *lacus* does not require a *saliens* (i.e., water movement), a *saliens* must have some sort of *lacus*, or collecting basin.<sup>136</sup> While the *saliens* is used in the Early Empire, by the fourth century, it falls out of use, when the Regionary Catalogues only report that the city of Rome has *lacus* at that point, not *salientes*.<sup>137</sup>

Given the lack of specific epigraphic and archaeological evidence, it is impossible to pinpoint the exact ancient form and meaning of the *saliens*. It has been suggested that the *saliens* could have taken on a variety of meanings: an element of the movement of water known as *giochi d'acqua* or *Wasserspiele* in public and private water-displays; an essential element of the *lacus* to move water into the basin; a fountain with a utilitarian function (akin to the *lacus*); a sort of public drinking fountain, perhaps similar to those still found in Rome.<sup>138</sup> It would also appear that the *saliens* was often either decorated or furnished part of a decorative scheme in a water-display. Despite the different modern interpretations of the term, the *saliens* appears to be multivalent a term that took on different meanings in various contexts.

<sup>&</sup>lt;sup>134</sup> Those in favor include Del Chicca (1997, 246) and Ambrogi (2005, 58), while Neuerburg (1965, 22) and Letzner (1999, 82-83) do not.

<sup>&</sup>lt;sup>135</sup> Del Chicca 1997, 236, 244.

<sup>&</sup>lt;sup>136</sup> Letzner 1999, 86.

<sup>&</sup>lt;sup>137</sup> Del Chicca 1997, 244; Letzner 1999, 84.

<sup>&</sup>lt;sup>138</sup> Del Chicca 1997, 246.

## ix. septizodium/septizonium

The *septizodium* (or *septizonium*) is a water-feature characterized by the number seven (*septi-*) and either figures ( $\zeta \phi \delta \iota \alpha$ ) or zones (*-zona-ium*).<sup>139</sup> Because of the different versions of the term, there has been much scholarly debate over the last century and a half concerning the correct form of the word. It has been argued that the *septizodium* has cosmic origins, honoring the seven planetary deities known to the ancients, especially given the archaeological evidence of known structures throughout the Roman world, which included statues of various deities, namely Sol-Helios-Apollo, Luna-Selene-Diana, Mars, Mercury, Jupiter, Venus, Saturn.<sup>140</sup>

There are a few known examples of *septizodia* throughout the Roman world, including the famous Severan Septizodium of Rome. Dedicated in 202-203 CE, the Septizodium was a gigantic three-niched façade water feature at the southeast foot of the Palatine Hill, where it met with the terminus of the via Appia (**Fig. App. 6; No. 1.120**). Outside the city of Rome, there were a number of so-called *septizodia*, including at Lambaesis (Algeria), Cincari (Tunisia), Philadelphia (Amman, Jordan), and Jerusalem.<sup>141</sup> At Lambaesis, an inscription reveals the presence of a *septizonium* dating to about 247-

<sup>&</sup>lt;sup>139</sup> Ernout and Meillet 884-885 (s.v., Septem); Settis 1973, 722-723; Longfellow 2011, 173. The  $LSJ^9$  defines a  $\zeta\phi\delta\iota ov$  as a "small figure, painted or carved" or a "sign of the zodiac" (s.v.,  $\zeta\phi\delta\iota ov$ ). Spano (1950) argues that the arch of P. Cornelius Scipio Africanus on the slopes of the Capitoline was a septizodium, because there were seven statues on top, along with basins for fountains in front (**App. No. 1.109**).

<sup>&</sup>lt;sup>140</sup> Settis 1968, 723; Lusnia 2004, 523; Thomas 2007a, 344; Longfellow 2011, 180.

<sup>&</sup>lt;sup>141</sup> For more on these locations see: Ginouvès 1969, 152; Aupert 1974, 114-126; Shaw 1991; Letzner 1999.

248.<sup>142</sup> Because *septizodia* are found outside of Rome, some scholars have questioned whether the structures originated in Rome and moved to the provinces, or vice versa.<sup>143</sup>

There has always been the question of whether or not a *septizodium* was the same as a *nymphaeum*. In the fourth century Regionary Catalogues, there is mention of 15 *nymphaea* in the city, along with the Septizodium.<sup>144</sup> In the same century, the historian Ammianus Marcellinus glossed the Septizodium as an *operis ambitiosi Nymphaeum*, or a *nymphaeum* of ambitious work.<sup>145</sup> Most modern scholarship, however, asserts that *septizodia* were not in fact *nymphaea*.<sup>146</sup>

Given the long history of the term, it is important to recognize some important features of the *septizodium*. The architecture of the *septizodium* is one of monumental proportions, with these structures often having three apses, grand façades, and decorative sculpture, in addition to moving water. While there seems to be a cosmic interpretation for the *septizodia* in the West, in the East, the large-scale form seems to be adopted without any of the cosmic overtones.<sup>147</sup> While there has been some discussion of the similarities between the *septizodium* and the *nymphaeum*, it is clear that there are enough differences to suggest that these were two separate structures. It is noted, however, that both the *septizodium* and *nymphaeum* share the concept of celebrating water in an often impressive architectural setting.

<sup>&</sup>lt;sup>142</sup> CIL 8.2657. [Pro salute Imppp(eratorum) Caesss(arum) --- M.] Aur(elius) Cominius Cassia[nus leg(atus) Auggg(ustorum) pr(o) pr(aetore) c(larissimus) v(ir)] septizonium marmorib(us) musaeo et omni cultu vetustate dilabsum restituit. For more on this inscription, see: Settis 1973, 713; Letzner 1999, 55; Lamare 2014, 291-292, ins. no. 10.

<sup>&</sup>lt;sup>143</sup> Lusnia 2004, 523; Thomas 2007a, 358-363; Longfellow 2011, 180.

<sup>&</sup>lt;sup>144</sup> Neuerburg 1965, 23.

<sup>&</sup>lt;sup>145</sup> Ammianus Marcellinus 15.7.3.

<sup>&</sup>lt;sup>146</sup> Settis 1973, 722-726; Ghiotto 1999, 84.

<sup>&</sup>lt;sup>147</sup> Longfellow 2011, 180.

Etymologically, the *silanus* (or *silanum*) was probably first just a fountain cover, in the form of a grotesque mask of a Silenos or satyr figure.<sup>148</sup> By late antiquity, however, the *silanus* indicated the large public fountain of the *nymphaeum*, as the word *silanus* is found glossing the word *nymphaeum*.<sup>149</sup> Given the late date of the term and its lack of popularity among Latin writers, it does not feature widely in this discussion. Yet, the word could potentially impact any future studies of the Christian appropriation of Roman water-display terms.<sup>150</sup>

## **II. Secondary**

#### i. alveus

The *alveus* (or  $\pi \dot{\upsilon} \lambda \epsilon o \varsigma$ ) is an uncommon basin form. Most literary sources connect the *alveus* to bathing, whether a basin in the baths for water to flow forth or a basin used for actual bathing.<sup>151</sup> Annarena Ambrogi, in studying large basins of the Roman world, concludes that the *alveus* could be constructed of different materials (marble, stone, or wood), could contain water for a variety of functions (including for bathing, drinking, washing newborns, and fountains in gardens, as well as for other materials, such as wine, cereals, and other things), and could be used for a number of different reasons (cooking, troughs for feeding animals, and for use in the baths).<sup>152</sup> In the baths, the *alveus* is often

<sup>&</sup>lt;sup>148</sup> Gros 1996, 419; Ghiotto 1999, 81; Richard 2012, 23. Richard suggests that the *silanus* was a plain street fountain, despite its etymological origins of a Silenus covering for a water-display.

<sup>&</sup>lt;sup>149</sup> *Corpus Glossariorum Latinorum* 4, p. 262, 8. For more on this, see: Ghiotto 1999, 81; Letzner 1999, 732, cat. no. 483; 736.

<sup>&</sup>lt;sup>150</sup> For more on later water-displays in late antiquity, see Jacobs and Richard (2012).

<sup>&</sup>lt;sup>151</sup> Cic. *Cael.* 67; Vitr. *De arch.* 5.10.4; Ovid *Met.* 8.652; *SHA* Capitol. Alb. 5.6; Rhet. Her. 4.10.14. For more, see Cavalieri and Barbagli (2002, 49). The *alveus* is later mentioned by Isidore as a place where ablutions took place (*Orig.* 20.6.8: *albeum, quod in eo ablutionem fieri solitum est*).

<sup>&</sup>lt;sup>152</sup> Ambrogi 2005, 17. See also Daremberg-Saglio 1.1: 219 (s.v., Alveus, E. Saglio).

seen in the *caldarium*, sometimes also known as the *decensio* (with steps), or the *solium*, in which one could sit.<sup>153</sup> It is believed that the *alveus* was generally a basin of rectangular form, while the *labrum* is of a circular shape.<sup>154</sup>

### ii. cantharus

The *cantharus* (οr κάνθαρος), known especially from its popular form as a drinking or mixing vessel, is a large basin, with a wider mouth than bottom, a slim foot, and two handles.<sup>155</sup> From illustrations of *canthari* in Roman wall painting of gardens and archaeological evidence from gardens, it is believed that actual *canthari* would have decorated Roman gardens, providing water-displays in those spaces, usually as subsidiary elements in the garden.<sup>156</sup> In fact, the later *Digest* states that *canthari* were vessels for 'jumping' water.<sup>157</sup> Pliny the Elder is one of the only instances in which the *cantharus* is mentioned in classical Latin literature, when he states that the famous doves of the Sosus mosaic rest on the lip of a *cantharus*.<sup>158</sup> The *cantharus* appears in later literary passages, but in the context of the Christian church.<sup>159</sup> It appears that the meaning of the *cantharus* shifted from a decorative water feature in the Roman garden to a feature found in the atrium of the Christian basilica.<sup>160</sup>

 <sup>&</sup>lt;sup>153</sup> Ambrogi 1995, 11. See also Ambrogi (1999), which is an addendum to her monograph of 1995.
 <sup>154</sup> Cavalieri and Barbagli 2002, 50.

<sup>&</sup>lt;sup>155</sup> Daremberg-Saglio 1.2: 893-894 (s.v., Cantharus, E. Saglio); Hilgers 1969, 46; Letzner 1999, 94; Dessales 2013, 152. For more on the Roman drinking vessel form associated with *cantharus*, see Hilgers cat. no. 79. It has been argued that the *cantharus* would have been of smaller dimensions than the *labra*, sometimes held up by a *columella*, or a small column. For more, see Delbrück (1932, 175) and Cavalieri and Barbagli (2002, 50). The *cantharus* is glossed as a Greek name (see Eucher. *Instr.* 2p. 147, 11: *cantharus Graecum nomen est*).

 <sup>&</sup>lt;sup>156</sup> Daremberg-Saglio 1.2: 894 (s.v., Cantharus, E. Saglio); Farrar 1996, 36-7; Richard 2012, 23-24.
 <sup>157</sup> Dig. 30.41.11.

<sup>&</sup>lt;sup>158</sup> Pliny the Elder *NH* 36.60, *in canthari labro*.

<sup>&</sup>lt;sup>159</sup> Pass. Chron. 2; *Liber pontificalis* p. 123.9, p. 124.6.

<sup>&</sup>lt;sup>160</sup> Paul. Nol. *Ep.* 32.15. See also: Hilgers 1969, 47-48; Letzner 1999, 95-96.

## iii. castellum [aquae/divisorium]

One of the most important features of the urban water distribution network in any Roman city was the *castellum, castellum aquae*, or *castellum divisorium*—the 'castle' that received the water coming into the city from an aqueduct.<sup>161</sup> Pliny mentions that Agrippa installed 130 *castella* in Rome (*HN* 36.25.131). The most famous literary passage concerning the *castellum*, however, is in Vitruvius, who states that the *castellum* is a tripartite structure, providing water for the baths, public fountains, and private water connections.<sup>162</sup> For the most part, the *castellum* was at the highest point of the city, distributing water lower down into the city using a system of water towers. There is also evidence that there were secondary *castella* in some cities, which would help to redistribute the water to other parts of the urban fabric, as was the case especially in the Roman East, where the positioning of the water infrastructure had to be done right to maximize the success of water distribution in an semi-arid climate.<sup>163</sup>

<sup>&</sup>lt;sup>161</sup> Neuerburg 1965, 22; Berg 1994, 13; Bruun 2000, 585; Ohlig 2001; Hodge 2002, 280. For more on the archaeological remains of the *castellum*, especially of the well-preserved remains in Pompeii and Nîmes, see: Eschebach 1979; Riera 1994, 263-271; Ohlig 2001; Hodge 2002, 279-321; Catalano 2003, 132-135, along with Keenan-Jones (2015).

<sup>&</sup>lt;sup>162</sup> Vitr. De arch. 8.6.2. Ita in medio ponentur fistulae in omnes lacus et salientes, ex altero in balneas vectigal quotannis populo praestant, ex quibus tertio in domus privatus, ne desit in publico; non enim poterint avertere, cum habuerint a capitbus proprias ductiones. For more discussion of this passage of Vitruvius, see: Del Chicca 1997, 245; Ghiotto 1999, 73; Hodge 2002, 282. There is much discussion regarding the validity of Vitruvius, especially as Ohlig has recently proven that Vitruvius' *castellum* model was not accurate, using archaeological remains (Ohlig 1995, 135-140; Ohlig 2001). Hodge reminds the reader that Vitruvius is not an encyclopedia or a how-to-guide, but a recommendation for the reader (2002, 282). Also of note is the tripartite division presented by Frontinus in his *De aquaeductu*, which is for public, private, and imperial use. For more on this division, see Bruun (1997, 138).

<sup>&</sup>lt;sup>105</sup> For more on the use of secondary *castella* in general, see Hodge (2002, 291-303), and for the network of secondary *castella* in the East, see Richard (2007), who suggests a variety of models for water distribution in Greece, Israel, Jordan, Lebanon, Syria, and Turkey, along with Kamash (2012). It should be noted that in the context of this study, the use of the term 'semi-arid' implies the chance for a severe lack of water in a geographical location that can impact the growth of vegetation and the raising of animals. True 'arid' climates are present in the Roman world, which are generally desert-like areas, such as the modern countries located on the so-called 'Arid Belt,' including Libya, Egypt, Sudan, Jordan, Yemen, Oman, United Arab Emirates, Iran, Turkmenistan, etc. For more on the 'Arid Belt,' especially in the context of the ancient world, see the collected volume of Liverani (2003), which explores life at arid sites in the Roman Empire. The volume was the product of a conference hosted by the Centro Interuniversario di Ricerca sulla

In general, most *castella* were not decorated with facades. There is evidence, however, that some were actually ornamented, perhaps as part of a *munus*.<sup>164</sup> For example, the reservoir at Formia was outfitted with a facade in the late Republic.<sup>165</sup> We know from an inscription in Metz of the installation of an aqueduct and a nymphaeum, along with its decoration, which could perhaps suggest a decorated *castellum* (App. No. **1.42**).<sup>166</sup> There is also evidence of the *castellum fontis*, or the "water castle of the fountain," in Zaghoan (Tunisia, App. No. 1.151), Henchir Tamesmida (Tunisia), Aïn Djoukar (Tunisia), and Nemausus (Nîmes, France), which could suggest a larger, decorated fountain structure, rather like a nymphaeum.<sup>167</sup> While there is evidence that could indicate that *castella* were decorated, it is still unclear whether that was in fact the case. As Peter Aicher argues, displays at the terminus or castella of aqueducts, so-called *mostre* in Italian, were a post-antique conception, with very few *mostre* known in antiquity, and that were probably located in the imperial baths.<sup>168</sup> Nevertheless, the *castellum* was an integral component of the water distribution network that would have provided for water-display throughout the Roman world.

#### iv. cisterna

*Cisternae*, just like their modern English counterparts (cisterns), are reservoirs to hold and contain water for later use, often for rainwater storage. For the most part,

civiltà e l'ambiente del Sahara antico (CIRSA) of the Università di Rome 'La Sapienza.' The group strives to study life diachronically in arid lands.

<sup>&</sup>lt;sup>164</sup> Del Chicca 1997, 248-49.

<sup>&</sup>lt;sup>165</sup> Neuerburg 1965, 74. See Neuerburg for a complete list of imperial examples of the addition of a façade to a water holding tank (74).

<sup>&</sup>lt;sup>166</sup> CIL 13.4325. See: Leveau 1991, 158.

<sup>&</sup>lt;sup>167</sup> Letzner 1999, 103.

<sup>&</sup>lt;sup>168</sup> Aicher 1993, 344-345.

*cisternae* were covered, subterranean structures, unlike the *lacus*.<sup>169</sup> The cistern could range in scale from smaller domestic examples, such as at Delos and Pompeii, to larger ones that would have supplied whole towns.<sup>170</sup> For unknown reasons, the *cisterna* is conflated with the *piscina*, a large open basin that could serve either as a swimming pool or a fishpond, because perhaps they were sometimes repurposed.<sup>171</sup>

#### v. concha

In the form of a conch, mussel, or clamshell, the *concha* (or *conchula*) was a multi-purpose vessel, holding a variety of substances, including salt, oil, and water.<sup>172</sup> Because the *concha* is sometimes associated with bathing, along with its marine appearance, it is often shown in the context of Venus or the nymphs bathing.<sup>173</sup> It has been noted that the *concha* appears in the decoration of ornamental fountains, while also being a basin in fountains that received moving water.<sup>174</sup> Finally, the *concha* is later seen in the form of baptismal fonts in a Christian context.<sup>175</sup>

<sup>&</sup>lt;sup>169</sup> Daremberg-Saglio 1.2: 1208 (s.v., Cisterna, E. Guillaume). Etymologically, Festus mentions that the cisterna is so-named because it is below ground, related to the cis- prefix (Paul. Fest. 43: cisterna dicta est, *quod cis, id est infra, terram*). <sup>170</sup> Hodge 1991, 58-66.

<sup>&</sup>lt;sup>171</sup> Neuerburg 1965, 22. For more on the *piscina* as a fishpond, see the monograph of Higginbotham (1997). <sup>172</sup> Daremberg-Saglio 1.2: 1431 (s.v., Concha, E. Saglio); Hilgers 1969, 50; Ambrogi 2005, 17. For more on the Roman drinking vessel form associated with concha, see Hilgers cat. no. 109. The name concha perhaps comes from the fact that these shells are in fact hollow, allowing for storage (Isid. Orig. 12.6.48 (conchae et cochleae hac ex causa vocatae, quia deficiente luna cavatur, id est evacuantur); 20.4.11 (gavata, quia cavata..., hinc et conca; sed illa cavata, ista concava: sic et Graeci haec nuncupant)). <sup>173</sup> Daremberg-Saglio 1.2: 1431 (s.v., Concha, E. Saglio); Ambrogi 1995, 11.

<sup>&</sup>lt;sup>174</sup> Daremberg-Saglio 1.2: 1431.

<sup>&</sup>lt;sup>175</sup> Ambrogi 2005, 17. Just as was the case with the *cantharus*, it would be interesting to pursue this transition from a pagan to Christian water feature.

### vi. crater

The *crater* is a well-known Greek vessel used for mixing wine. While it was used in the Roman world for wine mixing, the word occasionally appears in the context of water-display.<sup>176</sup> Pliny mentions that he has a fountain of a bowl-form, with jets of water that make a pleasing murmuring sound (*Ep.* 5.6.23).

## vii. euripus

The *euripus* either refers to a natural strait in Greece, or an artificial water channel. The strait between Euboea, near Chalcis, and Boeotia, was famous in antiquity for changing its current four to six times a day.<sup>177</sup> But the Romans used the term to mean some sort of conduit that allowed for the movement of water, as opposed to a simple pool (e.g., *piscina*) that was stagnant.<sup>178</sup> The most famous was probably the Euripus of Agrippa, a channel that helped drain the Stagnum Agrippae in the Campus Martius into the Tiber River (**App. No. 1.107**).<sup>179</sup>

*Euripus* can also mean a flowing water channel that was both decorative and utilitarian. Ausonius mentions that the public fountain in his city of Burdigala (modern Bordeaux, France) contained a *euripus* that is big enough to allow water to move violently enough to create foam (*Ordo nob. urb.* 20.21-22). Modern scholarship has adopted this meaning, applying the term to large-scale open-to-the-air water conduits in private and public contexts. In the domestic sphere, large waterways adjacent to outdoor

<sup>&</sup>lt;sup>176</sup> Hilgers 1969, 52-3; Dessales 2013, 152. For more on the Roman drinking vessel form associated with *crater*, see Hilgers cat. no. 119.

<sup>&</sup>lt;sup>177</sup> Diod. Sic. 13.1, 47.3; Str. 1.1.17, 9.2.2, 8, 10.1.2. See also *New Pauly* 5.206 (s.v., Euripus, E. Olshausen).

<sup>&</sup>lt;sup>178</sup> Richardson 1992, 146; Zarmakoupi 2014, 157-163.

<sup>&</sup>lt;sup>179</sup> Excavations that are currently taking place in Rome on the Linea C of the underground Metropolitana hope to elucidate more about the course and structure of the *Euripus*. See Filippi (2010; 2014).

triclinia have often been referred to as *euripi*, such as at the Casa di Loreio Tiburtino (2.2.2) in Pompeii or the large channel in the so-called Canopus in Hadrian's Villa in Tivoli.<sup>180</sup> In the urban contexts, water conduits running through the middle of the streets are also called *euripi*, especially those at Perge and Pisidian Antioch in Asia Minor.<sup>181</sup> In both domestic and public contexts, the *euripus* allows for the display of water by providing a space for it to move and create its own show, often making the surrounding space more appealing. The moving water certainly would have cooled the air around it, creating a pleasant environment.

There is also evidence that *euripi* were found in the Roman circus. The original such *euripus* was probably a channel dug around the arena of the Circus Maximus in Rome, under Nero, when a physical barrier needed to be created to protect spectators from animals in the *venationes*.<sup>182</sup> Later, probably by the time of Trajan, a second *euripus* would have existed on the barrier in the middle of the space, the *spina*, and it was probably decorated with marine sculpture (known through a variety of media, including depictions on reliefs, mosaics, and sarcophagi).<sup>183</sup> Elagabalus is reported to have replaced the water in this *euripus* with wine for a naval battle (SHA *Heliogab*. 23.1). John Humphrey does not believe, however, that circuses throughout the Empire would have been flooded, given the already shallow space and the large amount of surface to cover. *Euripi* are found in a number of circuses outside of Rome, including in the mid-fourth

<sup>&</sup>lt;sup>180</sup> For the Casa di Loreio Tiburtino, see Salza Prina Ricotti (1987, 171) and Rogers (2013, 159). On the *euripus* of Villa Adriana, see Salza Prina Ricotti (1987, 175), MacDonald and Pinto (1995, 4), and Fahlbusch (2008). See also Zarmakoupi (2014, 157-163), who discusses the *euripus* in the context of the luxury villas on the Bay of Naples. The *euripus* of Villa Adriana is placed in the Canopus, a feature tied to Egypt. For more on the popularity of Egyptian inspired water features (such as gardens), see Carruesco (2011), who explores water-related toponyms of cities in Greco-Roman Egypt, along with Vittozzi (2013). <sup>181</sup> Richard 2012, *passim*.

<sup>&</sup>lt;sup>182</sup> Richardson 1992, 147; *LTUR* 2.239 (s.v., Euripus in Circo Maximo, P. Ciancio Rossetto).

<sup>&</sup>lt;sup>183</sup> Humphrey 1986, 116, 127, 275-277, 373-374, passim.

century CE restorations of the circus at Mérida (Spain).<sup>184</sup> There was probably a practical function to the basins in the middle of the racetracks: they would have allowed *sparsores* to throw water on the track to cut down on dust, as well as cooling water on the wheels of chariots and perhaps even on the horses.<sup>185</sup>

### viii. labrum

One of the most versatile vessels in the Roman world in terms of function, the *labrum* (or the *labellum*, λουτήριον, or λεκάνη) is generally a large, flat circular basin.<sup>186</sup> Etymologically the name *labrum* could refer to the 'lip' that exists on most *labra* found in archaeological contexts.<sup>187</sup> The *labrum* could be made of a variety of materials, including marble, porphyry, stone, bronze, iron, and terracotta.<sup>188</sup> In prominent spaces, such as the Templum Pacis in Rome, *labra* would often be made of semi-precious stones or marbles to highlight the area in which they were placed.<sup>189</sup> Indeed, Livy mentions that P. Cornelius Scipio Africanus dedicated an arch on the slopes of the Capitoline, complete with two marble *labra* (37.3.7; **App. 1.109**). The most extensive work done on the *labrum*'s form, in terms of archaeological analysis, is the complete 2005 monograph of Ambrogi, who catalogued the extant *labra* of the Roman world. Unlike her previous study of other Roman stone basins of 1995, this investigation presented the *labra*, which

<sup>&</sup>lt;sup>184</sup> Humphrey 1986, 373-374.

<sup>&</sup>lt;sup>185</sup> Humphrey 1986, 276.

<sup>&</sup>lt;sup>186</sup> Letzner 1999, 97-8; Cavalieri and Barbagli 2002, 49; Ambrogi 2005, 18; Dessales 2013, 151-152. For more on the Roman drinking vessel form associated with *labrum*, see Hilgers cat. no. 202. See Lissarrague (1990) for a discussion on Greek drinking vessels. The form of the *labrum* could stem from similar appearing examples found in contexts of the Classical and Hellenistic periods in Greece (Bowe 2012, 204-206).

<sup>&</sup>lt;sup>187</sup> Ernout and Meillet 488; Letzner 1999, 98. Some have argued that the name *labrum* could possibly relate to its function in bathing (e.g., *lavabrum*). Isidorus mentions that the name could be derived from an episode relating a child bathing in a *labrum* form (Isid. *Orig.* 20.6.8). For more, see Ambrogi (2005, 19). <sup>188</sup> Letzner 1999, 99; Ambrogi 2005, 18; *New Pauly* 7: 137 (s.v., Labrum, R. Hurschmann).

<sup>&</sup>lt;sup>189</sup> Ambrogi 2005, 66.

are more easily understood in terms of function, given that they are more often found in their original contexts, unlike other basins that were generally reused in post-Antique periods.

The *labrum* was found in many different spaces throughout the Roman world, which means that this vessel form has a rich history of use by the Romans. The term *labrum* was sometimes used in agricultural settings, such as for drinking troughs of farm animals, along with describing a container to hold produce like figs, or for the production of oil and wine.<sup>190</sup> The *labrum*, however, was most often associated with bathing, such as with an inscription found in one of the public baths of Pompeii.<sup>191</sup> *Labra* could be featured as ornamental decoration in baths, or they could be utilitarian components of the baths, moving water. As well as facilitating bathing, the *labrum* was a component in purification rites at temples and sanctuaries, namely the *lustratio*, and in both funerary and marriage rituals, in a similar way to the Greek *louterion*, *loutrophoros*, or *perirrhanterion*.<sup>192</sup> Given the appearance of the *labrum* in a religious context, it has been argued that the vessel was an integral part of the transition into Christian spaces equipped with *acquasantieri*, or small vessels filled with baptismal water.<sup>193</sup>

<sup>&</sup>lt;sup>190</sup> Ambrogi 2005, 65; *New Pauly* 7: 137 (s.v., Labrum, R. Hurschmann). See in particular: Columella *Rust.* 12.15.3; Cato *Agr.* 10.4.

<sup>&</sup>lt;sup>191</sup> CIL 10.817. Cn. Melissaeo Cn. F Apro, M. Statio M. F Rufo IIvir(is) iter(um) i(ure) d(icundo) labrum ex d(ecreto) d(ecurionum) ex p(ecunia) p(ublica) f(aciundum) c(urant). Vitruvius indicates the proper way to install a labrum in the baths (5.10.4). Ernout and Meillet (488) connect the labrum to the verb lavo, 'to wash.' In addition, later Latin authors seem to link the labrum etymologically to bathing: Mar. Victorin. Gramm. 6.9.20 (nos...non ut antiqui...pro lavabro potius labrum); Isid. Orig. 20.6.8 (labrum vocatum eo quod in eo labationem fieri solitum est infantium).

<sup>&</sup>lt;sup>192</sup> Daremberg-Saglio 3.2: 881-882 (s.v., Labrum, Labellum, E. Saglio); Letzner 1999, 97-98; Ambrogi 2005, 21-37; *New Pauly* 7: 137 (s.v., Labrum, R. Hurschmann).

<sup>&</sup>lt;sup>193</sup> Ambrogi 2005, 40. Saint Ambrogius also reports that Valentinian II (r. 375-392) was buried in a porphyry sarcophagus (*Ep.* 1.53), which adds an interesting dimension to the meaning of the word, although the use by this saint could mark a shift in the meaning of the term. For more, see Ambrogi (1995, 12).

Most important for our purposes, however, is the private use of the *labrum* in the Roman domestic sphere for collection, display, and overflow of water. From a variety of evidence, it is clear that *labra* could be not only ornate, but also functioned as small vessels to catch and pool water. Pliny the Younger, in describing his Tuscan villa, states that he has a *labrum* with overflowing water (*Ep.* 5.6.20). Archaeological evidence illustrates that *labra* were popular in atria, gardens, and peristyles, in which water could either be displayed, pooled (for drinking purposes or to attract birds), or simply collected.<sup>194</sup> For display, there are examples of piping in *labra*, allowing for columns of water to erupt at the center of the basin; and most examples have no drainage holes, which implies the overflow of the water.<sup>195</sup> Thus, *labra* would have been integral components of the Roman domestic space, allowing for not only the collection of water, but also its exhibition, whether through deliberate water-display (e.g., through a column of water) or natural overflow.

The *labrum* is a perfect example of a vessel used for water-display. The large circular form easily allowed for the collection of water in these containers, which meant that water could pool in the *labrum* for either pleasurable (*amoenitas*) or utilitarian (*utilitas*) purposes.<sup>196</sup> The *labrum*, given that it was found in different contexts, often took different locations in a space, such as a central position, bettering the surrounding area (e.g., at a public monument), or was inserted into another structure or joined a wall or other decorative scheme (e.g., in the context of the Roman house).<sup>197</sup> Further, the *labra* could be placed in a variety of spaces: as an isolated element; a complimentary

<sup>&</sup>lt;sup>194</sup> Ambrogi 2005, 42-53.
<sup>195</sup> Amrbogi 2005, 67-70; Richard 2012, 23-24.

<sup>&</sup>lt;sup>196</sup> Amrbogi 2005, 57-58. See Pliny Minor Ep. 2.17.25, for more on amoenitas and utilitas.

<sup>&</sup>lt;sup>197</sup> Amrbogi 2005, 67.

structure to other elements of the complex; a simple collection basin; or an ornamental basin (secondary to a primary basin).<sup>198</sup> The varied function of the *labrum* points to the multi-purpose nature of much of Roman material culture, with the *labrum* appearing in agricultural, religious, hygienic, public, and private contexts, often with different functions in each.

### ix. phiala

An uncommon term to describe a water structure, the *phiala* is believed to be of a similar form to the *labrum*, namely a flat circular basin.<sup>199</sup> Given its rarity in ancient literary sources connecting it to fountains, rather than drinking vessels, this term is, in all probability, not appropriate to use for water features.

### x. *puteus/puteal*

Traditionally, the term *puteus* indicates a well, from which water was drawn in the Roman house for various purposes, such as supplying fountains, as described by Vitruvius.<sup>200</sup> There is much archaeological evidence to prove that Roman houses were equipped with wells. To cover them, the wells would have been given a *puteal*, which was either a simple drain cover or was a cylindrical cap, the latter of which often had

<sup>&</sup>lt;sup>198</sup> Amrbogi 2005, 65.

<sup>&</sup>lt;sup>199</sup> Neuerburg 1965, 22; Hilgers 1969, 74; Letzner 1999, 101; Richard 2012, 23-24. It was Neuerburg who first proposed that a *phiala* was indeed a term for a water feature. One can imagine that the form of the vessel to be similar to the Greek  $\varphi(\alpha\lambda\eta (phiale))$  or the Roman *patera*, both forms used in libation and sacrifice. Isidorus, in fact, reports that the Latin *phiala* comes from the Greek word for glass, ὕαλος, as a majority of Roman *phialae* were made from glass (Isid. *Orig.* 20.5.1). For a brief discussion of Greek philai and relevant bibliography, see Smith (2009, 356-357). For more on the Roman drinking vessel form associated with *phiala*, see Hilgers cat. no. 288; for the *patera*, see cat. no. 282.

<sup>&</sup>lt;sup>200</sup> Vitr. De arch. 8.6.12. Sin autem fontes, unde ductiones aquarum, faciamus, necesse est puteos fodere.
"If we make, however, fountains, from the leading-away of water, it is necessary to install wells." (Trans. F. Granger) See also Ernout and Meillet (789) for a longer discussion on the etymological difference between the *puteus* and the *puteal*.

relief decoration.<sup>201</sup> It seems that for the most part, puteals were just well-covers, creating a water system in the home, with the cistern, fountain, and *impluvium* in the atrium and peristyle of the house.<sup>202</sup> While puteals are seen in the domestic sphere, they also appear in the public, such as with the *lacus Curtius* in the Forum Romanum (**App. No. 1.111**), as well as in sanctuaries and baths.<sup>203</sup>

# xi. solium

The *solium* is a large basin primarily used for cold water for a variety of purposes, including bathing and agriculture, and constructed of a number of materials (e.g., marble, gold, porphyry, or terracotta).<sup>204</sup> The most notable literary usage of the term *solium* comes from the *Historia Augusta*, in which the writer describes the Nymphaeum Alexandri on the Esquiline Hill of Rome as the *Oceani Solium*, or the *solium* of Oceanus (*Alex. Sev.* 25.3). The archaeological remains of the structure also included a reclining figure of Oceanus, which has prompted some scholars to discuss the term more fully, whether it was in fact dedicated to Oceanus or not.<sup>205</sup> Given that all later sources refer to this water-feature as the Nymphaeum Alexandri, the term *solium* seems to be unique to the *Historia Augusta*.

<sup>&</sup>lt;sup>201</sup> Golda 1997; Letzner 1999, 93; Wilson 2008, 286; Schmölder-Veit 2009, 16; *New Pauly* 12. 234 (s.v., Puteal, C. Höcker). Golda's 1997 monograph is an important contribution to our understanding of the functional, decorative, and archaeological aspects of the puteal.

<sup>&</sup>lt;sup>202</sup> Golda 1997, 33. There is limited evidence that puteal-like objects, perhaps more cylindrical vases, could receive water from piping, which would then allow for overflow to spill into the gutter of the area. There are a few examples from Pompeii of this phenomenon, such as in the Casa del Torello's peristyle (5.1.7/9) (Andersson 1990, 218-219).

<sup>&</sup>lt;sup>203</sup> Golda 1997, 26; Letzner 1999, 76.

<sup>&</sup>lt;sup>204</sup> Ambrogi 1995, 11; Ambrogi 2005, 18. The large shape of the *solium* could also apparently be used as a sarcophagus, as a secondary use of the vessel.

<sup>&</sup>lt;sup>205</sup> Settis 1973, 718; Aicher 1993, 348-350; Ghiotto 1999, 81-82; Letzner 1999, cat. no. 337.

# **III.** Conclusions

The preceding discussion has defined the ancient Greek and Latin terms known for being associated with the display of water. Because of the inherent ambiguity of the meaning and usage of the terms in their physical environment, they have been placed into two different categories of usage: primary and secondary. The primary terms, *fons*, hydreion, hydrekdocheion, lacus, Meta Sudans, munus, nymphaeum, saliens, septizodium/septizonium, and silanus, not only contained water in some sort of accompanying basin, but they were also concerned with the display of water through actual movement (often into these basins). For the most part, these features are essential simply to show water. All of the examples these primary-function terms are known to apply to public fountains, illustrating how water was accessible and flowing in often large-scale features during the High Empire. Finally, some of the terms' meanings shift over time (e.g., hydreion changing from strictly a reservoir to a reservoir that acts as a large, decorated fountain), which makes sense, given language's ability to adapt, and the increased number of public, decorative fountains over time. It also has the potential to suggest that the Romans themselves did not have a clear and concrete conception of these structures—and that their terminology was indeed fluid.

The secondary structures (*alveus*, *cantharus*, *castellum* [*aquae/divisorium*], *cisterna*, *concha*, *crater*, *euripus*, *labrum*, *phiala*, *puteus*, and *solium*) are generally containers for water, with very limited water-display capabilities. Because most of the secondary examples have ambiguous uses, especially stemming from the fact that they were often first utilitarian in function and could vary in their function from context to context, it is still hard to pinpoint the exact meaning of the terms. A number of the terms in the second category are primarily found in domestic settings (e.g., *alveus*, *cantharus*, *cisterna*, *concha*, *crater*, *labrum*, *phiala*), perhaps demonstrating that while water was displayed in the home, it did not necessitate a large show, like in the public realm. What is clear about the secondary structures is that water could flow into and collect in them, still an important aspect of water-display.

The difficulty has been shown then of assigning ancient terms to the archaeological evidence. Ambiguity in antiquity of course does not aid the modern scholar attempting to understand what exactly a Roman would have called the waterdisplays that they encountered in a variety of public contexts. A majority of the examples that are explored in this dissertation belong to the first category of fountains, given their public nature and oftentimes large-scale nature. A handful of the terms in the second category (e.g., *euripus, labrum*, and *puteal*) make appearances, but only in a few instances throughout the Empire. While the primary terms are more widespread, it is still crucial to only describe the structures as 'water-displays' or 'fountains,' unless there is epigraphic or literary evidence to confirm the use of one of these ancient terms.

#### **Chapter 2: Ancient Perceptions of Water in the Roman World**

The Roman fascination with water was manifested in a variety of ways, from the large structures that they built that are evident in the archaeological record, to the perceptions that they captured in their literature. Drawing on both poetry and prose sources primarily from the first century CE, we can begin to reconstruct Roman attitudes and thoughts about water. More empirically minded authors, such as Pliny the Elder and Seneca the Younger, show us the inherent properties of water, based on scientific observations. Other authors illustrate the awesome qualities of water in a personified state, as Statius does, when he describes water rushing through the pipes of his villa as nymphs. By examining the literary evidence of ancient perceptions of water, we are able to understand better how Romans *interacted* with and *reacted* to water in natural and artificial settings.

*Letter* 86 of Seneca the Younger (4-65 CE) presents a unique glimpse at the use of water in the ancient baths of Scipio Africanus and baths contemporaneous with Seneca. The letter, like the others in the *Epistulae Morales*, is addressed to a Lucilius, to whom Seneca presents different anecdotes and thoughts. In this letter Seneca discusses the villa of Scipio Africanus (236-183 BCE) at Liternum, near Cumae.<sup>1</sup> Its middle section, describing the villa and its bathhouse (86.4-13) provides a number of important observations on water.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> For more on this letter, see: Maiuri 1957, 92-98; Holtsmark 1973; Fagan 1999, 52; Ker 2002, 165-73, 177-203; Gowing 2005, 80-81; Henderson 2005; Ker 2009, 347-58; Yegül 2010, 23-24; and Setaioli 2014. Seneca is no stranger to discussing baths, especially in a moralizing context. See the following letters: 56; 58; 83.5; 108.16; 123.4. For more on Seneca, see Griffin (2000, 555-558) and Damschen and Heil (2014), the latter of which includes a good overview of Seneca's life and career (Habinek 2014).

 $<sup>^{2}</sup>$  The letter has three sections: Scipio's exile from Rome (86.1-3); a description of the villa and its bathhouse (86.4-13); and information on the villa's current owner, Aegialus (86.14-21). We could also
Scipio's villa is described like a fortress, constructed of ashlar masonry, with walls, towers, an enclosed cistern, and a small bath (86.4). Seneca portrays the villa in terms of "austere and rustic physicality," which sets him up to juxtapose the Romans of Seneca's own day.<sup>3</sup> The bath complex of Scipio is described as having only small holes for windows (86.8), cold water that was heated by the body heat of the bathers (86.10), and unfiltered water (86.11). The bathhouse was a place where Scipio would wash the sweat off his arms and legs, dirty from work in the fields, while only taking a full bath once a week (86.11-2). In fact, Seneca imagines that the men of Scipio's day must have literally smelled like the military camp, agricultural work, and manliness (*militiam, laborem, virum*, 86.12). It has been argued that this letter seeks to portray Scipio as a model of *pietas*, mainly through moderation and a sense of duty, along with the *mores* stemming from the veneration and the representation of ancestors, all of which accord with Seneca's stoic philosophy.<sup>4</sup>

To depict how greatly the times have changed since the Republic, Seneca goes on to describe the audacious bathing complexes of his own time, in stark contrast to Scipio's bath. In his description, he lists many of the features now found in baths:

> Pauper sibi videtur ac sordidus nisi parietes magnis et pretiosis orbibus refulserunt, nisi Alexandrina marmora Numidicis crustis distincta sunt, nisi illis undique operosa et in picturae modum variata circumlitio praetexitur, nisi vitro absconditur camera, nisi Thasius lapis, quondam rarum in aliquo spectaculum templo, piscinas nostras circumdedit, in quas multa sudatione corpora exsaniata demittimus, nisi aquam argentea epitonia fuderunt. Et adhuc plebeias fistulas loquor: quid cum ad balnea libertinorum pervenero? Quantum statuarum, quantum columnarum est nihil sustinentium sed in ornamentum positarum impensae causa!

expand our discussion further here to descriptions of other baths, including the baths in the villa letters of Pliny (*Ep.* 2.17 and 5.6), the villa poems of Statius (*Silv.* 1.3 and 2.2), the Bath of Claudius Etruscus (Stat. *Silv.* 1.5; Mart. 6.42). See Holtsmark (1973) for more about the context of these descriptions of baths. <sup>3</sup> Ker 2002, 165.

<sup>&</sup>lt;sup>4</sup> Ker 2002, 166; Ker 2009, 348.

quantum aquarum per gradus cum fragore labentium! Eo deliciarum pervenimus ut nisi gemmas calcare nolimus. (Ep. 86.6-7)

But who in these days could bear to bathe in such a fashion [as Scipio]? We think ourselves poor and mean if our walls are not resplendent with large and costly mirrors; if our marbles from Alexandria are not set off by mosaics of Numidian stone, if their borders are not faced over on all sides with difficult patterns, arranged in many colors like paintings; if our vaulted ceilings are not buried in glass; if our swimming-pools are not lined with Thasian marble, once a rare and wonderful sight in any temple—pools into which we let down our bodies after they have been drained weak by abundant perspiration; and finally, if the water has not poured from silver spigots. I have so far been speaking of the ordinary bathing-establishments; what shall I say when I come to those of the freedmen? What a vast number of statues, of columns that support nothing, but are built for decoration, merely in order to spend money! And what masses of water that fall crashing from level to level! We have become so luxurious that we will have nothing but precious stones to walk upon. (Trans. R.M. Gummere)

What marks this account is the overwhelming sense of opulence in the materials and amenities that are now expected in bath complexes. There are a great number of lavish features, especially in terms of decorative elements.<sup>5</sup> Towards the end, in discussing the baths of freedmen, Seneca mentions the crashing of the water, which apparently pours forth generously.<sup>6</sup>

The role of water in the baths is important. Not only does water supply the baths for hygienic purposes (as that is one of the main purposes of baths), but water also clearly performs decorative and sensorial functions. Presumably, the water pours out of a waterdisplay on one of the walls of the baths in some sort of façade feature, adding to the aesthetic nature of the ornament, combined with the columns, statues, and opulent marbles. Further, the sensorial nature of the water must have been overwhelming, as one

<sup>&</sup>lt;sup>5</sup> Interestingly enough, Seneca also mentions in another letter that materials first associated with temples were then transferred to baths and private homes (*Ep.* 90.25).

<sup>&</sup>lt;sup>6</sup> Fagan (1999, 126) briefly mentions freedmen in connection to private baths.

could not only touch the water, but also hear the loud din crashing into its basin. Indeed, Seneca mentions in various other letters the soothing sound of water. In *Letter* 56, as he rails against the plethora of noises that emanate from the bath complex he lives above, he mentions that he cannot concentrate when he hears people speaking, but only when he hears noise that has no human words, such as the crash of water (Ep. 56.4). In another letter, Seneca compares the sound from the circus to the crashing of waves, presumably because they create a din of noise (Ep. 87.7). Thus, we must consider the importance of the sensorial nature of water in all of its various facets: aural, tactile, visual, olfactory, and taste.

In *Letter* 86, Seneca also stresses the change in behavior of Romans in terms of bathing. Through the increase of amenities, in particular, Seneca demonstrates the role of novelty. Over the course of the centuries since Scipio, Romans started bathing in much hotter water, with a marked increase in water temperature in the baths. In comparing how men of old would bath in cold water, by the time of Seneca, there seems to be no difference between 'the bath is on fire' and 'the bath is warm,' as all baths have heated waters (*Ep.* 86.10).<sup>7</sup> Apparently, men of old like Scipio would warm the water with their own body heat. Further, the Romans of Seneca's day admired filtered water, unlike the 'muddy' water that would have flowed through the bath of Scipio (*Ep.* 86.11). Romans by the time of Seneca also increased the frequency of their bathing, from once a week to

<sup>&</sup>lt;sup>7</sup> This is not the only occasion that Seneca discusses the temperature of the water of the baths. In *Letter* 83, Seneca describes how he used to only take cold baths, but now enjoys the warmth of the baths (*Ep.* 83.5). Seneca does mention that Romans instituted changes in water temperature (and cleaning of the baths) for hygienic purposes, under the aediles. See Lucore and Trümper (2013) for more on this transitional period, especially in terms of coeval Greek baths throughout the Mediterranean. On the development of Roman baths in the Republic, see Yegül (2013).

practically daily in these new bathing establishments (Ep. 86.11).<sup>8</sup> Seneca, moreover, stresses how bathers in his time anoint themselves with perfumes, in stark contrast to Scipio, who only went to the bath in order to wash off the sweat from his body (Ep. 86.11, 13).

The windows of baths offer another point of innovation. Seneca reports that Scipio only had small holes in the walls of his baths, given the fortress-like nature of his villa (Ep. 86.8). The baths in Seneca's time, however, include windows large enough to allow ample light to enter, affording the bathers the ability to tan. In fact, he also mentions how some baths provide windows that look out to stretches of land and sea (ex*solio agros ac maria prospicunt*). Of course, the desire for vistas was common in Roman culture. Pliny the Younger, for example, reports that his Laurentine villa has impressive views to the sea (Ep. 2.17.12).<sup>9</sup> Such a combination of a constructed edifice harnessing nature (by exploiting natural vistas) is a hallmark of the Romans. Such a dichotomy between the built and natural is a recurrent theme in water-display, as the Romans attempt to control a natural force and display it in artificial ways.

Finally, there are a number of unique features in these new and luxurious baths that Seneca describes. In terms of novelty, Seneca reports that when a bathing establishment opens, it draws crowds until a newer bath opens up, meaning the original bath is now an antique (*Ep.* 86.8). He claims that what draws the bathers to the new complexes is the *novi luxuria*, "the luxury of the new," that are constantly being developed to lure bathers away from older bathhouses. Although Seneca does not specify

<sup>&</sup>lt;sup>8</sup> Seneca, in this passage, depicts Scipio as only washing his arms and legs, which become dirty from working in the fields every day, without taking a full bath (Ep. 86.12). On bathing frequency, see Yegül (2010, 11-12).

<sup>&</sup>lt;sup>9</sup> For more on this villa, see Förtsch (1993) and Rogers (2013, 154-155), along with Zarmakoupi (2014, 203-211) for examples of villas with views to the sea in the Bay of Naples.

exactly what this *luxuria* is, it is important that they are part of these bath complexes.<sup>10</sup> Further, Seneca makes the point that baths were originally intended only for utilitarian purposes (i.e., solely bathing), while they later developed into loci of delight, full of decorative displays, amusing the bathers (*Ep.* 86.9). To demonstrate this point, Seneca states that bathers of Scipio's era did not need water poured over them or that the water had to be from a hot spring. Thus, one of the novelties associated with these new baths is water movement, which is tied to water-display, all of which would have evidently have pleased bathers. These points exemplify another dichotomy: utility versus delight.

The ancient literary sources also present water throughout the physical Roman landscape, outside of man-made bathing establishments. It is the study of 'landscape' that allows for an inquiry into the water in its natural environment. Predicated on experience and perception, 'landscape' challenges our understanding of how humans interact with space, moving past 'environment' and 'space,' highlighting "cultural context and emphasiz[ing] the relationship between humankind, nature, and the inhabited world."<sup>11</sup> Ancient sources depict this relationship effectively in terms of the perception of water.

In the natural landscape there are many types and sources of water. Of fresh waters, there were rivers and streams, bodies of water that literally carve themselves through the natural landscape. The terms *flumen* or *amnis* indicate substantial rivers, which would have allowed for water travel and thus allowed the movement of people and

<sup>&</sup>lt;sup>10</sup> Seneca himself takes pleasure in reporting of the luxury and vice associated with the town of Baia, known in antiquity for its baths. See *Letters* 51 and 56.

<sup>&</sup>lt;sup>11</sup> Spencer 2010, 1. Spencer's monograph explores Roman landscapes, applying landscape studies to literary and archaeological evidence. See also Leach (1988), who explores issues of landscape in literary texts. Rogers (2008) explores how the term 'landscape' might be inappropriate when discussing the past, especially in the context of Roman religious spaces.

goods.<sup>12</sup> Next to rivers in waterscapes are streams, indicated in the Latin by *fluvius*, *rivus*, *unda*, and *vadum*. The streams, smaller bodies of water than the rivers, seem to offer a more gentle way in which plants on their banks can take in water.<sup>13</sup> The streams' importance in literature (and life) stems from the fact that they provide the necessary life-giving nutrients to make the banks green, a verdant symbol of its restorative properties.<sup>14</sup> Natural springs, prized by the Greeks and Romans for their clean, pure drinking water, could be indicated by the word *fons*, which is also the term used for fountains.<sup>15</sup> Although not the main focus of this chapter, bodies of salt water were indicated by *mare*,

pelagus, and pontus.<sup>16</sup>

With these issues already in mind, we can explore a wide variety of perceptions of

water, including water in the (literary) landscape, the properties of water discussed by

ancient authors, water usage in an artificial setting, and the sensorial pleasures of water.

Despite the differences in literary genres, by using both prose (e.g., Vitruvius, Columella,

Pliny the Elder and Younger, Seneca, and Frontinus) and poetry (e.g., Horace, Ovid,

Vergil, and Statius), we can begin to reconstruct the ancient Roman interaction and

<sup>&</sup>lt;sup>12</sup> Campbell 2012, 35. For *flumen*, see Verg. *G*. 4.288, discussing the Nile River. For *amnis*, see Columella *Rust*. 10.23-28, who mentions that the cultivated plots of land on one's estate must be close to a running source of water. See also Jones (2005), who presents a study of rivers in Latin literature, while Campbell (2012) provides in-depth investigation of all aspects of Roman rivers. For more on the power of rivers in the Roman psyche, see Holland (1961, 8-21).

<sup>&</sup>lt;sup>13</sup> For example, Vergil's endive "rejoices in the streams (*rivis*) it drinks" (*quoque modo potis gauderent intiba rivis* (*G.* 4.120, Trans. Fairclough). Columella reports that the white cucumber in the cultivated space of Book 10 creeps towards the running water of the stream (*ad undam*) (*Rust.* 10.394-395).

<sup>&</sup>lt;sup>14</sup> Horace mentions that when streams overflow because of heavy rains, there is work to do for the farmer, because the banks are now nutrient-rich, allowing for the cultivation of plants. (*Epist.* 1.14.29). Banks of rivers or streams can be indicated by *ripa*; flooding by rivers and streams is shown by *inundatio* and *alluvio* (which can add soil to a landscape), while the opposite, namely erosion by a river, is seen by the *abluvio*. For more on these terms, see Campbell (2012, 34-35).

<sup>&</sup>lt;sup>15</sup> Altman 2002, 92-93.

<sup>&</sup>lt;sup>16</sup> While a full exploration of the Roman perception of the sea is beyond the scope of this chapter, there are some relevant resources one can consult with regards to the power of the sea for the Romans. The edited volume of Hohlfelder (2008) presents a number of essays regarding Rome and its role in the Mediterranean, including issues surrounding ships, maritime commerce, and harbors. On Roman hydraulic concrete, see Brandon et al. (2014), which includes a section on literary sources on Roman concrete technology in marine environments.

*reaction* to water in a variety of contexts.<sup>17</sup> These perceptions of water provide a foundation to conceptualize the shared experience of water, allowing us to understand the meaning behind Roman water-displays.

## I. Properties of Water

The Romans were not unique in recognizing the supreme importance of water for survival. Stemming from a long tradition of observing and recognizing the properties and qualities of water, such as that of the Greek Presocratics, the Romans knew much about water and were able to tap into its resources in a variety of ways to the benefit of their general population.<sup>18</sup> In addition to recognizing the necessity of water, the Romans classified waters based on their inherent qualities that aided survival, which often stemmed from understanding what made 'good' and 'bad' waters. 'Good' water was in constant motion, had a good taste, and was healthy, while 'bad' water was usually conceived of as the opposite. Water was also transformative, whether it was a product of its own environment, or it was able to transform those who drink it.

Before exploring the qualities of water, it is useful to survey the comments of four Roman authors on water: Vitruvius, Seneca the Younger, Pliny the Elder, and Frontinus. Their thoughts about water represent the communality of Roman attitudes towards water.

<sup>&</sup>lt;sup>17</sup> There are certainly differences in the connotations of water with the differences in literary genre. Water could be used as an inspiration for all those who encountered it. Vitruvius informs us that the powers of water are understood by doctors, philosophers, poets, and priests, in that everything is made from water (*De arch.* 8.*praef.*4.). See Robinson's comments about the power of water (2013a), especially the intellectual power that water can have on these figures. In poetry, wine was also inspirational. For example, there was the notion that water and wine were connected, due to their ability to inspire the poet (Knox 1985, 107). See also Jones (2005, 57).

<sup>&</sup>lt;sup>18</sup> For more on the Presocratics and their thoughts on water, first see Vitruvius (*De arch.* 8.*praef.*1) and Seneca (*QNat.* 3.22). See also the most recent edited volumes of Curd and Graham (2008) and McCoy (2013).

These authors show the extent to which the Romans knew the properties and qualities of waters, which enabled them to harness the utilitarian and restorative properties of water.

Vitruvius (ca. 80-70 – after ca. 15 BCE) is widely known for his treatise on architecture (*De architectura*), probably written between 30-20 BCE. The ten books of the work explore a variety of topics that would have been crucial for the Roman architect or engineer to understand, including the layout of cities (Book 1), building materials (Book 2), temples (Books 3 and 4), public buildings (Book 5), private buildings (Book 6), decorative details of structures (Book 7), water (Book 8), sundials and clocks (Book 9), and machines (Book 10).<sup>19</sup> It is, of course, Book 8, on water, which interests us here the most. Within the book, Vitruvius discusses the four elements (preface), finding water (chapter 1), rainwater (chapter 2), the nature of different waters (chapter 3), testing water (chapter 4), methods for leveling earth for water infrastructures (chapter 5), and aqueducts and piping (chapter 6). Chapter 3's discussion of waters presents hot waters (1-5), poisonous waters (15-18), intoxicating waters (20), and springs that can harm (21-23). By demonstrating the properties of these different waters, Vitruvius ensures that subsequent architects and engineers know which types of waters are the best to tap to provide healthy water to future customers.

Seneca the Younger composed one of the first Roman treatises on scientific matters, the *Naturales quaestiones*, in the early 60s CE. The seven books of the work deal with a variety of issues related to meteorology, including celestial phenomena (e.g.,

<sup>&</sup>lt;sup>19</sup> For a succinct introduction to Vitruvius and his treatise, see Rowland and Howe (1999, 1-18). See also Wilson Jones (2000) and Rowland (2014), the latter of which presents a brief introduction to the *Nachleben* of Vitruvius and his influence on subsequent architecture. Plommer (1973) discusses subsequent texts concerning building constructions, particularly those of the fourth century CE Faventius and the later Palladius. For more on the technological aspects of Book 8 of Vitruvius, see Callebat (1973), Prager (1978), Hodge (1981), Fahlbusch (1987), Lewis (1999), Kessener (2002), and Peleg (2002). For more on the notion of the Roman 'architect,' see Anderson (2014), who discusses all known Roman architects.

meteors, comets, thunder, lightning), terrestrial waters, precipitation, winds, earthquakes, and the sources of the Nile.<sup>20</sup> Seneca, a Stoic, presents in the *Natural Questions* an indepth physical description of the various meteorological phenomena, in order to understand the nature of the benevolent, caring god, who sends signs through phenomena.<sup>21</sup> Book 3 discusses terrestrial waters, including how water impacts health (3.2.1-2), movement of water and its relation to topography (3.3.1), rivers (3.4-19), varieties of water (3.20), deadly waters (3.21) and deadly waters without bad tastes or

smells (3.25), stoicism and eternal waters (3.22), and hot waters (3.24).<sup>22</sup>

In Seneca's discussion of the nature of water, there is a passage of particular

importance for our understanding of the aspects of water popular in Roman thought:

Aut stant omnes aquae aut eunt aut colliguntur aut uarias habent uenas. Aliae dulces sunt, aliae uarie asperae; quippe interueniunt salsae amaraeque aut medicatae, ex quibus sulphuratas dicimus, ferratas, aluminosas: indicat uim sapor. Habent praeterea multa discrimina, primum tactus: frigidae calidaeque sunt; deinde ponderis: leues et graues sunt; deinde coloris: purae sunt, turbidae, caeruleae, luridae, deinde salubritatis: sunt enim utiles, sunt mortiferae, sunt quae cogantur in lapidem, quaedam tenues, quaedam pingues; quaedam alunt, quaedam sine ulla bibentis ope transeunt, quaedam haustae fecunditatem afferunt. (Sen. *QNat.* 3.2.1-2)

All waters are still, or running, or collected, or occupy various subterranean channels. Some are sweet, others have flavors that are disagreeable in different ways; among them are the salty, the bitter, and the medicinal. In the last category I mean sulphur, iron, and alum waters. The taste indicates the properties. They have many other distinctive qualities in addition. First, there is touch: they are hot or cold. Then weight: they are light or heavy. Then color: they are clear, muddy, blue, yellowish. Then their effect on health: for some are wholesome, others are deadly. There are certain waters which thicken into rock, others are thin or fat. Some give nourishment, some pass through without any benefit to the

<sup>&</sup>lt;sup>20</sup> For more on the *Natural Questions*, see: Gross (1989), Gauly (2004), Hine (2010), Beretta et al. (2012), Williams (2012; 2014), and Vogt (2013). Hine (2010) and Williams (2012; 2014) have reorganized the order of the books, placing Book 3, on terrestrial waters, at the beginning of the sequence. <sup>21</sup> Graver (2007) and Vogt (2013).

<sup>&</sup>lt;sup>22</sup> For more on Book 3, see Gross (1989, 103-147), Gauly (2004, 96-104), and Berno (2012).

drinker; and some waters, when drunk stimulate fecundity. (Trans. T.H. Corcoran)

Seneca presents the various states of water (i.e., still, in motion, collected, or subterranean). Next, Seneca discusses the sensorial elements of water, related to taste, touch, and sight. Waters have different tastes, which can indicate their inherent properties. First are the sweet waters, then waters that are not pleasant, which are characterized by bad flavors (namely salty, bitter, and medicinal). Seneca here alludes to the fact that the taste of water can be altered by passing through other elements, such as sulphur, iron, and aluminum.<sup>23</sup> Then, water can be tactile, either being hot or cold, and can feel light or heavy, presumably based on its chemical composition. The discussion of the visual appearance of water includes 'clear' water at the beginning of the list (before muddy, blue and yellowish), probably as it was considered by the Romans to be the best and most pure form of water. Finally, Seneca discusses how water can give life or brings death, based on its composition. Thus, water has the ability to nourish humans, but it also has the ability to transform and alter them, sometimes in a negative direction. This succinct passage gives insight into the Roman psyche regarding water and its inherent qualities, which drove their understanding of the element and how they interacted with it in their daily lives.

Pliny the Elder (23-79 CE), in Book 31 of his *Natural History*, explores natural phenomena, in a similar vein to Seneca.<sup>24</sup> Pliny describes a great deal about water: medicinal properties of water (31.1), waters and their qualities (31.2), classes of water, including healing and curative (31.3-17), marvels associated with water (31.18), deadly

<sup>&</sup>lt;sup>23</sup> For more on the taste of water and its transformation of other elements, see Sen. *QNat.* 3.20.1-2.

<sup>&</sup>lt;sup>24</sup> The bibliography on Pliny the Elder is immense, but Healy (1999) offers an important discussion on science in the *Natural History*, Carey (2003) explores issues related to art in the work, and Gibson and Morello (2011) offers a wide array of essays on Pliny.

waters (31.19), beneficial waters (31.21), water finding techniques (31.26-28), varieties of water (31.29), phenomena of waters (31.30), water pipes (31.31), hot and medicinal springs (31.32), medicinal uses of sea water (31.33-37), salt (31.39-45), soda (31.46), and sponges (31.47).

Finally, the commentary, *De aquaeductu urbis Romae*, of the year 98 CE by Frontinus (ca. 40-103 CE) provides important insight into the construction and management of the city of Rome's water infrastructure.<sup>25</sup> While much of the work is technical or legal (e.g., distribution capacity of aqueducts or the legal rights of water servitude), Frontinus provides glimpses into the nature of water, in his descriptions of certain aqueducts.<sup>26</sup> The water of the Aqua Marcia is known for having a greenish color (7.1).<sup>27</sup> The Aqua Alsietina/Augusta was known for having no redeeming or consumable qualities for humans, so it was delivered to the Transtiberium solely for use in Augustus' Naumachia (11.1).<sup>28</sup> The Anio Novus has water that can sometimes turn a muddy color, because the banks of the river are loose (15.1-2).<sup>29</sup>

A brief survey of four major sources on water in the Roman world share a number of points. The importance of the classification of water is present throughout. Seneca divides water not only into celestial or terrestrial (*QNat.* 3.23), but also by the properties

<sup>&</sup>lt;sup>25</sup> For more on Frontinus in general, see: Evans (1997); Bruun (2003); Peachin (2004). On the literary nature of *De aqaeductu*, see DeLaine (1996) and Saastamoinen (2003). The most recent editions of Frontinus are Del Chicca (2004, in Italian) and Rodgers (2004), whose introduction (1-20) offers a succinct understanding of the author and work.

<sup>&</sup>lt;sup>26</sup> For more on legal issues associated with water rights, see Bruun (1991; 2000), Taylor (2000), de Kleijn (2001, 92-146), Lloris (2006), Kehoe (2008), and Bannon (2009; 2013).

 $<sup>^{27}</sup>$  Frontinus curiously does not include any discussion of the pleasant drinking nature or coolness of the waters of the Aqua Marcia, as Vitruvius does (*De arch.* 8.3.1) or Pliny (*HN* 31.24).

<sup>&</sup>lt;sup>28</sup> See also *Res Gestae* (22.4). See also Taylor (2000, 169-200), who describes of the aqueduct, along with the location of the Naumachia of Augustus, along with Tortorici (2012, 26-28).

<sup>&</sup>lt;sup>29</sup> Ideoque a faucibus ductus interposita est piscina limaria, ubi inter amnem et specum consisteret et liquaretur aqua. Sic quoque quotiens imbres superveniunt, turbida pervenit in urbem. "The banks are thus rather loose, and so this water runs muddy and turbid even without the adverse effect of rainstorms. For this reason a settling-tank was put in at the intake, where the water might settle and clarify itself between the river and the aqueduct channel." (Trans. R.H. Rodgers)

that can then give water their own specific tastes, medicinal properties, odors, and temperatures (*QNat.* 3.20.2). And just as there are a number of different liquids in nature, so too can there be a variety of waters to classify (Vitr. *De arch.* 8.3.26).

Furthermore, other literary texts mention that beneficial waters must be moving.<sup>30</sup> Pliny the Elder reports that physicians know that running water is better for those who drink it, due to the agitation of the currents in the water, than stagnant waters (*stagnantes*).<sup>31</sup> Because the water's impurities are removed through its motion, it can be used without concern for one's health. In fact, the importance of moving water extends beyond even just drinking water. Those waters used in purifying rituals in Roman religious practice must be moving.<sup>32</sup> Thus, in various aspects of Roman life, the importance of moving water, over stagnant, was stressed.

There is also the transformative nature of water, whether the quality of water itself is changed, or that the waters alter those who imbibe them.<sup>33</sup> Just as wine can take on the properties of the environment in which its grapes are cultivated, so, too, can water take on

<sup>&</sup>lt;sup>30</sup> Verg. G 4.25; Ov. Fast. 5.210; Stat. Silv. 1.3.17-18; Hor. Epod. 1.14.29

<sup>&</sup>lt;sup>31</sup> Plin. HN 31.21. Quaeritur inter medicos cuius generis aquae sint utilissimae. Stagnantes pigrasque merito damnant, utiliores quae profluunt existimantes, cursu enim percussuque ipso extenuari atque proficere. "It is a question debated by the physicians what kinds of water are most beneficial. They rightly condemn stagnant and sluggish waters, holding that running water is more beneficial, as it is made finer and more healthy by the mere agitation of the current." (Trans. W.H.S. Jones)

<sup>&</sup>lt;sup>32</sup> Liv. 1.45.6-7; Ov. *Fast.* 4.778; Ov. *Met.* 3.27; Columella *Rust.* 12.4.3; Tac. *Hist.* 4.53; Valerius Flaccus 4.420-423; Sil. 8.125; Festus 152.11-13 L. On the necessity for moving water for religious use, see *ThesCRA* 2.3a.IV.A (s.v., Purificazione, Romana, Mezzi impiegati nelle purificazioni, liquidi e unguenti; V. Saladino).

<sup>&</sup>lt;sup>33</sup> There are a myriad of transformative properties associated with water. In the mid-late second-century BCE inscription (the so-called Salmakis Inscription) from Halicarnassus, the nymph Salmakis "beneath the holy waters in the cave that she pours forth makes gentle the savage minds of men" (αὐτή τε σταγόνων ἰεροῖς ὑπὸ νάμασιν ἄντρου | πρηύνει φώτων ἀγριόεντα νόον) (lines 21-22; Trans. Lloyd-Jones). For this inscription (*SEG* 48.1330), see the *editio princeps* in Isager (1998), followed up by Lloyd-Jones (1999). The edited volume (Isager and Pedersen 2004) explores the inscription and its physical context in-depth, including the fountains associated with Salmakis. In other versions of the myth, such as in Ovid (*Met.* 4.285-388), the waters have an effeminizing effect. On these effeminizing waters, see Sourvinou-Inwood (2004, 70). Water has the ability to physically transform humans, as in the *Metamorphoses* of Ovid. Because it is not the goal of this study to explore these instances, see: Segal (1969) and Myers (1994), among a wide array of Ovidian scholarship. See Andersson (1991) for an examination of how fountains can physically show metamorphoses that are generally only seen in literature.

the quality of the soils that it passes through (Vitr. De arch. 8.3.4, 8.3.12). Seneca

explores the ways in which the taste of water can be affected by its environment:

At quare aquis sapor uarius? Propter quattuor causas: ex solo prima est, per quod fertur; secunda ex eodem, si mutatione eius nascitur; tertia ex spiritu, qui in aquam transfiguratus est; quarta ex uitio, quod saepe concipiunt corruptae per iniuriam. Hae causae saporem dant aquis uarium, hae medicatam potentiam, hae grauera spiritum odoremque pestiferum, hae leuitatem grauitatemque, <hae> aut calorem aut nimium rigorem. Interest utrum loca sulphure an nitro an bitumine plena transierint; hac ratione corruptae cum uitae periculo bibuntur. (Sen. QNat. 3.20.1-2)

But why the variety of taste in water? There are four causes. The first is from the soil through which the water is carried; the second also depends on the soil if the water is produced by a transmutation of earth into water; the third comes from the air which was transformed into water; the fourth from a pollution which water often receives when it has been corrupted by harmful substances. These causes give water its different taste, its medicinal power, its disagreeable exhalation and pestilential odor, as well as its unwholesomeness, heat or excessive cold. It makes a difference whether it passes through places full of sulphur, nitre, or bitumen. When water is polluted this way it is a risk of life to drink it. (Trans. T.H. Corcoran)

Seneca cites a variety of ways water is malleable, including interactions with earth and air, which might stem back to the canonical four elements. With the contact of different elements come changes in the water itself, such as in taste, odor, and wholesomeness. It is when water is affected in terms of its healthy quality that it has the power to transform those who drink it. The ancient sources report that water can adversely affect people in variety of ways, such as being deadly or poisonous, intoxicating, causing forgetfulness, making men dull, and causing tooth loss.<sup>34</sup> Thus, one must be aware of where one's water is coming from, in order to choose the healthiest and best tasting water.

<sup>&</sup>lt;sup>34</sup> For deadly waters, see: Vitr. *De arch.* 8.3.21-23; Sen. *QNat.* 3.2.1-2, 3.21, 3.25; Plin. *HN* 31.19. Poisonous waters can be found in Vitruvius (*De arch.* 8.3.15-20), with intoxicating waters in the same section (8.3.20). Forgetfulness is induced by a spring the river Hercynnus in Boeotia, while the other spring causes remembrance (Plin. *HN* 31.11). Men becoming dull from water in Vitruvius (*De arch.* 8.22) and

Roman authors also all stress the necessity of water. On a superficial level, Pliny the Younger mentions that water is necessary for the upkeep of a villa, aiding the various aspects of life there (*Ep.* 2.17.25). Of course, water is crucial not only for drinking, but also for a variety of other utilitarian uses, as Vitruvius reminds us (*De arch.* 8.*praef.* 3). Water is used for raising animals and various foodstuffs.<sup>35</sup> Columella tells his reader to water plants thoroughly, lest they die.<sup>36</sup> Thus, the harnessing of water by the Romans is the catalyst for the survival and flourishing of all forms of life, not only of humans, but also of flora and fauna necessary for man's survival.

## **II.** Artificial and Natural Water Use

Roman villa culture utilized water for a variety of purposes. The actual agricultural activities of the villa (*pars rustica*), including the cultivation of crops and livestock raising, would have called for great amounts of water. In the luxurious part of the villa (*pars urbana*), water would have been employed for the pleasure of the villa owner and his guests, such as in baths, in dining areas, or in gardens. In the context of the *pars urbana*, the use of water could be innovative. The villa letters of Pliny the Younger (*Ep.* 2.17 and 5.6) and the villa poems of Statius (*Silvae* 1.3 and 2.2) present a dichotomy

Plin. (*HN* 31.12). For tooth loss, see Vitruvius (*De arch.* 8.3.23). Pliny, however, reminds us that there are plenty of healing qualities from a variety of waters (*HN* 31.3-12).

<sup>&</sup>lt;sup>35</sup> Vitr. De arch. 8.3.28. sine aqua vero nec corpus animalium nec ulla cibi virtus potest nasci nec tueri nec parari. Quare magna diligentia industriaque quaerendi sunt et eligendi fontes ad humanae vitae salubritatem. "But without water, neither the animal frame nor any virtue of food can originate, be maintained, or provided. Hence great diligence and industry must be used in seeking and choosing springs to serve the health of man." (Trans. F. Granger)

<sup>&</sup>lt;sup>36</sup> Columella *Rust.* 10.143-144. *Et primum moneo largos inducere fonts, / ne sitis exurat concepto semine partum.* "First I would warn you water to provide abundantly, lest parching thirst destroy the life conceived within the fruitful seed." (Trans. H.B. Ash)

of artificial versus natural water uses in the Roman world.<sup>37</sup> These literary works demonstrate the ways in which the Romans artificially employed water in their built environments. Both these prose and poetry sources on villas provide similar insights into villa life, illustrating the pleasure and utility of water.

*Letter* 2.17 of Pliny to Gallus presents Pliny's villa on the Laurentine coast, south of Ostia, on the Tyrrhenian Sea. Pliny explains to Gallus the situation, in relation to the natural landscape, and the actual layout of the villa. The villa is prominent because it is located on the sea, a popular area for villas during the Roman Empire.<sup>38</sup> There are a great number of amenities associated with a villa: spaces for dining, arcaded areas, bathing complexes, gardens, and vistas. There are also indications that this villa is certainly not alone in the landscape, for neighboring structures are mentioned near the end of the letter (2.17.21).

The relationship between the sea and the garden of the villa is constantly stressed by Pliny throughout the letter. In fact, this particular villa takes advantage of many views, which bring attention to these features. In particular, this one villa, according to Pliny, has nine different vistas, which look toward the sea, the surrounding countryside, and the gardens within the villa itself.<sup>39</sup> The rooms that allow these views are varied, including

 <sup>&</sup>lt;sup>37</sup> The bibliography on the villa letters of Pliny is exhaustive, including Henderson (2002), Anguissola (2007), Méthy (2007), Lefèvre (2009), Marchesi (2008; 2015), Spencer (2010, 113-134), Gibson and Morello (2012), and Dewar (2014). For *Letter* 2.2, see the most recent commentary by Whitton (2013). For more on the archaeological remains of the villas, see: Förtsch (1993), Marzano (2007), Uroz Sáez (2008), Sáez Braconi and Uroz Sáez (2009), and Gibson and Morello (2012, 225-230). There has been much scholarship on the relationship between Pliny and Statius, including White (1975, 125-127), Aricò (1995), Hinds (2001), Leach (2003, 152-6), Myers (2005), Marchesi (2008, 140-142), Newlands (2010), Pagán (2010), Spencer (2010, *passim*), Gibson and Morello (2012, 303), and Rogers (2013, 154-155).
<sup>38</sup> For more on the phenomenon of the luxury villa in the Roman Empire, see Purcell 1987 and 1998 (especially for those villas on the Litus Laurentinum), along with the recent monograph of Zarmakoupi (2014). Lafon's 2001 monograph offers an in-depth investigation of sea-side villas (the so-called 'villa maritima') on the Italian Peninsula, see especially 273-323 for those villas of the High Empire.
<sup>39</sup> Plin. *Ep.* 2.17.5, 6, 10, 11, 12, 15, 16, 20, 21.

dining rooms (four examples), arcaded spaces (three examples), a bedroom, and a caldarium in the bath complex.

The views that one encounters in the Laurentine villa are often rather simple, such as directly to the sea. Others, however, combine different vistas to create a more complex and dynamic sense of space. One of the first dining rooms mentioned has a bay window with three sides, which allows diners to see the sea from three different angles (2.17.5). A view such as this would allow for a connection with the flowing sea below.<sup>40</sup> One of the arcades provides windows that alternate views to the sea and to the gardens in the villa (2.17.16). Finally, an alcove has windows that not only look to the sea, but also the surrounding countryside, which includes neighboring villas (2.17.21). The views of the villa create a hierarchy of sightlines, directing the viewer to look at and value specific elements of nature, with the sea being the most important.

There is one dining room in Pliny's account, however, that is an anomaly in this model (2.17.13). This particular room does not have any windows which would allow for views to the outside world; rather, it has a view, Pliny points out, into the adjacent garden. Pliny also states that while one cannot see the sea from there, the moving water on the coast can be heard in the dining room. Thus, Pliny through his prose makes the artificial (i.e., the garden) seem natural, because of the natural sounds of the moving sea water. One wonders how the garden and its surrounding walls would have been decorated, especially if Pliny incorporated marine themes and elements to allude to the

<sup>&</sup>lt;sup>40</sup> See Lefèvre (1977) for more on the views included in Pliny, especially the views to the sea (521-22). Views are certainly popular in the archaeological remains of the Roman world. Dobbins (2000) illustrates sight-lines and views in domestic structures in Roman Antioch, which aid in our understanding of how Romans placed various features and structures within the home to make statements about wealth, status, and power. For more on views in gardens, see Farrar (1996, 23), Klynne (2005), and Zarmakoupi (2014, 203-211).

sea on the outside of the villa.<sup>41</sup> One might even assume that there was a small fountain serving as a focal point for the garden here, which would allow for a play in the artificial and natural exploitation of water.

The only reference in this letter to the artificial use of water is near the end (2.17.25). Pliny states that running water is necessary to complete the utility and beauty of the house.<sup>42</sup> Interestingly enough, Pliny does not specify exactly what water-related amenities he supplies to the villa. We can assume that there was water for household activities, such as for cooking and maintaining personal hygiene, and perhaps a decorative display of water by means of a fountain, of which he has numerous examples in his Tuscan villa (*Ep.* 5.6). He goes on to state that water at the Laurentine villa is supplied by wells and springs, which are located very near the surface. There is a fine balance of water usage here, since seawater could potentially contaminate the fresh water, which Pliny assures us does not happen.

Pliny writes in *Letter* 5.6 to Domitius Apollinaris about his Tuscan villa. Unlike the Laurentine villa, this property is situated in the Tuscan hills, and Pliny decides to defend the climate and situation of the villa to Apollinaris. A majority of the letter offers

<sup>&</sup>lt;sup>41</sup> Such a notion, of alluding to other types of space is not unheard of in the Roman world. See, in particular, Bergmann (1991), who explores the painted space of the Roman villa, especially the garden. The dining room of Livia's villa at Primaporta near Rome, while a completely interior space, evokes the garden through its wall painting. For more, see Kellum 1994. For discussions of garden painting in general, see Ling (1991, 149-53), and Jashemski (1993, 313-404), for a catalogue of garden paintings in the Roman world.

<sup>&</sup>lt;sup>42</sup> Plin. *Ep.* 2.17.25: *haec utilitas haec amoenitas deficitur aqua salienti, sed puteos ac potius fontes habet. sunt enim in summo. Et omnino litoris illius mira natura: quacumque loco moveris humum, obvius et paratus umor occurrit, isque sincerus ac ne leviter quidem tanta maris vicinitate corruptus.* "Only one thing is needed to complete the amenities and beauty of the house—running water; but there are wells, or rather springs, for they are very near the surface. It is in fact a remarkable characteristic of this shore that wherever you dig you come upon water at once which is pure and not in the least brackish, although the sea is so near." (Trans. B. Radice)

a tour of the property and the intricate villa complex therein.<sup>43</sup> As with other villa properties in the High Empire (especially the early second century CE), there is a clear juxtaposition between the artificial and natural. Even Pliny himself underscores this distinction in the letter, comparing the man-made garden to the natural meadow (5.6.18).

The use of water in the Tuscan villa is manifested through Pliny's description of at least seven different fountains (5.6.20, 23-24, 36-8, 40). What distinguishes these fountains is their purpose within the villa, whether utilitarian or aesthetic. The utilitarian fountains aid in supplying water to the gardens. In a courtyard with four plane trees, a fountain ensures that the trees are watered (5.6.20). Here, an artificial water feature waters a plant that famously has no purpose other than to provide shade. In the villa's hippodrome, there are *fonticuli*, which can help water parts or all of the hippodrome area (5.6.40). While not small, simple fountains, these examples provide necessary water to a large swath of land that was filled with various forms of vegetation.

Pliny's Tuscan villa has a number of purely aesthetic fountains, which must have helped to beautify their surroundings. One of the areas of the villa, perhaps part of a bedroom, contains a small fountain, with tiny jets that allow for a soothing murmuring sound (5.6.23). Nearby is a pool that allows for flowing water, which becomes pale when it hits the marble of the pool (5.6.24). The dining room of the hippodrome contains systems of water that move when a diner reclines on the couch; in the vicinity of the dining area are jets of water that literally throw and catch water, practically playing with the water (5.6.36-8). In the bedroom of the hippodrome, near the dining room, is a small

<sup>&</sup>lt;sup>43</sup> For more on the element of the tour and description of the villas in the letters of Pliny, see: Bergmann 1995; du Prey 1994), Riggsby 2003; Chinn 2007; Marzano 2007, 110-114, 150-1, 306-312; Gibson and Morello 2012, 200-233, 306-307; Dewar 2014, 64-65; Marchesi 2015, 230-238. Marchesi is of special interest, examining the post-signs in the Latin text that help to illustrate the villa and guide the reader.

fountain that is practically hidden; the chairs in the bedroom even have small fountains attached to them (5.6.40).<sup>44</sup>

Given the sheer number of fountains in the Tuscan villa, we must consider the reasons why Pliny installed these structures. As we have seen in *Letter* 2.17, there was a connection between dining and water.<sup>45</sup> The Romans evidently enjoyed dining with the accompaniment of the trickling of moving water, a sort of light musical accompaniment. There are also two instances in the villa in which bedrooms contain fountains. This notion is not surprising, given that the *murmura* of water in the *Silvae* of Statius induce sleep (1.3.42). While the pleasant sound of moving water was certainly not a requirement for bedrooms in the Roman world, such a structure offers a lovely addition to an area devoted to sleeping.

The aesthetic nature of most of the fountains in the villas of Pliny shows their elevated position in the Roman mind. The artificiality of these fountains highlighted the

<sup>&</sup>lt;sup>44</sup> Pliny simply describes the fountains and their relation to the surrounding villa, without giving many specific details about their placement, construction, or mechanical function. Of course, such details are not Pliny's purpose. For the modern classical archaeologist, however, it is frustrating to try to reconstruct the fountains in the Tuscan villa. The layout of Pliny's villas is difficult to navigate based on the Latin text itself. For discussions of these problems, see Lefèvre (1977), Förtsch (1993), Riggsby (2003), Anguissola (2007), Chinn (2007), and Gibson and Morello (2012). For more on Roman garden fountains, see Neuerburg (1965), Farrar (1996, 20-27), Jashemski (1996), Slavazzi (2006), Von Stackelberg (2009, 38-41), Venditti (2011, 231), and Gleason (2013).

<sup>&</sup>lt;sup>45</sup> The *Copa* of the *Appendix Vergiliana*, indicating that a both a garden and dining space are being provided, included moving water in the space (12). Förtsch (1993, 96) describes the water architecture here in relation to the triclinium; he also posits a connection of this arrangement of artificial structures to the construction of the *locus amoenus*. See Schönbeck (1962) for more on the literary trope of the *locus amoenus*. See Griffin (1986, 91) who also notices the connection of dining and water. Such an experience is also seen in the archaeological record. There are numerous examples of dining rooms at Pompeii connected to artificial water structures, including the dining room (number 31) of the *Casa del Bracciale d'Oro* (6.17(Ins.Occ.).42) at Pompeii, which includes not only a nymphaeum on the east side of the masonry couches, but also a view looking directly out to the Bay of Naples through the garden at the end of a terrace. For more, see Ciardiello (2006) and Jashemski (2002, 20). For more on *al fresco* dining spaces connected to water features, see Soprano (1950), who cites all known examples from Pompeii, along with Rogers (2013, 158-159). See also Zarmakoupi (2014, 179-212) for a discussion of dining rooms in the luxury villas of the Bay of Naples.

status of their owners.<sup>46</sup> For the most part, the primary purpose of these fountains is to embellish a space, with certain exceptions for utilitarian fountains that also have an added visual dimension. The fountains, made by man to harness the flow of natural water, which would have presumably originated at a natural spring near the villa, are symbols of wealth, power, and status for the owners of the villas. With the exception of the utilitarian fountains, these structures only added to the visual and aural experience of the owner and his visitors.

A comparison of the two villa letters of Pliny reveals the interesting absence and presence of water structures in the two different locations. Nowhere at the Laurentine villa is an artificial fountain mentioned. Only the sea and its relationship with the villa are discussed at any length. While it is the Tuscan villa that is practically full of fountains located in different areas of the complex, giving the space a sense of grandeur. But at Pliny's Laurentine villa, it is as if the sea is acting as a fountain. Indeed, the sea takes on an active role in the landscape, given the proximity of the villa to the seashore, as one can hear the waves crashing and washing up on the shore below.<sup>47</sup> The only passing reference to water, besides the sea, in *Letter* 2.17, is the fact that running water is necessary to add to the utility and beauty of the structure (2.17.25). This is no doubt Pliny's tacit nod to the fact that the Laurentine villa indeed did have artificial water structures, in addition to the natural water of the neighboring sea. We know from the archaeological record, from sites like Pompeii, that the Romans often included fountains in areas that had views to the

<sup>&</sup>lt;sup>46</sup> See below (pages 103-105) for a discussion of status connected to villas.

<sup>&</sup>lt;sup>47</sup> Pliny *Ep.* 2.17.5: *fractis iam et novissimis fluctibus leviter adluitur*. "[the house] is lightly washed by the spray of the spent breakers." (Trans. B. Radice)

sea.<sup>48</sup> But in 2.17 he does not emphasize them, perhaps to stress the number of views to the sea itself. Indeed, the well-known real estate lining the coast directly to the south of Ostia would have afforded Pliny the ability to show his status with a villa on the sea.<sup>49</sup> In his letter, then, he would want to stress the awesome power of the natural sea, not artificial fountains, to stress the fact that he has a property on the coast.

In the *Silvae*, Statius describes two different villas that are useful to compare to the villas of Pliny.<sup>50</sup> The villa of Manilius Vopiscus of *Silvae* 1.3 was located on the River Anio, near Tibur. Unlike Pliny, Statius actually describes the interior decoration of this building, including gilded ceiling beams, lintels in the Moorish style, expensive marble, and water.<sup>51</sup> The water, however, is described as *nymphas*, female figures who literally run through the bedrooms, which we assume is an allusion to the water pipes. Thus, Statius employs the nymphs as metonymy for water, a striking difference from Pliny's prose.

In *Silvae* 2.2, Statius describes the villa of Pollius Felix, situated on the Sorrentine coast. Like Pliny's villa in 2.17, there is a relationship evident between the sea and the man-made built environment of the villa. The seawaters, in fact, are described as *nympha mari*, in a similar metonymic fashion as in *Silvae* 1.3 (2.2.19). What is striking about the use of *nymphae* for the salt waters is that in Greco-Roman mythology the Nereids were

<sup>&</sup>lt;sup>48</sup> Such as with the case of the *Casa del Bracciale d'Oro* (6.17(Ins.Occ.).42) in Pompeii. For more on the house, see Ciardiello (2006).

<sup>&</sup>lt;sup>49</sup> See Purcell (1998) and Lafon (2001) for more on the Litus Laurentinum, along with recent British School at Rome excavations at Castelporziano, for which, see Claridge (2002).

<sup>&</sup>lt;sup>50</sup> See Spencer (2010, 104-113) for more on Statius and landscape, along with Myers (2005).

<sup>&</sup>lt;sup>51</sup> Stat. *Silv*. 1.3.35-37: *auratasne trabes an Mauros undique postes | an picturata lucentia marmora vena | mirer, an emissas per cuncta cubilia nymphas?* "Shall I wonder at gilded beams or Moorish doorposts everywhere or marble lucent with colors or water discharged through every bedchamber?" (Trans. D.R. Shackleton Bailey)

the more usual inhabitants of the sea, while nymphs were associated with fresh waters.<sup>52</sup> In fact, later in 2.2, Statius uses the Nereids to mean the waters of the sea. Are we to assume that by the High Empire Roman nymphs can be associated with both fresh and salt waters—or is this just an exercise in poetic license? While there is a rich poetic tradition concerning these deities, it does not explain the interchangeability of the terms by the Romans.

The relationship of the natural to the artificial environment is pronounced in Statius, although perhaps not as explicitly as in the *Letters* of Pliny. At one point in 2.2, discussing one of the inner chambers, Statius states that the sound of the waves from the shore of the neighboring villa can be heard, but there are other parts of the villa complex that do not hear the sounds of the waves (2.2.50-51).<sup>53</sup> A room impenetrable to sound is certainly not unheard of, as Pliny had one such room in his villas so that he could get work done without being disturbed (2.17.7 and 5.6.21). It is an interesting juxtaposition that some rooms in these villas invite the sound of moving water, especially in public areas like a dining room, but areas designated for work and business are divorced from such pleasurable sounds.

The differences between Pliny and Statius are important for our understanding of not only the use of water in the High Empire, but also of these genres of literature. Pliny, on the one hand, writing letters about his villas that were published, evidently wanted to demonstrate to his readers the importance of his villa: their situation within the landscape, their amenities, and the pleasure associated with staying at them.<sup>54</sup> Statius, on the other hand, while he presents the villas as markers of status, still describes them in a much

<sup>&</sup>lt;sup>52</sup> See Barringer (1995) for an in-depth study of the Nereids.

<sup>&</sup>lt;sup>53</sup> Compare with Griffin (1986, 119), who, again, examines at the moral implications of dining near water.

<sup>&</sup>lt;sup>54</sup> See Henderson (2002, 17), who discusses how Pliny employs a sense of *jouissance* in his letters.

more poetic manner, without focusing on the minute details that Pliny did. That is not to say that Pliny and Statius' styles of writing were not mutually exclusive. The literary nature of Pliny, especially his debt to epistolary writing and poetry, has been recently shown by Ilaria Marchesi.<sup>55</sup> Pliny in his letters was not simply writing prose, but composing letters that drew on a rich poetic tradition, including Catullus, Horace, and Ovid.

It has been argued that Pliny was using Letter 5.6 as a sort of ekphrasis regarding his Tuscan villa. Pliny does not offer, however, a complete description of the villa itself, perhaps because he was using the villa as a metaphor for the aristocratic Roman lifestyle.<sup>56</sup> Sara Myers has recently argued that the villas described by Pliny and Statius are shown with gardens and their accompanying structures and decorations "to convey social, political, and literary messages."<sup>57</sup> Eleanor Leach has gone as far as to say that Pliny's *otium*, that is, the ability to have time and opportunity for leisure, is a symbol of status—and, in fact, a marker of luxury.<sup>58</sup> Fountains, which harbored water used for decoration within the domestic context of the Roman world, are markers of status. Only those wealthy enough would be able to afford private connections to the water supply, along with the construction and installation of these structures within the home.<sup>59</sup> By placing water in the artificial setting of the villa in these examples, nature is altered, which can be interpreted either as moral or immoral, if it is regarded as against nature

<sup>&</sup>lt;sup>55</sup> Marchesi 2008, 16.

<sup>&</sup>lt;sup>56</sup> Chinn 2007, 266. Chinn goes on to argue that the ekphrasis featured in Pliny went beyond simple description, but set up a model for future use of ekphrasis in literature. See Fowler (1991) for more on ekphrasis, along with Spencer (2010).

<sup>&</sup>lt;sup>57</sup> Myers 2005, 105.

<sup>&</sup>lt;sup>58</sup> Leach 2003, 148.

<sup>&</sup>lt;sup>59</sup> While private water rights were obtained from the emperor in the city of Rome, it is believed that outside of Rome, private individuals could petition their local authorities (Bruun 2000, 587-590). For examples of archaeological evidence of private water connections outside of Rome, see Jansen (2000; 2001).

itself.<sup>60</sup> Most recently, Mantha Zarmakoupi, using archaeological remains from the Bay of Naples, has identified the elements of the villa that mark out luxury, and how these elements inform actual architectural design.<sup>61</sup> Both the literary and archaeological evidence point to the luxurious nature of the Roman villa.

It is clear from these villa poems that Romans were constructing villas in similar areas on the Italian peninsula, such as on the coast (Pliny's Laurentine villa and Pollio's Sorrentine villa) and in the hillier regions (Pliny's Tuscan villa and Vopiscus' villa near Tibur). The interior of these complexes evidently was similar, too, as these structures were markers of status, wealth, and power. While Pliny does not describe in detail the interior decoration, Statius provides a passing reference to the rich materials used in the decoration of Vopiscus' villa. There was presumably a wide-ranging difference in villa configurations and decorations throughout Italy, based on the status and wealth of the owner. Nevertheless, by owning a villa in the High Empire, there was clearly a certain amount of conspicuous consumption on the part of the owner.

These villa poems also show that water in these primarily domestic contexts could be used for a variety of purposes, including utilitarian, aesthetic, and pleasurable. Indeed, the Roman villa evidently first used water for utilitarian purposes (for farming and livestock), but, over time, its inclusion was for a different end, namely to beautify and change a surrounding space within the villa itself. Whether the owner was focusing the attention of their guests on salt or fresh waters, there is still the marked importance of

<sup>&</sup>lt;sup>60</sup> For more on the moral and immoral connotations of changing nature in Latin literature, see Reitz (2013). See also Taylor's comments about the Roman dominance of nature when it comes to hydraulic-related constructions (2009, 40). One only has to consider how Statius in *Silvae* 1.3 praises the amenities villa of Manlius Vopiscus, while Horace in his odes condemns luxurious villas. For more, see: Edwards (1993, 144 ff.), Newlands (2002, 130), and Reitz (2013, 128-130).

<sup>&</sup>lt;sup>61</sup> Zarmakoupi 2014, 13-23.

water in these spaces. While having water in a villa certainly elevated the status of the owner, there is still the inherent importance of having moving water (or at least implying that through surrounding decorations), which presumably stems from a common human desire to interact sensorially with water.

#### **III.** Pleasure of the Senses

Decimus Magnus Ausonius (ca. 310-ca. 395 CE) wrote the *Ordo urbium nobilium* around 388-389.<sup>62</sup> The work praises twenty of the most famous cities of Ausonius' time. The last one he presents is his own hometown, Burdigala (modern Bordeaux, France), which, in his opinion, is comparable to Rome. In the passage, he describes the public fountain there:

Quid memorem Pario contectum marmore fontem Euripi fervere freto? quanta unda profundi! quantus in amne tumor! Quanto ruit agmine praeceps marginis extendi bis sena per ostia cursu, innumeros populi non umquam exhaustus ad usus! hunc cuperes, rex Mede, tuis contingere castris, flumina consumpto cum defecere meatu, huius fontis aquas peregrinas ferre per urbes, unum per cunctas solitus potare Choaspen.

Salve, fons ignote ortu, sacer, alme, perennis, vitree, glauce, profunde, sonore, inlimis, opace. Salve, urbis genius, medico potabilis haustu, Divona Celtarum lingua, fons addite divis. non Aponus potu, vitrea non luce Nemausus purior, aequoreo non plenior amne Timavus. (20.21-35)

What shall I say of that fountain, over laid with Parian marble, which foams in the strait of its *euripus*? How deep the water! How swelling the stream! How great the volume as it plunges in its headlong course through the twice six sluices in its long-drawn brink, and never fails to meet the people's countless purposes? This would'st thou long reach with thy hosts, King of the Medes, when streams were consumed and rivers failed; from this fount to carry waters through strange cities, thou who through them all wast wont to drink Choaspes alone!

Hail, fountain of source unknown, holy, gracious, unfailing, crystal-clear, azure, deep, murmurous, shady, and unsullied! Hail, guardian deity of our

<sup>&</sup>lt;sup>62</sup> For more on Ausonius, see Bourgeois (1991, 23-24) and Green (1991).

city, of whom we may drink health-giving draughts, named by the Celts Divona—a fountain added to the roll divine! Not Aponus in taste, not Nemausus in azure sheen is more clear, nor Timavus' sea-like flood more brimming full. (Trans. H.G. Evelyn White)

Ausonius reveals that the fountain is decorated with Parian marble, and shows the water in a *euripus*—that causes the water to form foam as it moves. The water itself, however, is the most important feature of the display. Ausonius describes the water in a way that all of the senses are engaged. We see that it is clear, with a bluish tint, makes pleasing sounds, is cool (given the limitless, *inlimitis*, nature of the source), and surely tastes good, as it is unsullied. Ausonius makes clear that the engagement of the five senses is the greatest part of the experience of the fountain. Of course, he also asserts that the waters at Bordeaux are better than any of those of the rivers of Aponus, Nemausus, and Timavus.

The fascination with water stems from its sensorial nature, which is perceived by an observer in its landscape. Water can be enjoyed by all five of the canonical senses, satisfying the carnal, basic needs of human beings. It is our goal, then, to survey a variety of ancient sources to understand the Roman perceptions of water by the five senses. This is the first time a systematic overview of literary passages related to the sensorial responses to water have been assembled, providing insight into the Roman perception of water—an awareness that is exceptionally familiar to any modern audience.

#### i. Sound

Water has the great ability to make a variety of sounds. The kinetic nature of flowing water causes sound. Such sound, however, can be a pleasant trickle of a spring, or the din of a large river moving through the landscape. In *Letter* 56 to Lucilius, Seneca describes the quietness that he demands when he works, in contrast to the sounds of the

bath complex that he supposedly lives above.<sup>63</sup> The evocative description of the noisy activities within the bath complex is humorous, such as the grunting ball players or the shrill voice of the hair-plucker (*alipilius*) (56.1-2). Seneca presents the image of the goings-on of the bath to discuss how he deals with noise pollution, so that he can be productive. In response to the sounds of the bath, Seneca goes on to explain:

At mehercules ego istum fremitum non magis curo quam fluctum aut deiectum aquae, quamvis audiam cuidam genti hanc unam fuisse causam urbem suam transferendi, quod fragorem Nili cadentis ferre non potuit. [4] Magis mihi videtur vox avocare quam crepitus; illa enim animum adducit, hic tantum aures implet ac verberat. In his quae me sine avocatione circumstrepunt essedas transcurrentes pono et fabrum inquilinum et serrarium vicinum, aut hunc qui ad Metam Sudantem tubulas experitur et tibias, nec cantat sed exclamat: [5] etiam nunc molestior est mihi sonus qui intermittitur subinde quam qui continuatur. Sed iam me sic ad omnia ista duravi ut audire vel pausarium possim voce acerbissima remigibus modos dantem. Animum enim cogo sibi intentum esse nec avocari ad externa; omnia licet foris resonent, dum intus nihil tumultus sit, dum inter se non rixentur cupiditas et timor, dum avaritia luxuriaque non dissideant nec altera alteram vexet. Nam quid prodest totius regionis silentium, si affectus fremunt? (Sen. Ep. 56.3-5)

But I assure you that this racket means no more to me than the sound of waves or falling water; although you will remind me that a certain tribe once moved their city merely because they could not endure the din of a Nile cataract. Words seem to distract me more than noises; for words demand attention, but noises merely fill the ears and beat upon them. Among the sounds that din round me without distracting, I include passing carriages, a builder in the same block, a saw-sharpener nearby, or some fellow who is demonstrating with little pipes and flutes at the Meta Sudans, shouting rather than singing. Furthermore, an intermittent noise upsets me more than a steady one. But by this time I have toughened my nerves against all that sort of thing, so that I can endure even a boatswain marking the time in high-pitched tones for his crew. For I force my mind to concentrate, and keep it from straying from things outside itself; all outdoors may be bedlam, provided that there is no disturbance within. provided that fear is not wrangling with desire in my breast, provided that meanness and lavishness are not at odds, one harnessing the other. For of what benefit is a quiet neighborhood, if our emotions are in an uproar? (Trans. R.M. Gummere)

<sup>&</sup>lt;sup>63</sup> For more on this particular letter, see Motto and Clark (1970), Fagan (1999, 30, *passim*), and Yegül (2010, 20-21).

In his response, Seneca implies that the noise of the bath, while loud, making it difficult to concentrate, is akin to the sound of falling water. The white noise of water, then, is pleasant enough that he can work with it in the background. In contrast, however, he mentions the anecdote of a city that moved away from the noise (*fragorem*) of the Nile cataract. While the sound of water can be pleasant, it must be in moderation. Seneca then continues to list sounds that do not hinder his work, such as the din of the carriage and a builder working. He also mentions the pipe-seller, stationed, incidentally, next to the Meta Sudans, the large 'sweating' fountain, a sound that we know Seneca can tolerate. Seneca has also fortified himself to concentrate against intermittent noise, whose punctuations can interrupt almost anyone, unlike that of a constant noise.<sup>64</sup> His powers of concentration allow Seneca to block off emotions, perhaps associated with sound, that would undoubtedly prevent him from working effectively. Thus, sound is an important factor of human life, as it can both be soothing and grating.

By far the most popular Latin noun associated with the sound of water is *murmur*. The word is defined by being a 'low, continuous noise' and a 'rumble, roar.'<sup>65</sup> As we noted with the comments of Seneca, the fact that water can have a subtle low, continuous sound, links well with water's nature as a white noise, not competing with other sounds that are occurring in the same space.<sup>66</sup> Certainly, the white noise associated with the movement of water is conducive to sleep. One only needs to think of modern examples of white noise machines used while trying to fall asleep. It is clear that the Romans too also

 $<sup>^{64}</sup>$  The powers of concentration, along with sleep, are often aided by total silence. Pliny the Younger reports that he has a bedroom that cannot be penetrated by neither light nor sound (*Ep.* 5.6.21).

<sup>&</sup>lt;sup>65</sup> OLD<sup>2</sup> s.v. *murmur, murmuris (n)*: (1) low, continuous noise, (a) rumble, roar, (b) growl, grunt (animals), (c) hum, buzz (insects); (2) subdued or indistinct utterance, mutter, murmur, whisper.

<sup>&</sup>lt;sup>66</sup> White noise is characterized by the fact that its registered by the human brain on all hearable frequencies, which means that loud or sudden sound interruptions can be tuned out by the brain with the presence of white noise. For more on this phenomenon, see Horowitz (2012).

enjoyed the lull of moving water to fall asleep. Statius mentions that in a courtyard in the villa of Manlius Vopiscus, the sound of the river Anio in the courtyard invites sleep on a lazy afternoon.<sup>67</sup> Ovid reports that Rhea Silvia sat on the banks of a stream and was lulled to sleep by its soft sounds.<sup>68</sup> During this slumber, Mars rapes Rhea Silvia, thus producing the twins, Romulus and Remus. The sound of moving water, it could even be argued, albeit tenuously, acts as the catalyst for the founding of Rome.

Most instances of *murmur* are quantified by an adjective, illustrating the low and continuous nature of the sound of moving water. Ovid describes the sound of the spring of the nymph Egeria by *incerto murmure*.<sup>69</sup> *Incertus* has connotations of inconstant and variable, suggesting a low murmur of the water. The *Copa* in the *Vergilian Appendix*, which presents a small garden that could be rented out for dining and other pleasures, included, among its many amenities advertised, a small stream that produces sound as it moves.<sup>70</sup> In fact, the stream makes a loud noise (*strepitans*), but the murmur is *raucus*, which can be a husky, raucous sound, which could be the perfect background sound in a rented garden. In Pliny's Tuscan villa, a small fountain has small jets that produce an

<sup>&</sup>lt;sup>67</sup> Stat. Silv. 1.3.39-42. te, quae vada fluminis infra cernis, an ad silvas quae respicis, aula, tacentis, qua tibi tota quies offensaque turbine nullo nox silet et nigros imitantia murmura somnos? "Of the courtyard that view's the river's course below or that other looking back to the silent woods, where your rest is safe and night, impaired by no turbulence, is silent, or murmurs invite lazy slumber?" (Trans. D.R. Shackleton Bailey)

<sup>&</sup>lt;sup>68</sup> Ov. Fast. 3.17-18. Dum sedet, umbrosae salices volucreque canorae fecerunt somnos et leve murmur aquae. "While she sat, the shady willows and the tuneful birds and the soft murmur of the water induced [her] to sleep." (Trans. J.G. Frazer)

<sup>&</sup>lt;sup>69</sup> Ov. *Fast.* 3.273. *defluit incerto lapidosus murmure rivus.* "A pebbly brook flows down with fitful murmur" (Trans. J.G. Frazer). See also Scheid (2013, 168) for a discussion of this passage. The waters here of Egeria are also connected with the Camenae, known for their associations with music, which might be of importance here, given its aural nature. See Chapters 4 and 5 for more on Egeria and the Camenae in Rome and at Nemi.

<sup>&</sup>lt;sup>70</sup> *Copa* 12: *est strepitans rauco murmure rivus aquae*. "And the stream of water makes a loud noise, with raucous murmurs" (Trans. author). For more on gardens that could be rented out for dining purpose, and equipped with water in some way, see Rogers (2013).

*iucundissimum murmur*, the loveliest sound.<sup>71</sup> One can only imagine the artificial use of water, specifically crafted to create a particular sound that the patron wanted to hear, given that Pliny presumably commissioned the fountain to be included in his villa. Finally, Statius describes the Anio River in his *Silvae* as full of rocks, with a strong current of water movement (*tumidam rabiem*), along with a foamy din (*spumosa murmura*).<sup>72</sup> Here, the sound of the water moving is paired with a visual adjective, creating a unique and complex, multi-sensory description of the river.

While the *murmur* has connotations of a low rumble, the *fragor* or *clamor* associated with water implies roars and crashing.<sup>73</sup> As we saw earlier in this chapter, Seneca describes the sumptuous baths of his time, and in the large water-displays associated with them, he mentions that the water comes crashing down, over the course of various levels.<sup>74</sup> One can conceive of the sound emitted by the large amounts of water, *cum fragore*! In terms of natural examples of roaring water sounds, the most prominent are those of the sea. One can easily imagine how the large expanse of the sea can create loud sounds of roars and crashes, in stark juxtaposition to the subtle murmurs of streams and artificial streams we have already encountered. Pliny the Younger describes that in one of the dining rooms of his Laurentine villa one can hear the sound of the sea,

<sup>&</sup>lt;sup>71</sup> Plin. *Ep.* 5.6.23. *Fonticulus in hoc, in fonte crater; circa sipunculi plures miscent iucundissimum murmur.* "Here is a small fountain with a bowl surrounded by tiny jets which together make a lovely murmuring sound." (Trans. B. Radice)

<sup>&</sup>lt;sup>72</sup> Stat. Silv. 1.3.20-23. ipse Anien—miranda fides—infraque superque saxeus hic tumidam rabiem spumosaque ponit murmura, ceu placidi veritus turbare Vopisci Pierosque dies et habentes carmina somnos. "Anio himself, wondrous to tell, full of rocks above and below, here rests his swollen rage and foamy din, as though loath to disturb Vopiscus' Pierian days and song-filled slumbers." (Trans. D.R. Shackleton Bailey)

<sup>&</sup>lt;sup>73</sup>  $OLD^2$  s.v. *clamor, clamoris (m)*: (1) shout, shouting; (2) shout of joy or pleasure; (3) battle cry; (4) clamor, noise (animals); (5) roar (natural phenomena). *fragor, fragoris (m)*: (1) act or process of breaking/splitting up; (2) noise of breaking, crash, roar, shouting; (3) uproar, disturbance.

<sup>&</sup>lt;sup>74</sup> Sen. *Ep.* 86.7. *Quantum aquarum per gradus cum fragore labentium*! "And what masses of water that fall crashing from level to level!" (Trans. R.M. Grummere)

although it does not have a sightline to the sea.<sup>75</sup> The sea is described as having a *fragor*, but, by the time it reaches the diners, it is distant (*languidum ac desinentem*). The power of the sound, however, is strong enough to be perceived by the diners, despite their not being able to see it. Statius mentions that some buildings in the Roman landscape, like a villa situated near the sea, resound with the crash of the sea (*pelagi clamore fremunt*), while, on the other hand, the land is silent.<sup>76</sup>

Finally, the sound of water can be likened in poetry to talking. In the famous Horatian ode to the Fons Bandusiae, perhaps located at Horace's Sabine villa near modern Licenza, the water of the spring that comes crashing down from the source is described as 'chattering' (*loquaces*).<sup>77</sup> Propertius, in describing the Porticus Pompeiana in Rome, describes a fountain there: "nor the water that flow from Maro's slumbering form and run, their Naiads babbling through all the streets of Rome (*leviter nymphis tota crepitantibus urbe*), till at the last, with sudden plunge, they vanish in the Triton's mouth" (**Fig. 5; App. No. 1.118**).<sup>78</sup> Here, the water that supplies the fountains is

<sup>&</sup>lt;sup>75</sup> Plin. *Ep.* 2.17.13. *sub hoc triclinium, quod turbati maris non nisi fragorem et sonum patitur, eumque iam languidum ac desinentem; hortum et gestationem videt, qua hortus includitur.* "While below is a dining room where nothing is known of a high sea but the sound of the breakers, and even that is a dying murmur; it looks on to the garden and the encircling drive." (Trans. B. Radice)

<sup>&</sup>lt;sup>76</sup> Stat. *Silv*. 2.2.50-51. *haec pelagi clamore fremunt, haec tecta sonorous ignorant fluctus terraeque silentia malunt*. "Some buildings are loud with the sea's clamor, others know nothing of the sounding billows, preferring the silence of the land." (Trans. D.R. Shackleton Bailey)

<sup>&</sup>lt;sup>77</sup> Hor. *Epod.* 3.13.15-16. *unde loquaces lymphae desiliunt tuae*. "from which your chattering waters come leaping down." (Trans. N. Rudd) See Thomas (1982, 8-34), for Horatian landscapes. For the remains of the so-called Villa of Horace at Licenza, see Frischer, Crawford, and De Simone (2006).

<sup>&</sup>lt;sup>78</sup> Prop. El. 2.32.11-16. scilicet umbrosis sordet Pompeia columnis porticus, aulaeis nobilis Attalicis, et platanis creber pariter surgentibus ordo, flumina sopito quaeque Marone cadunt, et leviter nymphis tota crepitantibus urbe cum subito Triton ore recondit aquam. "Forsooth, thou carest naught for Pompey's colonnade, with its shady columns, bright-hung with gold-embroidered curtains; naught for the avenue thick-planted with plane-trees rising in trim rows; nor the water that flow from Maro's slumbering form and run, their Naiads babbling through all the streets of Rome, till at the last, with sudden plunge, they vanish in the Triton's mouth." (Trans. H.E. Butler) For more on this elegy, see Beasom (2009, 139-163). Propertius here mentions that the water comes from a statue of Maron, falling into the mouth of a Triton. While we have many depictions of Triton and Tritones in sculpture (see LIMC 8.1<sup>1</sup>.68-85, s.v., Triton, Tritones, N. Icard-Gianolio), there are no known extant Maron statues (see LIMC 6.1.362-364, s.v., Maron,

personified by nymphs, and as they travel through pipes through the city of Rome, they are described as 'babbling' (*crepitanibus*). Stemming from the verb *crepito*, the waters are producing a rapid succession of sounds, in a sense 'chattering' like a human being.<sup>79</sup> The talking associated with moving waters seems to be similar to the *murmures*, in that they are of a continuous nature, making the low resounding rustle to create a white noise.

In the same vein, there is an instance in which water sounds like a human crying. Columella, describing how a plot of land should be well watered from a stream or river, mentions how the water can also be channeled into a fountain for the same purpose.<sup>80</sup> He describes water that is to go into the fountain as 'shedding tears' into the basin (*illacrimet*). While the Latin word does not have explicit connotations of aural qualities, one can imagine the sounds a human can make while crying. One can easily posit similar sounds, whether a light or heavy sob, to the trickle and flow of the water that is to go into the basin of the fountain that is supplying the garden in Columella's passage.

What marks this discussion of the sound of water is that Romans evidently took pleasure in hearing water, such as in relaxing contexts, dining, and even sleeping. The white noise of the constant, low-sounding movement of the water of streams and rivers created a pleasing environment. Within the context of the artificial, fountains in a villa or the sound of a river in a room with no visual access to the body of water reminds the Roman of nature—and the pleasure one can derive from it. Excess of water movement,

A. Kossatz-Deismann). Maron known for his wife and hailing from Thrace, was in the retinue of Dionysus, as he is sometimes, among other episodes, depicted at the marriage of Dionysus and Ariadne. <sup>79</sup> *OLD*<sup>2</sup> s.v. *crepito*: to produce a rapid succession of sharp, shrill, or similar noises, rattle, rustle, chatter, etc.

<sup>&</sup>lt;sup>80</sup> Columella 10.23-26. *Vicini quoque sint amnes, quos incola durus | attrahat auxilio semper sitientibus hortis: | aut fons illacrimet putei non sede profunda, | ne gravis hausturis tendentibus ilia vellat.* "Let rivers flow adjacent to your plot, whose streams the hardy gardener may lead as aid to quench the garden's ceaseless thirst, or else a fountain should distil its tears into a basin, not too deeply sunk, lest it should strain the drawer's panting sides." (Trans. E.S. Forster and E.H. Heffner)

however, prompts a certain amount of displeasure, or, at least, not a full appreciation of water. One is reminded of the din created by the Nile cataracts, mentioned by Seneca, the loud roar of the Anio River in the *Silvae*, and the breakers of the sea (contrasted with the silence of the land), also in Statius. In moderation, one can appreciate the subtle, pleasant murmurings of water. The white noise of the movement of water would have created an environment of contemplation and relaxation, prized by the Romans.

# ii. Touch

The tactile quality of water, Romans thought, comes from its temperature and its so-called weight. As we have already seen, Seneca reveals that water can either be cold or hot, and light or heavy (*QNat.* 3.2.1-2). These dichotomies are explored briefly in this section, in order to understand what characteristics constitute each.

Cold water (*frigida aqua*) was the water *par excellence* for the Romans. Perhaps this feeling stems from the refreshment that comes from a cold drink of water that one takes in on a hot summer day, especially while in the Mediterranean basin. Pliny comments that there are waters near Pella in Macedonia that are cold even during the summer.<sup>81</sup> The city of Rome herself is supplied by the coolest (*frigoribus*) and most wholesome (*salubritatis*) waters in the whole world, namely the waters of the Aqua Marcia.<sup>82</sup> Waters that can sustain a cold state are cherished, as they are unchanged by any chemical processes, as is the case with hot water.

<sup>&</sup>lt;sup>81</sup> Plin. *HN* 31.28. *Ante oppidum enim incipiente aestate frigida est palustris, dein maximo aestu in excelsioribus oppidi riget.* "For before the town there is a marsh stream that is cold at the beginning of the summer; then in the higher parts of the town the water is very cold even in the height of summer." (Trans. W.H.S. Jones)

<sup>&</sup>lt;sup>82</sup> Plin. HN 31.24. Clarissima aquarum omnium in toto orbe frigoris salubritatisque palma praeconio Urbis Marcia est inter reliqua deum munera urbi tributa. "The first prize for the coolest and most wholesome

Hot water (*calida aqua*), while a natural form of water, has to be changed from a cold state into a hotter one. As has been alluded to previously, cold water is transformed

into hot water, as Vitruvius describes in one instance:

Neque enim calidae aquae est ulla proprietas, sed frigida aqua, cum incidit percurrens in ardentem locum, effervescit et percalefacta egreditur per venas extra terram. Ideo diutius non potest permanere, sed brevi spatio fit frigida. Namque si naturaliter esset calida, non refrigeraretur calor eius. Sapor autem et odor et color eius non restituitur, quod intinctus et commixtus est propter naturae raritatem. (Vitr. De arch. 8.2.9)

For there is not special character attaching to hot water, but when cold water, as it runs, comes upon hot ground, it seethes and comes out warm through the cracks above ground. Therefore it cannot retain its heat, but soon becomes cold. For if it were naturally warm, its warmth would not be subject to chill. But taste and smell and color are not surrendered, because it is steeped and blended with these qualities owing to its rarefied texture. (Trans. F. Granger)

When cold water hits hot ground, it expands, sometimes rising to the surface of the earth,

in effect cooling off. Further on, however, Vitruvius states that when cold water is

changed into hot water, thanks to the properties of the surrounding soils, the hot water

takes on curative properties.<sup>83</sup> Healing hot waters are often noted for their chemical

composition, which includes sulphur, alum, and bitumen.<sup>84</sup> Sulphur, in particular, is

known by the Romans for making water hot, and by extension, being curative.<sup>85</sup> While

hot waters are the product of transformative processes, they are still important waters for

the Romans because of their healing properties.

water in the whole world has been awarded by the voice of Rome to the Aqua Marcia, one of the gods' gifts to the city." (Trans. W.H.S. Jones)

<sup>&</sup>lt;sup>83</sup> Vitr. De arch. 8.3.4. Omnis autem aqua calida ideo [quod] est medicamentosa, quod in pravis rebus percocta aliam virtutem recipit ad usum. "As to the curative power of warm springs, the reason is that the water being thoroughly heated in vitiated soils, takes up an additional and useful quality." (Trans. F. Granger)

<sup>&</sup>lt;sup>84</sup> For more on hot waters, see: Sen. *QNat.* 3.20, 3.24; Plin. *HN* 31.32. Pliny describes what exactly each of the different waters (i.e., whether they contain sulphur, alum, or bitumen) can heal. See below (pages 120-123) on the discussion of the smell of water, for more on the chemical compositions of water.

<sup>&</sup>lt;sup>85</sup> Vitr. *De arch.* 2.6.1; Sen. *QNat.* 3.24; Plin. *HN* 35.50. See also the discussion by Edlund-Berry (2006b, 171). See also Chapter 5's discussion of healing waters.

The "weight" of water, whether considered light/soft (*levis*) or heavy/hard (*gravis*), comes from its chemical makeup. Even today, some talk of the 'softness' or 'hardness' of water, such as when bathing. More often than not, it is calcium that causes changes to water. That calcium can itself be transformative, in that it is petrifies, as when stalactites and stalagmites are created.<sup>86</sup> At Hierapolis in Phyrigia, the hot, calcium-rich waters create stony crusts, as Vitruvius reports.<sup>87</sup> Even today, Hierapolis is known in Turkish as Pamukkale ('Cotton Castle'), due to the large white formations made from the moving calcium-rich waters. Certain waters, when objects are thrown in, create rock-like objects when later retrieved, due to the calcium incrustations (Sen. *QNat.* 3.20.4). Thus, in addition to being 'heavy,' waters can physically transform objects or the landscape, in a sense changing their tactile state, too.

Finally, touching water is an important part of purification during Roman religious rituals. Washing one's hands was a crucial element to many festivals, such as those of Fortuna Virilis and Venus Verticordia, Parilia, Lemuria, Mercury, Ambarvalia, Vestalia, and the Ludi Romani.<sup>88</sup> The Vestal Virgins were obliged to collect water from the spring of Egeria connected to the Porta Capena, in a special vessel that was to never touch the ground, and to provide that water for hand-washing.<sup>89</sup> Lustration was often provided by the use of water, whether through actual washing of the face and hands, cleansing objects, or sprinkling water.<sup>90</sup> Water, then, plays an important role in the

<sup>&</sup>lt;sup>86</sup> Plin. HN 31.20. See Healy (1999, 124-125) for more on this passage of Pliny.

<sup>&</sup>lt;sup>87</sup> Vitr. 8.3.10. Ad eundem modum Hierapoli Phrygiae effervet aquae calidae multitudo, e quibus circum hortos et vineas fossis ductis inmittitur; haec autem efficitur post annum crusta lapidea. "In the same way at Hierapolis in Phrygia, abundance of hot water boils up, from which a supply is taken by channels round the orchards and vineyards. After a year the water leaves a stony crust." (Trans. F. Granger) <sup>88</sup> Edlund-Berry 2006b, 168-169.

<sup>&</sup>lt;sup>89</sup> See Edlund-Berry (2006b, 169) for the full bibliography of this ritual.

<sup>&</sup>lt;sup>90</sup> Edlund-Berry 2006b, 171. See also *ThesCRA* 2.3a.IV.A (s.v., Purificazione, Romana, Mezzi impiegati nelle purificazioni, liquidi e unguenti, V. Saladino).

religious practice of the Roman; more often than not the physical contact with the water for whatever purpose was crucial to performing the rite. Thus, while one might experience the tactile nature of water, the meta-sensorial religious experience transcended just the simple sense of touch.

iii. Sight

The visual qualities of water play an important role in the ancient Roman perception of water. Pliny described the waters of the Clitumnus River as pure and glasslike (*purus et vitreus*), and so clear that one can see the coins at the bottom of the water (Plin. *Ep.* 8.8.2). Clear water, free from impurities, is the best, according to the Romans, as it is easy to drink and to enjoy. Colored water exists, but it is of an inferior quality, often times used for other purposes, such as supplying the baths. Finally, water can visually transform itself when it crashes upon a hard surface, creating a whiteness or a foam.

Vitruvius, in his description on how to choose the best waters for the water supply, describes how it is optimal to seek out clear waters. Sight can be a quick method to indicate the quality of water:

> Itemque in aeneo si ea aqua defervefacta et postea requieta et defusa fuerit, neque in eius aenei fundo harena aut limus invenietur, ea aqua erit item probata. (Vitr. De arch. 8.4.1)

Or if water is boiled in a copper vessel and is allowed to stand and then poured off, it will also pass the test, if no sand or mud is found at the bottom of the copper vessel. (Trans. F. Granger)

Vitruvius states that after water has been boiled, it should not be contaminated by impurities, such as mud or sand, at the bottom of the pot. He goes on to argue that:
Non etiam minus ipsa aqua, quae erit in fonte, si fuerit limpida et perlucida, quoque pervenerit aut profluxerit, muscus non nascetur neque iuncus, neque inquinatus ab aliquo inquinamento is locus fuerit, sed puram habuerit speciem, innuitur his signis esse tenuis et in summa salubritate. (Vitr. De arch. 8.4.2)

Likewise, if the water itself in the spring is limpid and transparent and if wherever it comes or passes, neither moss nor reeds grow nor is the place defiled by filth, but maintains a clear appearance, the water is indicated by these signs to be light and most wholesome. (Trans. F. Granger)

Again, the best water is limpid and clear (*limpida et perlucida*), maintaining a clear appearance (*puram speciem*) as the place around it is not polluted (*inquinamento*). Waters that take on these properties are then considered to be light and most wholesome (*tenuis et in summa salubritate*). Thus, clear water is to be sought out for its beneficial qualities.

On the other hand, those waters that are not clear are to be avoided for drinking but used for other purposes. Vitruvius mentions that the waters that supply the city of Athens and Piraeus are insufficiently clear (*non satis perlucidas*), with a color like purple glass (*colore similis vitri purpurei*).<sup>91</sup> Because of its lack of clarity, Vitruvius states that the Athenians relied on well-water for their drinking, while the unclear water is used for baths (*De arch.* 8.3.6). As we saw previously, the city of Rome used the waters of the Aqua Alsietina for the Naumachia of Augustus, on account of qualities that made it unsuitable for human consumption (Front. *Aq.* 11.1).

Poetic depictions of water capitalize on its clear and pure complexion. In Horace's ode to the Fons Bandusiae, he invokes the spring, whose waters are 'more

<sup>&</sup>lt;sup>91</sup> Vitr. De arch. 8.3.6. Aquae autem species est, quae cum habeat non satis perlucidas et ipsa uti flos natat in summo, colore similis vitri purpurei. [...] e quibus bibit nemo propter eam causam, sed lavationibus et reliquis rebus utuntur, bibunt autem ex puteis et ita vitant eorum vitia. "There is a kind of water which has pores insufficiently clear; a foam floats to the top, in color like blue glass. [...] No one drinks from it because of the reason given, but they use it for baths and so forth. They drink from wells and thus avoid its ill effects." (Trans. F. Granger)

glittering than glass' (*splendidior vitro*) (Hor. *Carm.* 3.13.1).<sup>92</sup> Horace compares the clear waters of the spring to that of glass, which in the Roman period had a glittering quality, in addition to being clear.<sup>93</sup> But this comparison is not limited to poetry, as we have already seen in the description of the Clitumnus river by Pliny (*Ep.* 8.8.2), along with two instances in Statius (Silv. 1.3.73, 2.2.49), which suggests that a glassy appearance to water is desired by the Romans. Given the reflective aspect of water, it is not surprising for the Romans to describe water as appearing like glass. Ovid describes a pool in the *Metamorphoses* as shining with 'silvery' waters (*nitidis argenteus undis*).<sup>94</sup> Its silvery nature suggests that it is a clear water that might be akin to the desirous 'glassy' water of Horace and Pliny. In the *Georgics*, Vergil proclaims that springs should be clear (*liquidi*).<sup>95</sup> In the *Fasti*, Ovid tells of a garden being cooled by a breeze and a spring of clear water (*liquidae aquae*).<sup>96</sup> *Liquidus* could have two connotations, the visual, namely clear or pure, or the bountiful, such as 'flowing without interruption,' suggesting that water should always flow freely. These poetic descriptions of clear water highlight its inherent and natural character as a beautiful substance, one that glimmers and reflects, constantly changing as it moves through the natural landscape, ever-flowing and bountiful in the celebrated poetic landscapes of the Romans.

<sup>&</sup>lt;sup>92</sup> See Curley (2003) for more on this poem, including Callimachean allusions.

<sup>&</sup>lt;sup>93</sup> For more on Roman glass, see Hess and Wight (2005); Wight (2011); Henderson (2012).

<sup>&</sup>lt;sup>94</sup> Ov. *Met.* 3.407. *Fons erat inlimis, nitidis argenteus undis.* "There was a clear pool with silvery bright water." (Trans. F.J. Miller) This line is also quoted by Seneca (Q Nat. 3.1.1). The use of the adjective argenteus (silver) reminds one of luxury objects found in the Roman world. Newlands argues that there is a connection between water and luxury items, such as glass (2002, 164). She asserts then that the sea is its own object of wealth, which further stresses the luxurious nature of maritime villas. She attempts to show that the glass was a luxury good in the High Empire, despite its appearance in different social contexts of élite and non-élite Romans.

<sup>&</sup>lt;sup>95</sup> Verg. G. 4.18-19. At liquidi fontes et stagna virentia musco adsint et tenuis fugiens per gramina rivus. "But let clear springs be near, and moss-green pools, and a tiny brook stealing through the grass" (Trans. R.H. Fairclough)

<sup>&</sup>lt;sup>96</sup> Ov. Fast. 5.210: aura flovet, liquidae fonte rigatur aquae.

Next, water is also described by the Romans as being colored. Seneca indicates that water can be clear, muddy, blue, and yellowish (*purae, turbidae, caeruleae, luridae*; *QNat.* 3.2.1-2). Clear, of course, comes at the beginning of the list, privileging it as the most important type of water to consider. When water is not clear, but colored, it can surely be used by the Romans for a variety of purposes, even if not used specifically for drinking. Vitruvius mentions that colored waters can be used by livestock, which will then give them their characteristic colors, such as the red cattle and light brown sheep of the Trojans, who take in the waters of the Xanthos (Blond) river.<sup>97</sup> While colored water is not desired for human consumption, the Romans recognized and capitalized upon the ability of all waters to be beneficial in some way.

Another visual quality of water is the foam that it produces when it hits a hard substance, embodied in the Latin *spumosa*. Pliny describes the fall and crash of water in an ornamental pool of his Tuscan villa.<sup>98</sup> Upon impact with the marble of the pool, the water becomes pale (*albescit*). Presumably, this pale, or even white, appearance comes from the foam that is created with the collision of the water.<sup>99</sup> This change in appearance gives water an almost magical property, especially as the water is still potable and usable for the garden. In considering the noise made by the Anio River, we have considered the

<sup>&</sup>lt;sup>97</sup> Vitr. De arch. 8.3.14. ex eoque, quamvis sint alba, procreant aliis locis leucophaea, aliis locis pulla, aliis coracino colore. Ita proprietas liquoris, cum inît in corpus, proseminat intinctam sui cuiusque generis qualitatem. "Thereby, although they are maybe white, they bring forth young in some places of a dun color, in other places of dark grey, in others raven-black. Thus the property of the liquid when it enters the body produces the kind of quality with which it is tinctured." (Trans. F. Granger)

<sup>&</sup>lt;sup>98</sup> Plin. *Ep.* 5.6.23-24. *piscinam* [...] *strepitu visuque iucunda; nam ex edito desiliens aqua suscepta marmore albescit.* "an ornamental pool, a pleasure both to see and to hear, with its water falling from a height and foaming white when it strikes the marble" (Trans. B. Radice)

<sup>&</sup>lt;sup>99</sup> This water is pale, but it could be a whiteish tint, based on the amount of foam in the water. It certainly is not a true white or chaulky tinted water, like the river Nar, which appears white due to its sulpheric composition (Verg. *Aen.* 7.516-517).

passage in which the sound of the fall of the waters of the river are *spumosa murmura*.<sup>100</sup> Again, the din of the water is described as being 'foamy,' insinuating that the crash of the moving waves is loud enough to create foam. The combination of two different senses here depicts not only the sensual nature of water, but also its powerful properties of transformation.

A casual glance at water, in order to glean its physical composition, is the first indicator of its qualities. While it cannot be assumed that clear water is automatically pure, it certainly was a telltale sign to the Romans for ascertaining whether or not it was potable. Only after secondary tests, such as boiling water, could one actually tell if a water source was good enough for the common water supply. Further, descriptions of 'glassy' and 'silvery' water evoke for the Roman the magical nature of water, as being glossy and reflective creates a visual *tour de force* for the eyes. Finally, water, as always, has the transformative power to produce foam, a unique substance, when its crashes and impacts a hard surface.<sup>101</sup> Thus, the creation of *spumosa* incorporates other senses, such as hearing, into the perception of moving water.

#### iv. Smell

Water does not have an inherent odor. When one smells water, therefore, something has presumably altered its composition to create an odor. Vitruvius notes that when water passes through sulphur, alum, or bitumen, it is changed, whether it becomes

<sup>&</sup>lt;sup>100</sup> Stat. Silv. 1.3.20-23. ipse Anien—miranda fides—infraque superque saxeus hic tumidam rabiem spumosaque ponit murmura, ceu placidi veritus turbare Vopisci Pierosque dies et habentes carmina somnos. "Anio himself, wondrous to tell, full of rocks above and below, here rests his swollen rage and foamy din, as though loath to disturb Vopiscus' Pierian days and song-filled slumbers." (Trans. D.R. Shackleton Bailey)

<sup>&</sup>lt;sup>101</sup> Water, because of the hydrological cycle, has the ability to change states (liquid-gas-solid) based on temperature. For more on this transformative property, see Oestigaard (2011, 42) and Campbell (2012, 4-13).

hot, or to has a 'bad' smell.<sup>102</sup> These elements have already been encountered when they helped to make waters hot and curative.<sup>103</sup>

According to Roman authors, the smelliest of waters are associated with sulphur. We have already seen that sulphurous waters are generally hot to the touch.<sup>104</sup> Vergil, describing the oracle of Faunus underneath the groves of Albunea, mentions that there are springs, and deadly vapors (*mephitin*).<sup>105</sup> Servius, glossing this passage, illuminates the nature of these vapors:

> MEPHITIN mephitis proprie est ter- rae putor, qui de aquis nascitur sulphuratis, et est in nemoribus gravior ex densitate silvarum. alii Mephitin deum volunt Leucotheae conexum, sicut est Veneri Adonis, Dianae Virbius. alii Mephitin Iunonem volunt, quam a ërem esse constat. novimus autem putorem non nisi ex corruptione a ëris nasci, sicut etiam bonum odorem de aere incorrupto, ut sit Mephitis dea odoris gravissimi, id est grave olentis. (Serv. Ad Aen. 7.84)

[Vergil] refers to the ferocious vapor as "mephitis" because foul scent is thought to properly belong to Mefitis, who was born from sulphur water, and because the smell is stronger in forests because of the density of the trees. Some desire that the god Mefitis be connected to Leucothea just as Adonis is to Venus and Virbius is to Diana. Others want Mefitis to be Juno, since it is agreed that she is air. Moreover we know that a foul smell does not occur unless there is a fracturing of the air, just as a pleasant smell arises from pure air. Thus, since Mefitis is a goddess with the most unpleasant smell, the air is heavy with scent. (Trans. Edlund-Berry 2006b)

The goddess Mephitis is then marked by the smelly, foul air associated with sulphurous

waters. But the figure of Mephitis is an elusive one. On the one hand, her foul vapors

<sup>&</sup>lt;sup>102</sup> Vitr. De arch. 8.2.8. Nisi si inciderint in sulphurosum locum aut aluminosum seu bituminosum. Tunc enim permutantur et aut calidae aquae aut frigidae odore malo et sapore profundunt fontes. "Unless they [traveling waters] come upon sulphur, alum, or bitumen. For then they are changed; and either hot or cold, they send forth springs of a bad flavor or odor." (Trans. F. Granger)

<sup>&</sup>lt;sup>103</sup> For more on these elements in antiquity: for sulphur, see Manning (1992), McNulty and Hall (2001), Photos-Jones and Hall (2011); for alum, see Borgard et al. (2005) and Firth (2007); for bitumen, see Forbes (1936), Abraham (1945), Matson (1953), and Hellner (2004).

<sup>&</sup>lt;sup>104</sup> See *supra*. Vitr. *De arch*. 2.6.1; Sen. *Q Nat*. 3.24; Plin. *HN* 31.32, 35.50. See also Chirassi Colombo (2004, 303-304) and Edlund-Berry (2006b, 171-172).

<sup>&</sup>lt;sup>105</sup> Verg. Aen. 7.83-84. nemorum quae maxima sacro fonte sonat saevamque exhalat opaca mephitim. "mightiest of forests, echoes with hallowed fountain, and breathes forth from her darkness a deadly vapor." (Trans. H.R. Fairclough)

have the power to kill, as is seen at her temple at Ampsanctus, in which people die when they enter the temple (Plin. *HN* 2.95), although the validity of this assertion might be exaggerated or apocryphal. On the other hand, archaeological evidence suggests that Mephitis is linked to healing, sulphurous waters throughout the Italian peninsula.<sup>106</sup> Thus, while smelly sulphurous waters can be considered disadvantageous for one's health, there is still an intrinsic healing property of the waters that Romans (and even modern people) seek out.

But was 'bad' smelling water 'bad'? It appears that in this instance, in terms of sulphurous waters, that the answer was 'no.' The smell of sulphur was a marker, an indication to the ancient Roman of the inherent properties of the water. They knew that these were good, healing properties that could be expected from sulphurous waters throughout the whole of the Empire. The odor of sulphurous waters would be much different than, say, the smelly waters flowing through the streets and run-off drains of the Roman city, full of excrement, dead animals, and rotting foodstuffs. The (not-so-pleasant) odors of the Roman city have recently been explored, recontextualizing the pervasive smells of the Roman urban landscape, contrary to our hygienic notions of the modern city.<sup>107</sup> While there was a plethora of different smells attacking the olfactory senses of the Roman city dweller, it seems that, like the white noise discussed above, they became accustomed to the smells of the urban landscape.<sup>108</sup> While as a modern audience,

<sup>&</sup>lt;sup>106</sup> Chirassi Colombo 2004, 303-304; Edlund-Berry 2006b, 175-179. See also De Mincis (2013, 241). <sup>107</sup> A new volume on smell in the Greco-Roman world has recently been published (Bradley 2015c), and the introduction provides a succinct introduction and historiography of the study of smell (Bradley 2015b). In the volume, see especially Koloski-Ostrow (2015b) for a reevaluation of the smells of the Roman city. She shows that cities were not zoned based on smells (and their associations with industrial production), but allowed for the mixing of élites and non-élites, allowing for an "interaction and involvement among citizens of different social status that must have helped preserve peace on the city's streets" (99-100). Bradley (2015a) explores the smells that humans would have created in the Roman city.

<sup>&</sup>lt;sup>108</sup> Morley 2015, 117-118.

we would react very differently than our ancient counterparts (perhaps with disgust) to the smells of the city ("a mixture or urine, shit, decay, smoke, incense, cooked meat and boiled cabbage, among other things"), there was the dichotomy of the civilized sphere of the city versus that of the smells of the countryside, which were certainly less intense than those of the urban centers.<sup>109</sup> In a sense, then, the Roman nose must have been discerning, picking out distinct smells, including those of odorous waters, allowing them to choose and use the best types of water for their purposes, such as with curative sulphurous waters.

v. Taste

In Seneca's description of the sensorial characteristics of water, early on in the *Natural Questions*, the first sense that he mentions is actually taste (*Q Nat.* 3.2.1-2). Some waters are sweet (*dulces*), while some are salty, bitter, or medicinal (*salsae*, *amaraeque aut medicatae*). The last of which are, as he tells us, of a harsh or irregular flavor (*aliae varie asperae*). These waters take on this disagreeable taste because of their added elements, such as sulphur, iron, or alum. Sweet taste is a prized element of water, with its absence of salt and sulphur. Salt or other bad flavors can insinuate that water should not be consumed.

The nature of sweet-tasting water was discussed among Roman authors. The best time for sweet water was during the winter, less during the summer, and the worst time

<sup>&</sup>lt;sup>109</sup> Morley 2015, 119. Morely argues that even though the smells of the city would have been more intense, the 'civilized' nature of the city was superior to the 'uncivilized' smells of the countryside (e.g., livestock and their smells). See also, Spencer (2006) for more on this dichotomy of the city and countryside in the *Odes* of Horace.

was very late in autumn.<sup>110</sup> The reasoning behind this is perhaps the precipitation during the late autumn and early winter in the Mediterranean basin. The water added to the water table could have the ability to flush out any ill-tasting elements, along with increasing the water supply, which had gone down as the summer months passed into autumn. Mountains and northern regions are known for their abundant supplies of sweet water.<sup>111</sup> One only needs to think of the passage regarding the Clitumnus River from Pliny, rising in the hills of Umbria (*Ep.* 8.8). Furthermore, water is reported to take on a sweet taste by passing through clay.<sup>112</sup> It is through the tuff stone, however, that water can take on its sweetest properties, as the porous rock acts as a strainer, taking out any impurities from the water. Instead of having to use a man-made settling tank to strain the water, by choosing water that has passed through tuff, the Roman engineer can find good, beneficial water in the natural landscape.<sup>113</sup> Sweet water is certainly a product of its environment, and certain areas of the Roman landscape were not only recognized, but also clearly isolated and exploited for their sweet waters.

<sup>&</sup>lt;sup>110</sup> Plin. *HN* 31.29. *Omnis aqua hieme dulcior est, aestate minus, autumno minime, minusque per siecitates.* "All water is sweeter in winter, in summer less so, in autumn least, and less during droughts. (Trans. W.H.S. Jones)

<sup>&</sup>lt;sup>111</sup> Vitr. De arch. 8.1.6. Haec autem maxime in montibus et regionibus septentrionalibus sunt quaerenda, eo quod in his et suaviora et salubriora et copiosiora inveniuntur. "Water, however, is to be most sought in mountains and northern regions, because in these parts it is found of sweeter quality, more wholesome and abundant." (Trans. F. Granger)

<sup>&</sup>lt;sup>112</sup> Plin. HN 31.28. Aqua semper dulcis in argillosa terra, frigidior in tofo. Namque et hic probatur, dulces enim levissimaque facit et colando continent sordes. "Water in clay is always sweet, but cooler in tufa. For tufa too is commended, for it makes water sweet and very light; acting as a strainer it keeps back any dirt." (Trans. W.H.S. Jones)

<sup>&</sup>lt;sup>113</sup> Frontinus reports that the waters of the Anio Novus River, due to the loose banks of the river and the resulting added sediment, has to be put through a settling tank to clarify the quality of the water (Aq. 15.1-2). For more on settling tanks, see Hodge (1991, 27, 273) and Wilson (2008, 296, 301).

The antithesis of sweet water in the Roman world is salty water. While sweet water has a pleasant, inviting taste, salt water is the complete opposite.<sup>114</sup> The salinity of the water prevents one from actually drinking it, in addition to the fact that consuming seawater can have deadly consequences. Vitruvius reports that the river Himeras in Sicily bifurcates from its source, with one branch having a flavor of infinite sweetness (*infinita dulcedine*), while the other branch, because it runs through salt mines, has a salty flavor (*salsum saporem*).<sup>115</sup> While Vitruvius is not explicit as to whether the taste of the salty branch of the Himeras is 'bad,' it does seem pejorative by implication, given the infinite sweetness of the other branch. In addition to the bad taste and composition of salty water, there is also the danger of the sea, which can add to the negative connotations of seawater. It has been argued that the *Aeneid* is characterized by two approaches to water.<sup>116</sup> In the first six books, as the Trojans continue to reach Italy, water, typically seawater, is shown as bad and destructive, while in the last six books in Italy proper water, usually freshwater, is shown as helpful and a positive force. Salt water, then, is a form of water that has many negative connotations.

As has been mentioned, the transformative properties of water allow for water to pass through certain elements, altering its composition enough to cause its sensorial nature to be changed. Seneca, as has been shown, states that there is a variety of tastes of water because of the soils or air that it comes into contact with (*QNat.* 3.20.1-2). Before

<sup>&</sup>lt;sup>114</sup> In an epigram of Martial, the poet stresses the difference between fresh and salt waters by making an explicit juxtaposition between the springs and woods on one side of a landscape, with the sea water off the shore of Anxur on the other (10.51.7).

<sup>&</sup>lt;sup>115</sup> Vitr. 8.3.7. *in Sicilia flumen est Himeras, quod a fonte cum est progressum, dividitur in duas partes; quae pars profluit contra Etruriam, quod per terrae dulcem sucum percurrit, est infinita dulcedine, quae altera parte per eam terram currit, unde sal foditur, salsum habet saporem.* "In Sicily, the river Himeras, on leaving its source, divides into two branches: one flows towards the coast which faces Etruria and is of infinite sweetness, because it runs through the sweet juices of the soil; the other stream which runs through the other part where there are salt mines has a salt flavor." (Trans. F. Granger)

<sup>&</sup>lt;sup>116</sup> Benario 1978. See also Edlund-Berry (2006b, 168).

Seneca, Vitruvius describes how the elements of sulphur, alum, and bitumen do indeed give water, whether it is hot or cold, a bad flavor (*malo sapore*).<sup>117</sup> Vitruvius also stresses that hot or cold water can have good and bad tastes.<sup>118</sup> The temperature of water, and presumably not just the smell (as a lot of hot waters probably had an altered smell), was the prime indicator of taste for the Romans. It seems that all the senses were consulted together, in order to judge whether a given source of water was appropriate to drink and consume.

It is unclear, however, whether taste would be indicator of which water sources were deadly or not. Vitruvius, again, mentions the example of the two streams near Pella in Macedonia, in which one water has a good quality (*bonitatem*), while the other side is not even approached because of its poisonous quality (*De arch.* 8.3.15-16). It is difficult to tell from this passage what exactly indicated to those around the streams the dangerous quality of the one side. Presumably, humans or animals died after imbibing the waters, but were there any other signs? A bad smell? A cloudy appearance?

Taste is an important element to water. A good, sweet taste allows for the easy consumption of water, making it a pleasant experience. When the taste is altered, it can mean that a water is still consumable (although not a desirable quality) or not consumable

<sup>&</sup>lt;sup>117</sup> Vitr. De arch. 8.2.8. Nisi si inciderint in sulphurosum locum aut aluminosum seu bituminosum. Tunc enim permutantur et aut calidae aquae aut frigidae odore malo et sapore profundunt fontes. "Unless they [traveling waters] come upon sulphur, alum, or bitumen. For then they are changed; and either hot or cold, they send forth springs of a bad flavor or odor." (Trans. F. Granger)

<sup>&</sup>lt;sup>118</sup> Vitr. De arch. 8.3.1. Sunt autem etiam nonnulli fontes calidi, ex quibus profluit aqua sapore optimo, quae in potione ita est suavis, uti nec fontalis ab Camenis nec Marcia saliens desideretur. Haec autem ab natura perficiuntur his rationibus. Cum in imo per alumen aut bitumen seu sulphur ignis excitatur, ardore percandefacit terram, quae est supra se; autem fervidum emittit in superiora loca vaporem, et ita, si qui in îs locis, qui sunt supra, fontes dulcis aquae nascuntur, offensi eo vapore effervescunt inter venas et ita profluunt incorrupto sapore."There are some hot springs from which water flows of excellent flavor and so pleasant to drink that we miss neither the Fountain of the Camenae nor the conduit of the Marcian Aqueduct. Hot springs arise naturally in the following way. Fire arises underground owing to alum or bitumen or sulphur, and by its heat makes the soil above it glow. It further sends a warm vapor to the surface of the ground, and whatever springs of sweet water rise in such places, meeting this vapor they surge forth between the cracks and flow without damage to their flavor." (Trans. F. Granger)

at all (as is the case with salty and poisonous waters). Taste can be used an indicator *par excellence* of the quality of water. While the other sensorial aspects of water add to the whole experience of encountering water, particularly in its natural landscape, it is the base element of water (namely that it is a crucial element for human survival) and its good taste that one can easily understand, across time and space.

# vi. Conclusions

The sensorial nature of water, which we can study in Roman literary texts, has been fruitful in understanding what the Romans actually thought about their experiences with water. Because the texts consulted were both poetry and prose, the reasoning behind the words (and even the choice behind those words) can be due to their literary genre, but there seem to be a set of common thoughts about water in the Roman world. Water can take on human attributes, such as the 'talking' water. The transformative properties related to water are omnipresent. Water is a product of its landscape, which could alter all of its qualities that can be perceived using the five senses. In addition, water can alter those who use it or consume it. Thus, water takes on a malleable property, in a sense, potentially benefitting or harming humans, animals, and nature. What is constant, however, is how it is beneficial, and that one must seek out beneficial waters, based on their known properties.

Finally, the examination of the senses and water has demonstrated a dichotomy between 'good' and 'bad' waters—and specifically how the senses can help one to discern the difference between the two. 'Good' waters, across the board, seem to elicit positive sensorial experiences—namely ones that have the potential to create positive memories for those interacting with the water and its landscape. We can think back to the example of the water of Bordeaux that began this section. Ausonius articulates all of the 'good' aspects of the waters of the spring, with the sound of the moving water, and the coolness and clarity of the water, along with the freshness of the air around the fountain and *euripus* and the refreshing taste of the unsullied water. Ausonius' surrounding urban landscape was positive and seemingly pleasant. Because Ausonius includes this passage in his praise of his hometown, he presumably wants not only to share his experience with his readers, but also for his readers to understand the greatness of the fountain, as they too can perhaps share a similar pleasant sensory experience at their own local spring. The charm of the Clitumnus is also predicated on the 'good' water and the sensorial *tour de force* of a shared experience. The celebration of 'good' waters because of the pleasure of the senses that they bring is important in our considerations of perceptions of water throughout the Roman world.

# **IV. Conclusions**

Water was an important element of all aspects of Roman life. It was necessary for survival, pleasure, and daily use, as Vitruvius states (*De arch.* 8.1.1). The Romans were masters of discerning exactly which waters to exploit, based on the innate qualities, which can be traced back to the *interactions* and sensorial experiences with water in its natural and artificial landscapes. 'Good' water was characterized by its sweet taste, coolness, and clear complexion, and sometimes associated with sources connected to nymphs. Water also has the ability to be transformed, as some cold waters were altered to become hot, although they were still 'good' because of their curative properties. Water is

unique in that it elicits a variety of responses and *reactions* deriving from the fact that humans can use all five of their senses to appreciate it. The Romans identified waters in their landscapes, and celebrated them, whether through prose or poems that elevated the flowing waters in villas, or celebrated the personifications of the water deities associated with the spring sources. The various waters were seen in diverse contexts, while all still demonstrated important dichotomies of water usage: artificial-natural and utilitypleasure. These notions helped to drive the ways in which the Romans perceived and used water in their surroundings. The omnipresence of water in life is of paramount importance in the Romans' elevation of water in all aspects of their lives. It is then easy to understand the Romans' obsession of displaying water where they could, illustrating its supreme life- and pleasure-giving qualities for all to experience.

### **Chapter Three: Civic Spaces: Fora and Macella**

Typical Roman civic spaces could include a number of structures and building complexes, such as the forum, the macellum (market place), comitium (place for voting), tabularium (place for record keeping), and the basilica (for judicial procedures). These structures are located in public areas of the city, in places of high traffic, facilitating ease of access and use by inhabitants of the town. While each structure has its own typology, morphology, and necessary elements (to be considered a certain building type), the addition of water-displays in each can dramatically alter the surrounding civic space, along with the individual interaction one has in these areas. Of course, the sensorial experience of added water in a place with many people and products constantly on the move would have been refreshing and welcomed throughout the Empire, regardless of location and climate. There is the functional and practical use of water, which would not only quench the thirst of humans and animals in the forum and macellum, but also ensure that perishable goods could be kept fresh in the markets associated with these spaces. Finally, in some instances, water-displays in civic areas can carry mythological or historical meanings, which can further the individual goals of the patron of the structure.

### I. Fora and Agoras

The architecturally defined open area is a hallmark of both Greek and Roman civic spaces. In a central zone of the urban landscape, Greek and Roman architects planned areas that often brought various dimensions of society together, including the athletic, commercial, economic, legislative, religious, and social. In the Greek world, this open space was commonly defined as the agora.<sup>1</sup> The Greek agora, a place where assemblies occurred and periodic markets were held, was generally marked off as public land. While a number of examples grew organically in cities with ancient foundations, the agora became an organized, architecturally defined space by the Classical and Hellenistic periods in newly founded cities. Often, agoras were framed on one to three sides by colonnaded stoas, which were punctuated by other types of buildings and structures, such as bouleuteria, odeia, prytaneia, temples, altars, fountains, and public commemoration, such as honorific statues. Typically, the Greek agora was an open space, which allowed for assemblies to congregate and other events to happen there. The agora was in effect the epicenter of activity in the Greek city, and its form is seen throughout the Mediterranean.

The Roman forum, the counterpart to the Greek agora, had a similar function, although with slightly different architectural permutations.<sup>2</sup> Vitruvius discusses the

<sup>&</sup>lt;sup>1</sup> For succinct overviews of the Greek agora, see Bell (2010) and Camp (forthcoming). The recent monograph of Sielhorst (2015) presents a detailed study of the agora during the Hellenistic period. The edited volume by Ampolo (2012) provides discussion not only of the different aspects of the Agora, but also the agorai of Sicily, Southern Italy, and Cyprus. An older resource to examine on the agora is still Martin (1951). For the specific buildings, see: in general, MacDonald (1943); the prytaneion (Miller 1978); the bouleuterion (Gneisz 1990); commercial activities (Rotroff 2009); the stoa (Coulton 1976). Of course, the American excavations of the Athenian Agora have yielded much research and publication, which are easily accessible. For more on fountains associated with Greek agoras, see Glaser (1983, 165-175), Robinson (2011), and Donati (2013).

<sup>&</sup>lt;sup>2</sup> The most complete discussion, with bibliography, is Gros (1996, 207-234) and Gros and Torelli (2007, *passim*, 376-392), along with Frakes (2014), who offers a succinct synthesis of previous scholarship, along with insightful critiques of Gros and updated bibliographic references. MacDonald's discussion of plazas in the Roman urban armature is still important in considering the Roman forum (1986, 51-66). Lackner's 2008 monograph considers the development of the forum in Italy from the beginning of the Republic to the Social War, evaluating the forum in its urban context, not just a *disiecta membra* of the urban fabric. Lackner uses evidence from 66 Latin colonies on the Italian peninsula. In the same vein, Akaiturri (2008) also examines the Republican Roman forum in Italy, examining its urban context, but focusing on specific structures in the forum itself. There is much work on the fora of Rome, with the most recent being: on the Forum Romanum (see the "Digital Roman Forum" website from UCLA; also, more recently the "Projekt Digitales Forum Romanum" of Humboldt-Universität zu Berlin, along with Gorski and Packer 2015); on the Imperial fora (Meneghini and Santangeli Valenzani 2007; Meneghini 2009); on the Forum Iulium (Delfino 2014); on the Forum Augustum (Meneghini and Santangeli Valenzani 2010); on the *Nachleben* of the Roman fora (Küster 2014). There has been much work on the development of the forum form in and

placement and features of the forum in *De architectura*.<sup>3</sup> He mentions that fora should be placed in the center of town when cities are inland, or close to the port when on the sea (1.7.1). Vitruvius emphasizes connections to the city grid, which gave rise to the rectangular-shaped fora of a 2:3 proportional layout (5.1-2). The forum can contain basilicas (one cannot forget Vitruvius' Basilica at Fanum, 5.1.6-10), treasuries, jails, senate houses, temples, and space for gladiatorial games, the last of which is an ancient Italic tradition (5.1.1).

The Forum Romanum of Rome is today arguably the most famous and most ancient of Roman fora. Thus, there is always, in a certain sense, an ideological connection that towns outside of Rome make when they construct their own fora, employing similar models of design and comparable types of structures. For example, there is the widespread use of the Capitolium (a temple of the Capitoline Triad), which often becomes the center for imperial cult in towns throughout the Empire, or use of the Corinthian order, known for its associations with Augustan abundance.<sup>4</sup> It has been argued that the forum reflected prominent Roman social principles of "strict hierarch[ies], *pietas*, and social stratification" through the use of its canonical structures, which is not the case with the Greek agora.<sup>5</sup> While we see components of the Roman forum adopted throughout the Empire (e.g., basilicas, Capitolia, macella), the architectural ensemble of

outside of Italy, such as Akaiturri (2008). The development of Pompeii's forum has been most recently discussed by Ball and Dobbins (2013), with the promise of future results. Roman fora in the western provinces was explored in a conference held in 1987, "Los foros romanos de las provincias occidentales," and published under that name, along with an ample discussion by Laurence, Esmonde Cleary, and Sears (2011, 170-202).

<sup>&</sup>lt;sup>3</sup> For a discussion of Vitruvius on fora, see Frakes (2014, 250-251).

<sup>&</sup>lt;sup>4</sup> Frakes 2014, 254-255. See Frakes for the bibliography for Capitolia and the Corinthian order in this context. *Contra* this assertion is the recent work of Quinn and Wilson (2013), who argue that Capitolia in North Africa were not widespread until at least the Antonine period.

<sup>&</sup>lt;sup>5</sup> Evangelidis 2014, 352. See Zanker (2000) for a full discussion of how the forum became a hallmark of the Roman city, serving as a symbol that articulated these social principles.

the forum is only seen in the western half of the Roman Empire, because the agora was still popular in the East, with the exception of new Roman colonies and older urban centers that began adopt Roman-style urban center design.<sup>6</sup> For example, up to the late Hellenistic period, the Athenian Agora was a relatively open area, but afterwards with the construction of new stoas (e.g., Stoa of Attalos and the stoas on the northwest corner flanking the Panathenaic Way), the Odeion of Agrippa, and other Roman buildings, the Agora was transformed into a more congested and closed space.

The forum layout and features seem to have ancient Italic origins that were adopted throughout the Italian peninsula before being taken up in the western provinces, similar to the phenomenon of the Roman-style theater. As the forum style travels, the essential components are always replicated , but with a large degree of adaption and change. For example, while Vitruvius recommends the rectangular forum and it is seen in the archaeological record, we have evidence for long and narrow fora, almost square fora, and square-shaped fora.<sup>7</sup> The parameters that do guide the design of fora are axiality, frontality, and symmetry.<sup>8</sup> Finally, as the forum form travels outside of Italy, a 'tripartite forum' develops, which features a main temple, the civic basilica, and an open rectangular space.<sup>9</sup> Again, like the Greek agora, the forum is the civic, commercial, political, and social epicenter center of the Roman urban life, marking this space as an extremely important one for every Roman city.

<sup>&</sup>lt;sup>6</sup> Frakes 2014, 249. For more on the relationships between the Roman forum and the Greek agora, see: Martin (1972; 1978). Evangelidis (2010; 2014) demonstrates how the Roman forum form was adopted in the colonies of Greece (e.g., Corinth, Patras, Philippi, Dion, Knossos), with the typically axially aligned space, while older agoras (e.g., Athens) were modified but not rebuilt on a 'traditional' Roman forum model. Dickenson (2011), *contra* scholars that have asserted that Greek agoras in the Roman period were 'museums,' that is, places to display old buildings and monuments, argues that agoras continued to be used for nodes of political activity in the Empire.

<sup>&</sup>lt;sup>7</sup> MacDonald 1986, 52; Frakes 2014, 251.

<sup>&</sup>lt;sup>8</sup> Russell 1968, 336; Frakes 2014, 252.

<sup>&</sup>lt;sup>9</sup> Gros 1996, 220; Frakes 2014, 252.

# i. Examples of Water-Displays Throughout the Empire

In various fora throughout the Empire, there different elements of hydraulic infrastructure have been found, especially pipes and drainage channels, of which the latter would have ensured dry spaces.<sup>10</sup> Usually tied to centrally located spaces, fora and agoras tended to be positioned with easy access to urban water distribution networks.<sup>11</sup> Water-displays also exist in fora, and they can come in three forms: as subsidiary; entrance-adjacent; or as focal points. Subsidiary water-displays are part of the landscape of the forum, but do not impede traffic flow (i.e., pedestrians tend not to stop there and block traffic) through the nearby area, as the fountain is relegated to the side of the forum.<sup>12</sup> Water-displays placed near or at entrances mark off the space of the forum, signaling to the pedestrian that a different type of space is beyond or near.<sup>13</sup> Focal points that include water-displays draw the attention of the pedestrians either to congregate at the structure itself or to focus their gaze on the fountain or an adjacent structure (e.g., temple). Focal points can either stand alone or act as architectural pendants to other important buildings in the forum. Finally, focal points do not have to be planned, as they

<sup>&</sup>lt;sup>10</sup> Akaiturri 2008, 86-97. The Greek agora, of course, also included the presence of water-infrastructures and fountain-houses. For example, on water-infrastructure of the Athenian Agora, see Camp (1977, *passim*) and Chiotis (2011).

<sup>&</sup>lt;sup>11</sup> Richard 2012, 189.

<sup>&</sup>lt;sup>12</sup> Subsidiary water-displays are not explored in detail here. One can look to examples at Paestum (Augustan period, near the bouleuterion; Schmölder-Veit 2009, 112), Cuma (first-second centuries CE; Neuerberger 1965, cat. no. 52, Letzner 1999, cat. no. 76), Ordona, Italy (first half of the first century CE; Letzner 1999, cat. no. 244), Aspendos (mid-second century CE; Richard 2012, cat. no. 11), Ebba Ksour, Tunisia (second-third century CE; Letzner 1999, cat. no. 427), Djemila, Algeria (Severan; Letzner 1999, 136). Mello (1995) asserts that Paestum would have had a large-scale water-display in the town, based on two fragmentary inscriptions that have been discovered near the forum—but the evidence is tenuous for such a claim.

<sup>&</sup>lt;sup>13</sup> The Arco di Germanico of Pompeii is a prime example of a water-display at the entrance to a forum, as the it uses the architectural forms of the arch and the moving water to draw pedestrians from the north into the forum proper (**App. No. 1.98**). There were other instances throughout the Empire: Otricoli, Italy (end first century BCE-beginning first century CE; Letzner 1999, cat. no. 273), Ostia (so-called 'Ninfeo della Forica,' Domitianic-Trajanic; Neuerberg 1965, cat. no. 129; Letzner 1999, cat. no. 231; Ricciardi and Scrinari 1996, 227, cat. no. 20), and Phaselis, Turkey (Hadrianic?; Dorl-Klingenschmidt 2001, cat. no. 89, Richard 2012, cat. no. 62).

can be part of the organic development of an urban node, when a public square grows around an area where there is a fountain and a major street. We first examine fountains associated with fora in three Gallic examples (Avaricum, Vienna, and Glanum) to demonstrate the impact of water in the civic spaces in Roman France. Then, waterdisplays in the fora and agoras of Philippi, Baelo Claudia, Minturnae, Athens, Corinth, Kos, Sagalassos, Ephesus, Miletus, and Pisidian Antioch are briefly discussed to demonstrate the nature of fountains that can be considered focal points and their placement in the urban landscape.<sup>14</sup>

The civic spaces of Roman Gaul in the Early Empire included a number of waterdisplays. Starting under Augustus, with the implementation of new water infrastructure systems such as aqueducts and *lacus*, Gaul saw an increase in water gathered by large man-made constructions, as opposed to more traditional native-style wells.<sup>15</sup> Water euergetism seems to be locally sponsored in many cases in Roman France, although there are a number of examples of imperially sponsored projects under Agrippa in southern Gaul, Claudian work in Lugdunum, and perhaps one example under Trajan.<sup>16</sup> Local euergetism often manifested itself in the installation of new *lacus* in the cityscape.<sup>17</sup> At Vienna (modern Vienne), there is a group of at least eight fountains constructed by two men during the Claudian period that are known by inscriptions and were located

<sup>&</sup>lt;sup>14</sup> The reader is reminded that the examples presented in the text in each section are organized chronologically.

<sup>&</sup>lt;sup>15</sup> Agusta-Boularot 2004, 10; 2008.

<sup>&</sup>lt;sup>16</sup> Agusta-Boularot (2004, 10-11) seems to emphasize the local dedications over the numerous imperial examples throughout France. On Agrippa's construction of aqueducts in France, see Roddaz (1984, 398-401), along with his construction of the Temple of Valetudo in Glanum (**App. No. 1.58**). At Lugdunum, there is the Cyclops Fountain related to Claudius (**App. No. 1.72**), along with other examples explored in Chapter 4. On the inscription of a fountain dedicated to Trajan, see *CIL* 12.4341 and Agusta-Boularot (2004, 10-11).

<sup>&</sup>lt;sup>17</sup> *CIL* 12.2493-2494 (various locations), 12.2606-2607 (Genaua; Genève, Narbonnaise), 12.4190 (Sextantio; Murviel-lès-Montpellier). See also Agusta-Boularot (2004, 6, 10-11).

throughout the town, with some in the forum.<sup>18</sup> Avaricum (modern Bourges) has a large fountain in a space that leads to the forum, probably installed in the mid-first century CE (**App. No. 1.21**). The water-display was a simple large basin (8.40 m by 2.54 m) in a long hall, which was decorated with arches and engaged Tuscan columns. The current condition of the remains makes it difficult to understand just how the fountain actually functioned, but we do know that it was installed to interact with people proceeding into the forum beyond.

Glanum (modern Saint-Rémy-de-Provence) was a city of Hellenistic origins that grew dramatically during the Early Roman Empire, including the construction of a new forum with a so-called 'Triumphal Fountain.'<sup>19</sup> In 27 BCE, when Augustus created the province of Gallia Narbonensis, Glanum was incorporated as a colony with Latin Rights. During this period, a forum was built into the city center (**Fig. 7a**). The Augustan forum included the construction of a three-sided porticoed space that culminated in a basilica, along with twin temples dedicated to the imperial cult (and surrounded by a portico) to the southwest.<sup>20</sup>

At Glanum, immediately to the east of the temples, and marking the southern edge of the forum, was the so-called 'Triumphal Fountain' (**Fig. 7b; App. No. 1.59**). The fountain was built around 20 BCE, along with the other structures of the Augustan forum on the site. The shape of the water-display is an exedra (whose hemicycle measures 5.86 m in diameter), which is one of the earliest known exedra fountains in the Roman

<sup>&</sup>lt;sup>18</sup> CIL 12.1881-1887, 1889. See also Bedon, Chevallier, Pinon (1988, 287).

<sup>&</sup>lt;sup>19</sup> For more on the city of Glanum, see: Rolland 1958; King 1990, 68-70; Roth Congès 1992; Bromwich 1993, 201-221.

<sup>&</sup>lt;sup>20</sup> Roth Congès 1987; Roth Congès 1992, 49-55; Frakes 2009, 168-170; Roth Congès 2000; Laurence, Esmonde Cleary, Sears 2011, 183-184.

world.<sup>21</sup> It was fronted by a rectangular basin (1.75 m by 4.75 m) that opened to the north and, thus, the rest of the forum. The structure would have been supplied by a contemporaneous vaulted aqueduct that brought water from a local lake that had been dammed.<sup>22</sup> The fountain was decorated on the superstructure of the hemicyle (**Fig 8**). Around the back would have been Corinthian columns helping to support a sculpted cornice. It is believed that at the back of the basin, in front of the columns, would have been sculpture related to victory, hence the monument's modern name. Included in the program were at least two kneeling captive Gallic prisoners and two trophies in the form of cuirasses—all of which evokes contemporary and subsequent triumphal decoration throughout the Roman Empire.<sup>23</sup>

The 'Triumphal Fountain,' however, is curious. Its placement in the newly constructed Roman urban landscape marks its importance, as it interacts with the forum's basilica and twin temples. Because its basin looks towards the forum itself, it does not visually invite pedestrians to travel from the south *into* the city. When people came into the forum, however, the use of water and triumphal imagery must have been striking. With the use of Gallic prisoners and the monument's Augustan date, along with the construction of the contemporaneous adjacent structures, there is a prominent message of domination presented in this newly appointed Roman colony, even though the town stretches back to the Hellenistic period.<sup>24</sup> Water-displays are rarely decorated with actual images of triumph, but fountains can allude to naval victories with both the show of the

<sup>&</sup>lt;sup>21</sup> Agusta-Boularot 2004, 8.

<sup>&</sup>lt;sup>22</sup> For the vaulted-dam aqueduct, see Agusta-Boularot and Paillet (1997, especially 66-74). The authors, in addition to their research on the water supply and Gros (1995), who argues that the site was a place of transhumanace of sheep at certain times of the year and suggest that perhaps the Triumphal Fountain was used to water the animals. The use of large water-displays to water animals is seen throughout the Empire, such as with the fountains found in the *paradoi* of theaters in the East, like at Sparta (**App. No. 1.136**). <sup>23</sup> For comparanda of this composition, see Agusta-Boularot, Follain, and Robert (2004, 93-95).

<sup>&</sup>lt;sup>24</sup> Agusta-Boularot 1997, 258-270. For more on Roman trophies, see Picard (1957).

abundance of water—and the peace associated with water.<sup>25</sup> While the decorative scheme may be unique, it promotes the peace that was imposed by Augustus' adoptive father, Julius Caesar, in this area. Further, the construction of the forum during the Augustan period, along with the subsequent erection of the famous triumphal arch to the south of the city, show how a water-display can interact with an overarching political message of victory within the larger urban landscape of a site.

Moving to the other side of the Mediterranean, in northern Greece, two long rectilinear fountains on the northern side of the forum of Philippi show how a waterdisplay can help to emphasize the central area of the space. The forum of Philippi (Colonia Julia Augusta Philippiensium) was monumentalized in three subsequent phases, from the colony's refounding in 27 BCE to the fifth century CE (**Fig 9a**).<sup>26</sup> On the slopes directly to the north of the via Egantia and the lower forum area, a terrace with three different temples was installed. During the first monumentalizing phase (mid-first century CE), along the northern edge of the open space of the forum, below the temple terrace, a line of different structures was constructed that included a *rostrum*, two small temples, and two ramps, the latter of which provided access to the via Egnatia.<sup>27</sup> In the second phase (between 161-175 CE), the open space of the forum itself was formalized, enclosing all four sides (making an area of roughly 98 m by 48 m). On the north, the

<sup>&</sup>lt;sup>25</sup> This 'Triumphal Fountain' is virtually unparalleled in the Roman Empire. The only other known waterdisplay showing triumphal images being the Nymphaeum Alexandri in Rome, whose façade was decorated with trophies (hence the monument's post-antique name, the 'Trofei di Mario'; **App. No. 1.116**). Agusta-Boularot (1997, 255-277) discusses the ideological use of water-displays, including the Fountain of Poseidon in Corinth (as a symbol of Agrippa's victory at Actium, which is tenuous, given that the fountain was a private dedication; **App. No. 1.33**) and the Cyclops Fountain at Lyons (a symbol of Claudius' victory over Britannia; **App. No. 1.72**). It is argued below (especially pages 165-167), through the use of water in the Imperial fora of Rome, how victories, especially naval, can be alluded to through water-displays. <sup>26</sup> The most succinct (and most recent) treatment and synthesis of the forum of Philippi is Sève and Weber (2012), who describe the three monumentalizing phases. See also Evangelidis (2010, 259-275). <sup>27</sup> Sève and Weber 2012, 14-16.

space between the small temples and the ramps was filled by two extremely long fountains (22.00 m by 3.10 m, nearly 0.80 m deep), which were minimally decorated with a single pillar on the interior that had a lion-head spout that poured water into the basin (**Fig. 9b; App. No. 1.95**). An extremely fragmentary inscription names one Decimus as responsible for the construction of the fountains (at a cost of 30,000 sesterces), and it has been suggested to belong to these water-displays.<sup>28</sup>

The fountains in the Philippi forum effectively use their placement in the landscape to focus the attention of the passer-by. Although the fountains themselves are relatively simple basins with solitary pillars of moving water, they filled an area that was previously empty. Nestled on the northern edge of the forum, they provide continuity in the architectural space among ramps, temples, and the *rostrum*. The single visual line then prompted the viewer not only to look at them, but also at what was above, namely the via Egnatia and the temple terrace (**Fig. 9c**). By working with other architectural elements and the natural terracing of the site, the architects and patrons effectively monumentalized the northern edge of the Philippi forum.

At the same time, the division of space in the forum of Philippi exemplifies the Roman desire to create an *area sacra* in the forum. Throughout the Roman Empire, fora are known for including *areae sacrae* that are spatially (and sometimes visually) separated, particularly through axial configurations of the space, often with a temple at the end of the forum.<sup>29</sup> In addition to axial arrangements, one finds terracing that can aid

 $<sup>^{28}</sup>$  [... L. Decimu]s L(uci) f(ilius) Vol(tinia) Bassus aed(ilis) Philippis testament sibi et L(ucio) Decimio L(uci) f(ilio) Vol(tinia) / [q(uaestori) IIvir(o) Philippis patri(?) e]t C(aio) Decimio L(uci) f(ilio) Vol(tinia) Massimo fratri fieri iussit HS ((I)) ((I)) ((I)). For the text of the inscription, see Collart (1937, 346-347) and Pilhofer (2000, 230). Sève and Weber (2012, 72) disagree with the attribution of the inscription to the fountain, but suggest that it perhaps belongs to some other structure, such as a funerary monument. <sup>29</sup> Laurence, Esmonde Cleary, Sears 2011, 176-179; Evangelidis 2014, 351.

in the visibility of structures (evident especially through steps and ramps) and occasionally streets passing through (which increases traffic in a space), such as at a site like Brescia, where a line of temples culminates in an axis that is punctuated by ramps, a main street, a long colonnade, and a basilica (**Fig. 10**).<sup>30</sup> At Philippi, this organization of space is clear, especially with bifurcation created by the terracing, the path of the via Egnatia, and the line of monuments, including the fountains, in the forum proper.

Other examples also employ water-displays to help articulate this differentiation of areas in the forum. At Baelo Claudia in the province of Baetica (modern Belo, Spain), the forum is divided into two levels, with a line of temples on the higher north end with the forum proper below (including a basilica, macellum, and shops) (**Fig. 11a**).<sup>31</sup> On the north terrace wall, in between two sets of stairs that lead up to the temple terrace, is a semicircular basin that was added to this space in the second-half of the first century CE (**Fig. 11b; App. No. 1.22**).<sup>32</sup> Originally, there was a simple terrace with a tribunal and an altar directly above on the temple terrace. When the space was converted to remove the tribunal, the fountain was the main focal point, which also emphasized the northern side of the forum, namely the *area sacra*. It has been suggested that the water-display could have served a ritual purpose (as a water source) for the temples and their activities above.<sup>33</sup> And at Minturnae (modern Minturno, Italy) the Republican-era forum's sacred space that included a Capitolium and a Temple of Augustus was bifurcated by the via

<sup>&</sup>lt;sup>30</sup> For more on the Brescia example, see Laurence, Esmonde Cleary, and Sear (2011, 176-178). For more on the notion of visibility that is increased through terracing, see MacDonald (1986, 135-137).

<sup>&</sup>lt;sup>31</sup> For a discussion of the forum, see Pelletier, Dardaine, and Sillières (1987) and Laurence, Esmonde Cleary, and Sears (2011, 180-182). See also: Sillères et al. (1995) for an overview of Baelo, and Bonneville et al. (2000) for the Capitolium.

<sup>&</sup>lt;sup>32</sup> Ponsich (1974, 30) suggests a date of the second-half of the first century CE.

<sup>&</sup>lt;sup>33</sup> Reis 2009, 303.

Appia (the city's *de facto* decumanus) (**Fig. 12a**).<sup>34</sup> Sometime between the Hadrianic period and the beginning of the third century, two small, rectangular, marble-clad pendant fountains were installed along the via Appia, which helped to frame the two temples and provided access to an accompanying portico and the theater that lay just to the northwest (Fig. 12b; App. No. 1.75). The fountains here both mark the *area sacra* of Minturnae's forum and connect the north side of the forum to its southern counterpart across the decumanus, which contained the curia and basilica of the town. The fountains provide architectural (and perhaps even visual) links between the two parts of the forum. Both sets of fountains at Baelo Claudia and Minturnae were of similar size and orientation, set off to the east and west sides of the forum. All of these examples with clear *areae sacrae* aid in differentiating the space architecturally and visually to the pedestrian, indicating sacred versus secular areas, even though this is all still considered to be the forum. They focus the gaze of the viewer on the most visually and ritualistically important spaces of the *areae sacrae* in the forum, helping to create spatial hierarchies, with the religious spaces connected to the forum at the top and the civic spaces at the bottom.

Returning to Greece, it is not uncommon to find water-displays nestled in the colonnades of stoas. Through the Hellenistic period, there were a number of examples in the stoas of Athens, including those of Eumenes II, of Attalos II, and the South Stoa II.<sup>35</sup> During the Roman period, the tradition of fountains incorporated into stoas continued, including at Athens and Corinth. In the first century CE, a fountain house was installed in the south stoa of the Roman Agora of Athens (**Figs. 13, 14a, 14b; App. No. 1.17**). Fed by

<sup>&</sup>lt;sup>34</sup> For more on Minturnae's forum, see: Ruiz de Arbulo (1991, 24), Akaiturri (2008, 240-242), and Laurence, Esmonde Cleary, and Sears (2011, 144-148).

<sup>&</sup>lt;sup>35</sup> Glaser 1983, cat nos. 28, 79; Agusta-Boularot 2001, cat. nos. 1-3. See also: Evangelidis 2010, 37-83.

a spring to the south, the water-display would have provided water necessary for a variety of purposes (e.g., drinking, washing hands or food products) in the new commercial space of Athens. Even today one can experience the sound of the trickle of water when the fountain is full enough with water from the spring—giving a hint (at least aurally) of the ancient experience. Corinth's South Stoa also has water-display placed near the intersection of the city's cardo and decumanus (Figs. 15, 16a; App. No. 1.38). Situated in a similar fashion in a stoa, the Corinthian example is unique in Greece in its use of polychrome marble, including the basin's parapet, carved with bucrania and myrtle branches (**Figs. 16b, 16c**).<sup>36</sup> One can only imagine the effect of the water trickling over the parapet and wetting the relief, altering its appearance. A final consideration in these two cases is that both fountains were covered in a more Greek style of fountain design perhaps resulting from the need to control the evaporation of water and eliminate impurities that can contaminate a basin open to the elements.<sup>37</sup> The cool space, too, due to not only moving water, but also the covered portico of a stoa, must have been a welcome addition to a civic space in Greece.

Moving away from the mainland, in a rebuilding of the agora of Kos after an earthquake of 142 CE, a water-display was added to the entrance that focused the attention of all those entering with the space. The main agora in this rebuilding was connected with the lower commercial agora and the harbor (**Fig. 17a**).<sup>38</sup> Instead of making a simple entrance to the space, the architects and patrons constructed a

<sup>&</sup>lt;sup>36</sup> Robinson 2013b, 359-360.

<sup>&</sup>lt;sup>37</sup> Longfellow 2011, 107-109; Bowe 2012; Richard 2012, 115, 175-176. Longfellow argues that with Hadrian's new benefactions of hydraulic infrastructures in Greece, new and innovative forms of fountains (especially with open basins) could be constructed—a sharp contrast to the more covered type Greek fountain style.

<sup>&</sup>lt;sup>38</sup> Rocco and Liviadotti 2011; Evangelidis 2014, 343.

monumental propylon that included a temple of the imperial cult that opened to the north (thus towards the harbor), which was flanked by entrances the led to the south (thus, the main agora). The excavators have likened the monumental propylon to other contemporaneous architectural examples from the eastern half of the Empire, such as the Sanctuaries of Bel in Palmyra and Zeus at Baalbek, which would place the architecture of Kos in a wider eastern Mediterranean context.<sup>39</sup> On the south side of the temple was found a three-niched nymphaeum (Fig. 17b; App. No. 1.66). Each niche had a basin that overflowed into a lower channel and then drained into the inner part of the agora proper. The water-display was veneered by slabs of cipollino verde and white marble stones, which must have been impressive when wet, since the colors of the stone would have changed with the addition of water.<sup>40</sup> The fountain on the south side of the entrance of the agora would have been sumptuous, giving the space a grandeur that the harbor of Kos perhaps wanted to achieve in the post-earthquake restorations. Further, the water-display would have been the focal point of the north side of the main agora, while also beckoning pedestrians to continue through the adjacent entrances down to the commercial agora and harbor.

At the site of Sagalassos in Pisidia (Turkey), the Lower and Upper Agoras are bound on their northern sides by façade fountains (**Fig. 18a**). Three water-displays on three different terraces going up the slopes of the city provide a monumental *tour de force* of water, including the Trajanic/Severan Nymphaeum in the Lower Agora (**Fig. 18b; App. No. 1.125**), the Hadrianic Nymphaeum on the terrace directly above the

<sup>&</sup>lt;sup>39</sup> Rocco and Liviadotti 2011, 417.

<sup>&</sup>lt;sup>40</sup> On the effects of wet stone, see Gnoli (1971, 154-156). Robinson (2013, 362) claims that in Roman Greece, except for a few examples at Corinth, polychrome marbles is not used. With the evidence from Kos, it is time revisit the use of polychrome marble in Roman Greece.

Lower Agora (Fig. 18c; App. No. 1.124), and the Antonine Nymphaeum on the Upper Agora (**Fig. 18d; App. No. 1.123**).<sup>41</sup> The fountain on the Lower Agora was relatively plain in its appearance, with a simple columnar facade, which would have been a welcome architectural addition to this agora space that had no colonnaded stoa. For a person standing in the Lower Agora, the two-storied Hadrianic Nymphaeum would have risen above the agora, making it seem as if the Trajanic/Severan and the Hadrianic Nymphaea were in fact one construction (**Fig. 18e**).<sup>42</sup> The Antonine Nymphaem at the top of the terrace would have acted in a parallel fashion, mimicking the architecture seen in the Lower Agora, particularly the columnar facade. The architects were able to create an almost perfect visual axis of three water-displays that established a sense of monumentality throughout the whole city. If one were to start at the lower part of the city, the successive water-displays in the two civic centers would have invited the pedestrian up into the city, much as Perge's Hadrianic North Nymphaeum at the base of the acropolis did the same (App. No. 1.89). In addition, the fountains act as frames for each of the agoras, prominently lining one side of the space and prompting visitors to continue *up*, in order to discover the next architectural frame.

In a similar fashion, a series of four fountains dated from the Augustan to Flavian periods help to demarcate the Upper Agora of Ephesus (**Fig. 19a**).<sup>43</sup> On the northwest

<sup>&</sup>lt;sup>41</sup> The Trajanic/Severan nymphaeum is so named because it was constructed originally in the Trajanic period, with a Severan restoration that kept nearly the same appearance. For a discussion of these fountains in their urban context, see also Richard (2008; 2012, 193-194). Longfellow (2011, 151-156), while she mentions the Trajanic/Severan and Antonine Nymphaea, does elaborate much on them despite their importance in the landscape of Sagalassos. The reason behind is probably due to the fact that Longfellow's data set is limited to only water-displays that are directly related to the emperor.

<sup>&</sup>lt;sup>42</sup> Richard 2012, 193.

<sup>&</sup>lt;sup>43</sup> See the discussion of Dorl-Klingenschmid (2001, 139-142) for the placement of water-displays in the urban landscape of Ephesus. Of interest to this discussion of monuments in Ephesus, some of which have inscriptions, is the article of Graham (2013), which offers a new approach to understanding monumental Roman inscriptions.

corner of the agora, along the *Domitianstraße* (running north-south), is the so-called Pollio-Bau, a pedestaled monument dated to the Augustan period, with a semi-circular niche for water on the west side, which was demolished in the Domitianic period to be changed into a square-shaped space that allowed for tabernacles, with basins below, to be installed (Fig. 19b; App. No. 1.52). Across the street was the Fountain of Domitian (the so-called "Apsisbrunnen"), an exedra that supported a semi-dome, dated to 92-93 CE (Fig. 19c; App. No. 1.49). Along the south side of the agora is the Hydrekdocheion of C. Laecanius Bassus, an ornate pi-shaped façade fountain, originally built in 78-79 CE at the corner of the *Domitianstraße* and the street that leads to Magnesia (Fig. 19d; App. No. **1.50**), and the so-called Flavian Fontäne, farther to the east on the Magnesia Road, that took the form of a semi-circular structure flanked by two rectilinear basins (Figs. 19e, **19f; App. No. 1.48**). The placement of these large water-displays along the streets that lead directly into the Upper Agora would suggest to the pedestrian that the Upper Agora is an important urban space. The height and unusual form of the Domitian Fountain would have been alluring.<sup>44</sup> The impressive water-display of Bassus at the crossroads of the Magnesia Road and the *Domitianstraße*, and the southwest corner of the agora, would have surely invited pedestrians to stop, take in the water, and perhaps prompt them to go into the agora, if that was not already their destination. The fountains help to provide an impetus to proceed into the large civic space located in the Upper City, marking off this particular area of the town. Finally, the water-displays nicely frame the agora, giving it a sense of monumentality.

<sup>&</sup>lt;sup>44</sup> See Longfellow (2011, 62-76) for more on the unique features of this water-display.

# ii. Water-Displays in Corinth, Rome, and Argos

Water-displays that have sacred associations are seen in the fora throughout the Empire.<sup>45</sup> The sacred nature of these fountains can be tied to mythological, historical (socalled "historiated springs"), or mytho-historical episodes at some point in Rome's past, giving them a nuanced meaning that pushes past a simple water-display in a civic center.<sup>46</sup> Fountains in fora often took on 'sacred' meanings from their architectural context and their associations with ancient (or newly constructed) mythologies. Waterdisplays created sacred landscapes in the forum of Corinth, the Forum Romanum and the adjacent Imperial Fora in Rome, and the agora of Argos, evoking performance and stimulating memories, along with promoting a common Roman identity. Both the civic spaces of Corinth and Rome are well studied, but can be further probed to understand their monuments related to water. The agora of Argos, while it is known, is still not well understood in the Roman period, allowing for new interpretations of the space. By tapping into aquatic pasts, Romans across the Empire were able to mold an Empire-wide identity, strengthening the bonds of Romans across the Mediterranean.

The city of Corinth provides a glimpse into the nature of mytho-historical water connected to its civic center. The Archaic and Classical city, with its role in Mediterranean trade networks, was destroyed by Mummius in 146 BCE. After its refounding in 44 BCE by Julius Caesar as a colony of Latin speakers, the city again rose to prominence to become the administration capital of the province of Achaia. With the Romans now inhabiting Corinth, the urban fabric began to evolve through great building

<sup>&</sup>lt;sup>45</sup> By using the term 'sacred,' it is not implied here that these water-displays were 'religious' in nature, in that they were the object of cult. See Chapter 5 for a discussion of the sacrality of water for the Romans, along with examples of water-displays used in religious settings.

<sup>&</sup>lt;sup>46</sup> Robinson (2005, 123) defines "historiated spring" as "places long associated with historical events."

projects throughout the city. The old agora was transformed into a proper forum: the old *dromos*, or racetrack, was replaced with a simple open space; a basilica was added on the east side; a series of small temples and structures were added on the east side; on the north, a large gate was added to the so-called Lechaion Road, which led to one of the two harbors of Corinth; on the south side the large stoa was enlarged (**Fig. 15**).<sup>47</sup> North of the forum area was the Archaic Temple of Apollo (ca. 540 BCE), along with the theater, enlarged in the Roman period, and a new odeion.

But what tied this urban landscape together was Corinth's relationship with water. Simonides is among many ancient writers who praised Corinth as εὕυδρος, 'wellwatered.'<sup>48</sup> And the natural landscape supports this assertion, with a series of springs and water channels around Corinth running from lofty Acrocorinth, which was situated to the south of the city.<sup>49</sup> All the built fountains were close to the heart of the forum: Peirene (with access through the Lechaion Road) (**Fig. 20; App. No. 1.36**), Glauke (west of the Temple of Apollo, reported to be the spot where Jason's new bride jumped into the spring, after wearing the poisoned garments given to her by Medea) (**Fig. 21; App. No. 1.34**), the Fountain of Poseidon (on the west side of the forum, complete with a statue of Poseidon and dolphins in a niched recess) (**Fig. 22; App. No. 1.33**), the South Stoa Fountain (**Fig. 16; App. No. 1.38**), and the small North Nymphaeum (**App. No. 1.35**).<sup>50</sup>

<sup>&</sup>lt;sup>47</sup> Luce (2014, 43-48) discusses the origins and early development of the agora of Corinth. See Romano (2003) for more on the development of Roman Corinth. The most complete treatment of the Julian Basilica is Scotton (1997).

<sup>&</sup>lt;sup>48</sup> Simon. 11.720. For the breadth of sources that discuss the aquatic nature of Corinth, see the compilations of Robinson (2001, *passim*; 2011, 27-64).

<sup>&</sup>lt;sup>49</sup> The water supply of Corinth has been extensively treated by Landon (1994; 2003), Lolos (1997), and Robinson (2011, 3-26).

<sup>&</sup>lt;sup>50</sup> An early study of the fountains of Corinth was by Hill (1964), whose work has been supplanted by the careful studies of Robinson (2001; 2005; 2011; 2013b). Robinson pursues the notions of cultural identity at Corinth in connection with the "historiated springs" there (see especially 2005 and 2013b).

The most famous spring of Corinth was Peirene because of its associations with localized mythological events. Peirene was reportedly the site where Pegasus was tamed by Bellerophon, an event that became immortalized in a variety of media, not only by the city of Corinth itself, such as on its coinage, but also throughout the Roman Empire, as on wall-paintings found in Pompeii.<sup>51</sup> Pegasus even continues to this day to be part of the cultural identity of the modern Corinthians, serving a symbol of the modern city of Corinth, whether on pavements, shop fronts, or a large fountain near the waterfront (**Fig. 23**). Furthermore, Pausanias says that Peirene was the mother of Cenchrias and Lechaion, who later became the two harbors of Corinth (2.3.2-3). When Cenchrias was killed by Artemis, Peirene could not stop sobbing, and her tears were transformed into a spring. This is a literary topic that is seen throughout the Roman world, such when the nymph Egeria becomes a spring herself at the Sanctuary of Diana at Nemi in Italy, lamenting the dead Numa Pompilius (**App. No. 1.81**).

The Peirene fountain was increasingly monumentalized with the passing of time, seeing its apex in the High Roman Empire, with a sumptuous arcuated façade that masks the long water channels below, all of which opens on to a large, open court. The "historiated" nature of Peirene caused this spring to be rebuilt endlessly and decorated, tying it to the past for those interacting with it, invoking the mythical history of the monument.<sup>52</sup> There were only two major fountains in Corinth before the Romans: Peirene and Glauke, both with their own pasts that formed part of the cultural psyche of the Corinthians. In effect, these were monuments that the Corinthians were proud to commemorate, given that they were reportedly the spots where the myths actually

<sup>&</sup>lt;sup>51</sup> Robinson (2011, 27-64) demonstrates the variety of these sources.

<sup>&</sup>lt;sup>52</sup> For more on this notion, see Robinson (2005, 116-127; 2013b, 348-350).

occurred. When the Romans arrived, they first built up these fountains, and continued to monumentalize them well into the High Empire.

It is not until the early imperial period that we see the Fountain of Poseidon built by a local, Cnaeus Philius Babbius; after which came the South Stoa Fountain and the North Nymphaeum. It has been argued by Robinson that the Romans capitalized on the mythical *caché* of the ancient fountains of Corinth before building their own *de novo*.<sup>53</sup> Indeed, the Romans used all of the fountains, especially Peirene and Glauke, with their sacred pasts, to "cultivate memories and shape identity" not only for those inhabiting Corinth, but all those passing through the town.<sup>54</sup>

Over the course of time, however, the fountains of Corinth begin to frame the forum. In addition to the "historiated" springs of Peirene and Glauke, the new waterdisplays were positioned on almost all four sides of the forum, presenting to the viewer the wealth of water for which Corinth was known. While the new water-displays do not have the same rich history and fame as their ancient neighbors, they still tapped into the great water resources of the Corinthian plain to display water. In fact, standing in the middle of the forum, one could not avoid the sight of water. The forum is framed by fountains on three of its sides. In addition, to the north, one could see the waters of the Corinthian Gulf and the Lechaion Harbor, which tied Corinth to the vast trade networks of the Mediterranean—and "wealthy" Corinth was a city whose ancient reputation was based on trade, and thus once again upon water. Acrocorinth to the south would have evoked for a Corinthian the source of the springs that ran through the plain, such as the

<sup>&</sup>lt;sup>53</sup> Robinson 2013b, 365.

<sup>&</sup>lt;sup>54</sup> Robinson 2013b, 341.

Upper Peirene fountain house nestled on the south side of Acrocorinth.<sup>55</sup> The forum of Corinth was, in effect, wholly predicated on water through the artificial water-displays that evoked mytho-historical pasts of Corinth, along with its siting with direct sight lines to the gulf and its trade routes—both of which encouraged its perpetual international fame.

The city of Rome, the capital of a vast Empire, possessed spaces intimately associated with water in its Forum Romanum and adjacent Imperial Fora. Due in part to its ancient origins, the Forum Romanum became the city center of Rome, and also provided a model upon which subsequent fora in the city and throughout the Empire were based.<sup>56</sup> The Forum Romanum, however, was built upon an aquatic foundation, both literally and figuratively (**Fig. 24**). The Romans used the aquatic landscape of the space over time in the way they constructed the built environment there, particularly with monuments tied to water that were connected to mythical or historical figures, although often without displaying moving water. Further, the Imperial Fora also employ water features, but for another purpose, namely, to display moving water (**Fig. 25, Map 10**). The ensemble of the Forum Romanum and the Imperial Fora demonstrates the ways in which monuments tied to water and water-displays evoke mythical and historical events and figures, allowing for the commemoration of the past and present through water.

The city of Rome is connected to water by virtue of its landscape.<sup>57</sup> The great River Tiber dominates the cityscape, carving its course through a surrounding plateau

<sup>&</sup>lt;sup>55</sup> For more on Upper Peirene, see Robinson (2011, 20-23).

<sup>&</sup>lt;sup>56</sup> For brief overviews of the Forum, see: Richardson 1992, 170-174; Köb 2000; Haselberger 2002, 129-130; *LTUR* 2.313-325 (s.v., Forum Romanum (fino alla prima età repubblicana), G. Tagliamonte), 2.325-336 (s.v., Forum Romanum (The Republican Period), N. Purcell), 2.336-342 (s.v., Forum Romanum (The imperial Period), N. Purcell), 2.342-343 (s.v., Forum Romanum (età tarda), C.F. Giuliani and P. Verduchi). <sup>57</sup> See Campbell (2012, 13-21) for the watery landscape of Rome, which is tied to its origins as a city.

that was once created by a volcano.<sup>58</sup> The power of the Tiber is evident in the cult of the river god (Pater) Tiberinus, said to have been instituted by Romulus and reinstituted by Augustus, the newly styled *Pater Patriae*.<sup>59</sup> It has been argued that Father Tiber had the ability to unite not only Romans living in the city, but also Romans living throughout the Empire, who focused a common identity on the deity.<sup>60</sup> Personifications of the River Tiber in a variety of artistic media (e.g., coins, sculpture, etc.) would evoke the powerful river that supplied the city.

There is, however, a hydrogeomorphic landscape in Rome beyond of the Tiber. As the river carved the landscape to create the seven famed hills, there were lower lying areas of the city, which were prone to being swampy, especially after floods of the Tiber (**Fig. 26**).<sup>61</sup> In addition, the city was dotted with a number of streams that fed into the river, such as those draining the valleys of the Quirinal and Esquiline Hills that later became the famed Cloaca Maxima drain (**Fig. 27**).<sup>62</sup> Springs were also abundant throughout Rome, especially in the city center, including the *fons Cati* (Quirinal), the *fons* 

<sup>&</sup>lt;sup>58</sup> Ammerman 2013, 169. Vout (2007, 297) insinuates that Rome was only known for its hills that were carved from the landscape through the actions of the Tiber. Rome should equally be known for its aquatic landscape. For more on the hills and their *Nachleben*, especially in the psyche of not only ancients, but also moderns, see Vout (2012).

<sup>&</sup>lt;sup>59</sup> Le Gall 1953; Holland 1961; Campbell 2012 (especially 140-143); *LIMC* 8.1.25-27 (s.v., Tiberis, Tiberinus, R. Mambella). For more on the relationship between the emperor and Tiberinus and other rivers, see Montero (2012). The Tiber's destructive nature through inundations of the cityscape worried the Romans, who constantly attempted to control the river. For more, see especially Aldrete (2007), who examines the floods of the Tiber, including elements of flood control (166-203). One also only needs to think of the office of the *pontifices*, the 'bridge builders,' who ensured that the dangerous river was safely crossed by bridges, along with conducting propitiating rituals (Campbell 2012, 21). 'Ripuarian' landscapes are of interest in current scholarship, as these are the borders between land and water, particularly on the borders of rivers. For more, see the collected volume of Hermon (2010). The city of Rome also had a *cura riparum et alvei Tiberis* to ensure the security of the city from flooding, which was of such great importance, that the office in the High Empire was headed by a man of consular rank. For more on the office, see: Aldrete (2007, 198-203) and Campbell (2012, 318-319), but especially Lonardi's 2013 historical and prospographical study of the *curatores*.

<sup>&</sup>lt;sup>60</sup> Meyers 2009. See also, Taylor (2009).

<sup>&</sup>lt;sup>61</sup> Corazza and Lombardi 1995.

<sup>&</sup>lt;sup>62</sup> Richardson 1992, 91-92; *LTUR* 1.288-290 (s.v., Cloaca, Cloaca Maxima, H. Bauer).

*Iuturnae* (Forum Romanum), the Tullianum<sup>63</sup> and *aquae Lautulae* (Capitoline), the Lupercal (Palatine), and the *fons Camenarum* (Caelian).<sup>64</sup> Rome, then, was a place where water flowed in different contexts: a large river, tributary streams of the Tiber, paludial basins, and natural springs.

The site of the Forum Romanum was the location of a swamp that prevented inhabitation and building. It has been demonstrated by Albert Ammerman that the Forum was transformed from a paludial zone to a space that had the ability to be monumentalized by the beginning of the Republic and beyond.<sup>65</sup> It had been previously thought that the Forum area had some early habitation, but then the site was converted to a city center by layering gravel on top, along with the insertion of drains to take away excess water. Ammerman's study of the forum has shown, however, that in order to reclaim the land, a significant amount of earth was moved into the Forum, allowing the surface of the Forum to lie above the swampy terrain. John Hopkins has argued that in the period after the reclamation of the Forum area, three different levels of the city were present: the areas on the hills associated with domestic spaces; the civic and commercial space of the Forum; and the banks of the Tiber connected to shipping and industry.<sup>66</sup> The new elevation of the Forum, then, allowed it to become the prime nucleus in the urban landscape of Rome.

<sup>&</sup>lt;sup>63</sup> The Carcer, or jail, of Rome is occasionally referred to as the Tullianum. The name is derived from the spring (the *tullius*) that was associated with the underground portion of the jail complex; the name is sometimes confused with the King Servius Tullius, who some claim originally built the jail. For more, see Richardson (1992, 71), along with Fortini (2012) for recent work on the Tullianum and the Carcer.
<sup>64</sup> For more on these springs, see: Lanciani 1975, 215-240; Cifani (2008, 307); individual entries in the *LTUR*. For more on the Lupercal, especially the tholos shrine built atop the spring by Augustus, see Bruno (2008, 132-137) and Carandini (2008, 4-29).

<sup>&</sup>lt;sup>65</sup> Ammerman 1990a; 1990b; 2013. Ammerman (2013, 170-174) also discusses his findings regarding the Velabrum, which was always thought to be a swamp during the Regal period. By strategic coring in the area of earth samples, Ammerman has shown that in the sixth century BCE, the area was being exploited for a fine clay that was probably being used in a growing roof tile industry at the time.
<sup>66</sup> Hopkins 2014, 54.
The addition of the monumental Cloaca Maxima in the seventh century, reportedly installed by Tarquinius Priscus, permitted the space to stay dry (Dion. Hal. Ant. Rom. 3.67.4-5). Built upon the ancient tributary streams of the Tiber, the Cloaca Maxima became monumentalized over time, such as when the drain was lined with stone in the fifth century.<sup>67</sup> In Plautus' day, the Cloaca was still apparently open to the elements, but by the end of the Republic, it was covered over, and it was eventually restored by Agrippa in 33, who added a new lower Gabine stone course. The course of the Cloaca Maxima ran on the ancient Argiletum, later covered by the Forum Transitorium of Nerva, then turned to the east at the base of the Basilica Aemilia, cutting across the Forum between the Basilica Iulia and the Temple of Castor and Pollux, proceeded through the Velabrum, and flowing into the Tiber, via the Forum Boarium (Fig. 28).<sup>68</sup> The meandering pattern of the Cloaca Maxima contrasts sharply with the more straightforward paths of other drains in the city, and it could be tied to what some scholars have considered to be a 'sacred' past, in that the original stream's course deserved special reverence even into the Empire.<sup>69</sup> Despite having the ability to change the path of the Cloaca Maxima, the Romans kept the ancient course of the drain, perhaps in reverence to its ancient route, as a marker of its past history and associated memories.<sup>70</sup>

<sup>&</sup>lt;sup>67</sup> For more on the Cloaca Maxima, see: Gowers 1995; Hopkins 2007 and 2012, the latter of which provides a corrected chronology of the fifth century monumentalization in stone of the drain. Hopkins points out that the Cloaca Maxima was not a septic sewer, but a drain, which would carry water run-off and other elements in the urban landscape. Hopkins also explores the 'sacred' nature of the Cloaca Maxima (2012). Edwards (1996, 105-109) briefly discusses the Roman fascination with aqueducts and sewers in literary evidence, which is usually predicated on the fact that the construction of these structures is a wholly Roman invention.

<sup>&</sup>lt;sup>68</sup> Tortorici (1991) explores the Cloaca Maxima's course in relation to the Argiletum.

<sup>&</sup>lt;sup>69</sup> For the 'sacred' nature of the Cloaca Maxima, see Holland (1961, 349-350).

<sup>&</sup>lt;sup>70</sup> Hopkins (2012, 88-89) argues for the association with the drain's history and memories to its continued meandering path.

With the Forum drained, monumentalization of the space could occur, befitting the civic and commercial center of the city. The creation of the Forum, with its many buildings and structures, was not an accident, but the result of planning in conjunction with the new landscape free of standing water.<sup>71</sup> By 480 BCE, at the beginning of the Republic, the Forum probably contained the Regia, the Temple of Vesta, the Temple of Castor and Pollux, the Curia Hostilia, the Temple of Saturn, and the Comitium.<sup>72</sup> Building continued until almost the beginning of the imperial period, when Julius Caesar decided to build his own forum to the northeast of the Forum Romanum, initiating a trend continued by his successors in that area.

The (formerly) swampy landscape of the Forum basin is then the backdrop for the monuments that were installed in the Forum Romanum. The connections that the space has (and had) to water are crucial for our understanding of the choice and placement of the structures in the built environment of the Forum. While by the late Republic there was no direct access to water, save for the springs and the flowing Cloaca Maxima, it is the memory of this past that is essential in the construction of the watery landscape of the Forum. Places, as we saw in the introduction of this study, are the repositories of memories. As people interact with a space, they will not only form their own memories about their experience in that space but also remember historical or mythical associations of those monuments. In an oft-quoted passage of Cicero's *De finibus*, Marcus Piso, reflecting on a visit to Plato's Academy states:

*Tum Piso: Naturane nobis hoc, inquit, datum dicam an errore quodam, ut, cum ea loca vídeamus, in quibus memoria dignos viros acceperimus multum esse versatos, magis moveamur, quam si quando eorum ipsorum aut facta audiamus aut scriptum aliquod legamus? [...] tanta vis* 

<sup>&</sup>lt;sup>71</sup> For more on the notion of the fact that the Forum was not an accident, see Hopkins (2014, 52-53).

<sup>&</sup>lt;sup>72</sup> Ammerman 2013, 174.

admonitionis inest in locis; ut non sine causa ex iis memoriae ducta sit disciplina. (Cic. Fin. 5.2)

Then Piso said: 'Is it inborn in us or produced by some trick that when we see the places in which we have heard that famous men performed great deeds, we are more moved than by hearing or reading their exploits? [...] So great a power of suggestion resides in places that it is no wonder the *Art of Memory* is based on it. (Trans. A. Vasaly 1993)<sup>73</sup>

Piso stresses the nature of seeing and *interacting* with a monument, which, in turn brings up its own memories. Presumably, when viewers went to the Roman Forum and saw the *fons Iuturnae*, they would think of a number of associations, such as Juturna, the eponymous nymph of the spring, but also the figures of Castor and Pollux who watered their horses at that spot. Indeed, this is what can be part of "metaphysical topography," in that each of the places in the Forum would have been tied to meaning for a Roman audience.<sup>74</sup>

The inclusion of monuments tied to water in the previously watery Forum stresses the importance of the substance for the Romans throughout the history of this space. When considering the water-related features of the Roman Forum, we must imagine what is happening for the visitor to the space. How are they interacting with the space? Are they remembering the myths and historical events that are tied to the structures? There is a relationship between the actual site and the viewing of the site, which is "crucial to the cognitive complexities of translating pictures, monuments, and dimensional spaces into intelligible experience."<sup>75</sup> What results for certain, however, is a blurred line between the

<sup>&</sup>lt;sup>73</sup> Vasaly 1993, 29; Edwards 1996, 29; Hopkins 2012, 88-89.

<sup>&</sup>lt;sup>74</sup> For the concept of "metaphysical topography," see Vasaly (1993, 41). Hopkins (2012, 88-90) argues for the memories of the ancient Cloaca Maxima for the Romans of subsequent period after the drain's construction, which was one of the reasons why they never altered the fragmented flow of the drain. <sup>75</sup> Larmour and Spencer 2007, 7.

past and the present, in what some have termed a 'synchronous, permanent present.'<sup>76</sup> What this means is that those of the present can consider the past in relation to the built environment around them. Thus, monuments have a past crucial in their meaning and importance, not only to those in the past, but also to those in the present, allowing us to graft meaning on to these structures. The Forum Romanum with a number of watery monuments would have evoked for all those encountering them the sheer importance of water in the urban landscape of Rome's past.

In addition to the actual past aquatic environment of the Forum basin, there are a number of monuments within the Forum itself that commemorate mythological, historical, or mytho-historical episodes of Rome's past. Three *lacus (luturnae, Curtius,* and *Servilius)*, the *sacellum* of Venus Cloacina, the *rostra* of the Forum, and the Temple of Janus Geminus are presented in the ensuing discussion. For the most part, there are no remains of true water-displays in that there are no monuments with moving water *per se*.<sup>77</sup> The ancient Forum Romanum takes advantage, however, of the inherent meaning of

<sup>&</sup>lt;sup>76</sup> Barkan 1991, 13; Edwards 1996, 29. Edwards explores this notion in terms of literary reactions to the built environment of ancient Rome.

<sup>&</sup>lt;sup>77</sup> There is the possibility that the Forum could have had a true water-display to which the Marforio could have belonged. The statue, currently in the cortile of the Museo Capitolino, installed as a fountain, is a reclining, bearded river god, dated to the first century CE. It has been thought to be a depiction of the River Tiber. Its name, however, comes from the fact that by the sixteenth century CE, the statue was located in the Forum, and its identification was conflated with Mars, hence Mar-forio. Drawings of Heemskerck place the statue in the Forum, but in a location that does not seem to be an ancient one (II Fol 79v, 80r). The statue was well known in Renaissance Rome, as part of a talking statue group, where poets would create fictional conversations (in verse and satire) between the Marforio and the so-called Pasqualino (a statue group of Menelaus carrying the dead body of Patroclus) that were posted on the walls surrounding the statues. By the late sixteenth century, the Marforio was moved from the Forum to piazza San Marco (1588), then the statue was restored as Oceanus by Bescapè and installed on the terrace wall of Santa Maria in Aracoeli in a niche (and fountain), which was designed by Giacomo della Porta (1594). The statue was then moved to its present location in 1644, undergoing a subsequent restoration by Pope Clement XII in 1734. Given that its history is unclear before the sixteenth century, it is tantalizing to posit its original location in the Forum Romanum as part of an imperial water-display, which would add an impressive show of water in the historic city center, which lacked such a monument. For more on the Marforio, see: Rossi (1928); Du Jardin (1932); D'Onofrio (1957, 131-134); Haskell and Penny (1981); Bober and Rubinstein (1986, 99-100, cat. no. 64); Barkan (1999, 213-215). For the Heemskerck folios (Marforio alone: I Fol. 19v; Marforio in the Forum: II Fol 79v, 80r), see Hülsen and Egger (1975). There is also an indication of

monuments' watery past, whether it is mythical, Regal, or Republican. Many of these structures had been in the Forum for generations, which gives them their own pasts and meanings for the passers-by, but would remind visitors of the ties the Forum had to water.

The *lacus luturnae* is probably one of the most well known monuments of the Forum Romanum connected with water, given that it is a monumentalization of an actual spring source and celebrates one of the best known of the Roman nymphs (**App. No. 1.112**). Juturna was believed to be the sister of Turnus, and she had a cult in Lavinium that was moved to Rome at some point in the latter part of the Regal period.<sup>78</sup> Thus, she had an ancient mythology that was present in the epic cycle through the *Aeneid*. Her importance was stressed by her cult's placement in the Forum, where she is associated with the spring that is located between the Temple of Castor and Pollux and the House of the Vestal Virgins, near the *vicus Tuscus* that leads to the Velabrum (**Fig. 29a**).<sup>79</sup> Juturna's source is also known as one of the famed ancient springs of Rome, along with those of the Camenae and Apollo.<sup>80</sup> It is believed that Castor and Pollux watered their horses at the spring associated with Juturna after the Battle of Lake Regillus in 494 BCE, and then again after Pydna in 168 BCE.<sup>81</sup> Particularly in relation to the Dioscuri's

an imperial period *lacus* in the Forum, but the evidence is still tenuous. La Regina (2013) has recently presented a new reading of Varro (*Ling*. 5.43-44), a passage describing the etymologies of the Aventine and Velabrum. Varro argues that both place names are related to transport (Aventine = *ab advectu*; Velabrum = *vehere*), given that in antiquity, one would need to use boats to approach these areas because of the swamps that were present. When illustrating the situation of the Velabrum, La Regina believes that the text of Varro is corrupted. Instead of *locus sacellum Velabrum*, the text should read something like *lacus ad sacellum Larum*. This new reading would then indicate a large rectangular pool (or *lacus*) that was present in the house that Caligula (and then Domitian) built on the slopes of the Palatine, later overlaid by the Chiesa di Santa Maria in Antiqua.

<sup>&</sup>lt;sup>78</sup> Juturna is discussed in full in Chapter 5 (pages 277-279).

<sup>&</sup>lt;sup>79</sup> For more on the spring, see: Lanciani (1975, 225-226); Ammerman (1990a); Corazza and Lombardi (1995, 198-199).

<sup>&</sup>lt;sup>80</sup> Front. Aq. 1.4. For more on this passage, see Chapter 5 (pages 266-268).

<sup>&</sup>lt;sup>81</sup> Scullard 1981, 64.

epiphany in 494 BCE, there is yet another connection to water, namely that the battle is at a *lake*. In fact, the association to the twins is strengthened by the discovery of a statue of the pair, which is dated to immediately after Pydna.<sup>82</sup> The Battle of Lake Regillus has been seen as part of the mythology of the birth of the Republic, as it was a pivotal event that led to the success of the new Roman state.<sup>83</sup> Subsequently, the battle is exploited in the Augustan period with the Octavian's victory at Actium, in the context of which Vergil describes how the Dioscuri aided Octavian, just as they did for the Romans 500 years previously.<sup>84</sup> In the Augustan renovations of the Forum, which were well under way, if not nearly complete, by 29 BCE, the memories of the Battle of Lake Regillus are easily evoked through the built environment, with Temple of Castor and Pollux next to the *lacus Iuturnae*, both of which are directly across from Augustus' Actian Arch.

The ancient and mythological associations of the spring, then, make the space an important one in the built environment of the Forum. The first phase of the spring, probably dated to the second century BCE, around the time of Pydna, monumentalized the natural spring source, by adding a rectangular basin on top, constructed of *opus incertum* and lined with cocciopesto.<sup>85</sup> With the revival of the cult by Augustus, marble veneer was added to the basin, along with a number of dedications, including a white marble puteal, inscribed with *Iuturnai sacrum* by the curule aedile, Marcus Barbatius Pollio.<sup>86</sup> In the time of Trajan, a small *sacellum* was added immediately adjacent to the

 <sup>&</sup>lt;sup>82</sup> Coarelli 1985, 156. *LTUR* 3.169. For more on the Dioscuri's connections to Juturna, see Clarke (1968).
 <sup>83</sup> Rebeggiani 2013.

<sup>&</sup>lt;sup>84</sup> Verg. Aen. 8.678-681. Rebeggiani 2013, 57-67.

<sup>&</sup>lt;sup>85</sup> For the chronology and development of the precinct associated with Juturna in the Forum Romanum, see the published excavations of the site (Steinby et al. 2012).

<sup>&</sup>lt;sup>86</sup> *CIL* 6.36807. Kajava 1989, 37-39. the Forum, there area number of puteals, including at the *lacus Iuturnae*, along with one at the *lacus Curtius*. The puteal can also mark a spot where some sort of random phenomenon occurred, such as a lightning strike, which is the case of the Puteal Libonis, near Augustus' Actian Arch, from the late Republic or early Empire, dedicated by Scribonius Libo. For more on the puteal

basin (**Fig. 29b**). By the fourth century CE, the area included the headquarters of the *statio aquarum*, the water department of Rome.<sup>87</sup> Not only does the space have mythological (e.g., with Juturna, and Castor and Pollux) and historical (e.g., the Battles of Lake Regillus and Pydna) associations, but the buildings surrounding the spring are utilized for the supervision of the maintenance of Rome's water supply.

Northwest of the *lacus Iuturnae*, in the open space of the Forum, between the Basilicas Aemilia and Julia, is the *lacus Curtius* (**App. No. 1.111**). There are at least four distinct phases of the structure: (1) tuff period dated to 184 BCE (Liv. 39.44.5); (2) travertine period dated to 78-74 BCE, with the repaving of the Forum by Aurelius Cotta; (3) Augustan (ca. 12 BCE); (4) Severan, with the new repaving of the Forum of 203.<sup>88</sup> Still visible today, it is an irregular polygonal monument surrounded by a marble parapet, which is sunk into the pavement of the Forum, the result of successive repavings of the area (**Fig. 30a**). Excavation has revealed at least three different layers of pavement, which can help to show the longevity of this monument in this space.<sup>89</sup> In the enclosure is a circular plinth to support a *puteal*, presumably concealing an ancient water source, along with rectangular cuttings on the other side of the enclosure for square altars. In fact, by the time of Augustus, it is known that there was no water flowing to the *lacus Curtius* (Ov. *Fast.* 6.403-404). During the imperial period, the monument was a place where

of Scribonius Libo, see Coarelli (1985, 166-170), Richardson (1992, 322-323), Haselberger (2002, 211-212), and the *LTUR* 4.171-173 (s.v., Puteal Libonis/Scribonianum, L. Chioffi). On the Augustan revival, see Ballentine (1904, 93) and Fowler (1916, 293). In

<sup>&</sup>lt;sup>87</sup> There are various dedications of the *curatores aquarum et Miniciae* and a statue of *Genius stationis aquarum*. For more on these dedications, see Kajava (1989). For more on the *cura aquarum*, see Bruun (1991) and Peachin (2004).

<sup>&</sup>lt;sup>88</sup> *LTUR* 3.166-167.

<sup>&</sup>lt;sup>89</sup> Excavations revealed at least three layers of pavements, including, from bottom to top, cappelaccio, Monteverde tuff, and travertine (*LTUR* 3.166-167).

Romans annually tossed coins for the good health of the emperor on his birthday (Suet. *Aug.* 57.1).

There are at least two different stories that the *lacus* was believed to have commemorated.<sup>90</sup> The first version is a battle between the Romans, led by Romulus, and the Sabines, commanded by Mettius Curtius.<sup>91</sup> In a skirmish near the gate of the Palatine, Mettius fled Romulus and his men, heading for the marshy Forum basin, the valley between the two hills. There, he got stuck, causing the battle to stop to allow for Mettius to free himself. Romulus and his men, however, are subsequently victorious in the battle. This episode is commemorated by a relief plaque found near the *lacus Curtius* in the sixteenth century, which was believed to have somehow decorated the *lacus* proper (Fig. **30b**).<sup>92</sup> In the second and far better known version, an earthquake or another phenomenon ripped open a hole in the middle of the Forum in 362 BCE.<sup>93</sup> According to Livy, prophets stated that the chasm must be filled, or the Republic would fall (7.6.1-6). Despite the Romans' attempts to fill the hole, it was reported that it could only be closed by the 'chief strength of the Roman people' (quo plurimum populus Romanus posset; Liv. 7.6.2). Marcus Curtius, a young soldier, outfitted in his armor and courage, rode on his horse into the chasm, which promptly closed. Livy reveals in his account that the second episode, the story of Marcus Curtius, is the true story of why the monument has Curtius' name attached (Liv. 7.6.5).

<sup>&</sup>lt;sup>90</sup> There are a number of literary references to the *lacus Curtius*, for which, see Spencer (2007, 63, n. 5). Another version in addition to the two presented in this discussion of why the *lacus* was given the name *Curtius*, is that in 102 BCE, C. Curtius marked the spot there where lightning struck by a puteal (Varr. *Ling.* 5.150).

<sup>&</sup>lt;sup>91</sup> Liv. 1.12.9-10, 13.5; Dion. Hal. 2.42.5-6; Plut. *Rom.* 18.4. See also: La Regina (1995) and Spencer (2007).

<sup>&</sup>lt;sup>92</sup> The back of the panel includes the following inscription: *L. Naevius L. f. Surdinus pr(aetor) inter civis et peregrinos*, alluding to a family prominent in both the Sullan and the Julio-Claudian periods. For more on Surdinus and the relief block, see Coarelli (1985, 226-229).

<sup>&</sup>lt;sup>93</sup> Liv. 7.6.1-6; Dion. Hal. 14.11.3-4; Val. Max. 5.6.2; Pliny *HN* 15.78; Cass. Dio fr. 30.1-2.

The stories are on the surface drastically different. There are similarities, however, between the two that are crucial for the understood meaning behind the monument. Roman superiority is stressed, whether by Romulus' victory over Mettius' men, or the ability for Roman excellence to fill up a threatening chasm in the Forum floor. Moreover, both episodes emphasize the presence of water in the Forum.<sup>94</sup> We cannot forget that the Forum was indeed once a swamp, commemorated not only in the preserved literary and mythological traditions, but also on the relief plaque added to the *lacus Curtius* for all to see. There was no running water by the time of Augustus at the *lacus*, but a Roman only needed to imagine the running waters of the Cloaca Maxima, which would have been flowing underneath the *lacus*.<sup>95</sup> Despite the lack of water, the lacus Curtius was an effective commemoration of the past mytho-historical events that were said to have occurred there. The spot is illustrated by a plaque and a puteal, insinuating that at some point there was flowing water there. In a sense, the structure in the Forum prompts the passers-by into "the present of the urban condition, which allows [them] to communicate not only with the city's past (through its mythology and patrimony), but also with an imaginary future."<sup>96</sup> While Romans who saw the monument, which commemorates the past, interacted with the present, they would also have been stimulated to consider the future, whether of the city itself and how to make the city better, or even of their own lives, perhaps given that the human condition is tied to water for survival.

<sup>&</sup>lt;sup>94</sup> See Spencer (2007, 89) for this notion in the two passages of Livy, which she compares to draw meaning related to the physical monument in the Forum.

<sup>&</sup>lt;sup>95</sup> Spencer 2007, 65. Spencer argues that the first episode, of Mettius, prefigures the Cloaca Maxima.

<sup>&</sup>lt;sup>96</sup> Spencer 2007, 67-68.

The final *lacus* to consider in the Forum Romanum is the *lacus Servilius* (App. No. 1.114). We know that this structure stood at the northwest corner of the Basilica Julia, at the end of the *vicus Iugarius*, acting as a fountain basin, not a spring source (Fest. *Gloss. Lat.* 370). The name *Servilius* probably derives from a Republican figure who gave his name for the fountain, whether Cn. Servilius Caepio (consul in 141 BCE) or a Servilius Caepius, who might have given the structure as a *munus* in 125 BCE, in connection with the construction of the Aqua Tepula.<sup>97</sup> We know that during the Sullan proscriptions, the heads of senators were displayed in some fashion on the *lacus*.<sup>98</sup> It is reported that Agrippa added a statue of a Hydra to the fountain (Fest. *Gloss. Lat.* 370). In fact, this involvement by Agrippa is not out of the ordinary because we know he was responsible for a number of water-related projects throughout the city as aedile in 33 BCE, when he commissioned the construction of the *lacus*). Further, he added statues to the public fountains throughout the city.<sup>99</sup> The monument survived into the Augustan period,

<sup>&</sup>lt;sup>97</sup> LTUR 3.172-173. For more on the Aqua Tepula, see Hodges (2013, 292).

<sup>&</sup>lt;sup>98</sup> Cic. Rosc. Am. 89; Sen. Prov. 3.7.8; Firm. Mat. 1.7.34.

<sup>&</sup>lt;sup>99</sup> Plin. *HN* 36.24.121. Agrippa had a strong involvement with water-related activities in Rome, with the construction of the Aqua Julia, Euripus, Stagnum Agrippae, and Thermae Agrippae, along with the scores of water features throughout the city (e.g., 700 *lacus*, 500 *salientes*, 130 *castella*, and the adornment of these structures with 300 bronze or marble statues and 499 marble columns). He also builds structures that have aquatic-related names, such as the Basilica Neptuni, Porticus Argonautorum, and the Poseidonion. There is also evidence that Agrippa also helped to finance water structures in Gaul, such as the Temple of Valetudo at Glanum and the source sanctuary in Nîmes, along with parts of the Pont du Gard. There has been some speculation about Agrippa's motives behind the water-related building in Rome and abroad, perhaps stemming from his aedileship of 33 BCE or the fact that he was fleet commander of Augustus. For more on Agrippa's connections to water, see the brief comments by Grüner (2009, 49-50), along with Lloyd (1979), Evans (1982), Albers (2013, *passim*) specifically on Agrippa's construction projects in Rome. The most comprehensive study to-date of Agrippa is that of Roddaz (1984). More can be done on Agrippa's connections to water and the built environment, especially in light of the present discussion of tying monuments to memory of previous aquatic events and landscapes.

and it was destroyed in the 12 BCE fire that consumed the Basilica Julia, and it was not rebuilt in the subsequent restoration of the Basilica.<sup>100</sup>

It is difficult to evaluate fully the *lacus Servilius*, given that it is lost to us. The fact that the fountain was gone by the early imperial period is also crucial: those in the Empire would have only know of the monument in memory. Perhaps they remembered the eponymous Servilius, the Hydra decoration on top, or the heads of the unlucky senators of Sulla's proscriptions. We can perhaps read a little more into the fountain through the figure of Agrippa. Because we know that he incorporated the Aqua Tepula into the larger Aqua Julia and that he added a statue to this particular fountain, Agrippa could have potentially been making his own connection to a Republican predecessor. If the Servilius Caepius of 125 gave the fountain as a *munus*, he may have done so as an aedile, just as Agrippa built waterworks.

Across the Forum, in front of the Basilica Aemilia was the *sacellum* of Venus Cloacina (**Fig. 31a; App. No. 1.119**). The figure of Cloacina is believed to be the *numen* of the waters of the Cloaca Maxima, who is later conflated as an aspect of Venus.<sup>101</sup> Pliny the Elder mentions Venus Cloacina when relating the anecdote that when the Romans and Sabines were to fight over the carrying off of maidens, the soldiers purified themselves with myrtle that was growing in the spot later occupied by the *sacellum*, given that Cloacina derives from *cluere* ('to cleanse') (*HN* 15.119-120). The appearance of the small shrine is known from numismatic evidence (**Fig. 31b**).<sup>102</sup> The shrine is

<sup>&</sup>lt;sup>100</sup> We have what we believe is the archaeological foundations of the *lacus Servilius* near the present Basilica Julia, and it seems that they were left after the fire. The fact that Festus refers to the fountain in the past tense has prompted scholars to assert that the *lacus* was in fact gone by the imperial period. See especially the *LTUR* (3.173).

<sup>&</sup>lt;sup>101</sup> Pliny *HN* 15.119-120. See also: Liv. 3.48.5; Plaut. *Curc*. 471.

<sup>&</sup>lt;sup>102</sup> BMC RR 1.577-578, nos. 4242-4254.

circular with an open balustrade, marked by the legend *CLOACIN(A)*. Inside, there are two draped female statues whose right hands are lowered, perhaps supporting thymiateria, or incense burners, and their left hands are raised to hold perhaps the leafy branches of the myrtle. The structure of the shrine suggested by the depictions on the coins was confirmed by the discovery of marble foundations of a small circular monument (2.40 m in diameter) in front of the Basilica. The foundations go deep into the ground (at least eight courses), suggesting that the shrine was in use for a long period of time (**Fig. 31c**).<sup>103</sup>

The meanings behind this particular shrine are manifold. The cult of Cloacina is reported to have been instituted by Titus Tatius, before the traditional 'Regal' period of Rome.<sup>104</sup> In a time before the Forum basin was drained and the streams of the Cloaca were yet to be canalized, it is easy to understand the desire to establish a cult to the spirit of the water that permeates the volatile landscape. With the archaeological and literary evidence, then, we can discern a cult of the *longue durée*, a monument continuously seen throughout the history of the Forum and indicative of its mytho-histrorical past. The *sacellum* was also actually in a long line of other small shrines in front of the Basilica (e.g., the Temple of Janus Geminus, etc.), which marked the space, opening onto the via Sacra, as one of a religious character, but also steeped in the historical past of the city.<sup>105</sup> Further, the shrine was placed over the spot where the Cloaca Maxima turns to the west, past the Basilica Aemilia, to head southwest across the Forum. The waters associated

<sup>&</sup>lt;sup>103</sup> Richardson 1992, 92. For more on the late nineteenth and early twentieth century excavations of the *sacellum* and the Cloaca Maxima, see Fortuna and Rustico (2014).

<sup>&</sup>lt;sup>104</sup> Cypr. *Idol.* 4; Aug. *Civ.* 4.8, 6.10.1; Min. Fel. 25.8; *LTUR* 3.290-291.

<sup>&</sup>lt;sup>105</sup> Freyberger 2012, 49. The Basilica Aemilia has recently been excavated by the Deutsches Archäologisches Institut in Rome, with a number of publications about the space: Ertel et al. 2007; Lipps 2011; Ertel et al. Forthcoming.

with the Cloaca would have been sacred, moving, and purifying, which would easily encourage a cult of a goddess of a literally *purifying* nature.<sup>106</sup> Thus, the shrine of Venus Cloacina would have had a number of associations for a Roman. She was a figure in Roman history before the kings, illustrating the antiquity of the deity. And her cult celebrated the purifying and sacred waters of the great Cloaca, which stresses the aquatic landscape that once reigned in this space that was conquered by the Romans.

The Forum Romanum's watery connections were also emphasized with the construction of various *rostra*. The speaker's platforms could be found in the Roman comitium and the Forum. After the naval victory of 338 BCE against the Latins at Antium, however, that platform in the Forum was decorated with naval beaks (*rostra*)— and so called after them.<sup>107</sup> After the naval victories of the Punic Wars, the *rostra* was further decorated with the beaks of enemy ships. Julius Caesar, however, decided to remove the *rostra* from the Forum (connected to the ancient comitium that was removed in this period), and replace it with a new one, which was finished by Augustus and given a prominent position on the northwest limit of the Forum (**Fig. 32**).<sup>108</sup> The *rostra Augusti* had at least five phases: Caesarian (a simple 13.00 m long, 3.50 m high speaker's platform with beaks); Augustan (larger core for two rows of beaks to be added, 23.80 m long, with a marble front balustrade); Flavian; Severan (more ornate decoration added, along with five columns on top, the co-called 'Fünfsäulendenkmal'); and Late

<sup>&</sup>lt;sup>106</sup> Van Essen 1956; Hopkins 2012, 96-97.

<sup>&</sup>lt;sup>107</sup> Liv. 8.14.12; Plin. *HN* 34.20; Coarelli 1983, 141-146; Verduchi 1985, 29-33; Richardson 1992, 334-335; *LTUR* 4.212-214 (s.v., Rostra (età repubblicana), F. Coarelli).

<sup>&</sup>lt;sup>108</sup> Coarelli 1985, *passim*; Richardson 1992, 335-336; Haselberger 2002, 216; *LTUR* 4.214-217 (s.v., Rostra augusti, P. Verduchi).

Antique.<sup>109</sup> There was also a Diocletianic *rostra* installed on the west side of the Forum, which would have been a pendant of a similar form of the Severan period *rostra Augusti*.<sup>110</sup> In addition to the *rostra* proper, there were rostrated columns—columns with curved ships' rams sticking out perpendicular to the column—marking naval victories from the Republic on, including that of C. Duilius (260 BCE victory over the Carthaginians), M. Aemilius Paullus (255 BCE), Augustus (Naulochus in 36 BCE and Actium in 31 BCE) (**Fig. 33**).<sup>111</sup> Finally, the *rostra* are also seen on the speaker's platforms of temples, such as those of Castor and Pollux, Divus Julius, and Venus Genetrix in Rome.<sup>112</sup>

The Forum Romanum it seems, then, was littered with the beaks of enemy ships or models of them. By the High Empire, there was the Augustan *rostra*, the Augustan rostrated columns, along with the nearby temple *rostra*. When Diocletian later adds another *rostra*, the message of Roman naval victory was only made more manifest. First, the long-standing tradition of rostration means that when Augustus installs his own rostrated columns, he harkens back to the memory of Duilius, whose own column Augustus refurbishes, thus marking the restoration an act of *pietas* and the construction of his own column as a way to use the past as an *exemplum*.<sup>113</sup> Augustus' new monument then gains legitimacy from an older, similar monument. The beaks of ships automatically

<sup>&</sup>lt;sup>109</sup> For more on the 'Fünfsäulendenkmal,' see *LTUR* 4.218-219 (s.v., Rostra: "Fünfsäulendenkmal," A. Pulte). A complete, and recent, overview of these phases is given on the "Projekt Digitales Forum Romanum" website (http://www.digitales-forum-romanum.de/gebaeude/rostra-augusti/).

<sup>&</sup>lt;sup>110</sup> LTUR 4.217-218 (s.v., Rostra Diocletiani, P. Verduchi).

<sup>&</sup>lt;sup>111</sup> Richardson 1992, 96-97; Muth 2012, 11, 24; Roller 2013, 120-126. The most in-depth discussion of these columns is Palombi (1993). See Hölscher (2009b, 314) for the rostrate columns related to the Actian victory. For a modern example, the column that is in the middle of New York City's Columbus Circle, dedicated to Christopher Columbus, is rostrated.

<sup>&</sup>lt;sup>112</sup> Ulrich (1994) describes the phenomenon of the *templum rostratum* in Rome and throughout the Empire. He defines a *templum rostratum* as a temple that has a speaker's platform that has a commanding a plaza, which allows for the congregation of people to hear an address by an orator. Not all examples have the beaks, but those cited in Rome do include them.

<sup>&</sup>lt;sup>113</sup> Roller (2013, 122-123) explores this relationship more fully.

evoke water for the passer-by, in addition to the victory that occurs on the seas. The great number of beaks that were in the Forum would have reminded viewers of the long history of the Roman domination of the Mediterranean, making them think back to the victories against a variety of foes, from Latins, Carthaginians, to fellow Romans, as the case was in the civil wars. Further, the *rostra* is also a symbol of the power of the Roman aristocracy, who used the speaker's platforms throughout the Republic and into the Empire as a place to not only to sway fellow citizens, but also to celebrate fellow Romans in funeral orations, such as those of Julius Caesar and Augustus.<sup>114</sup> The *rostra* and their use of beaks as a symbol of naval victory continue the strong associations of the Forum Romanum and an aquatic landscape.

The Temple of Janus Geminus in the Forum should be briefly mentioned in relation to another spring, that of the Lautolae. It is believed that this shrine of Janus was located near the southwest corner of the Basilica Aemilia and the Curia.<sup>115</sup> The story goes that in a battle between Titus Tatius and the Sabines, the gates of the Janus *sacellum* opened (perhaps under Juno's influence), a fact which was noticed by Venus.<sup>116</sup> She then persuaded the local nymphs (sometimes called the Ausonian nymphs, but usually termed the Lautolae) to aid in closing the temple doors. The nymphs accomplish this by changing their cool waters into hot, sulphurous waters, which drive away the enemy. There has been a lot of discussion about the exact location of the Temple of Janus in the

<sup>&</sup>lt;sup>114</sup> See Pina Polo (2005) for more on the power of the *rostra* as a symbol of the Roman aristocracy, especially in terms of funeral orations. See also Richardson (1992, 335-336).

<sup>&</sup>lt;sup>115</sup> Richardson 1992, 207-208; Ertel et al. forthcoming; *LTUR* 3.92-93 (s.v., Ianus Geminus, Aedes, E. Tortorici).

<sup>&</sup>lt;sup>116</sup> Ov. *Met.* 14.775-804; Macr. *Sat.* 1.9.17-18; Varro *Ling.* 5.32. See Richardson (1992, 233-234) for the differences between the two accounts of Ovid and Macrobius—and their inherent problems. See also Meulder (2000) for a discussion of this spring, along with Lanciani (1975, 232-233) and Corazza and Lombardi (1995, 198), the latter of which show that the spring of the Lautolae could be potentially be confused with the other springs on the eastern slopes of the Capitolium, such as the Tullianum and the Aquae Fontinalis.

Forum, along with the source of the Lautolae. It should just be noted here, however, that there was at least a literary tradition of associating miraculous waters and the Forum area, especially from a mytho-historical past, with historical figures (e.g., Titus Tatius) that are recurring characters in the drama that is the aquatic landscape of the Forum.

This survey of water-related structures in the Forum, including three *lacus*, two shrines, and the *rostra*, affords the opportunity to comprehend the ubiquity of structures that commemorate water in some respect. We can call structures, naturally, monuments, as they are reminders and memorials of the past, especially the mytho-historical past. Indeed, they can be called "historiated" fountains, as they celebrate and call to mind an historic event.<sup>117</sup> Memory then plays a crucial role in their interaction with their landscape and their relationships with those viewing them in situ. We only have to remember Piso's exhortation of the *disciplina memoriae*, the 'art of memory,' as seeing and interacting with monuments triggers not only personal memories of a monument, but also the constructed past of the structure. Monuments (*monumenta*) are more than the building materials that constitute them, as "they are intrinsically concerned with the mnemonic processes of remembering and instantiating culture and tradition."<sup>118</sup> Further, the various monuments within the Forum are part of a process of "intersignification" with each other, in that "the older and newer monuments produce, in each case, an implicit narrative that carries moral and political weight."<sup>119</sup> The structures of the Forum then recall past events and the present commemorators, with charged meanings for a passer-by of any time period. Thus, with the inclusion of all of these structures in the Forum, their

<sup>&</sup>lt;sup>117</sup> Robinson uses the term "historiated springs" not only for the fountains of Corinth, but also for the *lacus* of the Forum (2005, 123.)

<sup>&</sup>lt;sup>118</sup> Spencer 2007, 65. See also Feldherr 1998 (especially 21-35, 31-35).

<sup>&</sup>lt;sup>119</sup> Roller 2013, 120.

patrons are calling on pedestrians to consider the past water-soaked landscape of the Forum itself, along with the aquatic origins of Rome itself, whether from the Tiber, the twins being found along a stream, or the naval supremacy that the Romans demonstrated from the time of the first Punic War. The Forum, because of its own ancient origins, creates a "metaphysical topography" that causes those in the present to have interactions with the monuments that wholly transcend the present, but include the events and myths of that landscape in the past, along with reflecting on the potential of that space in the future.

Under Augustus, the Forum Romanum sees one of the most drastic changes in its use. With the new imperial regime, a new 'controlled access to the past' is created in the Forum by Augustus.<sup>120</sup> In part, the power of the emperor and his family is demonstrated through architecture and ornamental programs in the Forum Romanum proper, with his rebuilding of the Basilicas Aemilia and Julia, the Curia Julia, the *rostra* Julia (later the *rostra* Augusti), the Temples of Concordia, Saturn, and Castor and Pollux, along with the addition of the Arcus Augusti, Temple of Divus Iulius, and the Porticus Gaii et Lucii.<sup>121</sup> Through the new Augustan building program, the past was celebrated with the restoration of ancient monuments, such as the temples; however, enough was altered and added in the forum to create a dynastic monument for the new emperor. Andrew Wallace-Hadrill argues that for Augustus the Forum Romanum was "a new creation, carefully 'antiqued,'" in that specific monuments (e.g., the *sacellum* of Venus Cloacina) were kept,

<sup>&</sup>lt;sup>120</sup> Muth 2012, 24: 'kontrollierte Zugriff auf die Vergangenheit.' Hölkeskamp (2004, 137-168) explores the Republican political culture in the Forum; Hölscher (2006) discusses the role of the 'past' in the conception of the Forum. See Lusnia (2014, 60-90, especially 87-90) for a reinterpretation of the Forum Romanum under the Severans, and how they subtly change the Forum to make it their own monument.

<sup>&</sup>lt;sup>121</sup> For more on these renovations and additions, see Favro (1996, 195-200, *passim*). For more on the ways in which architecture can reflect the notion of 'power,' see especially the essay of Hölscher (2009a) in Maran's edited volume on the how architecture can express power.

restored, and incorporated into the new space, while others (e.g., the old comitium) were demolished, some to be replaced elsewhere.<sup>122</sup>

Furthermore, with the addition of Forum Iulium and the Forum Augustum, the urban nodes of Rome were drastically altered, moving the city center from Forum Romanum to the new Imperial Fora, in effect making the Forum a museum, a "showcase of collective past achievements," but no longer the main urban node of Rome.<sup>123</sup> Many of the monuments of the Forum were part of contemporaneous religious praxis, particularly given their inclusion into the new built environment of the Augustan period, but then become part of a larger historical consciousness of the Romans in the imperial era. The careful inclusion and restorations of ancient monuments that evoke an aquatic past were important for the celebration of the watery nature of the Forum Romanum, but also the commemoration of the emperor and the bounty that he brought.

As one moves to the subsequent Imperial Fora of Rome, with the successive spaces of Julius Caesar, Augustus, the Flavians, Nerva, and Trajan, there is a marked shift in monuments associated with water (**Fig. 25**). While there are still mythological associations with monuments related to water, the Imperial fora employ true waterdisplays. With the influx of water that occurs in the imperial period, the fora can now begin to exploit actual water sources, moving past mere allusions to an aquatic past, and show water to spectators. The incorporation of water can be subtle (e.g., the Forum Transitorium being built over the course of the Cloaca Maxima), demonstrative (e.g., the basins associated with the podium temples of the Fora of Caesar and Augustus), or truly

<sup>&</sup>lt;sup>122</sup> Wallace-Hadrill 1993, 51.

<sup>&</sup>lt;sup>123</sup> Favro 1996, 200.

ostentatious (e.g., the large water basins in the Templum Pacis).<sup>124</sup> In the end, the Imperial Fora continue the tradition begun in the Forum Romanum of evoking an aquatic past, while using water itself to continue crafting an identity tied to water. Excavations in the last twenty years have begun to reveal more evidence for water-display in these spaces, which is integrated into the discussion here.<sup>125</sup>

The Forum Iulium was the first of the Imperial Fora to be built in Rome.<sup>126</sup> Responding to a variety of needs (e.g., more civic, commercial, and religious space; personal glory), the Forum of Caesar was begun in 54 BCE, when land to the north of the Forum Romanum began to be purchased and the structures in that area were torn down. After the Curia Hostilia burned down in 52, the Senate invited Caesar to build a new curia. After the victory at Pharsalus in 48, Caesar vowed a Temple of Venus Genetrix, and by 46 the forum was dedicated, but was not completed until 29 by Octavian. The southwest side of the forum was bounded by the Forum Romanum (and the newly built Curia Julia) and the *clivus Argentarius*, along the slopes of the Capitolium (the so-called *Arx*) and the remains of the Servian Walls (**Fig. 34a**).<sup>127</sup> It is in this area that a number of

<sup>&</sup>lt;sup>124</sup> The Forum of Trajan is not treated here, as there have yet to be any fountains found in the space. Although, on the via delle Torri behind the markets is a third or fourth century fountain, with semicircular and rectilinear niches. See Neuerburg (1965, cat. no. 159) and Meneghini (2009, 184).

<sup>&</sup>lt;sup>125</sup> For more on the space associated with the Imperial Fora, see Palombi (2005a). See Cavallero (2014) for a succinct overview of how this space developed from prehistory through to the time of Julius Caesar, then the subsequent excavations by the Italian state in the 1920s and 1930s to create via dei Fori Imperiali. <sup>126</sup> The literature on the Forum Iulium, as with all of Imperial fora, is vast. For the best syntheses of the

space, see the monograph of Amici (1991) and the work of Ulrich (1986; 1993; 1994, 117-156), along with Stamper (2005, 92-102). See also: Richardson (1992, 165-167), Köb (2000, 203-224), Haselberger (2002, 134-135), and *LTUR* 2.299-307 (s.v., Forum Iulium, C. Morselli; Forum Iulium: Venus Genetrix, Aedes, P. Gros). There have been a number of excavations in the Forum Iulium in the past twenty years that especially look at the early history of the space (i.e., what was there before the forum)—see especially Delfino (2010; 2014), along with La Rocca (2001, 174-184), Rizzo (2001, 224-230), Meneghini and Santangeli Valenzani (2007, 31-42), Meneghini (2009, 43-57), and Tortorici (2012). Ungaro (2007, 94-117) and Bravi (2012, 77-94) offer an overview of the sculpture found in the space.

<sup>&</sup>lt;sup>127</sup> Along the *clivus Argentarius*, there is a horseshoe-shaped fountain, covered in a vault, with three niches on the walls. It is believed from the brick construction that the structure was built in the Hadrianic period. The fountain would have been an easily accessible structure, given its location on the *clivus Argentarius*. See Neuerburg (1965, 55, 82, cat. no. 454).

springs are found: the Tullianum and the *aquae Fontinalis*, the latter of which was connected to the Porta Fontinalis.<sup>128</sup> On the northern edge, in addition to the Servian Walls would have been the *atrium Libertatis*, the headquarters of the censors.<sup>129</sup> The Forum Iulium's overall plan was that of a temple at the head of a surrounding double-storied portico, a layout that became a standard design throughout the fora of the Empire.<sup>130</sup> The space used the landscape on the southern side, with the integration of irregularly shaped shops abutting the slopes of the Capitoline. There are at least six identified phases of construction: one (54-46 BCE), two (46-44 BCE), three (Augustan), four (Domitianic), five (Trajanic), and six (Diocletianic).<sup>131</sup> The space was also lined with a number of imported statues by famous masters, along with an equestrian statue of Caesar, a reworked statue of Alexander on Bucephalus by Lysippus.<sup>132</sup>

The main feature of the Forum Iulium was the Temple of Venus Genetrix (**Fig. 34b**). The temple had a high podium, measuring 23 m by 33 m. In the Augustan period, the *rostra* was added, enlarging the podium to 29.5 m by 39.0 m.<sup>133</sup> There was no frontal stair, but access to the *rostra* was through side stairs. The façade was octostyle, with a tight pycnostyle arrangement of the columns, making the façade feel cramped. Along the sides of the temple, the columns were organized in a modified peripteros sine postico, with the last column on the sides of the temple coming out of a projecting wing from the back wall. In the cella, the back included an apse to hold the cult statue, and the columns

<sup>&</sup>lt;sup>128</sup> For more on these springs, see Lanciani (1975, 235-236) and Corazza and Lombardi (1995, 197). On the Porta Fontinalis, see Richardson (1992, 303) and the *LTUR* 3.328-329 (s.v. 'Muris Servii Tullii,' Mura Repubblicane, Porta Fontinalis, F. Coarelli).

<sup>&</sup>lt;sup>129</sup> Richardson 1992, 41.

<sup>&</sup>lt;sup>130</sup> Stamper 2005, 102.

<sup>&</sup>lt;sup>131</sup> See Amici (1991) for a full discussion of these phases. Our discussion is limited here to the original phases of the temple, along with the Hadrianic renovations of the fountains. For more on the fourth and fifth centuries, see Corsaro et al. (2013).

<sup>&</sup>lt;sup>132</sup> Ulrich 1986, 405; Ungaro 2007, 94-117; Longfellow 2011, 18-19.

<sup>&</sup>lt;sup>133</sup> Ulrich 1994, 117-156; Stamper 2005, 94.

along with the walls would have been a two-storied portico of the Corinthian order. After a fire in the late Domitianic period, Trajan rebuilt the temple, rededicating it in 113 CE. It is because of this rebuilding of the temple that the original phases are still a poorly understood, given its imposing successor that is still seen today. In the Trajanic iteration of the temple, the architectural details reflected a marine theme, including a double cyma molding with dolphins, seashells, and tridents, alluding to Venus' marine associations.<sup>134</sup>

There is evidence for a series of water-displays in front of the *rostra* of the temple (App. No. 1.105). There are a few references in Ovid's Ars Amatoria that suggest the presence of fountains somewhere in the space of the temple and forum. When mentioning that even for a can be places for love, Ovid cites that underneath "the marble shrine of Venus, the Appian nymph strikes the air with her upspringing waters," suggesting a fountain.<sup>135</sup> We note here the proximity of the fountain to the temple, which insinuates that the water-display is directly beside it. Another passing reference by Ovid later in the work connects Venus with the Appian nymphs (Ars am. 3.451-452). The name 'Appian' for the nymphs here presumably connects the divinities to the waters of the Aqua Appia, whose waters actually supplied an area on the south side of the city (between the Aventine and Circus Maximus), and hence the modern name of the structure, the Appiades Fountain.<sup>136</sup> Oddly enough, the nymphs here were not associated with the Aqua Marcia, whose waters are believed to have supplied this area of town.<sup>137</sup> The association with Appian nymphs is believed to have come from a statue group of the nymphs that decorated the water-display, as we know from a passage of Pliny that Asinius Pollio

<sup>&</sup>lt;sup>134</sup> Stamper 2005, 94-95.

 <sup>&</sup>lt;sup>135</sup> Ov. Ars am. 1.81. Subdita qua Veneris facto de marmore templo / Appias expressis aera pulsat aquis.
 (Trans. J.H. Mozley). See also, Ulrich (1986, 406) for a discussion of these passages.
 <sup>136</sup> Front. Aa. 5.

<sup>&</sup>lt;sup>137</sup> For more on the Aqua Marcia supplying this area, see Rizzo (2001, 240) and Delfino (2014, 161).

assembled a statue collection of Appian nymphs by the Neo-Attic sculptor Stephanos, which might have been a copy of the nymphs featured in this space (*HN* 36.4.33). We note the connection in this space between the goddess Venus and the Appiades, who could potentially be part of an entourage of Venus.

The archaeological evidence supports the suggestion that there was a fountain in front of the temple (Fig. 34c). A marble basin was installed on each of the east and west corners of the *rostrum*. Between the two ends, there was a central basin, flanked on both sides by low wall (not to obscure the *rostrum* proper). There are cuttings in the pavement that also suggest that the basins were surrounded by some sort of railing.<sup>138</sup> The wall between the basins could have potentially been decorated by small sculpture, perhaps of the Appian nymphs, as is suggested by the passages in Ovid. Water for the basins passed through the wall, as indications for piping has been found underneath its marble veneering. The water, supplied by the Aqua Marcia, entered the space behind the temple, flowed through the temple podium and down to the basin, as the podium was high enough (at least 5 m) to ensure enough pressure for the basins to have jets of water.<sup>139</sup> Roger Ulrich has dated the masonry of the fountain's wall to the second century CE, probably under the emperor Hadrian.<sup>140</sup> While the evidence we have for the fountains dates to the Hadrianic period, the references in Ovid suggest that there was a Caesarian or Augustan precursor to the later examples.<sup>141</sup> In addition, recent excavations have shown that on the southwest side of the portico of the forum, there was another smaller

<sup>&</sup>lt;sup>138</sup> Ulrich 1986, 416. Ulrich also argues that the placement of the basins in these positions was to provide security for those speaking on the *rostra*, as the basins and their railings would have impeded access to the platform. Given, however, that the platform was at least three meters above the level of the forum and the stairs were located on the sides, it seems rather difficult that someone would be able to easily access the *rostrum*. Amici (1991, 99-100) also expresses some doubts as to the feasibility of this hypothesis.

<sup>&</sup>lt;sup>139</sup> Ulrich 1986, 417-419. For more on the Aqua Marcia supplying this area, see Rizzo (2001, 240).

<sup>&</sup>lt;sup>140</sup> Ulrich 1986, 419-421.

<sup>&</sup>lt;sup>141</sup> Ulrich 1986, 420-421.

fountain,<sup>142</sup> which one would assume was utilitarian for those passing through the forum on the south end (to and from the Forum Romanum and the Forum of Augustus) (**Fig. 34a**).

The siting of the Forum Iulium is heavily tied to water both physically and metaphorically. The forum was situated near the springs of the Tullianum and the Porta Fontinalis and was close to the Temple of Janus associated with the hot springs.<sup>143</sup> It is believed that the procession of the Fontinalia, celebrated on 13 October, would have passed from the Argiletum (to the southeast, where the Cloaca Maxima flowed and the Forum Transitorium was later installed) to the area of the Porta Fontinalis, where there might have been an *aedes Fonti*, or a Temple of Fons.<sup>144</sup> In the space of the forum itself, there have been found the remains of an Iron Age necropolis, a tholos-shaped cistern, and a number of irregularly shaped ditches, underneath the Caesarian levels.<sup>145</sup> Excavators noticed that all of these contexts were ritualistically emptied (e.g., the tombs do not have human remains), a libation was poured (given the remains of amphorae), and marine shells were placed on top of each of the contexts, before the area was covered over by the forum.<sup>146</sup> The area had an aquatic past (evidenced by the adjacent springs especially along with the cistern), just like the Forum Romanum. In order to build over it, although it was ritualistically cleared, allowed for a new built environment to go on top-of which the main structure was a Temple of Venus, a goddess connected with water, given her birth from the sea.

<sup>&</sup>lt;sup>142</sup> Delfino 2014, 160. There is also evidence for hydraulic installations in the forum, especially in the southwest side, perhaps related to the shops on that side, along with the drainage systems here that would have connected to the Cloaca Maxima.

<sup>&</sup>lt;sup>143</sup> For the recent excavations around the Tullianum and the adjacent Carcer, see Fortini (2012).

<sup>&</sup>lt;sup>144</sup> Palombi 2005b; Delfino 2010, 174-176; 2014, 250.

<sup>&</sup>lt;sup>145</sup> For a full discussion of these materials, see Delfino (2010 and 2014).

<sup>&</sup>lt;sup>146</sup> Delfino 2010, 173, 178. The shells could in be in fact symbols related Venus. There are examples of shell deposits to Venus and the nymphs throughout Italy. See Delfino (2010, 173, n. 15).

Caesar himself also had a variety of associations with water. He is supposed to have supported a number of building projects that altered aquatic landscapes: the draining of Lake Fucino, building a canal from Terracina to Rome, attempting to excavate the Isthmus of Corinth, constructing the first Naumachia in Rome, and suggesting a project to divert the course of the River Tiber, in order to prevent future floods.<sup>147</sup> In true Roman fashion, Caesar wanted to show superiority over nature, particularly over water, with its destructive character. In the space of the forum, while he did not dramatically change the landscape, he ensured that the space was free from any sort of previous pollution (e.g., the necropolis)—while still building in area that previously had watery associations.

Further, Caesar chose to build a Temple of Venus Genetrix. He had a desire to connect the *gens Iulia* with a mythical past stemming from Aeneas. A further association, however, can be made. By using the epithet *genetrix*, in lieu of *victrix*, because of Pompey's use of it in the Campus Martius, Caesar not only recalls his own past, but Venus' *own* past. Again, we remember that she was born form the sea, associating her immediately with water. Subtly, in the Forum Iulium, we can connect Venus' marine nature to the temple, especially in its Trajanic iteration with the marine-themed decoration. The Appiades fountain focused the attention of the passer-by not only on the flowing water, but also on Venus' temple, with its imposing podium and marble façade. The statues of the nymphs on the fountain would have also suggested that these deities were companions of Venus, furthering a cohesive architectural ensemble.<sup>148</sup> The space

<sup>&</sup>lt;sup>147</sup> Delfino 2010, 177-178; Tortorici 2012; Delfino 2014, 250.

<sup>&</sup>lt;sup>148</sup> There have been suggestions that the temple itself was a *nymphaeum*, with the connections between Venus and the nymphs. Gros argues that the interior of the temple, with its columns and apsidal end, is a nymphaeum, citing examples such as the nymphaeum of Villa Sant'Antonio of Tivoli (1967, 537). Ulrich (1986, 423) suggests the same connection, using the work of Gros, although making the conceit that it is still difficult to determine, because we do not have the Augustan original. It does not seem that the Temple

was charged with an aquatic past that was tied not only to a mythological past, but also a historical one, with Caesar's actions to harness the physical landscapes of water.

Immediately adjacent to the Forum Iulium is the Forum Augustum (**Fig. 35a**). The building of this new forum was driven by a new imperial desire to alter the built environment of the city center, with its gleaming colored marbles and extensive sculptural program alluding to the 'great men' of Rome's past, along with the divine ancestors of the *gens Iulia*.<sup>149</sup> The main focus of the space, however, was the Temple of Mars Ultor.<sup>150</sup> After the deaths of Brutus and Cassius in 42 BCE, Augustus vowed the temple to the 'avenger' Mars in an act of filial piety. Begun in 37 and dedicated in 2, the structure is on a 36 m by 50 m podium rising nearly 3 m in height fronted by a staircase. The octastyle temple employed the Corinthian order in Luna marble. Like the Temple of Venus Genetrix, the cella has a double-storied inner colonnade, along with an apsidal east end.

In front of the north and south podium ends are located two basins for fountains (**Fig. 35b; App. No. 1.110**). Abutting the podium itself, the marble basins were on the floor level of the forum, into which water poured from a spout that would have been located on the wall of the podium.<sup>151</sup> The basins would have been marked off by some sort of barrier, such as a metal grate, similar to the Appiades Fountain in the Forum

of Venus Genetrix is a nymphaeum *per se*, but part of an architectural ensemble that draws on a variety of styles and meanings to craft a new space predicated on water and its role in the landscape.

<sup>&</sup>lt;sup>149</sup> For the most recent work the Forum Augustum, see: La Rocca (2001, 184-195), Rizzo (2001, 230-234), Meneghini and Santangeli Valenzani (2007, 43-60), Ungaro (2007, 118-129), Meneghini (2009, 59-78).
See also: Zanker (1988, *passim*), Richardson (1992, 160-162), Favro (1996, *passim*), Köb (2000, 225-268), Haselberger (2002, 130-131), and the *LTUR* 2.289-295 (s.v., Forum Augustum, V. Kockel). For more on the sculpture, see Zanker (1988, 101-166), Ungaro (2007, 130-169) for the pieces in the Museo dei Fori Imperiali, Luce (2009), Bravi (2012, 141-150) for the Greek sculpture, Pollini (2012, *passim*), and Shaya (2013) for an interpretation of the *summi viri* sculpture of the Forum Augustum.

<sup>&</sup>lt;sup>150</sup> The major monograph on the temple is Ganzert (1996). In addition, see Stamper (2005, 130-150). <sup>151</sup> Not much has been published on these basins, although it seems certain from the basins on the ground that they were indeed present. Ganzert does not mention the basins, but does discuss the drainage system that was present around the forum (1996, 85-87).

Iulium. The basins in front of the Mars Temple are relatively simple and are relegated to sides of the podium. Because of their simplicity, it has been suggested that the basins would remind the onlooker of the numerous street fountains installed in the city under Augustus and Agrippa.<sup>152</sup> The water is secondary to the temple, whose commanding stairs and placement in the plaza are impressive. The basins, however, are different than those of the Forum Iulium, which would have directed the visitors' gaze to the *rostra* and the façade of the Temple of Venus and would have not simply sat on the sides. There was also a subtle reminder through the flowing water of the basins in the Forum Augustum of Augustus' naval victories, such as at Actium, which would follow well in this space tied to the commemoration of the new imperial order.<sup>153</sup>

Next, the Templum Pacis, built between 71-75 CE, presents an impressive series of water-displays in its plaza (**App. No. 1.121**).<sup>154</sup> Constructed to commemorate Vespasian and Titus' victory over the Jews in Palestine, the space culminates in a Temple of Peace, which celebrates the Flavians' victory in the East, along with their own rise to power, after the so-called 'Year of the Four Emperors.' The large square-shaped forum (137 m by 134 m) was colonnaded on all four sides, with the Temple nestled into the southeast portico (**Fig. 36a**).<sup>155</sup> The temple's presence is indicated by seven columns that

<sup>&</sup>lt;sup>152</sup> Longfellow 2011, 21. See also Chapter 4 for a discussion of water-displays at crossroads.

<sup>&</sup>lt;sup>153</sup> Augustus is no stranger to the commemoration of his Actian victory. Not only does he found Nikopolis in northwest Greece near the site of the battle, but he also celebrates the victory in Rome, with the Actian Arch in the Forum and the statue group of the Danaids on the terrace of Apollo. See below (pages 183-186), for a discussion of the Danaid group. Hölscher (2009b) presents an overview of the monuments associated with the Battle of Actium. See also Berlan-Bajard (2006, 332-342, especially 340-342) about the fortune and abundance associated with naval victories.

<sup>&</sup>lt;sup>154</sup> While the monument in question is referred to as the 'Templum Pacis,' it is still considered a forum. Just as the other fora discussed here have temples on their axis, so too does this forum of the Flavians. Modern terminology simply refers to it by the name of the major structure in the space, namely the Temple of Peace.

<sup>&</sup>lt;sup>155</sup> Leading up to the 2000 Jubilee and well into the new century, there has been much new excavation of the Templum Pacis. For more, see: La Rocca 2001, 195-207; Rizzo 2001, 234-243; Meneghini and Santangeli Valenzani 2007, 61-70; Meneghini 2009, 79-97; Corsaro 2014a; Meneghini 2014. See also:

are taller and thicker than those in the surrounding portico.<sup>156</sup> Inside the temple, in addition to the display of a cult statue of Pax would have been the spoils from the war, which are depicted in relief on the Arch of Titus.<sup>157</sup> Flanking the temple would have been offices for the *praefectus urbi*, along with the space that would later house the Severan Marble Plan of the city.<sup>158</sup> Within the covered space of the porticoes would have been a great deal of statuary, including a number of Greek works, identified by their bases, which indicate their titles and artists.<sup>159</sup> Doorways on the west side gave access to the Argiletum, which later became the Forum of Nerva.<sup>160</sup>

In the plaza of the forum, there are six long features (nearly 80 m long) that run east to west, which are indicated on the Severan Plan (**Fig. 36b**). In the interior space, between these features are 10 Hadrianic era statue bases, along with the main altar of the temple. Until about two decades ago, those long features of the plaza were thought to be planters, which would have created an inviting open-air garden and allowed for an escape in the busy city center.<sup>161</sup> The recent Italian excavations of the area, however, have revealed that these features are in fact *euripi* (**Fig. 36c**).<sup>162</sup> Each *euripus* is 4.7 m wide, separated by about the same amount of space in between. The main structure was constructed of brick to about a height of 1 m and then covered in marble veneering.

Richardson 1992, 286-287; Köb 2000, 305-324; Stamper 2005, 156-159; *LTUR* 4.67-70 (s.v., Pax, Templum, F. Coarelli).

<sup>&</sup>lt;sup>156</sup> Meneghini et al. 2009, 197-199.

<sup>&</sup>lt;sup>157</sup> For more on the cult statue, see Corsaro (2014b), and the cult room, see Facchin (2014).

<sup>&</sup>lt;sup>158</sup> On the location of the *praefectus urbi* in the Templum Pacis, see *LTUR* 4.159-160 (s.v., Praefectus urbana, F. Coarelli).

<sup>&</sup>lt;sup>159</sup> For more on the sculpture that was displayed in this space, see: Ungaro (2007, 170-177), Bravi (2009; 2012, 167-182), Fogagnolo and Carpano (2009), and Corsaro (2014b).

<sup>&</sup>lt;sup>160</sup> See La Rocca (2006) and Newsome (2011) for more on walking through the fora of Rome.

<sup>&</sup>lt;sup>161</sup> Macaulay-Lewis (2011) discusses walking in the city center, along with the leisure spaces like the openair plaza of the Templum Pacis and the Templum Divi Claudi. Macaulay-Lewis asserts that the features of the Templum Pacis were in fact planters, not water-displays, given her personal communication with two scholars who had seen the excavations (281, n. 84).

<sup>&</sup>lt;sup>162</sup> La Rocca 2001, 195-196; Rizzo 2001, 238-239; Meneghini and Santangeli Valenzani 2007, 61-63; Meneghini 2009, 81; Corsaro 2014a, 259; Meneghini 2014b, 285.

Water would have flowed from the middle part of the *euripus*, presumably pooling in a shallow basin on top, with overflow trickling down the sides into a marble drainage channel that was found in situ. Lead piping was also found in the masonry. A series of larger drains would have run along the perimeter of the plaza, along with at least four running east-west and one north-south, which would have allowed for the proper drainage of the space.<sup>163</sup> Running along the edges of the marble drainage channel of the *euripi* were amphorae with traces of roses, which suggests that the water-displays were lined with some sort of shrubbery.<sup>164</sup> During the Flavian period, it seems that the plaza was only paved with marble on the west side, near the entrance/exit, while the rest of the space was a packed earth.<sup>165</sup>

The water-display of the Templum Pacis has a variety of implications for the use of this space. First, the use of such large basins with flowing water, surrounded by plantings and the art in and around the plaza, would have created an inviting environment for passers-by to escape the bustle of the city center.<sup>166</sup> One can imagine the sensorial experience of the space: the sound of trickling water (versus the din of pedestrians and traffic), the refreshing coolness from the water felt in the plaza and the covered portico, the smell of the roses, the sight of the reflecting water that would play with the surrounding space, perhaps illuminating the art. The Flavians, then, were able to effectively create their own *paradeisos* in the historic center, akin to the Porticus Pompeiana or the *horti* throughout the city of Rome. Second, the water itself has a number of meanings. The great amount of water hints at the abundance that the Flavians

<sup>&</sup>lt;sup>163</sup> Meneghini 2014b, 285.

<sup>&</sup>lt;sup>164</sup> Rizzo 2001, 239; Celant 2005.

<sup>&</sup>lt;sup>165</sup> Meneghini et al. 2009, 193.

<sup>&</sup>lt;sup>166</sup> Köb 2000, 305-316; Maccaulay-Lewis 2011, 281-283.

hoped to bring to the Empire, through successful military campaigns and a fresh start after a civil war. The water also creates a sort-of metaphysical experience for those in the forum. It produces a peaceful, relaxing experience in the space, channeling the peace that only *Pax* can bring, which, in turn, was brought about by the Flavians themselves.

There are two examples of Domitianic era water-displays that are found in the Imperial Fora that should be briefly mentioned here. In a space that might be tied to one of the south exedras of the portico of the Templum Pacis, dated to the time of Domitian on the basis of brick stamps, it has been suggested that the space was *camera* type fountain space, with a large (3.5 m in diameter) porphyry basin.<sup>167</sup> It has been suggested that the water could have been used for purification before entering the temenos of the temple. There is not enough evidence, however, given the current state of the publications to warrant such claims of the presence of a 'nymphaeum' here. There is also another structure that has been thought to be a nymphaeum on the so-called Terrace of Domitian, which is situated immediately adjacent to the west hemicycle of the Forum Augustum, next to late Republican housing (Fig. 37a; App. No. 1.122). Edoardo Tortorici has argued that this fountain would have been the terminus of the Aqua Marcia, and the space would have acted as a terminal fountain, displaying the waters of the aqueduct.<sup>168</sup> The original form of the fountain is unclear (and perhaps unfinished), because the Forum of Trajan was installed immediately adjacent, obstructing the structure (**Fig. 37b**). At the bottom, there was probably a monumental stair, which originally would have passed to the Subura, but then was transformed into a water stair, with an apsed exedra added

<sup>&</sup>lt;sup>167</sup> Rizzo 2001, 240; Meneghini 2009, 82-83. For the basin, see Ungaro (2007, 177). There is confusion in the published material about where one would actually access the structure, whether in the exedra of the Templum Pacis, or through a space in the adjacent Basilica Aemilia. More work needs to be done on this space to clarify what is happening there. <sup>168</sup> Tortorici 1993a.

above.<sup>169</sup> Like the previous example near the Templum Pacis, the lack of clarity in this structure's form and use (especially in the urban landscape) prevents us from exploring it further here.

The Imperial Fora, in contrast to the Forum Romanum, employ the use of *moving* water, in addition to metaphorical associations with its display. While the water-displays of the fora of Caesar and Augustus were small, compact fountains, they still provide water that could be used for drinking, in addition to adding to the aesthetic experience of the space. The Templum Pacis, on the other hand, used truly new ways of displaying water that not only included a large show of moving water, but also effectively integrated the show into a space that acted as a cohesive ensemble for a unique sensorial experience. The patrons of each of the water-displays also provided mytho-historical associations for those passing by. One only needs to think of the marine nature of Venus, born on the sea, in Caesar's forum, the naval victories of Augustus, and the abundance associated with both peace and water (although the two do not need to be mutually exclusive). The use of water-displays in the Imperial Fora help to set the trend of water use in the Empire, when new aqueducts were constructed throughout the Mediterranean, allowing for new types of water-displays. The Forum Romanum, however, does not have any extant water-displays *per se.* Its watery past, stressed through the water-related structures, acts in tandem with the water features of the Imperial Fora, creating a city center that is entirely predicated on water.

Across the Mediterranean in Greece, the city of Argos in the Roman period used water-displays constructed by local élites to commemorate their shared mythical past tied

<sup>&</sup>lt;sup>169</sup> Longfellow (2011, 49-56) argues that the fountain borrowed forms found in domestic architecture, which was now monumentalized by Domitian.

to water. "Very Thirsty Argos," as Homer calls it, was known for not having ready access to natural water sources.<sup>170</sup> Strabo, however, protests this misnomer (8.6.7). He points out that "the country lies in a hollow, and is traversed by rivers, and contains marshes and lakes, and since the city is well supplied with waters of many wells whose water-level reaches the surface."<sup>171</sup> Argos, before the introduction of the Hadrianic North Aqueduct, relied primarily on the water taken from wells.

The mythological history of Argos was centered on water. The first king of Argos, Inachos, gave his name to the local river, although it is usual that legendary kings of cities throughout the Greco-Roman world gave their names to local rivers. It is reported that Argos was waterless because of the wrath of Poseidon, who was angry that Inachos introduced the cult of Hera to Argos rather than his own.<sup>172</sup> Phoroneus was the son of Inachos. While Phoroneus does not have set mythology, a cult developed around his persona, because he was supposedly responsible for grouping the people of the Argive plain into a city, along with bringing fire to the Argives (akin to a Prometheus figure).<sup>173</sup> At some point after Phoroneus, Danaos, the brother of Aegyptus, is reported to have traveled from Egypt and taken control of Argos from the ruling king, Gelanor.<sup>174</sup> Danaos is supposed to have brought marriage rites to Argos.<sup>175</sup> He was also subsequently treated as a foundation hero, as Pausanias reports seeing his tomb during his visit to Argos.<sup>176</sup> It has been argued that these last two figures illustrate "a pre-political stage [of the

<sup>&</sup>lt;sup>170</sup> Hom. *Il.* 4.171. πολυδίψιον Άργος.

<sup>&</sup>lt;sup>171</sup> Strab. 8.6.7. τῆς τε χώρας κοίλης οὕσης καὶ ποταμοῖς διαρρεομένης καὶ ἕλη καὶ λίμνας παρεχομένης, καὶ τῆς πόλεως εὐπορουμένης ὕδασι φρεάτων πολλῶν καὶ ἐπιπολαίων. (Trans. H.L. Jones).

<sup>&</sup>lt;sup>172</sup> Apollod. *Bibl.* 2.1.4. Piérart 1992, 121; Larson 1995, 74; Larson 2001, 149-150.

<sup>&</sup>lt;sup>173</sup> Paus. 2.19.5. Pausanias reports that there was a 'Fire of Phoroneus' in the Agora, and the Argives did not believe that Prometheus brought fire to the Greeks. Larson 1995, 74; Larson 2001, 149. For more on a discussion of Phoroneus' tomb, see Piérart (2000).

<sup>&</sup>lt;sup>174</sup> Apollod. *Bibl.* 2.1.4; Strab. 8.6.4-11; along with the plot of Aeschylus' *Suppliants*.

<sup>&</sup>lt;sup>175</sup> For more on the marital rites, see Detienne (1988) and Larson (1995, 74).

<sup>&</sup>lt;sup>176</sup> For the tomb of Danaos: Strab. 8.6.9; Paus. 2.20.4.

development of the city], represented by figures such as the culture-bearer Phoroneus [...] followed by a leader [such as Danaos] who ushers in the political era, often in combination with the foundation of the city's major cults."<sup>177</sup> Thus, the kings of Argos are important heroes for the Argives and for the subsequent identity of the city.

The daughters of Danaos are of great importance to the water landscape of Argos. The Danaids were 50 girls, among whom the most famous were Amymone, Physadea, Hippe, and Automate.<sup>178</sup> When Danaos arrived at waterless Argos, he had to find water, as Apollodorus reports.<sup>179</sup> He sent four of his daughters out to fetch water. While Amymone was searching for water, she was pursued by a satyr, who fled when Poseidon appeared. The god subsequently slept with Amymone, but revealed the springs of Lerna to her in return. The other daughters, too, also found water for the Argives, which, in turn, connects them to four different eponymous water sources in the area.<sup>180</sup> The city of Argos is reported to have had a spring called Amymone, which was used for the activities of Hera cult.<sup>181</sup> In Callimachus' *Aetia*, in two fragments concerning the fountains of Argos, the Danaids are identified with beloved, flowing waters (fr. 65-66).<sup>182</sup> In their iconography, the Danaids are overwhelming depicted as water-carrying figures.<sup>183</sup>

In Roman depictions of the Danaids, they are often associated iconographically with the sons of Aegyptus, whom they (briefly) married. The boys come to Argos,

<sup>&</sup>lt;sup>177</sup> Larson 1995, 71. Larson is drawing on the work of de Polignac (1984).

<sup>&</sup>lt;sup>178</sup> For more on the Danaids, see Bonner (1900), Larson (1995, 24; 2001, 149-150), and *LIMC* 3.1.337-341 (s.v., Danaides, E. Keuls). In addition to the literature presented in this section, there was also a satyr play of Aeschylus (*Amymone* fr. 13-15), along with an appearance of the Danaids in Aeschylus' *Suppliants*. For more, see Bachvarova (2009), Bednarowski (2010), and Bakewell (2013). In later Greek and Roman traditions, the Danaids are associated with being punished in the underworld by constantly filling up leaky water-jugs.

<sup>&</sup>lt;sup>179</sup> Apollod. *Bibl*. 2.1.4

<sup>&</sup>lt;sup>180</sup> A fragment of Hesiod also describes the Danaids as making waterless Argos well watered (fr. 128).

<sup>&</sup>lt;sup>181</sup> Larson 2001, 150.

<sup>&</sup>lt;sup>182</sup> The Danaids make a similar appearance in Callimachus' *Hymn on the Baths of Pallas (Hymn* 4.45-48). See also Piérart (1992, 120).

<sup>&</sup>lt;sup>183</sup> *LIMC* 3.1.337-341 (s.v., Danaides, E. Keuls), especially nos. 7-31.

probably sent by Aegyptus to punish Danaos. They demand to be married to the 50 daughters of Danaos, who consents to the unions. But he tells all the daughters to kill their husbands on their wedding night. All do as instructed, except for Hypermnestra, whose husband, Lynkeus, has respected her virginity. Danaos, in turn, wants to kill Hypermnestra for her disobedience. So famous was this episode that Delphi is reported to have a statue group of Danaos, Hypermnestra, and Lynkeus (Paus. 10.10.2). And at Rome, on the portico of the Temple of Actian Apollo, a statue group of the 50 victorious daughters and Danaos were dedicated in 28 BCE by Augustus (Fig. 38).<sup>184</sup> The statues. which on the bottom are in the shape of herms, topped with the torsos of women with upraised arms (following their depictions on South Italian vases), have been found in the temple precinct, with their hands upraised.<sup>185</sup> The group, in the wake of the victory over Antony and Cleopatra (i.e., a victory over an Egyptian foe), illustrates the Danaid victory over their Egyptian husbands.<sup>186</sup> The prominence of this statue group would have been a powerful and evocative image on the Palatine, and they were probably situated in a way that those in the valley below would also be able to see the sculpture.<sup>187</sup> The Danaids by the Augustan period, then, certainly occupied a prominent place in the collective psyche

<sup>&</sup>lt;sup>184</sup> Kellum 1985, 173-175; Spence 1991, 14-16; Bruno 2008, 205-213; Carandini 2008, 84-88; Miller 2009, 196-197. It is difficult to reconstruct the exact location of the sculpture in relation to the temple. Propertius reports that the statues of the Danaids were in between the columns on the portico of the temple (2.31.3-4). The portico could have been two-storied (Strazzulla 1990), on two-storied structure on the lower terrace of the tempos (Balensiefen 1995), or simply on the portico on the upper terrace associated with the temple (Iacopi and Tedone 2005-2006; Quenemoen 2006).

<sup>&</sup>lt;sup>185</sup> Quenemoen 2006, 229-230.

<sup>&</sup>lt;sup>186</sup> Spence (1991) also connects this parallel with that of Aeneas' victory over Turnus in the *Aeneid*. Spence reads that the murder of Turnus is prompted by Aeneas seeing the *balteus* of Pallas that Turnus now wears. One of the scenes that was probably depicted on the armor was the episode of the Danaids killing their husbands.

<sup>&</sup>lt;sup>187</sup> Quenemoen (2006, 245) successfully presents the use of the statuary, along with inventive orders and architecture, and various types of stone, which would have made this space so lively. Propertius is so enamored with the complex and its decoration that he is late to a rendezvous with his lover (2.31; Miller 2009, 196-197).

of not only the Argives, where the girls brought forth water, but also in Rome, where they are used in early imperial propaganda in the post-civil war period.

Turning to the archaeological remains of the city of Argos, the agora constantly evolved over time. For the past century, the École française d'Athènes has excavated the ancient remains of Argos, which include the agora, theater, the Larissa Nymphaeum, and the Bronze Age remains of the Apsis Hill.<sup>188</sup> Because the modern town lies directly above the ancient, we still do not know exactly where all of the monuments of the city are, or the extent of the agora. We, however, have a good understanding of the development of the agora, especially in the Roman phase of the city.<sup>189</sup> Adjacent to the Larissa Hill, the city center grew from the agora, especially recognizable in the fifth century remains, which included the palestra, the hypostyle hall, a race-track, an orchestra, traces of canalization of the Cephisos River, along with an early theater and an Aphrodision to the west on the slopes of the Larissa (**Fig. 39a**).<sup>190</sup> During the Hellenistic period, it seems that the large theater was installed on top of its primitive processor, the Temple of Demeter to the east of the agora, along with the terrace of the Temple of Apollo on the northern edge of the agora.<sup>191</sup>

After the conquest of Greece by the Romans in 146 BCE, it is during the imperial period that Argos began to see a noticeable change in the fabric and makeup of its agora.

<sup>&</sup>lt;sup>188</sup> There are innumerable publications and reports on the site of Argos by the French School, for which one can easily consult nearly any volume of the *Bulletin de correspondance hellénique* for an annual report of the excavations. While there is no monograph that offers a synthetic and diachronic history of the agora, the following are the best to which to refer: Marchetti and Rizakis 1995; Piérart and Touchais 1996; Pariente et al. 1998; Marchetti 2013, Luce 2014, 26-28. For more on the Roman agora, see the following *BCH* articles: 118 (1994) 132-142; 119 (1995) 437-472; 124 (2000) 489-496; 125 (2001) 565; 128-129 (2004-2005) 828-833; 130 (2006) 708-713; along with Piérart and Thalmann (1980).

<sup>&</sup>lt;sup>189</sup> For more on the development of the ancient city of Argos, especially in relation to the Roman period, see: Aupert (2001); Marchetti 2013.

<sup>&</sup>lt;sup>190</sup> Marchetti and Rizakis 1995, 454-458.

<sup>&</sup>lt;sup>191</sup> Marchetti and Rizakis 1995, 458-460.

In the late first century BCE and through the first century CE, the introduction of *opus camenticium*, *opus testaceum*, *and opus incertum mixtum*, in addition to Roman architectural forms, allowed the built environment of Argos to go through what some scholars deem a 'revolution' in the ability of the Argives to make novel architectural forms.<sup>192</sup> In the first century CE, the palestra was reconstructed, an odeion was installed to the north of the Aphrodision, and a tholos was built on the northern edge of the agora (**Fig. 39b**).<sup>193</sup> In the Hadrianic period, much was constructed in Argos, including the Hadrianic aqueduct with its terminus at the Larissa Nymphaeum, and the skene building of the theater, along with the Bath A to the east of the theater.<sup>194</sup> After 150 CE, the agora continued to change, with the transformation of the gymnasium/palestra on the south side of the agora into a bath, along the monumental tombs to the southeast of the tholos (on the northern edge of race-track) added, with the so-called square monument being added last in this space (**Fig. 39c**).<sup>195</sup> The two monumental tombs are believed to have been posthumous honors given to prominent local benefactors of the city.<sup>196</sup> Shops were also

<sup>&</sup>lt;sup>192</sup> Aupert 1985a; Aupert 1990; Marchetti and Kolokotsas 1995, 195; Aupert 2001. See also Waelkens (1987) discussion of the adoption and integration of Roman building materials in Asia Minor, which led to hybrid building techniques; in the same vein, see Lancaster (2010), who examines the building techniques of Roman Greece in the second century CE that were imported from Parthia.

<sup>&</sup>lt;sup>193</sup> Marchetti and Rizakis 1995, 460.

<sup>&</sup>lt;sup>194</sup> Aupert 1990, 602-610; Marchetti and Rizakis 1995, 460. For more on the Hadrianic aqueduct, see Lolos (1997, 306); the Larissa Nymphaeum, see Longfellow (2011, 112-120). Lancaster (2010) persuasively argues for a new date for the Bath A, pulling its initial construction from around 100 CE to the Hadrianic period, based on the vaulting technique that she believes came back with Hadrian's engineers that they learned when they were stationed in Parthia. This structure has had various names in the secondary scholarship, including the Serapeion-Bath A. Lancaster calls it a cult complex transformed into a bath, which is probably the best terminology, given that we do not exactly which cult was practiced there, although, it seems likely that it was devoted to Asclepius (and not Serapis, as Aupert has argued for in 1985b).

<sup>&</sup>lt;sup>195</sup> Marchetti and Rizakis 1995, 460-462.

<sup>&</sup>lt;sup>196</sup> In one of the tombs, the remains of a golden wreath suggested to excavators that inhumation was in fact practiced there. There are also indications in epigraphic remains that local benefactors could receive posthumous honors (*IG* 4.609.14-16). For more on the inscription, see Piérart (2010, 35, n. 138). See also Marchetti and Rizakis (1995, 460) and Parienti et al. (1998, 219).

added to the south side of the agora in this period, perhaps creating a large market space.<sup>197</sup>

Scholars have been interested in repopulating the urban landscape of Argos with the structures Pausanias saw on his trip through the city in the middle of the second century CE (2.18-22). Pausanias brings us from the Argolid plain almost directly into the agora, where he describes the Sanctuary of Apollo Lycaeus (2.19.3). As he goes through the city, he makes mention of a variety of monuments. Of particular interest is his description of the tombs of the various Argive heroes and heroines, including those of Phoroneus (2.20.3), Danaos (2.20.6), and Hypermnestra (2.21.2). Like many of Pausanias' descriptions of the places he visited, it is difficult to reconstruct exactly his path through the urban space, particularly since the whole of the ancient town has not been excavated.<sup>198</sup> For our purposes, however, it is important to note that he does describe the heroic landscape of Argos, which is scattered with the remnants of its heroic past. But Pausanias does not mention any of the water-displays of the city. The two largescale fountains of the agora were probably built in the late second century CE, after Pausanias had passed through the city. But we cannot assume based on their omission in the *Description of Greece* that they had to have been built after Pausanias visited Argos. In fact, he does not mention the Larissa Nymphaeum built by Hadrian, which was the terminus of the aqueduct built by Hadrian after his visit to the city in 124-125 (App. No. **1.9**). It is still not clear why Pausanias does not mention the nymphaeum, but he tends not to discuss the imperial period water-displays he must have seen during his travels in Greece, such as the Nymphaeum of Herodes Atticus in Olympia (App. No. 1.83), nor any

<sup>&</sup>lt;sup>197</sup> Marchetti and Rizakis 1995, 462.

<sup>&</sup>lt;sup>198</sup> Robert 1909, 127-137; Elsner 1995, 125-158; Arafat 1996, *passim*; Piérart 1998a; Pretzler 2007, *passim*.
of those in Athens (the Agora Nymphaeum (**App. No. 1.14**) or the Hadrianic Lykabettos Nymphaeum (**App. No. 1.15**)).<sup>199</sup> Pausanias then does not play a great role in our understanding of the actual water-displays themselves, but his description of the heroic landscape of Argos has an impact on our interpretation of the water-displays in the agora.

Local Argive families, particularly under the Flavians, had the wealth to sponsor new building projects.<sup>200</sup> The population of Argos seems to have been a mixture of Argives becoming Roman, along with Romans living in the city, as a number of Italic residents immigrated to Greece after 146.<sup>201</sup> Argives, however, often used their Greek names, in lieu of their Roman ones, making it difficult for the historian to identify "Romans" in Argos. It has been noted that old and new local families made their mark on urban spaces, as early Roman inhabitants of Greek cities "as well as their descendants, who became the élite in the local hierarchy, gradually changed the old urban landscape on the basis of a characteristically Roman architectural and spatial model."<sup>202</sup> Of the local élite families, two are quite prominent: the Tiberii Iulii and the Tiberii Claudii. The Tiberii Iulii, whose name derives from the imperial family of the Julians, perhaps stemming from Tiberius, are actually seen throughout the Peloponnese, including at Epidaurus, Sparta, and Corinth.<sup>203</sup> The Iulii appear as priests of the imperial cult in Argos, on the list of *hellenodikes* from the end of the second century CE, and as local Argive benefactors. The Tiberii Claudii were a Roman family that evidently moved east

<sup>&</sup>lt;sup>199</sup> Arafat (1996, 36-42) suggests that Pausanias, while he is perhaps reacting negatively to contemporary monuments (cf., Plato and Vitruvius), he does not report these water monuments, like the famous omission of the Nymphaeum of Herodes Atticus. While these are impressive gifts of water, they were, essentially, practical value, "of little importance in determining what the sanctuary is really about or in promoting its sanctity" (38).

<sup>&</sup>lt;sup>200</sup> Piérart 2010, 33-35.

<sup>&</sup>lt;sup>201</sup> Marchetti 2010, 43-45.

<sup>&</sup>lt;sup>202</sup> Evangelidis 2014, 349.

<sup>&</sup>lt;sup>203</sup> Spawforth 1996, 179; Marchetti 2010, 48-49. See also: Rizakis and Zoumbaki 2001, ARG nos. 144, 145, 152, 153, COR no. 337.

as *negotiatores*, and were the patrons in a number of cities, including Sparta and Pergamon, with Argos as their new home.<sup>204</sup> In Argos, in the late second century, Tiberius Claudius Menecleus and Tiberius Claudius Antigonus gave not only statues of the emperors and local heroes in the agora and the city's three gymnasia, but also that most expensive of all benefactions, an aqueduct.<sup>205</sup> It is the local élite population that used their local mythology in tandem with their public benefactions to alter the landscape of Argos' agora.

There were two water-displays in the Argive agora: the Round Nymphaeum (**App. No. 1.11**) and the Square Monument (**App. No. 1.12**). While both structures are of different shapes and sizes, they both evoke funerary architecture. By placing these water-displays in the civic center of Argos, which we know had a number of heroic monuments, the benefactors of these fountains would have commemorated a shared Argive past, while also altering the landscape of the agora.

The Round Nymphaeum of Argos is a relatively unique example of a waterdisplay, in terms of its history and architectural structure. The Nymphaeum was placed on the northern edge of the agora (**Fig. 40a**).<sup>206</sup> It is believed, however, that there was an ancient precursor to the Roman Nymphaeum on the ground there, which might have had some sort of sacred context. Suggestions for a precursor have included the building where

<sup>&</sup>lt;sup>204</sup> Spawforth 1996, 177-178; Rizakis 2007; Marchetti 2010, 51-56. See also: Rizakis and Zoumbaki 2001, ACH no. 73, ARC nos. 60, 62a, 64, 69-71, ARG nos. 83-91, 93-99, 104-107, COR nos. 158-170, 172-175, 177, 178, 181-184, EL nos. 125-134, 136-140, 142-148, 150-152, 154-160, 162, 165.

<sup>&</sup>lt;sup>205</sup> SEG 28.396. Piérart 1999, 262; Piérart 2010, 35. While the inscription states that the Claudii provided an aqueduct, the only aqueduct known in Argos is the Hadrianic North Nymphaeum. Perhaps the Claudii actually repaired part of the aqueduct, in order to ensure the continued flow of the water to Argos. There is evidence for rebuilding of some of the vaults in the drains of the agora, which could be a possible benefaction of the Claudii. See Lancaster (2010, 455) for the repair. For the bibliography on the Argive aqueduct, see Lolos (1997, 306)

<sup>&</sup>lt;sup>206</sup> Walker 1979, 117-122; Walker 1987, 64-68; Marchetti and Kolokotsas 1995; Pariente and Thalmann 1998, 219; Piérart 1999; Richard 2012, cat. no. 9.

the women of Argos were reported to have cried for the dead Adonis (Paus. 2.20.6), the so-called Pyrrhus monument, or the so-called cenotaph of Danaos.<sup>207</sup> Indeed, the cenotaph of Danaos was a tantalizing association with the nymphaeum. We know from the ancient sources that the cenotaph was located near to where the athletic competitions of the city took place.<sup>208</sup> Directly to the south of the structure in the agora lies the ancient racetrack. Further, if the Round Nymphaeum was associated with Danaos, some have suggested that the structure helped to facilitate rituals associated with marriage, given Danaos' institution of marital rites and the episode in which he orders his daughters to kill their husbands.<sup>209</sup> The ancient Round Nymphaeum could have potentially used water from the Cephisos River, for which there is fifth century BCE piping, although the evidence is tenuous.<sup>210</sup>

Patrick Marchetti has argued that the Round Nymphaeum has two phases: Phase 1 in the Domitianic era, with Phase 2 sometime perhaps in the second or third century, with both periods supporting some sort of water-display.<sup>211</sup> While there are differences in the interior make-up, according to Marchetti, both phases had a round structure, first a tholos (with a building inside), then a monopteros (without).<sup>212</sup> Built on a 16 m square peribolos, the octastyle round structure (nearly 7 m in diameter) was built on top of a

<sup>&</sup>lt;sup>207</sup> Piérart 1995a; Marchetti 1998, 358.

<sup>&</sup>lt;sup>208</sup> Strab. 8.6.9; Paus. 2.20.6; Hsch. s.v., Σθένια. Piérart 2010, 33; Marchetti 2013, 318.

<sup>&</sup>lt;sup>209</sup> Walker 1979, 117-122; Marchetti 2013, 318.

<sup>&</sup>lt;sup>210</sup> Marchetti and Kolokotsas 1995, 30.

<sup>&</sup>lt;sup>211</sup> Marchetti and Kolokotsas (1995) is the seminal monograph on the nymphaeum, which surveys all the known architectural elements of the structure, along with discussing its placement in the urban fabric of Argos. Piérart (1999) argues *contra* to the interpretations of Marchetti, which is presented below (pages 195-197).

<sup>&</sup>lt;sup>212</sup> Vitruvius articulates a difference between the tholos and the monopteros (*De arch.* 4.8.1). The tholos form is one that has a closed interior space, which one can see, for example, on round temples in the Greco-Roman world. The monopteros is one with a statue or a basin inside, without walls. The shape of the tholos and monopteros developed in the late Classical and early Hellenistic periods, but it is unknown just when the shape was first used for a fountain. For more on round fountains: Neuerburg 1965, 65-72; Letzner 1999, 136-141, 190-193; Richard 2012, 45. On the monopteros in Roman architecture, see especially Rambaldi (2002), along with Weber (1990, 105-124) and Wilson Jones (2000, 74-79).

crypt, with a circular stair and a small corridor leading to the north (**Fig. 40b**). Phase 1 would have contained a cella that would have enclosed the circular stairs, along with a set of steps on the north side of the structure, which would have allowed for easy access to the interior (**Fig. 40c**).<sup>213</sup> Along the exterior of the cella, it is supposed that there would have been spouts to allow water to flow out and into a basin encircling the base of the structure (**Fig**). Marchetti has restored an architrave inscription to this phase, too: "of the springs and of the nymphaeum in the midst of the reservoir" (**Fig. 40d; App. No. 2.30**).<sup>214</sup> The inscription and the reconstruction with the basins around the building suggest that the nymphaeum was supplied with a reliable source of running water in the first century CE.

The purpose of the Argos structure is still unclear. Given that there might be connections with a precursor building that was used for cleansing before marriage, it has been suggested this nymphaeum would have featured in marriage rites. It is presumed that the interior stairs and their underground corridor (a *bothros*?) could have been flooded with water, allowing women to enter and plunge into the purifying waters before their wedding.<sup>215</sup> The architrave inscription has been used to further support this interpretation, describing this structure as a *nymphaion*. There could be a connection between this space and the Danaids, who were sometimes considered to be nymphs, given their discovery of the waters in the surrounding area. In fact, in some modern plans of the nymphaeum, the structure is marked as the Nymphaeum of Amymone.<sup>216</sup> By associating the structure with the Danaids, such as Amymone, along with the ritualistic

<sup>&</sup>lt;sup>213</sup> Marchetti and Kolokotsas 1995, 144-148.

<sup>&</sup>lt;sup>214</sup> Marchetti and Kolokotsas 1995, 110-115; Piérart 1999, 246. [T]ῶν πήγων καὶ τῶν νυμφαῖον μετὰ τῶν δοχε[ίων].

<sup>&</sup>lt;sup>215</sup> Piérart 1999, 245.

<sup>&</sup>lt;sup>216</sup> See, for example, Fig. 1 of Marchetti and Rizakis (1995).

bathing before a wedding, the nymphaeum takes on a sacred function in the landscape of the agora.

The second phase of the Round Nymphaeum is marked by a likely change in the function of the building, which had an impact on the interior space (**Fig. 40e**). The Round Nymphaeum becomes a fountain, divorced from any ritual practices. The north stairs and the cella walls are removed. The building become a true monopteros, with four columns replacing the interior cella walls, and a basin installed on the interior that would have allowed water to flow over its lip, into a series of two basins on two different levels, before reaching the bottom basin for collection (**Fig. 40f**). The architectural members, in their execution and provenance, suggest a second century date (**Fig. 40g**).<sup>217</sup> The exterior eight columns were monolithic cipollino marble from Euboea, with Pentelic marble Corinthian capitals that are similar to the capitals found in the Hadrianic baths at Argos. The high quality of stone masonry in a city constructed largely of brick would have made this a spectacular monument in Argos.

The Round Nymphaeum was placed on the north side of the agora, southeast of what is believed to be the location of the Temple of Apollo Lycaeus, and north of the *dromos*, or racetrack. Marchetti noticed a similar trend in the placement of a round structure connected to some sort of sacred function, south of a temple, and a *dromos* at Corinth and Isthmia.<sup>218</sup> At Corinth, the Sacred Spring (monumentalized by the sixth century BCE) was located below the terrace of Apollo, directly south of the temple (**Fig. 15**).<sup>219</sup> In the Roman period, the Sacred Spring having gone out of use after Mummius'

<sup>&</sup>lt;sup>217</sup> See especially Walker's discussion (1979, 117-122). Also, in this reconstruction, a coin dated to 130 CE was found in the strata (Walker 1979, 120).

<sup>&</sup>lt;sup>218</sup> Marchetti and Kolokotsas 1995, 203-220; Marchetti 1998, 359-365; Marchetti 2013, 318.

<sup>&</sup>lt;sup>219</sup> Hill 1964, 116-199; Steiner 1992; Dubbini 2011, 186-206.

146 BCE destruction, a round tholos, perhaps dedicated to Bacchus, was installed on the terrace, which might not have had anything to do with the spring.<sup>220</sup> The agora, before its conversion into a forum during the period after 44 BCE, would not have had a racetrack, especially with the construction of Babbius' Fountain of Poseidon on the west side of the forum at the very end of the first century BCE.<sup>221</sup> The layout of the Corinthian forum, without a *dromos*, and with a round building perhaps not even connected to a watersource does not make for a strong parallel with Argos.

At Isthmia, to the south of the Temple of Poseidon was a precinct of Melikertes-Palaimon, called the Palaimonion, and the stadium (**Fig. 41a**).<sup>222</sup> The Palaimonion celebrated two entities: Melikertes, a child who died at sea andwas buried at Isthmia, and for whom the Isthmian Games were instituted; and Palaimon, the sea deity Melikertes seems to have become after his death.<sup>223</sup> The first shrine of Palaimon appeared at Isthmia perhaps in the first century CE, with its zenith during the Hadrianic period in its fifth and final phase of reconstruction, which included the building of a monopteros with a statue of Palaimon inside (**Fig. 41b**). It has been suggested that the last phase could have had a fountain, given that a basin was found near what appears to be an underground passage lined with waterproof plaster.<sup>224</sup> This passage has been connected with the underground passage that Pausanias reports having seen, perhaps being the space where the oaths of the Games were administered.<sup>225</sup> It is difficult to assess exactly how water might have

<sup>&</sup>lt;sup>220</sup> Hill, 1964, 151-153; Wiseman 1979, 513; Bookidis 2005, 149, 153.

<sup>&</sup>lt;sup>221</sup> Wiseman 1979, 513; Piérart 1999, 265; Romano 2003, 287-288; Gebhard 2005, 186-187.

<sup>&</sup>lt;sup>222</sup> For the Palaimonion, see: Broneer 1973, 99-116; Gebhard et al. 1998, 428-444; Piérart 1998b; Pache 2004, 135-180; Gebhard 2005; Mylonopoulos 2008b, 56-60.

<sup>&</sup>lt;sup>223</sup> Gebhard (2005) presents the most in-depth discussion of Melikertes-Palaimon's myth, cult, and ritual. She is currently preparing a monograph on the figure of Palaimon. The cult seems to be instituted after the colonial foundation of Corinth.

<sup>&</sup>lt;sup>224</sup> Bronner 1973, 110.

<sup>&</sup>lt;sup>225</sup> Paus. 2.2.1. Broneer 1973, 111; Gebhard 2005, 197-199.

been used here, but the evidence does not seem to suggest that there was a water-display being used, perhaps just water for ritual purification (kept in the basin found on-site).<sup>226</sup> No matter the actual cult practiced here, the form of the round monopteros used as a marker for the tomb of the figure that the Isthmian Games were instituted for is important for our considerations of how architectural forms, such as the monopteros, can evoke a mythological past.

Michel Piérart, however, has offered a different reading of the archaeological evidence of the Round Nymphaeum at Argos. Piérart suggests that there were two phases to the structure. Phase 1, again of Domitianic date, would have been a cenotaph of Danaos, perhaps with a statue inside.<sup>227</sup> Such an assertion makes sense: Pausanias does not report seeing a fountain in the agora, but, at the very least, a tomb of Danaos. Further, the archaeological evidence for the entrance on the north side with 11 stairs is based on a single block in the reconstruction by Marchetti.<sup>228</sup> The interior circular stairwell that could have acted a *bothros* for marriage rites is only 1.1 m in diameter, with steps of irregular height and spacing, making it virtually impossible to descend to wade or bathe in the waters below.<sup>229</sup> According to ancient sources, marriage rites must also use water from a source that was running.<sup>230</sup> Water access then poses a problem. There is no running water associated with the tholos, and it would have been difficult for the canalized waters of the Cephisos (not a substantial body of water) to feed into the crypt,

<sup>&</sup>lt;sup>226</sup> Piérart 1999, 265-266.

<sup>&</sup>lt;sup>227</sup> Piérart 1999, 259, 261. Piérart does not believe that this particular cenotaph would have taken a tholos form, but a monopteros form.

<sup>&</sup>lt;sup>228</sup> Piérart 1999, 247-249.

<sup>&</sup>lt;sup>229</sup> Piérart 1999, 250-252.

<sup>&</sup>lt;sup>230</sup> Piérart 1999, 250. See also Chapter 5 for more on ritualistic uses of water, including those used for marriage, especially pages 276-277 and 290-291.

let alone supply the water-display Marchetti suggests outside of the tholos.<sup>231</sup> Indeed, it is only in the Hadrianic period, with the introduction of the North Aqueduct, that the city of Argos had access to substantial amounts of water with necessary pressurize for water-displays.

Phase 2 of the Argos Round Nymphaeum would have evidently occurred after Hadrian. Phase 2 marks the transition of the structure into a full-fledged fountain, with water coming from the central basin in the monopteros, flowing down into the basins below, as described earlier. The installation of the circular stair and its crypt would easily facilitate any subsequent fountain maintenance.<sup>232</sup> Piérart places the inscription in this post-Hadrianic phase of the Round Nymphaeum.<sup>233</sup> The lettering of the inscription suggests a mid-late second century date, too.<sup>234</sup> The inscription on the Round Nymphaeum implies other hydraulic installations ("...of the springs"), suggesting that the structure belonged to a network of other water features in the city. Piérart suggests that the nymphaeum was reconstructed for Hadrian's 124/125 visit to the city, which would have included, presumably, the inauguration of the Larissa Nymphaeum to the north of the theater. The Larissa Nymphaeum, in addition to being a grotto-like structure, would have had a statue on its axis of a heroically nude Hadrian, in the guise of Diomedes, one of the kings of Argos who fought in the Trojan War.<sup>235</sup> In the same vein, in the agora, through the use of a structure that was formerly the cenotaph of one of the

<sup>&</sup>lt;sup>231</sup> Piérart 1999, 255-256.

<sup>&</sup>lt;sup>232</sup> Piérart 1999, 251-252.

<sup>&</sup>lt;sup>233</sup> Piérart 1999, 259-260.

<sup>&</sup>lt;sup>234</sup> The lettering is not well drafted, and each letter is tightly packed in the space. The inscription's appearance is drastically different than a dedication plaque of Hadrian (dated to 128) for the Temple of Hera on the agora of Argos, whose letter forms are well drafted and confidently rendered, suggestive of an official imperial dedication. For the temple inscription, see Piérart (1995b) and *SEG* 45.258. <sup>235</sup> Longfellow 2011, 112-120.

heroic kings of Argos, Hadrian was perhaps being likened to Danaos, just as he was compared to Theseus in Athens.<sup>236</sup>

The next water-display in the Argive agora is the so-called Square Monument (**App. No. 1.12**). Located to the southwest of the round Nymphaeum, north of the palestra, east of the Salle Hypostyle, and in the former location of the *dromos*, the Square Monument was 6.35 m square (**Fig. 42a**).<sup>237</sup> A podium would have raised four piers supporting a superstructure that would have resembled a tetrapylon with a pedimented attic, or a gabled or pyramidal roof (**Fig. 42b**). The spacing between the piers were 2.35 m, which opened into an interior that suggests there were niches on the interior sides of the piers. Around the base of the podium, a marble paving was put down, along with at least one step (which might have provided access to the water). The construction of the structure included a rubble core, revetted in marble. During the excavations, part of the recovered marble veneer was found with an inscription indicating that a member of the Tiberii Iulii dedicated the monument.<sup>238</sup> Thus, based on the construction and the inscription, the structure can be placed in the last half of the second century CE.

Subsequent post-second-century alterations to the structure have prevented a complete understanding of the structure. At some point after the second century, the structure's marble revetment was removed, and the water channels of the Square Monument acted as an aqueduct to the Bath B, installed in the former palestra on the south side of the agora.<sup>239</sup> A hole in the foundation of the interior suggests that a jet of

<sup>&</sup>lt;sup>236</sup> Piérart 1999, 261; Piérart 2000.

<sup>&</sup>lt;sup>237</sup> The Square Monument has never been fully published, perhaps given the state of remains, as the structure was later dismantled.

 <sup>&</sup>lt;sup>238</sup> The find of the inscription was reported in *BCH* 101 (1977) 673. Since then, it has been lost, making further examination impossible. For more, see Marchetti (2010, 49, especially note 72).
<sup>239</sup> Walker 1979, 202; Marchetti and Rizakis 1995, 460.

water would have been located under the roofing.<sup>240</sup> There seems to be no access point that would have allowed for the collection of water by pedestrians, especially given the relatively high podium and lack of draw basins found in situ.<sup>241</sup> The monument, then, appears to be a water-display in the purest form: pedestrians were only allowed to watch the water, not to collect it and enjoy its refreshing benefits. The Tiberii Iulii then appear to have donated the Square Monument to add to the hydraulic landscape of the agora.<sup>242</sup>

In addition to their placement in the agora, the Round Nymphaeum and the Square Monument both share a common architectural vocabulary, both showing the influence of funerary architecture. The Round Nymphaeum's first phase as the cenotaph of Danaos immediately evokes a funerary meaning. The round building type (either the tholos or monopteros) became popular in the Hellenistic period, and its use in funerary contexts is seen throughout the Mediterranean, including on the Italian peninsula by the second century BCE.<sup>243</sup> A statue of the deceased was placed in the interior of a round monument. Generally, the funerary tholos or monopteros was placed on some sort of square podium, with the circular portion placed on top, making the passer-by look up at the monument, perhaps for them to admire whomever the structure is commemorating. One only has to look to the Babbius Monument on the west side of the forum of Corinth for a comparandum to the round nymphaeum (**Fig. 43**).<sup>244</sup> The Babbius Monument was probably dedicated to all the gods, but was not accessible, unlike a true temple, making it a simply commemorative structure. While not a proper funerary monument, it employs

<sup>&</sup>lt;sup>240</sup> Walker 1979, 202.

<sup>&</sup>lt;sup>241</sup> Walker 1979, 205; Aupert 1985a, 257.

<sup>&</sup>lt;sup>242</sup> Walker 1979, 205.

<sup>&</sup>lt;sup>243</sup> For more on the monopteros form in Roman funerary architecture, see Weber (1990, 115-122), Rambaldi (2002, 59-71), and von Hesberg (2006, especially 13-26).

<sup>&</sup>lt;sup>244</sup> Scranton 17-32; Williams 1989, 158-159; Bookidis 2005, 153.

all of the same characteristics as at Argos: high podium, octastyle, interior statuary, inscription, and prominent placement in a civic space. Both examples evoke not only a temple, but also funerary architecture, creating spaces that were inaccessible, although high enough to be easily viewed and appreciated.

The Square Monument also evokes funerary structures, in addition to other Roman civic architecture. With its four piers we immediately think of a tetrapylon, but generally a tetrapylon was positioned at the intersection of two thoroughfares, making it a functional element of the urban landscape. Here, again, the main structure is placed on a podium, making the monument decorative. There are examples in funerary architecture that employ four piers supporting a superstructure. In the Argive plain in the Panagia Cemetery, L'expédition de Morée in the nineteenth century reported seeing the ruins of a funerary monument which preserved four large corner piers.<sup>245</sup> The example of the Mausoleum of the Julii of about 40 BCE in Gaul also offers an interesting parallel (Fig. 44).<sup>246</sup> The Mausoleum has a frieze on the bottom (which acts like a podium), surmounted by a quadrifrons, topped by a monopteros complete with two statues. While this is an early monument, it provides a precedent for the use of a functional architectural element (the tetrapylon or quadrifrons) on top of a podium.

Thanks to Pausanias, we know that the patrons in Argos wanted to evoke the heroic tombs that we know dotted the Argive landscape. The patrons and their architects ensure, moreover, that their monuments in the Argive agora were viewed in the same ways as a funerary structures, as they placed the focus of the structure on a podium,

<sup>&</sup>lt;sup>245</sup> Aupert 2001, 442-444. For a brief overview of tomb types in Greece during the Roman Empire, see Moretti (2006), who explores examples cut into the rock, altar-tombs, chamber tombs (with and without crypts), and the Philopappos Monument of Athens. <sup>246</sup> Rolland 1969; Roth Congès 2000, 21.

directing the view of the passer-by *upwards*. When the Round Nymphaeum was converted into a fountain in the second century, the element of height is kept, with the focus on the moving water inside the colonnade, while the basins closer to the pedestrian allowed them to collect the moving water. The Square Monument provided a water spectacle for those on the western side of the agora, though apparently without being able to take any of the water. The structure set on the podium invited viewers to stop, enjoy the moving water, and consider the patrons, the Tiberii Iulii.

A review of the chronology of the buildings in the agora of Argos allows us to understand how members of the local élite used the agora to shape a shared civic identity. The first monument to be installed is the Round Nymphaeum, but in its first iteration in the second half of the first century CE it was a cenotaph for Danaos. It would not be difficult to imagine that this particular structure replaced an earlier, perhaps very ancient, precursor. Immediately southeast, the two monumental tombs of local benefactors were placed on the northern edge of the racetrack that was still present in the agora during the beginning of the second century. The landscape, however, was dramatically altered when the Square Monument was installed on the western side of the racetrack in the second half of the second century, in effect closing off that side of the agora. At the same time, the Round Nymphaeum was converted into a fountain itself, creating a hydraulic landscape in the agora with the Square Monument. Pausanias, again, does not mention any large commemorative water features in the agora, which could suggest that the structures were installed after he passed through Argos, but he tends not to mention fountains. The shops added to the south end of the agora during this period helped to create a centralized market space in the city. With the Round Nymphaeum, it has been

suggested that a macellum-like space was created.<sup>247</sup> We should also imagine the agora with the other additional monuments that Pausanias mentions that have not been considered here, given their absence in the archaeological record.

In the post-Hadrianic period, the Argive agora was altered by members of the local élite, who commemorated their own shared past through the built environment. Instead of an imperial benefaction, as has been proposed previously, there are indications here that the local wealthy built the water-displays in the agora. The inscription on the round nymphaeum evokes a whole array of hydraulic features in Argos, which, while they may initially have been products of initial imperial benefaction, were probably completed by local élites. The Tiberii Claudii, as we have seen, at some point in the second century dedicated an aqueduct, along with a number of imperial and heroic statues in civic spaces. One can imagine that the Tiberii Claudii were also behind the transformation of the Round Nymphaeum in the agora, as part of their desire to bring more water to Argos. The Square Monument was directly tied by an inscription to the Tiberii Iulii. It is likely that the two prominent local families then used water-displays in rivalrous rebuilding of the agora.

The actual water monuments in Argos evoke a heroic past, with their employment of funerary architectural elements and connections to the heroic figures of Argos associated with water. When the Round Nymphaeum was transformed into a fountain, the fact that it had been a cenotaph of Danaos would likely not have been forgotten, given the cenotaph's ancient foundations in the space. Further, by using the similar architectural form of the monopteros, there was a smooth transition between the two phases. And, by incorporating moving water, the patron evoked the water that Danaos' own daughters

<sup>&</sup>lt;sup>247</sup> Piérart 1999, 262.

found in the springs of Argolid. One can imagine a spectator thinking about not only Danaos and his daughters when they approached the monument, but also that they were recreating the way in which the Danaids found the water, as they plunged their own hydriae into basins around the monopteros. The Square Monument operated in the same manner, although pedestrians could not, apparently, collect the water there. The Tiberii Iulii evoked another cenotaph through the use of funerary architectural forms. Because of the state of preservation of the structure, it is unclear which tomb the Iulii were trying to emulate, as the decoration and superstructure might have given us a clue. It is a tantalizing thought that if the four-sided monument celebrated the four known Danaids connected with finding the waters of Argos, Amymone, Physadea, Hippe, and Automate.

Members of local élite families made their mark on the urban center of Argos through their benefaction of water-displays. While many of the known local wealthy may have derived occasionally from the Italian peninsula, by the end of the second century CE, they were keen to craft their own identity in the city by constructing monuments tied to the local and ancient mythical past. They also celebrated water in a place that Homer declared was 'very thirsty.' They were thus able to contradict what the great epic poet said about their city, illustrating its importance in the Argolid, as a place with flowing waters. The members of the local élite, building on the work of the emperor Hadrian, were also able to continue to benefit the city with flowing waters that were both utilitarian and aesthetic. By the end of the second century, the agora would have been a place where the local past was commemorated through cenotaphs, statues, and waterdisplays, but also where the contemporary Argives could have come together to meet at a fountain and admire their past, in addition to shopping, using the baths, or participating a religious activity, all activities which one would expect in an agora.

Water-displays that have a 'sacred' nature are found throughout the Roman Empire. Tying a water monument to a mytho-historical past, such as the structures of the civic spaces of Corinth, Rome, and Argos, did allow the passer-by to consider the monument part of their own past and as part of their own identity, along with the meanings associated with that place and water. In the Imperial Fora of Rome and at Argos, innovative types of water-displays were introduced, either flanking a temple's podium or dominating the plaza, allowing for connections to ancient mythical pasts, such as Venus Genetrix or Danaos, or associations with the imperial regime, like the victory and dominance of the emperor. The 'traditional' forum design then included not only the temple surrounded by a portico, but also accompanying fountains. The Romans continued creating innovative designs by subsequently placing water-displays in proximity to structures devoted to the imperial cult, which are explored in Chapter 5, suggesting the abundance of the emperor through a show of water. Thus, the implementation of mythohistorical water-displays in Roman for provided the Romans not only to recall their ancient mytho-historical past, but also the stories of their present and ultimately the future.

### II. Macella

The Roman macellum was a permanent market space that sold meats, fish, and luxury foods.<sup>248</sup> Unlike other non-permanent markets, such as the *nundina* and the *conventus* (periodic markets) and the *mercatus* (low frequency markets), the macellum was an economic structure erected in the Roman city to serve an élite clientele that could afford the luxury foodstuffs found therein, especially as a home would need a kitchen to prepare the food bought at a macellum.<sup>249</sup> Indeed, the macellum was built in a particular way to accommodate a wide range of food products. Building elements included basins and tanks for fish, connections to the water supply for cleaning, and covered, nonsouthern facing porticoes that prevented hot sunlight from penetrating the shops inside.<sup>250</sup> In fact, the Latin name, *macellum*, derives from the Greek, μάκελλον, indicating a covered or enclosed space.<sup>251</sup>

The macellum building type was found throughout the Roman world. The first macellum was probably seen in the city of Rome sometime in the third century BCE, then spread throughout the Italian peninsula, to Gaul and Greece, then to Asia Minor and North Africa.<sup>252</sup> Early macella contained an open courtyard, in the center of which could be a tholos or monopteros (sometimes with a fountain), all of which is surrounded by shops, or *tabernae*. Macella in Italy tend to be rectilinear, while in the provinces, it is not

<sup>&</sup>lt;sup>248</sup> The most complete study of the Roman macellum is De Ruyt (1983), which is followed up by her in 2000 and 2007. Other scholarship on the structure includes: Frayn (1993, 101-103), Gros (1996, 450-464), Donahue (2004, 23-29), Holleran (2012, 160-180), and Richard (2012, 212).

<sup>&</sup>lt;sup>249</sup> Holleran 2012, 178. De Ruyt (2007) provides an updated discussion of the *macellum*, which includes what would have been sold in the space—along with how the foodstuffs were sold there. For more on the other markets, see de Neeve (1988), de Ligt (1993) and Frayn (1993). For more on the importance of purchasing luxury foods at the macellum, in connection with the diverse architectural forms of dining spaces in villas on the Bay of Naples, see Zarmakoupi (2014, 185-188). <sup>250</sup> Holleran 2012, 161.

<sup>&</sup>lt;sup>251</sup> De Ruyt 1983, 227-230; De Ruyt 2007; Holleran 2012, 160.

<sup>&</sup>lt;sup>252</sup> De Ruyt 1983, 236-270; Gros 1996, 451-464; Holleran 2012, 162-170; Richard 2012, 212.

unusual to encounter more circular- or octagonal-oriented macella.<sup>253</sup> Thus, while there are common architectural features to identify a structure as a macellum, no two existing macella are identical (**Fig. 45**).<sup>254</sup> In addition, today a macellum is also identified by the archaeological remains of foodstuffs, particularly animal bones and fish scales, along with dressed pavements that were easily cleaned, and wall decoration that implied a market (e.g., painted foods).<sup>255</sup>

Water was a crucial component of macella. Water aided in food preservation, including holding (presumably fresh-water) fish in tanks, along with keeping the space clean and hygienic. Access to water usually came from the town's water supply through channels and pipes.<sup>256</sup> Sometimes access was provided by wells. The large Severan macellum of Leptis Magna has a colonnade around two large tholoi (**Fig. 46**).<sup>257</sup> In the middle of the courtyard is a small well that would have granted access to water necessary for the economic activities of the macellum. There are also a number of examples of cisterns in the macellum, such as at Alba Fucens (Italy), Bulla Regia (Tunisia), Corinth, Dougga (Tunisia), Gigthis (Tunisia), Puteoli (Pozzouli, Italy), and Thuburbo Maius (Tunisia).<sup>258</sup>

Further, water could be stored for the macellum in a basin either in the courtyard or immediately adjacent.<sup>259</sup> Basins could hold the water necessary for activities going on

<sup>&</sup>lt;sup>253</sup> De Ruyt 1983, 284-303; Frayn 1993, 103.

<sup>&</sup>lt;sup>254</sup> De Ruyt 1983, 283.

<sup>&</sup>lt;sup>255</sup> De Ruyt 1983, 304-340; Holleran 2012, 161.

<sup>&</sup>lt;sup>256</sup> De Ruyt 1983, 315-322; De Ruyt 2007.

<sup>&</sup>lt;sup>257</sup> De Ruyt 1983, 97-106, 313; Gros 1996, 454-455; De Ruyt 2000, 182.

<sup>&</sup>lt;sup>258</sup> De Ruyt 1983, 313.

<sup>&</sup>lt;sup>259</sup> De Ruyt 1983, 313-314; Richard 2012, 213. A semi-circular structure discovered near the Gallo-Roman sanctuary at Vieil-Évreux (France) had been in past scholarship identified as an exedra fountain near the theater (Bertaudière and Guyard 2004). Recently, however, excavations have demonstrated that it was indeed a macellum that seems to have access to water and perhaps water-displays (Guyard and Bertaudière 2009, especially 29-31).

in the macellum, including as a holding place for fish. An early example is from the macellum at Morgantina, dated to between 140-120 BCE, where, in one of the spaces of the *tabernae* was a basin, measuring 1.65 m by 1.10 m.<sup>260</sup> In a courtyard of Ostia, a 4.00 m by 1.22 m rectilinear basin, with a curved west end, was constructed in masonry and faced in marble, constructed sometime between the second and fourth centuries CE.<sup>261</sup> It is possible that the basin could have been decorated with a statue of an eros on a dolphin, which was found nearby. At the Trajanic central macellum of Thamugadi (Timgad, Algeria), its unique design allows for a basin to be tucked away between two sets of shops (Fig. 47; App. No. 1.142).<sup>262</sup> The central space of the market is broken into two spaces, with two colonnaded islands. The semicircular wall of the islands is then mimicked by the back wall of shops of the macellum. At the intersection of the two rows of shops is a niche with a basin in the back wall. One must ascend two steps to enter a space 2.27 m wide, with a semicircular basin at the back. The basin at this example from Timgad becomes a focal point for those using the space, particularly since the basin is on axis with the main entrance of the macellum, which opens up off the Decumanus Maximus. The water, highlighted by the placement in the niche, is privileged by the architect and patron.

There are a number of macella that also have their own fountains in the central courtyard. The fountain was generally associated with the tholos, or round colonnaded structure, found in most macella. Inside the tholos could be a fountain, basin, or even sculpture.<sup>263</sup> Cuicual (Djemila, Algeria) had an Antonine tholos, complete with an

<sup>&</sup>lt;sup>260</sup> De Ruyt 1983, 109-114.

<sup>&</sup>lt;sup>261</sup> De Ruyt 1983, 115-125; Richard 2012, 213.

<sup>&</sup>lt;sup>262</sup> De Ruyt 1983, 198-203.

<sup>&</sup>lt;sup>263</sup> Holleran 2012, 161.

interior basin.<sup>264</sup> At one of the most well known macella, due to the natural phenomenon of bradyseism related to the volcanic activity of the Phlegraean Fields that constantly keeps the structure partially submerged under water, Pozzuoli probably had a fountain in its monumental monopteros, perhaps constructed in the Flavian period, or subsequently renovated by the Severans (**Fig. 45; App. No. 1.101**). The elegantly decorated monopteros came complete with Corinthian columns of African marble, decorated friezes, sculpted dolphins, and columns bases with marine animals. The monopteros would have been at the center of an octagonal socle constructed of marble, where a drain allowed for the discharge of water, which suggests the presence of a fountain.

The early imperial macellum of Pompeii is equally interesting (**Fig. 45; App. No. 1.100**). In the process of being restored at the time of the eruption, Pompeii's macellum lies off the northeast corner of the forum, lined with shops on the interior, and possessed a monopteros with a fountain, and a shrine on the east side (**Figs. 48, 49**). At the northeast corner of the macellum, a number of complete sheep and goat skeletons were discovered, suggesting that the animals were to be slaughtered and sold there as well.<sup>265</sup> Around the monopteros, with its fountain and adjacent drain, a large number of fish scales were found, confirming that fish were in fact sold in the space. Further, while the fountain in the monopteros was decorative, it also would have allowed for the circulation of air to keep the space cool during hot summer months; in addition, the drainage system connected with the fountain allowed for the space to be cleaned away of its food debris, maintaining hygiene in the macellum.

<sup>&</sup>lt;sup>264</sup> De Ruyt 1983, 61-68.

<sup>&</sup>lt;sup>265</sup> Holleran 2012, 170.

The macellum of Gerasa (Jordan) occupies nearly a whole insula in the city, off the Cardo Maximus, between the Oval Piazza and the South Tetrapylon (Fig. 50; App. No. 1.56). The courtyard is octagonal, paved in white limestone slabs, with 24 Corinthian columns on the edges, with *tabernae* and four exedrae radiating off of the space (Fig. 51). The macellum was laid out in the early second century CE. It is then that a fountain was installed in the center of the courtyard, in what the excavators termed a 'pseudocrossshaped basin,' which takes on an octagonal form, just like the shape of the surrounding courtvard.<sup>266</sup> An inscription was found in the excavations that would have been part of the fountain, which included traces of a spout and a pipe hole.<sup>267</sup> The elegant courtyard was beautified with the decorative fountain, with its curvilinear basin. In the latter part of the century, restorations took place on the macellum, which would have added a new facade and two more fountains at the main entrance on the Cardo Maximus. The northeast fountain there included an inscription to Julia Domna and a local M. Aurelius Philippus, dating the fountain to between 193 and 211.<sup>268</sup> The restorations to the macellum added more water to the structure and would have only improved the draw to pedestrians on the main thorough fare of the city. Those walking past would have seen, and perhaps used, the water, which would have invited them into the main space of the macellum, either to admire the elegant space or the foodstuffs all around.

The use of water and its display in the macellum is unique in the Roman urban landscape, altering this mercantile space with moving water. Most macella were centrally located either on or near the forum in heavily trafficked areas of town.<sup>269</sup> With an

<sup>&</sup>lt;sup>266</sup> Uscatescu and Martín-Bueno 1997, 67.

<sup>&</sup>lt;sup>267</sup> Uscatescu and Martín-Bueno 1997, 72.

<sup>&</sup>lt;sup>268</sup> Uscatescu and Martín-Bueno 1997, 74.

<sup>&</sup>lt;sup>269</sup> De Ruyt 1983, 326-340; Richard 2012, 213.

increased visibility by pedestrians, macella would have been easily accessed. Water in the context of the macellum would have added a decorative element to the space. While the members of the local élite were probably not physically shopping, the addition of fountains in this space devoted to élite foodstuffs may have drawn in the slaves or cooks who did the household shopping. Water, especially at the center of the courtyard, housed in a monopteros, could direct the view of shoppers to the center, as a focal point. The fountain could draw the shopper into the space, which would then prompt them to go to the *tabernae* to shop. Further, water was crucial for the maintenance of the macellum. Water-displays would allow for the circulation of cooler air. Working in tandem with tabernae that were not facing direct southern sun, architects insured that temperatures were kept cooler for the perishable meats and fishes. Water and its drainage systems also, of course, aided in making sure that the spaces stayed as clean as possible. The aesthetic and practical use of water in the Roman macellum are paralleled in modern foodhalls of luxury department stores, such as Harrods or Selfridges in London, which employ water in a decorative and functional manner in the presentation of foodstuffs.

#### **III.** Conclusions

This chapter has demonstrated that water-displays were present in the civic spaces throughout the Empire. While there are fountains found in fora and agoras everywhere, it is clear that there are greater numbers in the city of Rome and in Greece (**Table 4**). This marked number probably stems from the fact that Rome, Corinth, and Argos, especially, associated water-displays in their civic spaces with mytho-historical pasts. The "historiated" fountain is then a phenomenon that must be considered when investigating Roman water-displays. Unfortunately, while fountains in macella are present in a variety of sites, the low number of examples prevents definitive conclusions at this time about any sort of regional trends (**Table 5**).

For the most part, the water-displays that were installed in civic spaces throughout the Roman Empire altered the experience a pedestrian would have with the space. First, the sensorial nature of water changed how an area with water was perceived. Whether it was the cooling and calming space of the Templum Pacis or the refreshing covered space of the macellum of Pompeii, these spaces were made pleasing to the senses due to their use of fountains. Second, the water-displays added a functional element to these spaces. Water from these structures could be used for drinking, which was certainly welcomed in large civic areas that were highly trafficked. Water also insured that foodstuffs were preserved in the markets. Third, water-displays interacted with other elements of the urban armature to construct places with new visual focuses, such as at Sagalassos.

Not least important, moreover, fountains in civic areas help to graft meaning onto the surrounding space. In particular, the Empire-wide phenomenon of connecting waterdisplays to a shared local and pan-Mediterranean identity is particularly striking. Arguably situated in the most important areas of a town, water in the forum or macellum could be tied to how a city wanted itself to be viewed. Water's associations with abundance is manifested by benefactions of fountains in the Imperial Fora, or by using water in a market place full of food products that demonstrate the overall breadth of the Empire. Water-displays could focus one's view upon the *area sacra* of the forum, extolling a city's connection to the larger imperial framework by emphasizing the town's Capitolium—whose cult grew from Rome itself. Fountains could commemorate the triumph of the Empire, such as the Augustan example in Glanum, which celebrated the Roman domination of the surrounding area. "Historiated" fountains could give a community the ability to promote a local myth tied to water—and thus its own local identity—while at the same time could place a city into a larger Empire-wide framework and one that was familiar with that myth. Water-displays, by virtue of their shared typologies, placement in civic spaces in particular, and layered meanings, then, had the ability to connect Romans and to define Romanness, no matter where they lived in the Empire.

### **Chapter Four: Urbanism and Liminal Spaces**

There are a number of features that are considered to be characteristic to the conception of the ancient Roman city. By the time of the High Empire, it is clear that there was a set of 'requirements' that one expected from a city to provide comfort, order, and security.<sup>1</sup> In an often quoted passage, Pausanias, describing Panopeus of Phocia (Greece), is shocked that the site has the status of a *polis*, as the inhabitants have "no government offices, no gymnasium, no theater, no market-place, no water descending to a fountain, but live in bare shelters just like mountain cabins, right on a ravine."<sup>2</sup> In the same vein, in the second century oration on Rome, Aelius Aristides described the cities of the provinces as "full of gymnasia, fountains, gateways, temples, handicrafts, and schools."<sup>3</sup> Both passages are rhetorically charged descriptions that lack uniquely Roman structures (e.g., aqueducts, baths, basilicas), but they still demonstrate that there were certain standards regarding the physical makeup of an urban center by the Antonine period.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> In modern urban design and planning, similar goals of city building ensure: "(1) accessibility: low cost of movement or communication between activity locations; (2) adequacy: sufficient quantity and quality of such basic facilities as houses, roads, schools, recreation areas, shopping, offices, and factories; (3) diversity: a wide range of variation of facilities and activities, these varieties being rather finely mixed in space; (4) adaptability: low cost of adaption to new functions, and the ability to absorb sudden shock; (5) comfort: an environment which does not place undue stress on the individual, particularly in regard to communication, climate, noise, and pollution" (Lynch 1990, 68).

<sup>&</sup>lt;sup>2</sup> Paus. 10.4.1. (Trans. W.H.S. Jones). γε οὐκ ἀρχεῖα οὐ γυμνάσιόν ἐστιν, οὐ θέατρον οὐκ ἀγορὰν ἔχουσιν, οὐχ ὕδωρ κατερχόμενον ἐς κρήνην, ἀλλὰ ἐν στέγαις κοίλαις κατὰ τὰς καλύβας μάλιστα τὰς ἐν τοῖς ὅρεσιν, ἐνταῦθα οἰκοῦσιν ἐπὶ χαράδρą. See Alcock (1995) and Rubinstein (1995) for a discussion of the nature of the *polis* by the time of Pausanias, with special emphasis on this passage.

<sup>&</sup>lt;sup>3</sup> Aristid. Or. 26.97 (Trans. Behr 1981). πάντα δὲ μεστά γυμνασίων, κρῆνων, προπυλαίων, νεῶν,

δημιουργιῶν, διδασκάλων. See also Thomas (2007b, 121) and Pont (2010, 170).

<sup>&</sup>lt;sup>4</sup> For the lack of these uniquely Roman structures, see Thomas (2007b, 121).

The passages of Pausanias and Aristides cite water-displays as part of the litany of necessary structures in the Roman city.<sup>5</sup> While the Romans had access to abundant water resources throughout the Empire, it is necessary to examine how they used fountains to *construct* space. How might a water-display and its placement in the urban landscape shape how an area would have been used and approached? What exactly could a fountain accomplish in an urban context? There have been various attempts to understand the nature of water-displays and their locations and reasons for placement in the Roman city.<sup>6</sup> It has been suggested that water-displays were placed on primary thoroughfares and public squares only for aesthetic or urbanistic reasons, not for functional or utilitarian purposes.<sup>7</sup> Such a claim, which disregards the practical need for water throughout the city, is not sustainable. Water-displays are more than simple urban ornaments. While fountains were necessary, no matter where they were placed, their locations also reveal how the Romans could control space by providing monumental urban areas that would have elevated the nature and feeling of a city.

Before turning to the archaeological evidence related to the placement of waterdisplays in the urban landscape, a brief explanation about the shaping of a cityscape is necessary. Elements that are crucial in the conception of a metropolitan area include: (1) a major path system (e.g., streets); (2) major centers, focal points, or nodes; (3) special districts (i.e., places associated with "memorable activities, character, or associations").<sup>8</sup>

<sup>5</sup> Aristides is known to have written in other instances on water, such as in the extant fragments of a panegyric he gave on the waters of Pergamon (Jones 1991). Lendon (2015) explores the use of water-displays in rhetoric, connecting it to the desire for the construction of nymphaea, especially in Asia Minor. <sup>6</sup> On Roman urbanism and water-displays, see Agusta-Boularot (1997), Dorl-Klingenschmid (2001), Sahmäldar Voit (2000). Užurlu (2000). Pichard (2012).

Schmölder Veit (2009), Uğurlu (2009), Richard (2012).

<sup>&</sup>lt;sup>7</sup> Agusta Boularot 1997, 468-476. Both Thomas (2007b, 120-126) and Pont (2010, 169-176), while they do not state that fountains do not serve practical reasons, depict water-displays in terms of 'ornament' associated with cities.

<sup>&</sup>lt;sup>8</sup> Lynch 1990, 69.

The second category of focal points is of particular interest, for which Diane Favro offers a succinct definition:

Whereas a landmark is external to the observer, nodes are more interactive. Observers pass through urban nodes, and in fact are drawn irrevocably toward them. These strategic points are not singular, but made up of several individual structures or spaces that may center around a landmark. Unlike ensembles, nodes are not necessarily cohesive architectural designs, but rather concentrations of functions and meaning. They are formed by intersections of paths or by interrelated spaces or buildings associated with significant, recurring activities. An urban node may be made up of one or more ensembles, but not every ensemble becomes part of urban node. Furthermore, because nodes rely on activities and meaning, they can shift in location within the cityscape.<sup>9</sup>

This explanation is relevant for the Roman city, because water-displays were used to construct nodes within the urban landscape. These fountains also often interacted with other adjacent monuments to create new urban designs and places to create new experiences predicated on water. A city was then organized in terms of its streets, focal points, and districts into different systems, which in the Roman city could be considered a combination of the grid (focal points at intersections), linear (dominant and parallel paths that are bounded by edges, such as walls), and linkage systems (where focal points are distributed throughout the city).<sup>10</sup> Thus, in conjunction with other architectural structures and monuments, water-displays interacted with other pieces of the urban armature to create new spaces. The placement of fountains helped, also, to control how a space was used and experienced by pedestrians. Thus, fountains in liminal spaces (i.e., gates and arches) and at crossroads, along with examples of water-displays that work with other urban armature elements to create new urban nodes, are explored in this chapter to

<sup>&</sup>lt;sup>9</sup> Favro 1996, 195.

<sup>&</sup>lt;sup>10</sup> These systems are explored by Lynch (1990, 76-81). Not considered here is the radial system, which prescribes a single focal point for a city, which is generally not the case in Roman urban contexts.

discuss the construction and control of space, which is altered by the installation of

water-displays.

# I. Liminal Spaces: Gates and Arches

In 190 BCE, Publius Cornelius Scipio Africanus, before leaving the city of Rome to go on a new campaign, made a dedication on the Capitoline, particularly in response to a recent influx of prodigies, as Livy describes:

*P. Cornelius Scipio Africanus, priusquam proficisceretur, fornicem in Capitolio aduersus uiam, qua in Capitolium escenditur, cum signis septem auratis et equis duobus et marmorea duo labra ante fornicem posuit.* (Liv. 37.3.7)

P. Cornelius Scipio Africanus, before he left the City, constructed an arch on the Capitoline, facing the street by which one climbs the Capitoline, with seven statues of bronze and two equestrian figures and two marble basins before the arch. (Trans. E.T. Sage)

The last thing that Scipio does before his campaign is to construct an arch (the *fornix Scipionis*), perhaps at the monumental entrance to the Capitoline on the *clivus Capitolinus* (**Map 10; App. No. 1.109**). The passage states that Scipio constructed an arch, but does not specify whether he actually started construction in 190 or actually dedicated it in that year.<sup>11</sup> It is also curious that this is Scipio's last act leaving the city, for arches (at least later arches) are generally connected to victory (when one returns to the city).<sup>12</sup> Livy informs us that the arch was decorated with seven bronze statues and two equestrian statues. It is believed that the seven statues were probably portraits of

<sup>&</sup>lt;sup>11</sup> Haimson Lushkov 2014, 123.

<sup>&</sup>lt;sup>12</sup> Haimson Lushkov 2014, 123.

members of the *gens Cornelia*.<sup>13</sup> Of interest here, however, is the use of marble basins, *labra*, in front of the arch, which suggests that this was an arch and a fountain.

The plan and situation of the arch in the urban landscape is unclear. We do not have the archaeological remains of the arch, and it is not even certain that the arch was standing in Livy's own time.<sup>14</sup> But the *labrum* makes this monument one of the perhaps earliest public water-displays in the city of Rome. The *labra* act as basins and could collect water that poured from a spout. They are also opulent, made from marble, the first known testimony of the use of marble in Rome.<sup>15</sup>

Gates and arches could include fountains as part of their structure and decorative programs. The gate (*porta*), which is incorporated into some sort of fortification system, developed before the freestanding arch form, providing entrance points into urban centers.<sup>16</sup> Gates could have either square or circular plans, but their entrances were always made in an arch form. Sometimes the construction of gates (and city walls) formed rivalries between cities, as they would continue to construct larger, more visually grand entrances, such as Antalya responding to Perge's Plancia Magna Gate in the second century CE in Asia Minor.<sup>17</sup>

<sup>15</sup> *LTUR* 2.267. Giuseppe Spano (1950) even goes as far to argue that the arch was a type of *septizodium*, as the seven statues could be related to the seven planetary deities. While we cannot prove Spano's interpretation, it is still intriguing that the arch, which marks the entrance to one of the most important hills of Rome, could have potentially had a fountain as part of its decoration.

<sup>&</sup>lt;sup>13</sup> LTUR 2.267 (s.v., Fornix Scipionis, F. Coarelli).

<sup>&</sup>lt;sup>14</sup> Haimson Lushkov 2014, 122.

<sup>&</sup>lt;sup>16</sup> MacDonald 1986, 75. For more on gates, see: Gros (1996, 26-55), Segal (1997, 83-128), and Malmberg and Bjur (2011).

<sup>&</sup>lt;sup>17</sup> Thomas 2007b, 110. See *infra* for more on the Plancia Magna Gate. The same assertion has been made about the competition between cities in Asia Minor in regards to the construction of water-displays (Dorl-Klingenschmid 2006). For more on the competition between cities, especially in Asia Minor, see: Robert 1977; Heller 2006; Kuhn 2006.

Honorific arches became popular in the Republican period, with the first being the *fornices Stertinii* in 196 and then the *fornix Scipionis*.<sup>18</sup> The Republican arch was usually one-bayed and called a *fornix*. While the arch is seen in the eastern Mediterranean during the Hellenistic period, it is with the Romans and the advent of *opus caementicium* that allows for the construction of large archways.<sup>19</sup> By the time of Augustus, arches throughout the Empire adopted the Latin appellation *arcus*, and subsequently arches could have more than just one bay, allowing for a variety of architectural decoration to be used.<sup>20</sup> After Hadrian and Antoninus Pius arches were seldom seen in the city of Rome and in the Italian peninsula, while they returned to the urban landscape of Rome in the third century.<sup>21</sup> Arches could be elaborate as being a four-faced structure, forming what is known as either a *tetrapylon* or *quadrifrons*, often placed at the intersections of two streets.<sup>22</sup> While the main purpose of the free-standing arch was commemoration, they served other purposes, such as directing traffic and serving as boundaries, defining neighborhoods, and dividing urban landscapes into smaller units.<sup>23</sup>

Both the Roman gate and arch share the arch form. The arch shape provided for not only great stability, but also the potential for large, deep openings. The arch form became a staple of Roman architecture, helping to form vaults and allowing for a number of building types to be constructed using this technology, including bridges, aqueducts, funerary monuments, villas, terraced buildings, basilicas, porticus/stoas, and

<sup>&</sup>lt;sup>18</sup> De Maria 1988, 31-54; Haimson Lushkov 2014, 124-125. There is a great amount of scholarship on the Roman arch. See: Kähler (1942), MacDonald (1986, 75-87), Brands (1988), De Maria (1988), Kleiner (1989), Gros (1996, 56-94), Segal (1997, 129-152), Fändrich (2005), Schattner and Valdés Fernández

<sup>(2006),</sup> Müller (2011), Böttcher-Ebers (2012).

<sup>&</sup>lt;sup>19</sup> Gros 1996, 57; Thomas 2007b, 156; Böttcher-Ebers 2012, 17-31.

<sup>&</sup>lt;sup>20</sup> De Maria 1988, 51-86; Gros 1996, 57.

<sup>&</sup>lt;sup>21</sup> Kleiner 1989, 197.

<sup>&</sup>lt;sup>22</sup> MacDonald 1986, 87-92; Segal, 1997, 140-153; Mühlenbrock 2003.

<sup>&</sup>lt;sup>23</sup> Thomas 2007b, 116.

entertainment complexes.<sup>24</sup> The freedom conveyed by the arch shape allowed for great innovation in architectural development. Indeed, the arch as a structure became a symbol of both Roman rule and Roman cities in the imperial period, a symbol exploited down into the modern period.<sup>25</sup>

Gates and arches allow people to move from one space to another. Both gates and arches are important in William MacDonald's theory of urban armature, where he terms them 'passage architecture.'<sup>26</sup> In his model, the passages are placed at junctions in the urban armature, in effect making entrances and intersections in the urban landscape. Gates and arches, then, become both functional and symbolic, according to MacDonald. Thus, gates and arches can be used to move people from one place to another, in effect creating a liminal space.<sup>27</sup> It is appropriate to term gates and arches liminal spaces because they are literally a *limen*, or a threshold, that one must pass to enter into a new space. Gates and arches are, therefore elements of the urban architectural landscape that mark a transition for those using them, whether from the countryside into the city and *vice versa*, or from one quarter of the city to a different quarter. Thus, the addition of a fountain to gates and arches can help us to understand the transition associated with these structures.

<sup>&</sup>lt;sup>24</sup> Böttcher-Ebers 2012, 31-42; Lancaster and Ulrich 2014, 182-185.

<sup>&</sup>lt;sup>25</sup> MacDonald 1986, 84; Thomas 2007b, 25. The arch form itself also becomes the symbol of Roman architectural innovation, which we still associate with Roman architecture. Böttcher-Ebers (2012) discusses the development of the arch form in the Republican period, setting it up to be the sign of the Roman city. See also Hornbostel-Hüttner (1979), who explores the niche form in architecture, which includes not only rectilinear niches, but also arched niches and half-domed niches.

<sup>&</sup>lt;sup>26</sup> MacDonald 1986, 74-84.

<sup>&</sup>lt;sup>27</sup> Scholars have of course noted the 'transition' element of gates and arches, such as MacDonald (1986,75) and Longfellow (2011, 109). Here, the term 'liminal space' is employed, not a place of 'liminality,' which does not describe the experience accurately here. For a succinct overview of the historiography of 'liminality,' including the studies of Van Gennep and Turner, see Thomassen (2009).

# i. Gates

Gates as the entrances to urban centers could include the display of water. The utility of having water access at the entrance point of a city is easy to understand. As one enters a city, the ability to drink water and perhaps wash up would have been a crucial for thirsty passers-by from the dry, dusty countryside. Not every gate considered here has a water-display *in* its own architectural framework. Sometimes, a fountain is constructed in very close proximity to an arch or gate, such as the large fountain directly across the street from the Main Gate of Side in Pamphylia, Turkey (**App. No. 1.131**). Thus, gate and fountain, even if the fountain is not incorporated into a gate proper, can still work together with an accompanying gate to create a cohesive node that is a liminal space tied to water-display.

Before the Romans, the Greeks had water access at some gates. One of the more well known examples was the Dipylon Gate in Athens, dated to the third quarter of the fourth century BCE.<sup>28</sup> After coming into the city from the northwest and passing through the large imposing 'double gates,' the passer-by would have been greeted by a large fountain basin would have greeted the passer-by, allowing for a refreshing drink of water upon entering the Kerameikos. The way station nature of the stop there would have allowed for the user to transition from the countryside to the city.<sup>29</sup>

In the city of Rome, there are two gates of particular interest: the Porta Fontinalis and Porta Capena. The Porta Fontinalis was located on the *clivus Argentarius* near the

 <sup>&</sup>lt;sup>28</sup> Glaser 1983, 64-65, cat. no. 47; Richard 2012, 196. The water management system of the Kerameikos is currently being studied by Dr. Jutta Stroszeck of the Deutsches Archäologisches Institut-Athen.
<sup>29</sup> Another example to consider is the basin of the city gate of Eumenes II at Pergamon. See: Dorl-Klingenschmid 2001, cat. no. 79; Richard 2012, 196.

Carcer and the Tullianum spring, hence the gate's name (**Figs. 24, 34a**).<sup>30</sup> Livy tells us that in 193 BCE, the aediles M. Aemilus Lepidus and L. Aemilius Paullus constructed the Porticus Aemilia, a covered space that ran from the Porta Fontinalis (near the Atrium Libertatis) to the Altar of Mars in the Campus Martius (35.10.11-12). The covered walkway would have allowed censors to proceed from their office, the Atrium Libertatis, to the Altar, where voting was held.<sup>31</sup> There are remains of the gate made of Grotta Oscura tuff blocks on the north side of the Museo del Risorgimento on the Capitoline. There probably was no water-display associated with the gate itself, but it is important to highlight the connections the monument had with its spring, which flowed down in the direction of the Cloaca Maxima, helping to create the watery landscape of the Forum Romanum and Imperial Fora.

The Porta Capena was located in the valley between the Caelian and Aventine hills, where the via Appia and via Latina started, later leading south to Capua (**Fig. 52**; **Map 10; App. No. 1.117**).<sup>32</sup> There has been much debate over the name Capena. The direction of the town of Capena is to the north of Rome, which is on the opposite side of the city. The gate was associated with the Camenae, nymphs who were tied to Egeria. It is difficult, however, to connect the Camenae to Capena etymologically. Perhaps Capena is derived from Capua, to which one could travel south by way of the via Appia that led from the Porta Capena.

While there are several possibilities for the derivation of the name of the gate, there is a great deal of evidence to connect it to the Camenae and water. The ancients

<sup>&</sup>lt;sup>30</sup> Liv. 35.10.11-12; Paulus *ex Fest.* 75L. Richardson 1992, 303; Coarelli 1997, 250-258; *LTUR* 3.328-329 (s.v., 'Muris Servii Tullii,' Mura Repubblicane, Porta Fontinalis, F. Coarelli).

<sup>&</sup>lt;sup>31</sup> Richardson 1992, 311.

<sup>&</sup>lt;sup>32</sup> LTUR 3.325 (s.v., 'Murus Servii Tullii', Mura Repubblicane, Porta Capena, F. Coarelli).

themselves constantly associated the Porta Capena with the fons Camenarum (Fig. 52,

**Map 10; App. No. 1.108**), indicating that there was indeed a fountain close to the gate.<sup>33</sup> Found on the south slopes of the Caelian is a number of inscriptions, which indicate that the area had access to a fountain and/or a spring.<sup>34</sup> A series of inscriptions even included the phrase *magistri fontis*, suggesting that there might have been some sort of cult at a spring there.<sup>35</sup> But is there enough evidence to connect the famed the fountain (or spring) of the Camenae to the archaeological remains found in the area?

In 1558, Pirro Ligorio drew the remains of what he called the *fons Lollianus* (later called *fons Camenarum* by Rodolfo Lanciani) in the area of Villa Mattei (the modern Villa Celimontana, the so-called 'Orto del Carciofolo') immediately adjacent to the ancient Porta Capena (**Fig. 53**).<sup>36</sup> Lanciani is reported to have done some further excavations in 1868. The structure was a large basilica, with a nave culminating in an apse with niches, flanked by two small side aisles, along with two apsed aisles on the end. One can imagine that the space would have been a large one, with a grotto-like feeling. If the structure is indeed the *fons Camenarum*, it would have been connected with Egeria, as we know Numa monumentalized the spring (known as both the *fons Camenarum* and the *fons Egeriae*) because of his relationship with Egeria.<sup>37</sup> The fame of

<sup>&</sup>lt;sup>33</sup> Vitr. *De arch.* 8.3.1; Front. *Aq.* 4; Plut. *Vit. Num.*13.2; Liv. 1.21.3; Juv. *Sat.* 3.17-20; Schol. Juv. *Sat.* 3.17-18.

<sup>&</sup>lt;sup>34</sup> CIL 6.150, 154-156, 166.

<sup>&</sup>lt;sup>35</sup> CIL 6.155-156. See also Campbell (2012, 19).

<sup>&</sup>lt;sup>36</sup> Lanciani 1990, 225-226; La Rocca 1998, 209-210; Bruno 2008, 132-138; Carandini 2008, 25-27; de Mincis 2013, 238-239; *LTUR* 1.216. Bruno and Carandini both discuss the structure in question, attributing it as the *fons Camenarum*. They use the plan of the space for one of the interpretations of the Augustan/Julio-Claudian Lupercal on the nearby Palatine. For a long time, a fountain on the estate of the Villa of Herodes Atticus on the via Appia was believed to be the so-called 'Fountain of Egeria' (Tobin 1991, 314-315; Arnaldi 1997, 95-96). Recent archaeological work on the villa does not confirm this attribution. Thus, it has been asserted that the 'Fountain of Egeria' could have been the *fons Camenarum* outside the Porta Capena (De Cristofaro 2005) or a fountain at the Sanctuary of Diana at Nemi (**App. No. 1.81**).

<sup>&</sup>lt;sup>37</sup> de Mincis (2013, 238-239); *LTUR* 1.216. See Chapter 5 for a discussion of Egeria (pages 279-280).

such a fountain would have drawn passers-by coming into the city from the south, and perhaps even pilgrims, attracted by the *numen Camenarum/Egeriae*. Presumably they would want to use the water of a spring sacred not only to the consort of Numa, but also the waters that the Vestal Virgins themselves came to collect every day.<sup>38</sup>

Recently, however, it has been argued that this structure was actually the Thermae Severianae, built around 201 CE. It is reported that between 1670 and 1676, piping, hypocausts, and a black-and-white mosaic of Tritons and Nereids were found in the space.<sup>39</sup> The form of the structure (of an apsidal, symmetrical space), along with these finds, has suggested that this was a bath complex, whose exact location has never otherwise been confirmed. It is not out of the question that the Severan Baths could be in this area near Porta Capena, on the slopes of the Caelian. Because the edifice was not systematically excavated, given the customs of the time, and the excavations that occurred were sporadic and not completely detailed in their reports (e.g., where exactly were the finds discovered in the building?), one cannot assert with confidence that this structure was in fact the Thermae Severianae. The plan that we have of Ligorio, as it was indicated on the Forma Urbis Romae by Lanciani, appears to be half the length of the Septizodium (Fig. 52). While the whole of the bath complex might not have been excavated, it is difficult to imagine that the main baths of the emperor were this small, when his large fountain a few hundred meters away was twice as large and the baths of his son, Caracalla, across the thoroughfare were so monumental themselves (Map 10). In addition, the remains practically abut the slopes of the Caelian, hinting at another difficulty in the construction of a bath there. There would have been no more room on its

<sup>&</sup>lt;sup>38</sup> See Edlund-Berry (2006b, 169) for the full bibliography of the ritual of the Vestal Virgins collecting water from the source of the Porta Capena.

<sup>&</sup>lt;sup>39</sup> Colini (1944, 217-218), Tortorici (1993b, 167-170), and Lusnia (2014, 122-123).

northern side to expand. The size and siting, therefore, along with the spotty excavation records, suggests that this structure is something other than a bath.

The Ligorio plan indicates that the edifice is a fountain building. It is easy to imagine that the structure would have been monumentalized, given its mythological connections with one of the Camenae and its role as a watering-hole for the Vestal Virgins, along with the *magistri fontis* maintained the area. Could this mean that this is somehow related to a state-sanctioned cult? Because there are officers of a cult of the springs, along with the sacred Vestals using only this water, this is a tantalizing suggestion.

The Porta Capena was physically connected to water. The Aqua Appia and the Aqua Marcia both passed over the gate.<sup>40</sup> The gate itself literally took the burden of two large aqueducts, including one with the best-tasting waters of the city, those of the Marcia. In fact, one of the archways of the gate is sometimes called to as the *Arcus Stillans*, the 'dripping gate,' referring to the water that passes above and must sometimes have dripped down the façade of the gate.<sup>41</sup> Of course, the Porta Capena was not the only city gate to support the channels of an aqueduct. The Porta Maggiore supported the aqua Claudia and the Anio Novus.<sup>42</sup> These gates, however, are not true water-displays, in that one cannot see the water actually moving into a basin. There is, however, a clear demonstration on the Porta Capena of the abundance and majesty of water with the placement of two different aqueducts, which harnessed water from the surrounding hills

<sup>&</sup>lt;sup>40</sup> Front. *Aq.* 1.5, 19.

<sup>&</sup>lt;sup>41</sup> A scholiast of Juvenal describes the arch as such: *substitit ad veteres arcus madidamque Capenam.* [...] 'Madidam' ideo, quia supra eam aquaeductus est, quem nunc appellant arcum stillantem (Schol. Iuv. 3.10-11). "He stopped at the old arches and the 'wet' Capena. [...] 'Wet' therefore, because there is an aqueduct above, which they now call the 'dripping arch." *LTUR* 1.107 (s.v., Arcus Stillans, F. Coarelli). *Contra* Richardson (1992, 29), who uses the argument of Marchetti-Longhi (1924-1925), that the passage from the Scholiast, and other later uses, such as in pseudo-Papal bulls, actually to indicate the Porta Romana. <sup>42</sup> Richardson 1992, 306-307; Lusnia 2014, 120-121.

and then carried it into the city on a series of arches (mimicking the form of the Porta) that then passed over the gate itself. In addition, pedestrians would then actually be able to interact with this indirect water-display by passing directly under the (contained) flow of water.

Through the Porta Capena, if one were to continue travelling north towards the Circus Maximus and the Palatine, one would, after 202-203 CE, encounter the Severan Septizodium (**App. No. 1.120**).<sup>43</sup> The large three-exedra, three-story fountain would have in and of itself been a way station for all those passing by (**Fig. 6**). Pedestrians could admire the grandiose use of water, marble, and sculpture, as the structure is even mentioned in the *Historia Augusta* as a showpiece for Severus at the foot of the Palatine (SHA *Sev.* 24.3-5). While there, visitors could consider whether they wanted to head in the direction of the Circus Maximus or north to the Colosseum—skirting the Palatine in either direction.<sup>44</sup> The purpose of the Septizodium has been debated, whether it was a monumentalization of the end of the via Appia or as a marker for those traveling north from the port from Africa (where Severus was from).<sup>45</sup>

Severus additionally altered the surrounding landscape near the Septizodium, including repairs to the Aqua Claudia (on the Caelian hill) and the Aqua Marcia, both sometime after 201 CE, and constructed the Thermae Severianae somewhere in the area around this time.<sup>46</sup> The open space created a new monumental entrance for those entering

<sup>43</sup> Not much is left in situ of the Septizodium, given its final dismantlement by Domenico Fontana, under the orders of Pope Sixtus V (*LTUR* 4.269). We know of its placement in the urban landscape of Rome because part of its plan is still preserved on the *Forma Urbia Romae* of the Severan period. For more on the *Forma Urbis* and the Septizodium, see: Lusnia (2004, 519) and Thomas (2007a, 355).

<sup>&</sup>lt;sup>44</sup> On this space, in relation to the Severan Palace, see Sojc (2013).

<sup>&</sup>lt;sup>45</sup> Gorrie 2001, 657; Lusnia 2004, 519. For more on the lack of an aqueduct terminus at the Septizodium, see Aicher (1993, 341).

<sup>&</sup>lt;sup>46</sup> Lusnia 2014, 117-132.
the city at Porta Capena—with a new façade fountain, befitting of the status of Rome, the *caput mundi*.<sup>47</sup>

The new node was predicated on the display of water. The Septizodium worked with the architectural ensemble that was the Porta Capena, its two aqueducts and *fons Camenarum*. Severus placed his large fountain at the foot of the Palatine, no doubt considering the impact on a pedestrian coming from the south, encountering the *fons Camenarum*, passing underneath the large aqueducts of the gate, then experiencing the din of the water moving in the Septizodium. The node of this display of water, in so many different contexts, would have been a way for Severus to transform the landscape by not only adding new monuments, but also employing the use of older structures. Severus, while illustrating his power of a new dynasty, would have connected himself to the older, mythical past of Rome, seen through the association with the *fons Camenarum*. The use of water in this space would have been a stunning display for all those passing, allowing them to stop and experience the water before going into the heart of Rome.

The site of Nikopolis in Greece was founded by Augustus after his Actian victory of 31 BCE. The city resulted from the forced synoecism of communities from Epirus, Acarnania, and Aetolia.<sup>48</sup> The city was made the provincial capital of Epirus by Trajan, who removed Nikopolis from the province of Achaia.<sup>49</sup> In the Roman city founded *de novo*, there was ample ability to design and construct structures that relied on a more

<sup>&</sup>lt;sup>47</sup> Lusnia 2014, 123-124, 132; see also Longfellow (2011, 163-172).

<sup>&</sup>lt;sup>48</sup> Longfellow 2011, 131. For more on the founding of Nikopolis, see the edited volume of Isager (2001) and Spawforth (2012, 160-161). On the city itself, see the collected volume of Zachos (2008).

<sup>&</sup>lt;sup>49</sup> Karatzeni 2001; Longfellow 2011, 134. For a comparison of town infrastructures between Nikopolis and Butrint (the next substantial city north in Epirus), see Bowden (2007).

Italian, rather than Greek, heritage, evident in the nymphaea found inside the West Gate of the city.<sup>50</sup>

Termed Nymphaeum  $\Pi\alpha$  (south) and Nymphaeum  $\Pi\beta$  (north) by excavators, the two nymphaea at Nikopolis look very similar (**Fig. 54a; App. No. 1.82**). Both nymphaea are centered around large rectangular basins, with draw basins on their sidewalks. The structures are preserved today to their first story, but it is believed there would have been a shorter second story on top.<sup>51</sup> The preserved elevation presents alternating rectangular and apsidal niches, with seven on the interior façade and two niches on the front wings (**Fig. 54b**). Each niche is 2.5 m tall and is punctuated by engaged brick columns (**Fig. 54c**). There are indications in the brickwork that the nymphaea were stuccoed and covered in marble veneer in certain places.<sup>52</sup> Each niche had two waterspouts: a larger one underneath a second, smaller one. There is no sculpture associated with the nymphaea. Some suggest that either there was no sculptural program, with a great display of water in each of the niches, or, given the number of spouts, the water could have somehow physically interacted with sculpture that is no longer extant.<sup>53</sup>

Originally thought to date to the Augustan period, excavations in the late 1990s revealed that  $\Pi \alpha$  was in fact from the second century (under Hadrian), whereas  $\Pi \beta$  was actually constructed in the early third century.<sup>54</sup> It is believed that the second nymphaeum was added to answer the demands for more water in the city.<sup>55</sup> The large aqueduct, fed

<sup>&</sup>lt;sup>50</sup> Longfellow 2011, 131. Longfellow compares the two earlier fountains of Hadrian (Larissa Nymphaeum at Argos (**App. No. 1.9**); Lykabettos Nymphaeum at Athens (**App. No. 1.15**)) as modeled on more traditionally Greek modes of water-display until that point.

<sup>&</sup>lt;sup>51</sup> Walker 1979, 140; Longfellow 2011, 133. The façade wall is two meters thick, suggesting that there must have been a second story to support.

<sup>&</sup>lt;sup>52</sup> Longfellow 2011, 132-133.

<sup>&</sup>lt;sup>53</sup> Longfellow 2011, 133.

<sup>&</sup>lt;sup>54</sup> Zachos and Georgiou 1997, 588-592, 598-600; Longfellow 2011, 131.

<sup>&</sup>lt;sup>55</sup> Longfellow 2011, 134.

from the Louros River (50 km away) that also supplied the nymphaea, was probably constructed in the second century, allowing for these dramatic water-displays.<sup>56</sup> Thus, as it has been argued by Longfellow, the  $\Pi\alpha$  nymphaeum, along with his other constructions and restorations at Nikopolis, would have mirrored the improvements that Hadrian was completing in Athens, such as the addition of the nymphaeum in the Athenian Agora on the Panathenaic Way (**Fig. 55; App. No. 1.14**).<sup>57</sup>

Located directly inside the West Gate, the nymphaea at Nikopolis would have created quite the show as one entered the city. Even with just the Hadrianic  $\Pi \alpha$  fountain built, the dramatic flow of water from the powerful aqueduct, with two different spouts in each niche, would have marked quite a change for those entering the town. When the second nymphaeum was added a century later, the spectacle of the water-display must have been incredible, especially with the din of water crashing in each of the seven interior niches in the main rectangular basin. The drama that one can associate with the fountains, as one transitions from an extra-urban to urban space, could potentially show the civilizing nature of the Romans' ability to harness water, in addition to channeling it effectively, allowing for its display.

Next, the Hadrianic North Nymphaeum (Nymphaeum F3) of Perge is a gate fountain connected to a water channel that runs throughout the lower city (**App. No. 1.89**). Located at the northern edge of the town on the slopes of the acropolis, it marked the entrance to the upper town of Perge (**Fig. 56**).<sup>58</sup> The fountain was fed by an aqueduct

<sup>&</sup>lt;sup>56</sup> Doukellis 1995; Longfellow 2011, 131.

<sup>&</sup>lt;sup>57</sup> Longfellow 2011, 134.

<sup>&</sup>lt;sup>58</sup> See especially Grainger (2009, 94-96). For more on the Acropolis, especially its topography and the entrance created by the nymphaeum, see Martini (2003, 17-21; 2010).

supplied by the waters of the Kestros River, 10 km away.<sup>59</sup> Behind the façade was a reservoir that allowed for water to collect, before discharging through the façade. The water then continued down a *euripus* throughout the city. The nymphaeum thus used the surrounding landscape to its advantage, providing water throughout the town. But the structure also becomes a liminal point in the urban fabric, transporting pedestrians to the Upper City.

The structure proper takes the form of a three-bayed triumphal arch, with two vaulted side passages flanking the main water-display (**Fig. 57a**). The central bay contained a personification of the Kestros River who would have reclined over the wide waterspout, discharging into the *euripus* that ran through the town to the lower city gate of Plancia Magna (**Fig. 57b**).<sup>60</sup> The patron here also played with reality, taking actual water supplied from the nearby Kestos and forcing it through an artificial and man-made structure. The elegant elevation of the nymphaeum was two-storied and in the Corinthian order (**Fig. 57c**). Among the statues present in the façade were an Artemis and a Zeus, both of which were in their guises of Olympian gods, not the local Artemis Pergaia or Zeus Machaonios, seen in other contemporaneous urban monuments.<sup>61</sup> In addition, there were two life-sized portraits of Hadrian that likely stood in the upper story, although the portraits are not exact copies of portrait types coming out of Rome at the time.<sup>62</sup> The nymphaeum, however, was probably not commissioned by Hadrian, but rather by a member of the local élite, given the unusual architectural design (i.e., a triumphal arch

<sup>&</sup>lt;sup>59</sup> Longfellow 2011, 158.

<sup>&</sup>lt;sup>60</sup> The Plancia Magna Gate was constructed in the Hadrianic period by Plancia Magna, and it included an arch in the front, backed by an oval courtyard, terminating in a gate. For more on the gate, see Boatwright (1993), Chi (2002, 47-57), Burrell (2006, 455), Ng (2007, 126-153), and Delemen (2011). The urban node around the Plancia Magna Gate, with nearby water-displays, is explored later in this chapter. <sup>61</sup> Longfellow 2011, 158-159. See also, Trimble (1999, 151-154) and Chi (2002, 173-176).

<sup>&</sup>lt;sup>62</sup> Longfellow 2011, 160.

straddling the street), the central prominence of the river god (i.e., not the emperor), and the imperfect craftsmanship of the portraits of Hadrian.<sup>63</sup>

The North Nymphaeum is well placed in the urban fabric of the city of Perge. The water that gushes forth from the facade, then continues to cascade down into the city. In effect, the 550 m water channel is an extension of the nymphaeum at the foot of the acropolis. From the vantage point of the Kestros River's head, the drama of the water discharged from the statue is easily understood, as it continues further into the urban center, allowing more viewers to enjoy the water (Fig. 57d). One cannot help but imagine pedestrians interacting with the water either at its source at the North Nymphaeum proper, or at any point along the water channel—and the memories that would have been created from this interaction, whether the cooling function of the water's movement down into the town, the refreshing drink of water, or the sound of the water moving, mixing with the hustle and bustle of the town (Fig. 57e). The water channel is also well integrated into the city, nestled in the middle of the colonnaded street. An urban feature popular in the East, the columns prompt pedestrians to continue walking to other urban nodes.<sup>64</sup> The colonnade in Perge then interacts with the water channel to guide pedestrians either further up to the acropolis or down to the entertainment complexes and baths, beyond the Plancia Magna Gate.

Many elements work in sync at the North Nymphaeum of Perge to create a liminal space. The visual marker of a pseudo-triple-bay triumphal arch with a river

<sup>&</sup>lt;sup>63</sup> Longfellow 2011, 159-160.

 $<sup>^{64}</sup>$  For more on colonnaded streets, see below (pages 252-253) on the colonnaded streets associated with the crossroads. Libanius in his oration on Antioch-on-the-Orontes mentions that "the stoas have the appearance of rivers, which flow for the greatest distance through the city, while side streets seem like canals drawn from them" (*Or.* 11.201). This observation makes the strong parallel between the undulation of the colonnaded street and the flow of water—which must have also been a striking similarity at the site of Perge, too.

personification gushing water is unique. One is able to look *up* the town and see this visual marker; thus he or she is drawn to mount the city and approach it. Once there, a pedestrian could admire the sculpture and architectural details. The pedestrian, then could decide to continue farther up to the Upper City, thus transitioning to a different quarter. Further, the direct visual connection to the large Plancia Magna Gate at the southern edge of the city links these transitional nodes of the urban armature, stressing the liminal nature of stopping at them and then passing through them to different spaces.

During the Severan period, the space south through the Plancia Magna Gate received two more water-displays (**Fig. 58**). Directly outside of the gate, to the west, were the South Baths, dedicated in the time of Vespasian.<sup>65</sup> In the same area is an ancient well that is believed to have been sacred to the local Artemis Pergaia, as a statue of Artemis was found there.<sup>66</sup> Connected to this sacred space of Artemis is the Hydreion of Aurelia Paulina (Nymphaeum F2), which abuts the east wall of the South Baths (**App. No. 1.90**). Just a few meters to the south, still on the west end of the space outside of the city gate is the so-called Nymphaeum F4, which was probably built right after the Hydreion, based on architectural similarities (**App. No. 1.91**).

The Hydreion of Aurelia Paulina at Perge is, on our evaluation, a singular structure. Because it responded to the sacred spring of Artemis and perhaps the already-existing South Baths, the fountain seems to be squeezed into the space it occupies (**Fig. 59a**).<sup>67</sup> Thus, the plan is asymmetrical. The front basin's south side is at an angle, not parallel to its northern counterpart. The fountain's façade is two-storied, with alternating

<sup>&</sup>lt;sup>65</sup> Abbasoğlu 2001, 180-181.

<sup>&</sup>lt;sup>66</sup> Mansel 1975b, 368; Longfellow 2011, 187. For more on the cult and iconography of Artemis Pergaia, see Onurkan (1969-1970).

<sup>&</sup>lt;sup>67</sup> Longfellow 2011, 188.

aediculae and projecting single columns, all of which are punctuated by statue niches (**Fig. 59b**). Traces of some of the statues have been recovered, but it is unclear whether the figures would have been the imperial family, along with Aurelia Paulina's family.<sup>68</sup> In two of the statue niches, there were pedestals with waterspouts that allowed water to pour into the draw basin in front. The basin also had two smaller draw basins for easy access to the water. On the north end, there is a projecting wing. The aediculae of the façade, however, are not centered, and the southern-most aedicula actually connects to the Artemis Pergaia shrine on the south. The shrine then uses one of the fountain's aediculae, and it has a responding aedicula on the south side—both of which flank the subterranean vaulted spring. The shrine façade contains a statue niche on the second story and culminates in broken pediment, which is decorated with reliefs of Artemis Pergaia, the Three Graces, a bathing Aphrodite, an eros, Tritons blowing conch shells, Helios, and Selene.<sup>70</sup>

The structure is known as the Hydreion of Aurelia Paulina because two inscriptions show that the fountain was dedicated by Aurelia Paulina to Artemis Pergaia and the imperial family:

> Θεᾶι Ἀρτέμιδι Περγαία | ἀσύλωι καὶ | Αὐτοκράτορσι Καίσαρσι | Λ. Σεουήρωι Περ|τίνακι Σεβαστῶι καὶ Μάρκῷ | Αὐρ. Ἀντωνίνωι Σεβ. [[καὶ]] | [[Π. Σεμτιμίωι Γέται Καίσαρι]] | καὶ Ἰουλία Δόμνῃ Σεβ. | μητρὶ Κάστρων | καὶ τῶι σύμπαντι οἴκωι | τῶν Σεβαστῶν | καὶ τῆι γλυκυτάτῃ πατρίδι. (Şahin 1999, cat. no. 196)

To the asylum-granting goddess Artemis Pergaia and the Emperors Caesars Lucius Severus Pertinax Augustus and Marcus Aurelius Antoninus Augustus [and Publius Septimius Geta Caesar] and Julia

<sup>&</sup>lt;sup>68</sup> Longfellow 2011, 187.

<sup>&</sup>lt;sup>69</sup> Mansel 1975a, 67; Mansel 1975b, 368-369; Longfellow 2011, 187.

<sup>&</sup>lt;sup>70</sup> Dorl-Klingenschmid 2001, 230; Longfellow 2011, 187.

Then we learn more about the dedicator, Aurelia Paulina:

[ίέρε]ια θεᾶς Ἀρτέ[μ]ιδος | [Πε]ργαίας ἀσύλου διὰ | [βί]ου Αὐρηλία Παυλῖνα | [ἀρχ]ιερασαμένη τῶν | [Σεβ]αστῶν ἐν τῇ Σιλλυ|[έων] πόλει μετὰ τοῦ γενο|[μέν]ου ἀνδρὸς αὐτῆς Ἀκυ|[λίου τ]οῦ φύ(σει) υἰοῦ Κιδραμύου, | [θυγάτ]ηρ δὲ Διονυσίου Ἀπελλοῦ | [.....] καὶ Αἰλιανῆς Τερτύλλης, | [τειμηθ]εῖσα δὲ καὶ ὑπὸ θεοῦ Κομό|[δου πολ]ιτεία Ῥωμαίων, τὸ ὑδρεῖο[ν] | [ἐκ θεμε]λίων σὺμ παντὶ τῷ περὶ αὐ|[τὸ κόσμῳ] κατασκευάσα ἐκ τῶν ἰ[δί]|[ων] καθιέρωσ[εν] (Ṣahin 1999, cat. no. 195)

Aurelia Paulina, priestess of the asylum-granting Artemis Pergaia for life, archpriestess of the Sebastoi in the city of Sillyium, with her husband, Aquilius, the natural son of Kidramuas; she was the daughter of Dionysios, son of Apelles [...] and of Aelia Tertulla, who was honored by Divine Commodus with the citizenship of the Romans. She built and dedicated this Hydreion from its foundation with all of the ornamentation around it at her own expense. (Trans. B. Longfellow, much adapted)

Aurelia Paulina received her citizenship from Commodus, and she was active in the local religious community, as the priestess of Artemis Pergaia and formerly of the imperial cult. The inscription also helps us to date the structure to sometime between 198 and 204. While the imperial family is extremely important, since they receive part of this dedication, Artemis Pergaia is highlighted even more.<sup>71</sup> Indeed, Artemis Pergaia is depicted at the top of the pediment on the shrine while the members of the imperial family are stationed in the aediculae below. It has been argued recently that the unique architectural design of the fountain (i.e., the asymmetry, which is not popular in Roman architecture), along with the elevation of Artemis Pergaia, follows local trends, as was the case with the North Nymphaeum (**App. No. 1.89**) and its use of the Kestros River as its focal point.<sup>72</sup>

<sup>&</sup>lt;sup>71</sup> Longfellow 2011, 186-187.

<sup>&</sup>lt;sup>72</sup> Longfellow 2011, 187-188.

Directly to the south of the Hydreion is Nymphaeum F4 (**App. No. 1.91**). The structure has never been fully published, but there is enough information about its plan and architectural members to draw some conclusions.<sup>73</sup> The plan had a similar, asymmetrical form to the Hydreion, with three off-center aediculae, two projecting columns, and a southern wing, but at least 4 m longer (20 m versus 16 m of the Hydreion) (**Fig. 60a**). The façade would have been two-storied, with waterspouts allowing water to flow from high in the rear wall into the draw basin, which also contained three semi-circular recesses to allow for easy drawing of the water. The nymphaeum was built to be a southern counterpart to the Hydreion (**Fig. 60b**). While not on perfect alignment with the Hydreion, the projecting southern wing forms a symmetrical counterpart to the north wing of the Hydreion. Furthermore, the architectural decoration of the nymphaeum is a similar style to the Hydreion, which suggests that the two structures were intended to work together as an architectural ensemble.<sup>74</sup>

The two nymphaea south of the Plancia Magna Gate at Perge create a transitional space as one passes by them, either coming from the south or coming out of the city (**Fig. 58**). A Severan plaza is created with the construction of the two imposing fountains on the west side of the space directly outside of the gate, explored in detail later in this chapter.<sup>75</sup> Pedestrians would have been drawn to the long façade of water-display on the west, which is almost 36 m long. While transitioning from either the countryside or the city center, the way station here would also invite passers-by to investigate the shrine of Artemis Pergaia, to visit the large South Baths behind the Hydreion, or to proceed into

<sup>&</sup>lt;sup>73</sup> The only published materials are Dorl-Klingenschmid (2011, cat. no. 87) and Richard (2012, cat. no. 60), while the nymphaeum is always indicated in plans published about the site.

<sup>&</sup>lt;sup>74</sup> Dorl-Klingenschmid 2001, 230-231; Richard 2012, 275.

<sup>&</sup>lt;sup>75</sup> Dorl-Klingenschmid 2001, 145-147, 230.

the city's agora directly to the north. The architectural ensemble would have been alluring—and, in a sense, would have mirrored the long cascade of water in the *euripus* flowing through the city center, and perhaps still visible (or in the very least audible) through the Plancia Magna Gate.

At nearby Side, there was a large three-exedra fountain in front of the main city gate (**Fig. 61; App. No. 1.131**). Built in the Severan period, perhaps under Caracalla, the structure is 52 m wide and nearly 15 m deep (**Fig. 62a**). The façade was certainly two stories when constructed, and a third story may have been added later in the third century. The first two stories are punctuated by the three large exedrae, each of which has three large consoles to allow for the discharge of water into the rectangular basin in front (**Fig. 62b**). The exedrae were capped with half domes. The main two stories would have then been covered with a two-storied Corinthian colonnade. On the sides were short wings that included aediculae, adding to the semi-circular frontage of the fountain's façade. A passer-by could access the structure via a large platform, approaching the rectangular basin, and could retrieve water from a long series of rounded draw vessels, punctuated by reliefs of dolphins, fish, Medusa heads, and theater masks. The form of this fountain has been compared with that of the famous Severan Septizodium in Rome, given its three niches and monumental size.<sup>76</sup>

This large fountain is located directly across the street from the main gate of Side. The long and tall façade of the fountain would have been a beacon for all those entering in from the dusty, dry climate of the countryside to the north of Side. The crash of water into the basin would have created a loud din, illustrating to all the passers-by the

<sup>&</sup>lt;sup>76</sup> Longfellow 2011, 180-182, 188.

abundant water that was displayed here.<sup>77</sup> In addition, the platform and the accompanying draw vessels would have created a plaza for all those to gather, allowing for the collection of water, talking, and regrouping before entering into the city gate across the street.<sup>78</sup> Once through the gate, the landscape is totally different, and the visitor is drawn into the city center through a colonnaded street. The large fountain at Side, then, offers a place for individuals to stop and prepare themselves for a change in landscape, from the countryside to the built environment of the city.

At the site of Stratonicea in Caria (Turkey), a large fountain was placed at the North Gate of the city in the early Severan period (**App. No. 1.137**). A large exedrashaped fountain (ca. 15 m wide, ca. 12 m high) was positioned in between the two bays of the gate, making the width of the whole structure nearly 42 m (**Fig. 63a**). The fountain is constructed almost entirely of marble, including the paving, columns, and sculptural decoration. The tabernacle-style façade of the fountain was two-storied, with a series of semi-circular niches on the bottom level and rectilinear niches on the top (**Fig. 63b**). The niches were punctuated by a series of Corinthian capitals, along with a tendril frieze in the architrave. The niches would have been filled with statues, including two Muses, an Apollo, and a variety of portrait busts, along with some figural reliefs.<sup>79</sup> Water would have poured into the large basin from a throne in the central niche, whose arms were decorated with dolphins. The water then would have flowed into a large central draw basin immediately at the front, along with a smaller trough-like basin on the southeast corner of the basin.

<sup>&</sup>lt;sup>77</sup> For the water supply of Side, see: Mansel (1963, 49-52) and Atila et al. (2010).

 $<sup>^{78}</sup>$  The urban node that is created with the fountain, the city, and the colonnaded street beyond (complete with a series of other fountains at the south end by the agora and theater) is explored below (pages 263-264).

<sup>&</sup>lt;sup>79</sup> Mert 2005, 245.

Of the surviving examples of water-displays at the entrance of a city, the North Gate fountain at Stratonicea is unparalleled. On the city side, the sumptuous decoration and the crash of water must have been stunning to experience. The landside, however, was completely devoid of decoration.<sup>80</sup> As one approached the city from the countryside, there was no visual clue as to what lay directly behind the two gates. When one entered the gates, however, the crash of water and the cool air there must have captivated, illustrating the difference in the semi-arid Carian landscape outside and the urban space inside, which, as the fountain shows, was well-watered. The movement and display of water would have signaled to passers-by that this was an urban monument, while the landscape outside would not be able to provide the same constant flow and security of water that the city could provide its inhabitants and visitors. Thus, the North Gate represents a large and dramatic transitional space at the edge of the city.

One final example is the so-called Monument of Vespasian in Side (**App. No. 1.132**). The original monument, installed somewhere in Side in 74 CE, was a pi-shaped façade, with a central semi-circular niche, next to two smaller projecting niches, all of which were filled with statues (**Fig. 64**). At some point in the fourth century, the monument was moved to its present location, adjacent to one of the Late Antique city gates of Side.<sup>81</sup> In the conversion of the structure, the central statue was removed and a waterspout was added, along with a T-shaped basin in front. It is interesting that the monument was reused, and it was placed at one of the entrances of the city.<sup>82</sup> In the latter

<sup>&</sup>lt;sup>80</sup> Mert 2005, 245.

<sup>&</sup>lt;sup>81</sup> Richard 2012, 227-228.

<sup>&</sup>lt;sup>82</sup> For more on the reuse of fountains in the Late Antique period, see Jacobs and Richard (2012) and Richard (2012, 215-236).

part of the fourth century, the egress point, then, was still important enough to include a way station for water collection.

## ii. Arches

Water-displays attached to arches increase the focus on the monument, adding a moving element to a static architectural form. Arches, as it has been mentioned, are freestanding structures, not connected to a wall system, like gates and city entrances. The display of water on an arch can be a simple spout on the arch emptying water into a basin, a recessed niche into the pier of the arch, or the arch can serve as a framing device for a water feature. While one transitions from one type of space through an arch, there is also the element of adding another node for water-display into the urban fabric.

An early example of water-display in an arch is the so-called Arco di Germanico on the northeast corner of the forum of Pompeii (**App. No. 1.98**). Dated to the third quarter of the first century CE, the west pier abuts the northeast corner of the Jupiter Temple of the forum, while the east pier abuts one of the columns of the colonnade on the east side of the forum (**Fig. 48**). The arch, sited on the edge of the forum then opens on to the via del Foro and across the street from the Porticus Tulliana. The remains of the arch are brick masonry, but there are indications of marble veneering and architectural details. On the north sides of the piers, there are large niches that would have allowed for the movement of water into a basin, although the water infrastructure within the pier itself is difficult to discern (**Fig. 65a**).<sup>83</sup> The south side also has niches, which presumably would have held statues. Such an early example of an arch with relatively simple water-displays

<sup>&</sup>lt;sup>83</sup> Müller 2011, 71-73, 79-80.

might indicate how other sites might have had similar early examples, which later become larger and grandiose fountains as the Empire grew.<sup>84</sup>

The Arco di Germanico marks the northeast corner of the forum. There was an arch farther to the south of the current Arco di Germanico, closer to the front of the Temple of Jupiter, but it was removed and the Arco was installed in its present location.<sup>85</sup> The removal allows the entrance of the forum to be monumentalized, in a sense, creating a large-scale gateway. The arch's placement in the urban landscape highlights its axis with other monuments, including the forum to the south, and to the north, the Porticus Tulliana, the Forum Baths, the Temple of Fortuna Augusta, and the Arch of Caligula. Looking from the forum, through both of the arches, one would see Mount Vesuvius (Fig. 65b). But approaching the Arch of Germanicus from the north, one is drawn to the inviting movement of water in the two niches there. Perhaps both the sight and sound would catch one's attention and move the viewer closer to the arch. From that vantage point, an individual would notice the monumental colonnaded features of the forum, which were also mirrored by the columns of the Porticus Tulliana. As one goes south from the via del Foro, the arch is a crucial way station, constructing both a stopping point and a beacon, before entering the forum with all of its various activities. The arch here acts as a threshold into the forum, preparing all those who enter that a new type of space is just farther south.

In Athens, in the late first century CE, a small basin was added to the one-bayed arch on Plateia Street (**App. No. 1.16**), which leads from the older Agora to the Roman Agora (**Fig. 13**). After the destruction of the south stairs of the Stoa of Attalos, the street

<sup>&</sup>lt;sup>84</sup> Rogers 2013, 160.

<sup>&</sup>lt;sup>85</sup> Müller 2011, 258. In Müller's nomenclature, the Arco di Germanico is the Arch 3.

leading to the Roman Agora was widened, allowing for the construction of the arch and the Library of Pantainos directly to the north (98-102 CE).<sup>86</sup> On the south pier, on the western side, is a simple spout (perhaps in the form of an animal's head), while the water terminated in basin below on the edge of the street (Fig. 66a). There are traces of bronze piping, along with anathyrosis, indicating that there was a basin abutting the pier of the arch (Fig. 66b).<sup>87</sup> The flow of water would have been minimal, but its placement on the arch offers a point of transition, allowing for a way station to be created in the space. The adjacent Library would have been an inviting place, perhaps offering more shady spots for passers-by to rest. Those coming from the old Agora would have stopped here, taken a drink of water or washed their hands or face with the water, and seen the framing nature of the arch, which would have allowed for easy sighting of the Gate of Athena Archegetes, just beyond to the east (**Fig. 66c**).<sup>88</sup> The way station on the street would provide the mental change necessary for the pedestrian, going from the ancient, historical heart of the city into the newly built marketplace of the Romans, which presumably would have been a stark contrast.

The site of Pisidian Antioch in Phrygia (Turkey) had at an impressive waterdisplay at one of its urban arches (**App. No. 1.97**). The city was established by Augustus in 25 BCE, after the death of King Amyntas of Galatia.<sup>89</sup> Under Augustus and the Julio-Claudians, it flourished and grew steadily (**Fig. 67**). Hadrian, on his trip through Asia Minor in 129 CE, probably visited the site, which was possibly the impetus for the

<sup>&</sup>lt;sup>86</sup> Glaser 1983, 94; Agusta-Boularot 2001, 174. Longfellow (2011, 109) makes a mistake in her text, stating that the arch and the fountain were constructed in the late first century BCE, when late first century CE is meant, with the destruction of the south stairs of the Stoa of Attalos and the construction of the Library of Pantainos.

<sup>&</sup>lt;sup>87</sup> Glaser 1983, 93-94.

<sup>&</sup>lt;sup>88</sup> For more on the framing nature of Roman arches, see MacDonald (1986, 77).

<sup>&</sup>lt;sup>89</sup> Mitchell and Waelkens 1998; Owens and Taşlıalan 2009, 305-306; Gazda and Ng (2011).

construction of its Arch of Hadrian and Sabina.<sup>90</sup> The triple-bayed arch was located at the western side of the city at the bottom of the terracing that leads up into the main urban center. The decoration of the façades included an inscription to Hadrian, along with a number of figural reliefs that highlight abundance and victory, such as genius figures, bound captives, thyrsoi, hippocamps, and garlands.

Through the central bay of the arch is a water channel that cascades down the hill toward the arch. Probably installed at the same time of the arch, this water cascade is believed to have had a small façade-style fountain at the top, which connected to a *euripus*, ending in a semi-circular fountain at the bottom, located directly inside the central bay of the arch (**Fig. 68a**). The canal is visually impressive, as it is a series of basins (6.50 m x 2.00 m) that measure 90 m in length down the terrace.<sup>91</sup> The difference in the elevation from the top to the bottom of the hill, where the arch is situated, is about 3 m, making the cascade rather dramatic. It is unclear, however, exactly where the water came from that supplied the cascade.<sup>92</sup> On the sides of the channel were colonnades and shops on the east side of the space.<sup>93</sup>

In the hot, dry climate of Pisidia, it is remarkable to have such a large display of water that runs down the hill, terminating at the arch of Hadrian. Certainly, the inhabitants of the city were unequivocally able to illustrate their access to an abundance of water, highlighting their status as a Roman colony.<sup>94</sup> One can only imagine approaching the arch to ascend to the city center and seeing, hearing, and feeling the

<sup>&</sup>lt;sup>90</sup> The most recent and thorough treatment of the arch is Ossi (2011).

<sup>&</sup>lt;sup>91</sup> Owens and Taşlıalan 2009, 315.

<sup>&</sup>lt;sup>92</sup> Owens and Taşlıalan 2009, 316.

<sup>&</sup>lt;sup>93</sup> Owens and Taşlıalan 2009, 315; Ossi 2011, 91.

<sup>&</sup>lt;sup>94</sup> Owens and Taşlıalan 2009, 315.

cascade in the central bay, experiencing the drama of the water (**Fig. 68b**).<sup>95</sup> There are certainly parallels here to the water cascade of Perge (suggesting a regional habit), which comes from a fountain and flows through the town, adding a sense of coolness and drama as the water passes through the city.

The *euripus* at Pisidian Antioch was constructed as part of a cohesive building program. The arch was installed, along with the water channel and a colonnade. In the same space, on the east side, was a series of shops leading up the terrace, allowing for passers-by to stop and shop, and to enjoy the coolness of the shade and moving air (Fig. **68c**). The semi-circular fountain inside the central bay of the arch probably had a dolphin sculpture on it.<sup>96</sup> In addition, the relief sculpture of the arch's facade, which included hippocamps and thyrsoi, would have made visual connections for those encountering the space, stressing the abundance of water here at Antioch, especially as one is moving into this space from the south of town and wants to proceed to the upper town.<sup>97</sup> It has even been suggested that the city of Antioch was emulating the city of Rome by creating a channel that is similar to Rome's *Euripus* of Agrippa (App. No. 1.107), along with the fact that the folk at Pisidian Antioch used Roman neighborhood names in their own city and divided the city into seven wards (perhaps evoking the seven hills of Rome).<sup>98</sup> The locals at Pisidian Antioch made a statement about themselves through the construction of the arch and its accompanying water channel: they created an inviting space to draw in the passer-by, showcasing their abundance of water, while also encouraging the

<sup>&</sup>lt;sup>95</sup> Owens and Taşlıalan 2009, 315; Ossi 2011, 104.

<sup>&</sup>lt;sup>96</sup> Ossi 2011, 105.

<sup>&</sup>lt;sup>97</sup> Ossi 2011, 104.

<sup>&</sup>lt;sup>98</sup> Owens and Taşlıalan 2009, 316.

pedestrian to continue to the city center that featured another large fountain and a large imperial cult complex.

Across the Mediterranean lies the site of Volubilis in modern Morocco. Volubilis was probably founded sometime in the third century BCE, but it began to flourish under Claudius, when it was made a *municipium* and incorporated into the province of Mauretania Tingitana.<sup>99</sup> The site, like others in North Africa, saw an explosion of construction and refurbishments under the Severans.<sup>100</sup> The city's Arch of Caracalla, the Forum Novum, the Capitol, and a basilica were all built in this period (**Fig. 69a**).<sup>101</sup> The Arch of Caracalla, with its water-displays, plays a part in the new Severan monumentalization of the city. The excavated site includes the newly styled Severan city center, along with the northeast domestic quarter of the city.<sup>102</sup>

Volubilis is marked by a great use of water, despite the semi-arid conditions of the surrounding area. The water that was brought into the city by an aqueduct came from the slopes of the Zerhoun Mountain, east of Volubilis.<sup>103</sup> The city was well outfitted for the distribution of water, with nearly every house having not only a connection to the water supply, but also a drain into the sewer.<sup>104</sup> Among the public water fountains were the Arch of Caracalla (**App. No. 1.149**), a double-basin fountain on the Decumanus Maximus, a semi-circular fountain between the Arch of Caracalla, the double-basin fountain

<sup>&</sup>lt;sup>99</sup> Schmölder-Veit 2009, 149; Sears 2011, 43. See also the volume edited by Riße (2001b).

<sup>&</sup>lt;sup>100</sup> Sears 2011, 80-97.

<sup>&</sup>lt;sup>101</sup> Lenoir et al. 1987; Schmölder-Veir 2009, 149.

<sup>&</sup>lt;sup>102</sup> The most complete publication of this domestic quarter is Etienne (1960).

<sup>&</sup>lt;sup>103</sup> Thouvenot 1949, 45-47; Etienne 1960, 17-26; Bouzidi 2001; Schmölder-Veir 2009, 149-152.

<sup>&</sup>lt;sup>104</sup> Raven 1993, 116; Wilson 1995, 53; Schmölder-Veit 2009, 149-154. Schmölder-Veit offers the best overview of the water usage in the city, including both public and private water.

<sup>&</sup>lt;sup>105</sup> The fountain in the old forum is not discussed here, but more can be found on the structure in Bouzidi (2001, 86).

had a basin on both the decumanus and the North Cardo II, allowing it to serve two different thoroughfares.<sup>106</sup> The semicircular fountain is directly across the large plaza where the arch stands. Both fountains have lost their superstructures and decoration since antiquity, but it is believed that they were actually built in the Flavian period.<sup>107</sup> The fountains were also at the termini of the aqueduct that supplied the city.

The Arch of Caracalla is, in a way, a traditional one-bay triumphal arch, but with new elements (**Fig. 69b**).<sup>108</sup> The structure, dedicated to Caracalla and Julia Domna, is dated by an inscription to 216-217 CE, probably in connection to Caracalla's promulgation of the *Constitutio Antoniniana* of 212, when citizenship was extended to all free persons in the Empire.<sup>109</sup> The arch is made of local limestone with preserved measurements of 9 m in height and 19 m in width.<sup>110</sup>The arch was restored in the early twentieth century, but this reconstruction is now believed to have been done incorrectly. Claude Domergue proposes a new reconstruction, complete with a restored height of 13.75 m, along with a reconfiguration of the sculpture (**Fig. 69c**).<sup>111</sup> The sculpture, then, would have decorated the axes of the piers of the arch and, going from bottom to top, would include: shields, trophies, and the personifications of the seasons.<sup>112</sup> The piers would have two projecting columns, which were decorated in a 'modified' Corinthian order, which is also seen in the porticus of the decumanus and the new Severan basilica at Volubilis.<sup>113</sup>

 <sup>&</sup>lt;sup>106</sup> Etienne 1960, 13, *passim*; Letzner 1999, cat. no. 428; Bouzidi 2001, 86; Schmölder-Veit 2009, 152-153.
<sup>107</sup> Schmölder-Veit 2009, 152.

<sup>&</sup>lt;sup>108</sup> For the scholarship on the arch, see: Thouvenot 1949, 39-41; Domergue 1963-1964; Romanelli 1970, 134-135; Letzner 1999, cat. no. 441; Riße 2001a; Schmölder-Veit 2009, 152-154.

<sup>&</sup>lt;sup>109</sup> Domergue 1963-1964, 292-293. For the text of the inscription, see Domergue (1963-1964, 291-293).

<sup>&</sup>lt;sup>110</sup> Riße 2001a, 52.

<sup>&</sup>lt;sup>111</sup> Domergue 1963-1964, 289.

<sup>&</sup>lt;sup>112</sup> Domergue 1963-1964. See Riße (2001a) for a detailed discussion of the sculpture.

<sup>&</sup>lt;sup>113</sup> Riße 2001a, 52.

On each of the piers of the east side of the arch in between the two columns, there is a niche and a basin directly below. There are indications that the niche had piping that would have allowed water to pour forth and collect in the basin. Due to the poor preservation and problematic reconstruction, however, the water infrastructure of the arch where exactly was the water was pumped in is unclear. Nor can it be determined whether both the east and west sides of the arch had water-displays.<sup>114</sup> The east side of the monument faced the Decumanus Maximus approaching from the east and one of the main city gates (the so-called Tangier Gate). Because the northeast quarter has been excavated, it easy to imagine the water-displays on that side of the arch, and, presumably, the west, which now faces the unexcavated area of the site, would have also had water. The niches above the fountains are believed to have contained statues of water deities, which would mirror the images of abundance (i.e., the personifications of the seasons in the attic of the arch) and triumph.<sup>115</sup> Indeed, the decorative program of the arch works in tandem with the display of water, stressing the abundance of water that Volubilis had through its aqueduct, along with the triumph (not just militarily) over nature by controlling the water itself.

The Arch of Caracalla at Volubilis interacted with its surrounding built landscape to create a way station that drew pedestrians from different parts of the city. Directly to the east, the decumanus approached the arch from the Tangier Gate. Lining that street were domestic quarters. Closer to the city gate, the decumanus is quite wide, allowing for a large number of people to use the space, but, as one approaches the arch, the street constricts, narrowing the focus one has to the arch itself, which would have been

<sup>&</sup>lt;sup>114</sup> Riße 2011a, 52.

<sup>&</sup>lt;sup>115</sup> Domergue 1963-1964, 290-291; Riße 2001a, 57.

prominently situated in direct sight.<sup>116</sup> The lower half of the decumanus was lined with a porticus, which would have allowed people to congregate in the cool shade of the covered space as they moved closer to the arch. The porticus would have also been punctuated by the double-basin fountain, allowing a pedestrian to stop and consider which direction to continue. Once at the arch, one would have certainly been able to pause there, ponder the decorative program of triumph and abundance, and, then, decide where to travel. One can imagine how the other semi-circular fountain to the south would have prompted the pedestrian then to continue in that direction, finding himself in the city center at the forum. Thus, the arch acts as a transitional space, allowing for passers-by to transition from one quarter of the city (either from the countryside or from the domestic quarters) to that of the commercial and religious center, which is a totally different use of space. The sight lines of the arch, whether through the decumanus to the Tangier Gate, or to the area of the forum, allows the arch to become part of an architectural ensemble that employs disparate elements of the urban armature to become, in a loose sense, one more complete monument.

## iii. Conclusions

Water-displays connected to gates and arches demonstrate the desire to show water in transitional spaces. By employing the movement of water on these structures, or in the very least in a fountain close by, architects and patrons were able to create spaces that became way stations, inviting the passer-by to pause. The areas around these monuments promoted stopping points, which gave the pedestrian the ability not only to

<sup>&</sup>lt;sup>116</sup> Etienne (1960) has illustrated this well in his Plate I, which shows how the large Decumanus pushes the pedestrian farther to the west, and thus the Arch, and then to the south, in the direction of the forum.

use water, but also to appreciate the monuments. While examining a water-display at a gate or arch, one could take in the architectural ornament, especially if the monument has a decorative program associated with the abundance that water brings, such as at Pisidian Antioch and Volubilis. After pausing at the monument, the viewer could then move to the next urban node. In a sense, then, the liminal nature of the water-displays on gates and arches allowed for the effective mental transition of the pedestrian, so that he or she could appreciate the next type of space that they move into.

Further, it must be noted that a majority of the examples considered here are located in the East. Most of the monuments were in Greece and Turkey, with the exception of the *fornix Scipionis* and Porta Capena in Rome, the early Arco di Germanico in Pompeii, and the Severan Arch of Caracalla in Volubilis (**Tables 6, 7**). Perhaps, then, we can associate a native tradition of including water-displays on these types of monuments, as we saw the early example next to the Dipylon Gate in Athens. It might also be possible that these urban centers wanted to stress to those entering their cities, especially when considering the gates in these examples, of how the city was a place of abundant water, unlike the semi-arid countryside. The stability that one associates with the resources of the city certainly would have been a welcome sight to those coming into the urban center for whatever reason. Finally, most of the examples considered post-date Hadrian. It is easy to imagine of the impact that Hadrian had on the eastern Mediterranean, sponsoring the construction of new aqueducts and fountains, which might prompt or allow this rise in these types of water-displays.<sup>117</sup>

<sup>&</sup>lt;sup>117</sup> For more on Hadrian's relationship with water in this region, see Longfellow (2009; 2011, 107-162).

## **II.** Water at Crossroads

Intersections at two streets or thoroughfares provide the space necessary to construct water-displays. Streets are an integral element of the urban armature, connecting people to different areas of a town. In the Roman city, a street can also be considered a thoroughfare when it connects main gates with main plazas.<sup>118</sup> A crossroads then allows for the potential congregation of a large amount of traffic—in effect a way station—which makes it an ideal space for a fountain. While water-displays can certainly have aesthetic programs and monumental forms, at an intersection the utility of accessible water for pedestrians and animals is an important consideration in urban planning. While the present study does not examine the public street fountain (i.e., the *lacus*), they were present throughout every Roman city during the Empire and provided easy access to water.<sup>119</sup> While there are innumerable public street fountains, it is those fountains that are placed in large urban nodes, such as at crossroads, that can elevate the importance of a water-display.

The 'way station' nature of fountains suggests the parallel with urban compital shrines. Crossroads altars were found throughout the Roman landscape (e.g., the borders of two properties), but in the city they were located near the intersections of streets, usually abutting buildings.<sup>120</sup> Compital shrines were devoted to the Lares Compitales, whose cult was celebrated by all the inhabitants in the surrounding neighborhood, the *vicus*. The altars then brought together members of the community in one place. With the

<sup>&</sup>lt;sup>118</sup> MacDonald 1986, 33.

<sup>&</sup>lt;sup>119</sup> For archaeological examples of street fountains, see: Eschebach 1979; Agusta-Boularot 2008; Harnett 2008; Dessales 2013, especially 80-114.

<sup>&</sup>lt;sup>120</sup> See Van Andriga (2000a) for a discussion and catalogue of the compital shrines of Pompeii. Stek (2008) describes the celebration of cult of the Lares Compitales in the countryside. For an overview of the cult of the Lares, including archaeological evidence of its domestic cult, see Orr (1972, especially 4-33), Bassani (2008), Giacobello (2008, especially 37-58), Laforge (2009), Van Andriga (2009), and essays in Bassani and Ghedini (2011).

Augustan reorganization of Rome in 7 BCE, the division of the city changed from the Servian regions (of which there were four, with numerous *vici*), into 14 regions, further divided into 265 *vici* (**Fig. 1**). Each *vicus* would have already had its own compital shrine, which was then transformed into a shrine of the *Lares Augusti*. It has been argued that the new divisions of the city, with the implementation of the new Augustan iteration of the ancient cult of the Lares, allowed Augustus to be omnipresent throughout the city, not only in the monumental districts in the urban center.<sup>121</sup>

At the point when Augustus reorganized the city, Agrippa's revitalization of Rome's water infrastructure would have been complete. During Agrippa's aedilship of 33 BCE, he constructed 700 *lacus* and 500 *salientes*. He also instituted a number of other measures regarding the water supply of Rome, such as requiring that each *vicus* provide two men to ensure that their water supply was never polluted.<sup>122</sup> Thus, by the time of Augustus, each ward in the city already had a sense of the importance of readily available fresh water and its supply's upkeep. When Augustus later instituted the cult of the Lares Augusti, whose shrines were presumably located next to or very near the local *lacus*, the new organization of the city would have been intimately connected with water.<sup>123</sup> The association of the compital shrines and neighborhood *lacus* would have created numerous way stations throughout the city of Rome, providing appropriate places for the local population to congregate, taking in not only new beneficial Augustan reforms, but also the abundance of water that the city afforded.

<sup>&</sup>lt;sup>121</sup> Lott (2004, especially 81-127) offers the most extensive discussion of the *vici* of Rome and the implications of Augustus' reforms, along with Tarpin (2002). See also Longfellow (2011, 21-22). <sup>122</sup> Lott 2004, 70-72. For this regulation for each *vicus*, see Frontinus (*De aq.* 2.97). See also the discussion

of lacus in Chapter 1 (pages 37-42).

<sup>&</sup>lt;sup>123</sup> Plin. *HN* 36.24.121; Lott 2004, 71; Longfellow 2011, 21-22.

Under Agrippa, the fountains that were found in the *vici* of Rome were on a small scale. But during the reign of Augustus, the city witnessed the installation of some largescale fountains placed at crossroads. First, it has been argued that the *lacus Orphei*, mentioned by Martial (10.20.5-9), was located at a fork in a road that faces the *clivus* Suburbanus, which led to the Esquiline Gate, perhaps built in the Augustan period (App. **No. 1.113**). The Severan Marble Plan indicates that there would have been three basins abutting a wall with statue niches—and the fountain stood alone at the crossroads, marking its importance at the edge of two *vici* (Fig. 70, Map 10). It is believed that the fountain was decorated with sculpture of Orpheus, surrounded by his captive audience of animals. Second, the first phase of the Meta Sudans was built under Augustus (Fig. 1; **App. No. 1.115**).<sup>124</sup> The form of the Meta Sudans was unique at its initial construction: a conical marker (like the turn-post in the circus) down which water appeared to be sweating (Fig. 2a). It has been argued that the cone resembles a *baetyl*, an aniconic cult symbol that is sometimes associated with Apollo Agyieus, who protected roads, all of which would have fit well into Augustus' new Apollonine program after the victory at Actium (Fig. 2b).<sup>125</sup> Furthermore, the Meta Sudans was placed not only at the spot where four of the fourteen Augustan regions actually met, but also reportedly near one of the four corners of the original pomerium plowed by Romulus and near the place of Augustus' own birth, the nearby neighborhood of Capita Bubula of the Palatine.<sup>126</sup> Thus. the fountain would have been an ideal place for congregation at the intersection of four

<sup>&</sup>lt;sup>124</sup> Longfellow 2010; 2011, 23-25; Conte 2013. See also Chapter 1 for a discussion of the term 'Meta Sudans' (pages 42-43).

<sup>&</sup>lt;sup>125</sup> Longfellow 2011, 24-25. See also Marchetti (2001).

<sup>&</sup>lt;sup>126</sup> Panella 1990, 53; Longfellow 2011, 23-24.

*vici*, while, at the same time, being an ideologically charged space in the new Augustan organization of the city.

Throughout the first two centuries of the Empire, large-scale fountains were constructed in Rome. But it is not until the Severans that two examples were placed at crossroads, the Septizodium and the Nymphaeum Alexandri. The Septizodium, dedicated in 202-203, was a large three-niched façade fountain situated at the foot of the Palatine, adjacent to the Circus Maximus (App. No. 1.120). As we have already seen in this chapter, the water-display was positioned at a critical junction, namely at the terminus of the via Appia, coming through the Porta Capena. Upon entering the city, the large facade and the movement of water of the Septizodium must have been a sight to behold. The Nymphaeum Alexandri was completed before 226 BCE by Alexander Severus (App. No. **1.116**). It was located at the intersection of via Labicana and via Tiburtina, outside of the Esquiline Gate, which was also the terminus of the Ramus Aquae Juliae, a branch of the Aqua Julia (Map 10). The fountain probably had four levels, with a basin below for water retrieval (Fig. 71a). Not much is known about the decoration and program of the nymphaeum, except for the Domitianic era trophy sculptures that adorned the structure until the Renaissance (hence the modern Italian name for the monument, the 'Trophei di Mario'), when they were moved to the piazza del Campidoglio (Fig. 71b). The location of the nymphaeum, however, is important. Not only was it placed at an important intersection near the Esquiline Gate and it is the terminus of part of an aqueduct, but the water-display was also situated in a largely residential quarter of the city, away from the center. In a sense, then, Alexander Severus, on the model of the so-called 'good'

emperors before, especially Augustus, dedicated a large-scale water-display at an important intersection in the city.<sup>127</sup>

Outside of the capital, a variety of fountains at crossroads can be found throughout the Empire. Lugdunum (modern Lyon, France) received a wide range of imperial benefaction under the Empire, as the capital of Gallia Lugdunensis and the site of the Sanctuary of the Three Gauls, and also the birthplace of the emperors Claudius and Caracalla.<sup>128</sup> During the reign of Claudius, the city probably received a boost in urban infrastructure, including an aqueduct and a variety of fountains.<sup>129</sup> At Lugdunum, there is a curious fountain, dated to 41-44 BCE, found at a crossroads in the city (App. No. 1.72). The only remains of the fountain are the back pillar, from which the water would have poured into the basin below (perhaps a *lacus*-like structure) (**Fig. 72a**). The pillar contains an inscription at the top that names two local men (a Marcus Caprillius Iucundus/Luc[---u]s and a Tiberius Dubnatius Aeduus(?)) who dedicated the fountain to Jupiter Optimus Maximus on behalf of the emperor Claudius. Directly below the inscription is a relief of a head of a Cyclops, through whose open mouth water would have poured into the basin. This fountain is particularly interesting both because of the inscription that ties the fountain to the emperor directly, perhaps associated with his visit to the city in the early 40s, and because a Cyclops is not common on public fountains, with only two other known examples, a sculptural group of Polyphemus and Odysseus in the Fountain of Domitian of Ephesus (App. No. 1.49) and three heads of Cyclopes from

<sup>127</sup> For more on Alexander Severus' motivations regarding the construction of the nymphaeum, see especially Longfellow (2011, 203-204).

<sup>&</sup>lt;sup>128</sup> King 1990, 72-73; Bedon 1999; Darblade-Audoin 2006; Goodman 2007, 81-83, 119-130. On Claudius' role in Lyon, see the edited volume of Burnand et al. (1998).

<sup>&</sup>lt;sup>129</sup> Burdy 2002; Delaval and Savay-Guerraz 2004. Among the Claudian fountains, there are remains of an architrave block with indentions for bronze lettering that would have read *CLAVD AVG* (Delaval and Savay-Guerraz 2004, 74-75). It is unclear what the fountain would have looked like. See (Bérard, Cogitore, Tarpin 1998, 373, n. 4) for more inscriptions of fountains found at Lyon.

the first-century CE nymphaeum of Genainville, France (**Fig. 72b; App. No. 1.55**).<sup>130</sup> The placement of this fountain at a crossroads would have allowed a number of residents of the 'hometown' of Claudius to see the unique use of a Cyclops head, along with the mention of the emperor, which will have been a point of pride for them.

Laodicea-on-the-Lycus in Phrygia (Turkey) has a rectilinear fountain that is located at the intersection of two streets, with water access on both streets (**Fig. 73; App. No. 1.67**). Built during the early third century CE (hence its modern name the 'Caracalla Nymphaeum'), the water-display contains a central square draw basin, with two semicircular basins in adjacent exedras (**Fig. 74a**). The back wall of the main basin would have been two-storied and with a columnar display. What is striking about the example, however, is that one could approach the nymphaeum on the Stadium Street (which runs north-south) or on the Syria Street (running east-west) (**Fig. 74b**).<sup>131</sup> Unlike other examples in the eastern half of the Mediterranean that were sometimes placed at angles with the streets, this later example was orthogonally inserted into the street-grid to allow pedestrians to use it on either of these major thoroughfares of the city. The novel design and its placement in the urban landscape aid in the nymphaeum's approachability and ease of use, and makes this is a striking example at an urban crossroad.

Finally, water-displays can be placed at intersections of prominent colonnaded streets. The phenomenon of the street shaded with columns is primarily seen in the eastern half of the Empire, although there are examples in the West, especially in North

<sup>&</sup>lt;sup>130</sup> Three are a number of examples related to the emperor in private contexts, such as at the grotto of Sperlonga (Tiberius), the nymphaeum at Baia (Claudius), the Domus Aurea (Nero), and at Hadrian's Villa. See Lavagne (2012, 136-137). It is suggested by Lavagne that there is a jest in these examples, as the water is meant to somehow evoke for the passer-by the wine that Polyphemus ingested at the hands of Odysseus that led to his downfall. Further, the private examples, which mimic grottoes, insinuate the onlooker is the in the cave of Polyphemus (Lavagne 1970; 1988, 579-594; 2012, 127-129).

<sup>&</sup>lt;sup>131</sup> For a succinct appraisal of the site, especially regarding the work at there over the last decade, see Şimşek (2014).

Africa.<sup>132</sup> The earliest known example is Gerasa (Jordan) from the last half of the first century CE, and by the second century, the inclusion of the colonnaded street was almost required throughout Asia Minor and other regions in the East.<sup>133</sup> The columnar street added a sense of monumentality to large thoroughfares in urban centers throughout the Mediterranean. In the East, in particular, large-scale fountains are nestled into these colonnaded streets. When water-displays are placed at crossroads pedestrians can approach them from different sides so that an individual can obtain various views of the structure.<sup>134</sup> The ability to interact with a fountain from different angles adds an element of vitality to a built, stationary structure, as each person's experience with the architecture is different depending on how they approached it.

There is a handful of large-scale fountains at the crossroads of colonnaded streets. Although unavailable in the archaeological record, we know from Libanius (*Or.* 11.202) and John Malalas (*Chron.* 10.19.36-43) that Antioch-on-the-Orontes had a nymphaeum at the intersection of its major colonnaded thoroughfares (**Fig. 75; App. No. 1.2**). As the fountains were probably constructed sometime in the first or second century, the abundance of the waters of Antioch would have been well shown in one of the most important crossroads of the city. Additionally, a number of other examples of water-displays were situated along the most prominent intersections of various cities, including at Bosra, Leptis Magna, and Sythopolis.<sup>135</sup>

 <sup>&</sup>lt;sup>132</sup> Much has been written on the colonnade street. See especially MacDonald (1986, 33-51), Segal (1988, 105-106; 1997, 5-54), Bejor (1999), Parrish (2001, 11), Thomas (2007b, 113-120), Tabaczek (2008), and Pont (2010, 177-187). Bejor (1999, 82-91) provides a discussion of colonnaded streets in the West.
<sup>133</sup> Bejor 1999, 9.

<sup>&</sup>lt;sup>134</sup> Richard 2012, 201.

<sup>&</sup>lt;sup>135</sup> Not under consideration in the ensuing discussion are examples from Apamea-on-the-Orontes (Syria) of the second half of the second century CE and from Gadara, probably from the mid-second century CE. For more on the Apamea example, see Schmidt-Colinet and Hess (2005) and Richard (2012, cat. no. 5). On

The large-scale fountain of Bosra (Syria) was placed at the central crossroads of the city (**App. No. 1.23**). Originally constructed in the first or second century, in the Severan period, the water-display was fully integrated into a newly constructed colonnade on the street there (**Fig. 76a**). The back of the fountain was a semi-circular apse, with wings that would have created a basin (**Fig. 76b**). Four columns on the façade fully integrated the structure into the later colonnade, and the extremely tall proportions of the fountain added to its monumentality, rising above the smaller, adjacent street-side columns. Further, the water-display was placed on an angle with the intersection of the two streets, creating a larger plaza in front of the nymphaeum itself. In fact, the fountain interacts physically with the so-called *kalybe*, or monumental façade, directly across the street. The two large-scale monuments would have created an impressive urban node (**Fig. 76b**).<sup>136</sup> The placement and monumentality of the fountain are singular, particularly at the most important crossroad of the city, all of which would have drawn pedestrians to this space.

In another exceptional example at Leptis Magna (Libya), we see again how a water-display can employ a different design and situation to attract residents and visitors and beautify a space. Dedicated by 216 CE by Caracalla, the Great Nymphaeum of Leptis was a large two-storied aedicular façade fountain (**Fig. 77a; App. No. 1.69**). The plan of the structure includes a semi-circular settling basin at the back, with a trapezoidal draw basin in front, opening on to the street (**Fig. 77b**). The pre-existing thoroughfares

Gadara, see Segal (1997, 154-155) and Bejor (1999, 57-59). The latter example is not well published, so it is difficult to access the overall situation and history of the monument.

<sup>&</sup>lt;sup>136</sup> The *kalybe* is a unique structure to the Hauran and Trachon regions of Roman Syria; they were similar to large-scale fountains of the region, in that they were aedicular façades. What is strange about the structures is that they had no apparent function, except to aggrandize the surrounding urban space. For more on the *kalybe*, see Burrell (2006, 459).

intersect here at a 40° angle, which makes the placement of any structure in this space difficult. The architects, however, responded by employing the draw basin, which plays off the streets coming together here.<sup>137</sup> There are also similarities between this nymphaeum and the Septizodium of Rome, another Severan dedication, in terms of placement in the urban landscape. Both fountains help to mark transitional nodes in the city, allowing pedestrians to proceed from one district to another.<sup>138</sup>

Lastly, at Scythopolis (modern Beth-Shean, Israel), a water-display was placed at a crossroad of five different thoroughfares (App. No. 1.127). Originally constructed in the second half of the second century CE perhaps as some sort of honorific monument, the structure was made into a fountain at some point in the fourth century (Fig. 78a).<sup>139</sup> The overall plan is omega-shaped, with a main basin in the back exedra and fronted by a rectangular draw basin (Fig. 78b). The façade, like many large-scale fountains in the East, was columnar and probably included a sculptural program. But the placement of the water-display in the urban landscape is of the greatest importance. Situated on a short street, the nymphaeum is surrounded by honorific monuments and temples, all of which are nested into the colonnade street. The short street of the fountain is fed, also, by two other larger thorough fares on both the east and west sides, putting the nymphaeum at the crossroads of five streets in total. To say that the placement here would have allowed for high traffic is an understatement, as the adjacent Palladius Street (running southwest away from the direction of the fountain) terminated at the theater of the city. The nymphaeum here would have worked well with the surrounding structures, adding to the

<sup>&</sup>lt;sup>137</sup> Longfellow 2011, 183.

<sup>&</sup>lt;sup>138</sup> Longfellow 2011, 183.

<sup>&</sup>lt;sup>139</sup> The original function of the fountain is unclear. The urban node here, however, had a series of honorific monuments, which might mean that the water-display was also an honorific monument itself originally. For more, see Foerster and Tsafir (2002, 79-80) and Richard (2012, 203).

monumentality of this space, highlighting the central location of these thoroughfares coming together.

The examples of fountains at crossroads presented here have shown how the placement of a show of water can alter a landscape (**Table 8**). Often responding to a preexisting network of streets, water-displays elevated the importance of a space, because the fountain acted as a way station, prompting pedestrians to stop and congregate, to socialize, or to gather the refreshing water. Intersections made a great impact with the inclusion of monumental fountain forms, complete with innovative plans and designs, decoration, and expressions of ideology. A water-display also has the ability to promote the community spirit of a district, supplying a sense of pride for not only a monumental structure, but also more simple ones, such as the *lacus* in post-reform Augustan Rome. At intersections, water-displays have the ability to bond people together, whether they live in the neighborhood itself, are inhabitants of the city who are still proud of the water flowing through their town, or visitors, who can appreciate urban nodes created by water at crossroads.

## III. Creating New Urban Nodes in Asia Minor

In Asia Minor, there are numerous sites whose plans were transformed by the later incorporation of water-displays. While the province had previously undergone a process of urbanization, it was under the Romans that the built environment was dramatically altered, through the incorporation of new building materials, techniques, and ideas.<sup>140</sup> New features were added to these urban centers to make them more monumental

<sup>&</sup>lt;sup>140</sup> Parrish 2001; Raja 2012. See also Lancaster (2010) on how innovative building techniques from Parthia were incorporated into Hadrianic building projects in Greece.

and, thus, more Roman. Monumentalization could occur in a variety of ways, with the addition of colonnaded streets or by converting existing fountains into grander forms—or by simply adding new and innovative fountains.<sup>141</sup> The Romans, then, were able to use a preexisting environment to their advantage, allowing for a level of monumentality that was different than in other parts of the Empire, sometimes eliciting the modern adjective "baroque." In some cities, such as was the case with the preexisting urban fabric of Ephesus, water-displays were a way that benefactors could physically impact the city, without drastically altering the layout.<sup>142</sup> Further, the fountains installed in Asia Minor have been argued to be the products of rivalry between the cities of the area, with each surpassing the other for the largest water-display, which, by the Severan period, meant that the fountains were monumental indeed.<sup>143</sup>

Water-displays that were installed in Asia Minor often interacted with other elements of nearby urban armature, thus creating new urban nodes. As we saw earlier in this chapter, urban nodes are interactive urban spaces, in which pedestrians pass through them, are drawn to them, and experience the architecture on a personal level. Further, urban nodes do not have to be part of cohesive architectural ensembles. Such an assertion accords well with the implementation of structures in Asia Minor under the Romans, because they were often a hodge-podge assortment of buildings, with no specific and concerted building campaign. The addition of new water-displays in the region, in conjunction with other structures and monuments (e.g., agoras, city gates, thoroughfares),

 <sup>&</sup>lt;sup>141</sup> Thomas (2007b) explores the notion of monumentality in Roman Empire in the Antonine period.
<sup>142</sup> DeLaine 2008, 99.

<sup>&</sup>lt;sup>143</sup> For more on this notion of rivalry in Asia Minor, see Dorl-Klingenschmid (2001, *passim*) and Longfellow (2011, *passim*).

often created nodes that take on the appearance of a plaza.<sup>144</sup> These open spaces could grow from alterations to the urban armature, such as widening streets or constructing new monuments, such as fountains. Through a survey of six sites in Asia Minor, the ability of water-displays to create new urban nodes in an already pre-existing built environment is demonstrated.

Fountains are placed in locations on the street that developed into their own open plaza space, akin to an agora or forum.<sup>145</sup> The Flavian two-storied façade nymphaeum of Miletus was placed in a large open area that was the intersection of a number of monuments and structures: the North Agora, the Ionic Stoa, the *bouleuterion*, the South Agora, and the Sacred Way (Fig. 79a; App. No. 1.74).<sup>146</sup> The nymphaeum was also the terminus of the aqueduct that supplied the city and served as its *castellum aquae*, making this an important center for the distribution of water in the city.<sup>147</sup> The fountain then acted as an impressive focal point in Miletus, not only for showing (and storing) water, but also, by its sheer proximity to the other civic monuments, for creating an even larger agora within the urbanscape, including all of the adjacent structures (Fig. 79b). At Pisidian Antioch, a large fountain was added to the north end of the Cardo Maximus of the city to create a widened open plaza in the first half of the first century CE (Fig. 67; **App.** No. 1.96). This water-display would have been of a similar composition to that of Miletus, as a facade-style pi-shaped structure, which would have commanded the end of the cardo (Fig. 80). The new space that was created, while not an agora proper, could

<sup>&</sup>lt;sup>144</sup> For a discussion of plazas, see MacDonald (1986, 51-66).

<sup>&</sup>lt;sup>145</sup> See also: Richard 2012, 195-197.

<sup>&</sup>lt;sup>146</sup> Dorl-Klingenschmid 2001, cat. no. 64; Tuttahs 2007, 168-173; Richard 2012, cat. no. 50.

<sup>&</sup>lt;sup>147</sup> Richard 2012, 107-108.

have acted in a similar manner, allowing pedestrians to congregate in the space to socialize and to conduct business.

Similarly, the facade fountain of Septimius Severus located on Syria Street in Laodicea-on-the-Lycus, not far from the crossroads with the Caracalla Nymphaeum, was prominently situated on a major thoroughfare, directly across from the city's Central Agora (Fig. 73; App. No. 1.68).<sup>148</sup> The pi-shaped façade would have been well appointed with polychrome marbles, along with a variety of sculpture (including free-standing lions) (Fig. 81). The large rectangular basin would have emptied into three smaller circular draw basins for pedestrians. The large scale of the fountain (nearly 42 m long, 14 m wide, and 10 m tall) would have certainly been quite impressive, adding to the monumentality of the street. Further, because the water-display was situated across from the main agora on one of the most important streets of the town, which had another largescale fountain at the nearly adjacent crossroads, these structures would have created quite an urban node in Laodicea. Pedestrians would have been prompted to spend time at the fountain, enjoying the space and experience, before or after going through the central civic space of the city. Further, the roughly contemporaneous Caracalla Nymphaeum would have cemented the impact that water had on this district of town, illustrating the abundance of water on these major thoroughfares.

At Hierapolis in Phrygia, the Nymphaeum of the Tritons is located on Frontinus Street, near one of the city gates, and flanking the main agora of the city (**Figs. 82, 83a; App. No. 1.62**). There are two dedicatory inscriptions: one, of a Gaius Aufidius Marcellus, proconsul of Asia during the reign of Elagabalus, dates the monument to 220/1 or 221/2 CE; and a second, from a few years later, dedicates the fountain to Agatha

<sup>&</sup>lt;sup>148</sup> Longfellow 2011, 188; Richard 2012, cat. no. 48; Şimşek 2013, 147-159; Şimşek 2014.

Tyche, Apollo Archigetes, and Alexander Severus.<sup>149</sup> The pi-shaped fountain is believed to have been at least two stories tall, with perhaps a third story added in a subsequent renovation (**Fig. 83b**). It is the size of the nymphaeum that makes it especially impressive, measuring nearly 65 m long, making it the longest known water-display in Asia Minor. It is thought that the patron was in direct competition with those installing the Severan nymphaeum of Laodicea, given their monumental sizes and similar architectural structure.<sup>150</sup> Furthermore, both examples demonstrate how a water-display can be placed in conjunction with other structures, namely a large thoroughfare and a central agora, to create impressive urban nodes. The impressively large size and show of water of the Nymphaeum of the Tritons would have been a beacon for those coming into the city from the nearby city gate or from the central part of town, traveling down Frontinus Street to the agora (Fig. 83c). The interactivity of the space must have been an impressive experience, taking in the waters and the monumental architectural forms of the fountain itself and those of the surrounding area. While these structures were also built at different time periods, they would have acted together to create their own type of ensemble that allowed for onlookers to congregate in a pleasant and striking atmosphere.

The fountains outside the Plancia Magna Gate in Perge, explored earlier in this chapter, present a new urban node that was wholly created in the Severan period (**Fig. 58**). It appears that both water-displays there, the Hydreion of Aurelia Paulina (**App. No. 1.90**) and Nymphaeum F4 (**App. No. 1.91**), were installed between 198 and 204 under the Severans. Both mimicked each other, with similar designs and ornamental details, as well as architectural features that responded to the other (e.g., the north wing of the

<sup>&</sup>lt;sup>149</sup> Campagna 2006, 390; Longfellow 2011, 189-190.

<sup>&</sup>lt;sup>150</sup> Longfellow 2011, 189-190.
Hydreion and the south wing of the Nymphaeum). Both structures lay outside of the Hellenistic walls of the city, where Plancia Magna installed her arch and gate in the Hadrianic period.<sup>151</sup> The Hydreion abutted the east entrance wall of the South Baths. But how did the fountains fit into the urban context of the city? How did they create a new urban node?

The city of Perge was first settled sometime in the seventh century on its Acropolis, but over time the city continued to grow to the south and down to its ancient limits. The first extension occurred by ca. 350 BCE, up to the point of about the North Nymphaeum (**App. No. 1.89**). Then, the Hellenistic period saw the city grow as far as south as the later Hadrianic Plancia Magna Gate, which reused the Hellenistic towers in its own construction. Thus, the city was walled up to this southern stretch. The Roman population, in their building program, had to continue farther south of the walls, where they constructed the South Baths, theater, and stadium.<sup>152</sup> Monumental building inside the city walls was limited to the *euripus*, the Plancia Magna Gate, the North Nymphaeum, the widening of some streets, along with the construction of a large agora directly to the east of the Plancia Magna Gate.<sup>153</sup> Under the Severans, the two fountains and the agora were installed, and the South Baths were expanded.<sup>154</sup>

Longfellow has argued convincingly that the fountains at Perge are wholly of local conception and design.<sup>155</sup> The asymmetrical design of the fountains, along with their celebration of Artemis Pergaia by a local female citizen, indicates that these

<sup>&</sup>lt;sup>151</sup> For more on the Hellenistic walls, see Abbasoğlu (2001, 177-178) and Grainger (2009, 93-97). For the Plancia Magna Gate, see Boatwright (1993).

<sup>&</sup>lt;sup>152</sup> Abbasoğlu 2001, 180-183. For more on the theater, see Sear (2006, 372-373).

<sup>&</sup>lt;sup>153</sup> Abbasoğlu 2001, 179-180. For more on the Agora, see Mansel (1975a, 76-83).

<sup>&</sup>lt;sup>154</sup> Abbasoğlu 2001, 182.

<sup>&</sup>lt;sup>155</sup> Longfellow 2011, 188.

structures were indeed unique, unlike Side, which seems to have adopted a large threeexedra fountain, in a style copied from the Septizodium of Rome. But there may be something more here. When considering the urban development of Perge, it is clear that this area south of the Plancia Magna Gate was highly developed in the Severan period. Dorl-Klingenschmid has even described this space as a Severan Plaza that was framed on the west by the fountains and loosely on the east by the walls of the agora.<sup>156</sup> While the space was initiated and paid for by a local woman, there still might be connections to the city of Rome.

Susann Lusnia has recently argued for a new interpretation of the Forum Romanum in Rome under the Severans.<sup>157</sup> Because the space of the city center was already constricted by the late second and early third century CE, it would have been difficult for the emperor Septimius Severus to construct a new forum *de novo* in order to celebrate himself and his successors. What he did instead was strategically set up a few new monuments (e.g., new marble paving across the Forum, the large Arch of Septimius Severus, and an equestrian statue in the middle of the forum) and to restore older monuments, such as the Temple of Vespasian (**Fig. 84**). Thus, Severus was able to create his own forum in the most ancient of the fora of Rome, as it is "a self-contained space consisting of an open plaza, flanking porticoes [the Basilicas Julia and Aemilia], a temple [the Temple of Vespasian], and a decorative scheme [...] reflecting the emperor's policies or program."<sup>158</sup> Sight lines were created throughout the Forum, with the Severan arch linking up with Augustus' arch (both of which celebrate Parthian victories) and the Temple of Vespasian (with its new inscription of Severus and his sons) looking towards

<sup>&</sup>lt;sup>156</sup> Dorl-Klingenschmid 2001, 145-147, 230.

<sup>&</sup>lt;sup>157</sup> Lusnia 2014, 60-90, especially 87-90.

<sup>&</sup>lt;sup>158</sup> Lusnia 2014, 88.

the Porticus of Gaius and Lucius, the sons of Augustus. Severus, then, because of the spatial constraints of the city was able to fabricate a new space, with only a few modifications.

A similar situation occurs at Perge. Due to the spatial constraints of the walled city, there was limited new activity at the south of the city outside of the walls. Restorations to the South Bath, including the addition of new water features to their façade, created an inviting entrance to the baths themselves. Sight lines were created with the recently constructed agora across the Plaza. But more importantly, the fountains and the Severan Plaza were linked to Plancia Magna Gate and then connected to the north with the *euripus* and the North Nymphaeum, and, thus, to the ancient city center of Perge, its Acropolis. The whole city was predicated on sight lines, which moved pedestrians either up or down the city, moving from one urban node to the next. Furthermore, the building activity related to the fountains was financed, at least in part, by the local woman Aurelia Paulina, and therefore associated them with the Plancia Magna Gate, a sumptuously outfitted structure that was financed by another local woman. Thus, with just a small amount of *de novo* building on the part of the locals during the Severan period, just as the emperor did in Rome, we see new forms linking with the more ancient urban forms, creating a cohesive urban ensemble.

Finally, the site of Side in the Severan period and beyond offers a glimpse of how fountains can be linked through urban armature to create a larger water-display throughout a city (**Fig. 85a**). We have already explored the large fountain at the city gate of Side, probably built to mimic the Septizodium of Rome in terms of size and structure (App. No. 1.131).<sup>159</sup> In the colonnaded street that runs south from the city gate near the monumental fountain, one encountered a great urban node that included the agora, theater, baths, and another city gate that has at least three more fountains, the so-called Drei-Becken-Brunnen (dated to the second half of the third century) (Fig. 85b; App. No. 1.130), 'Monument of Vespasian' (Fig. 64; App. No. 1.132), and a round fountain (late fourth century) (App. No. 1.133). The 'Drei-Becken-Brunnen,' as its name suggests, was complete with three basins situated between four aediculae. Placed at the terminus of the major thorough fare that ended with the entrances to the agora and theater, this fountain would have acted as a pendant with the large facade water-display on the other side of the main city gate. The placement of the two fountains on each end of the long colonnaded street would not only have added a sense of monumentality to the space, but also would have architecturally tied the spaces together to create an urban node. With the addition of the other two fountains in the latter part of the fourth century, this connection would have been made even more dramatic, with such a great show of water from both ends of the street.

## **IV. Conclusions**

Water-displays had the power to shape and reshape how space was used. The insertion of fountains into the urbanscape certainly aided in the construction of new nodes in the built environment. Implementations of new water features happened anywhere in a city, thus (drastically) altering a preexisting landscape. We saw examples of this phenomenon occuring in Asia Minor, where, during the High Empire, the already surviving urban structures could be changed to create new spaces in the city.

<sup>&</sup>lt;sup>159</sup> Longfellow 2011, 188. See also above, pages 234-235.

In the various contexts explored in this chapter, we have seen how water-displays were placed in or created liminal spaces and acted as way stations. The insertion of fountains in the liminal areas of the urbanscape, such as gates and arches, prompted pedestrians to physically interact with the structures and drew attention to them, while providing a physical indication of a change in space. In a sense, then, water-displays could act as signposts for the passer-by, providing them with the mental signal of a new area of the city. Further, as way stations, fountains had the ability to bring people together. Particular in the context of crossroads, water-displays could entice pedestrians to congregate around them, collecting water, enjoying the aesthetic experience of viewing and interacting with the structure, and intermingling with those from the neighborhood there. Fountains could then instill pride among those living in the same quarter of a city, which, in the end, water was able to provide.

## **Chapter Five: Religion, Cult, and Healing**

In Book Seven of the *Aeneid*, Latinus receives a prophecy concerning the appending arrival of the Trojans and how that would affect his daughter, Lavinia.<sup>1</sup> Latinus, then, goes to the shrine of his own father, Faunus. At the shrine, which is also surrounded by a grove, the landscape resounds with the sound of a sacred spring, the *fons sacer*. Servius, writing a commentary in the fourth century CE on the *Aeneid*, felt the need to gloss this particular phrase, stating that *nullus enim fons non sacer*, that is "for there is no spring that is not sacred" (*Ad Aen*. 7.84).

Such a relatively short phrase from Servius initiates a discussion of the religious nature of Roman water, given its source of the spring: was water indeed always sacred?<sup>2</sup> The question is a difficult one to answer fully, but, it is an important one to pose, especially when considering water-display.<sup>3</sup> Was water for the Romans only 'sacred' when it was connected to natural springs that supplied water for *lustrationes*, or for ritual cleansings when connected to specific deities such as Egeria and the Camenae, as Georg

<sup>&</sup>lt;sup>1</sup> Verg. Aen 7.81-84. At rex sollicitus monstris oracula Fauni,/ fatidici genitoris, adit lucosque sub alta / consulit Albunea, nemorum quae maxima sacro/ fonte sonat saevamque exhalat opaca mephitim. "But the king, troubled by the portent, visits the oracle of Faunus, his prophetic sire, and consults the groves beneath high Albunea, which, mightiest of forests, echoes with a hallowed fountain, and breathes forth from her darkness a deadly vapor." (Trans. H.R. Fairclough). See Ramires (2003) for the most recent commentary on Servius' Book Seven.

<sup>&</sup>lt;sup>2</sup> This question not only appears in ancient sources, such as Servius, but also modern scholarship concerned with Roman religion. For more see: Wissowa 1902, 179-183; Holland 1961; Seppilli 1977. See Dumézil (1970, 387-393), who asserts that the Romans did not give great importance to the divine nature of water. The title of Giontella's 2012 monograph on the water cults of pre-Roman and Roman areas of the Italian peninsula (Regiones VI and VII) is incidentally entitled *Nullus enim fons non sacer*, although she does not explore the sacrality of water in great detail.

<sup>&</sup>lt;sup>3</sup> The ensuing discussion shows that the conception of 'sacred' water is prevalent throughout the Greco-Roman world (let alone throughout the rest of the world, that we cannot study here). For more on older traditions concerning Anatolia, see Smith (1997, 18-19), who makes a comparison between rock-cut reliefs from after ca. 200 BCE located near water sources in Lycia, to similar practices in Bronza Age Anatolia.

Wissowa suggested?<sup>4</sup> Was water also considered 'sacred' at the terminus of an aqueduct in the city center?<sup>5</sup> When water was tapped at its spring source, presumably where the sacred nymphs lived, did it continue, in a sense, to be sacred until its display in an urban context? Or are the fluid lines of any religious associations with water in the Roman world just too murky?

While a definitive and precise conclusion is perhaps unattainable at present, it is fruitful to explore different cults associated with Roman water-displays and their physical spaces, to arrive at a better understanding of what the Romans themselves thought of the so-called 'sacred' nature of water and its implications for the meanings behind fountain construction and placement. Water-displays near the entrances of sanctuaries, those associated with the sources themselves, the imperial cult, and healing sanctuaries, especially those of Apollo, are examined in this chapter.<sup>6</sup> It should be noted, however, that we cannot classify examples into one strict category, due to the fluid nature of the evidence, so the fountains examined might fit into more than one category.

Before turning to the archaeological data, two passages of Frontinus and Pliny aid in initiating the discussion of the nature of water. In an excerpt of *De aquaeductu*, written near the end of the first century CE, Frontinus describes the development of the aqueducts in Rome, which stemmed from the natural springs of the Camenae, Apollo, and Juturna:

> Ab urbe condita per annos quadringentos quadraginta unum contenti fuerunt Romani usu aquarum, quas aut ex Tiberi aut ex puteis aut ex

<sup>&</sup>lt;sup>4</sup> Wissowa 1902, 219-225; Edlund-Berry 2006b, 164.

<sup>&</sup>lt;sup>5</sup> See also Zarmakoupi 2014, 152-156.

<sup>&</sup>lt;sup>6</sup> Excluded from this survey of water-displays are those associated with Sanctuaries of Isis. For more on those examples, see Wild (1981), Genaille (1983), Beard et al. (1998, 264-266), Koemoth (1999), Bricault (2006), Kleibl (2007), Sirard (2007, 434-447), Gasparini (2013), and Feldman (2014). Also worth noting, regarding water related to Egypt, is the use of water in funerary practices in Alexandria during the Hellenistic and Roman periods. For more on this subject, see Tricoche (2009).

fontibus hauriebant. Fontium memoria cum sanctitate adhuc exstat et colitur; salubritatem aegris corporibus afferre creduntur, sicut Camenarum et Apollinis et Iuturnae. Nunc autem in urbem influunt aqua Appia, Anio Vetus, Marcia, Tepula, Iulia, Virgo, Alsietina quae eadem vocatur Augusta, Claudia, Anio Novus. (Front. Aq. 1.4)

For 441 years from the founding of the City, the Romans were satisfied with the use of whatever water they drew from the Tiber, from wells, or from springs. To this day memory of springs stands out and revered for their sanctity, and their water is thought to bring health to sick bodies. One thinks of the ancient springs of the Camenae, of Apollo, and of Juturna. There are now, however, nine aqueducts from which water converges into Rome. These are named Appia, Anio Vetus, Marcia, Tepula, Julia, Virgo, Alsietina (which is also called Augusta), Claudia, and Anio Novus. (Trans. R.H. Rodgers 2003, adapted)<sup>7</sup>

Frontinus mentions that the natural springs were revered for their 'sanctity' (sanctitate),

in addition to their healing properties. Frontinus does not state, however, if the waters

from the famous aqueducts of his time were in fact sacred, just as their natural

predecessors were. Furthermore, Frontinus implores us to be reminded of a certain set of

springs, those of the Camenae, Apollo, and Juturna, which are important in our ensuing

discussion.

Pliny the Younger, in a letter to Voconius Romanus, describes the spring and

temenos of the Clitumnus River:

Vidistine aliquando Clitumnum fontem? Si nondum (et puto nondum: alioqui narrasses mihi), vide; quem ego (paenitet tarditatis) proxime vidi. Modicus collis assurgit, antiqua cupressu nemorosus et opacus. Hunc subter exit fons et exprimitur pluribus venis sed imparibus, eluctatusque quem facit gurgitem lato gremio patescit, purus et vitreus, ut numerare iactas stipes et relucentes calculos possis. [...] Ripae fraxino multa, multa populo vestiuntur, quas perspicuus amnis velut mersas viridi imagine adnumerat. Rigor aquae certaverit nivibus, nec color cedit. Adiacet templum priscum et religiosum. Stat Clitumnus ipse amictus ornatusque praetexta; praesens numen atque etiam fatidicum indicant sortes. Sparsa

<sup>&</sup>lt;sup>7</sup> On this passage, see the brief mention by Ruiz de Arbulo (2011). For more on Frontinus in general, see: Evans 1997; Bruun 2003; Peachin 2004. On the literary nature of *De aquaeductu*, see: DeLaine 1996; Saastamoinen 2003. The most recent editions of Frontinus are Del Chicca (2004, in Italian) and Rodgers (2004).

sunt circa sacella complura, totidemque di. Sua cuique veneratio suum nomen, quibusdam vero etiam fontes. Nam praeter illum quasi parentem ceterorum sunt minores capite discreti; sed flumini miscentur, quod ponte transmittitur. Is terminus sacri profanique: in superiore parte navigare tantum, infra etiam natare concessum. [...] In summa nihil erit, ex quo non capias voluptatem. Nam studebis quoque: leges multa multorum omnibus columnis omnibus parietibus inscripta, quibus fons ille deusque celebratur. Plura laudabis, non nulla ridebis; quamquam tu vero, quae tua humanitas, nulla ridebis. Vale. (Plin. Ep. 8.8)

Have you ever seen the spring of the Clitumnus? If not (and I fancy not, or you would have told me) do visit it as I did the other day. I am only sorry I put off seeing it so long. There is a fair-sized hill which is densely wooded with ancient cypresses; at the foot of this, the spring rises and gushes out through several channels of different size, and when its eddies have subsided it broadens out into a pool as clear as glass. You can count the coins, which have been thrown in and the pebbles shining at the bottom. [...] The banks are thickly clothed with ash trees and poplars, whose green reflections can be counted in the clear stream as if they were planted there. The water is as cold and as sparkling as snow. Close by is a holy temple of great antiquity in which is a standing image of the god Clitumnus himself clad in a magistrate's bordered robe; the written oracles lying there prove the presence and prophetic powers of his divinity. All round are a number of small shrines, each containing its god and having its own name and cult, and some of them also their own springs, for as well as the parent stream, there are smaller ones which have separate sources but afterwards join the river. The bridge marks the boundary between sacred and profane: above the bridge boats only are allowed, while below bathing is also permitted. [...] Everything in fact will delight you, and you can also find something to read: you can study the numerous inscriptions in honor of the spring and the god, which many hands have written on every pillar and wall. Most of them you will admire, but some will make you laughthough I know you are really too charitable to laugh at any of them. (Trans. B. Radice, adapted)<sup>8</sup>

The source of the river is densely wooded, and the spring rises at the bottom of the hill.

Pliny mentions that the water is purus et vitreus, which in addition to being clear as glass

(as one can apparently see the votive coins at the bottom of the spring), can also have the

<sup>&</sup>lt;sup>8</sup> For more on the passage, see Maurer 1953; Sherwin-White 1966, 456-458; Scheid 1996; Facchinetti 2008, 44; Lefèvre 2009, 260-272; Bassani 2012, 405; Campbell 2012, 123. The literary trope of the Clitumnus River appears in a wide range of Latin literature: Verg. *G*. 2.146; Prop. 2.19.25, 3.22.23; Stat. *Silv*. 1.4.128ff.; Silius 4.545ff. See Maurer (1953) for a full discussion of these instances. There is certainly a post-Antique fascination with the river and its sanctuary, nicely presented in a poem by Ditsch (1973), "Ode on the Source of the Clitumnus." Emerick (1998) presents the remains of the temple, especially its life after Antiquity.

connotation of being unpolluted and truly pure.<sup>9</sup> The water continues to collect, rushing down to make the large Clitumnus River, where there is enough space for boats to navigate the waters. The colorless, snow-like waters of the river presumably hit the banks. One can easily imagine the sensorial experience of this natural landscape from this description.

The personified image of Clitumnus receives his own small temple, the remains of which can still be seen today, near modern Spoleto (Italy). But the other smaller sources of the river are also honored with their own *sacella* in this landscape. Then, there is a claim that the bridge that goes over the Clitumnus is the boundary between the sacred and profane portions of the river, for shipping and swimming. The sentence and its syntax are ambiguous, but Pliny perhaps hints at a distinction between the sacred and the profane. But one wonders what really marks this distinction? The letter concludes with the pleasure that can be derived from visiting the sanctuary, which is predicated on the water and its source. One can only imagine the illiterate dedications that Pliny saw and jests at here. Being at the source of a spring, however, it might be assumed that the spring could have a healing aspect, which is what the faithful are thanking Clitumnus for here.

This cursory glance at three different claims made by Roman authors helps to stress the awe and power that water commanded among the Romans. The ancients noted not only the life-giving properties of waters, but also the ways in which water could be destructive, such as through the Tiber floods.<sup>10</sup> The reverence shown to water, whether at its source or elsewhere, is part of a religious mentality that was ancient in and of itself.

<sup>&</sup>lt;sup>9</sup> See Chapter 2 (pages 116-120) for more on the desirable quality of clear water in Roman literary texts. <sup>10</sup> On the sacrality of water, see: Holland 1961, 8-20; Seppilli 1977, 53-65; Tölle-Kastenbein 1990, 11-15; Edlund-Berry 2006b; Calisti 2008. For more on the Tiber floods, see Aldrete (2007) and Campbell (2012, 309-310).

The Romans were the inheritors of a long tradition of reverence for water, whether by the Greeks, native Italic peoples, or the indigenous populations throughout Western Europe.<sup>11</sup> Examples of different water-displays in religious contexts throughout the Empire can also demonstrate how different traditions of water reverence (i.e., indigenous and Roman) can merge to create a unique form of water reverence. The actual or symbolic purity of water seems to be an underlying factor in the reverence of the element.<sup>12</sup> In fact, Servius mentions that the priestesses of Vesta must collect water from the running stream outside the Porta Capena, and they must not set the vessels holding the water on the ground, lest they be contaminated (and thus made impure by the earth).<sup>13</sup>

Water, also, was used in most rites where ritual cleansing occurred. Because sacred space was considered separate from profane, pollution had to be kept away.<sup>14</sup> The water used to purify had to be running water, and could never touch the ground, as was the case with the Vestal Virgins.<sup>15</sup> Water had the ability to cleanse one not only when one entered a sanctuary and encountered a *delabrum*, or basin, full of water, but also to purify after being tainted by death, even in cases of homicide.<sup>16</sup> *Lustrare* is the Latin verb most closely associated with ritual purification, and the word probably refers originally to

<sup>&</sup>lt;sup>11</sup> Seppilli 1977, 53-65; Fabre 2004. For the Greeks, see: Cole (1988) and Osanna (2015) for Lucanian examples. For the Etruscans and the areas that they inhabited, see: Prayon 1990; Chellini 2002, 235; Dall'Aglio 2009, 72-94. For outside of Italy, see: Alcock 1965; Krug 1985, 172-185; Green 1986, 138-162; Alarcão 1988, 102; Bourgeois 1992a; Burgers 2001, 5-6; Bel Faïda 2002; Arnaldi 2004; Andreu 2009a; Peréx and Miró 2011; Maier 2012.

<sup>&</sup>lt;sup>12</sup> Mazzarino 1969-1970, 643-645; Edlund-Berry 2006b, 162-180; Lennon 2014, 46-47.

 <sup>&</sup>lt;sup>13</sup> Ser. *Aen.* 7.150. See also: Wissowa 1902, 180; Fantham 2012, 63. See Edlund-Berry (2006b, 169) for the full bibliography of the ritual of the Vestal Virgins collecting water from the source of the Porta Capena.
 <sup>14</sup> See Lennon (2012; 2014, 44-54) on the definition of pollution and the polluted, along with Fantham (2012).

<sup>&</sup>lt;sup>15</sup> Edlund-Berry 2006b, 238-239.

<sup>&</sup>lt;sup>16</sup> *ThesCRA* 2.3a.IV.A (s.v., Purificazione, Romana, Mezzi impiegati nelle purificazioni, liquidi e unguenti; V. Saladino). On the basins that were at the entrances of sanctuaries, see Facchinetti (2008, 47). On the pollution associated with homicide, see Lennon (2014, 92-100).

simple washing (*lavare*).<sup>17</sup> Indeed, water aided those moving from a liminal place to a new space, such as entering a sacred space or being a new initiate into a cult. Furthermore, water was used in marriage rites, and the bride ritualistically bathed before her betrothal, before she moved from one stage of life to the next.<sup>18</sup>

In our consideration of the 'sacredness' of water for the Romans, we cannot isolate the power of nature on the ancient psyche. Nature was important in the creation of the divine for many of the ancients of the Mediterranean basin, perhaps stemming from the sensorial experience one has with nature.<sup>19</sup> Nature was a driving force for some of the identities of the divinities of the Greco-Roman pantheon, and, thus, worshippers would have derived meaning from their deities, such as those associated with water. Water appears to have sacred elements for the Romans, and their treatment of it in religious contexts underscores its power and awe the element can garner. The cult of Roman nymphs, explored in this chapter, shows how personified water sources can help to focalize the cult practice of the Romans, especially regarding the celebration of water. We cannot, then, disassociate water from its 'sacred' character for the Romans. This chapter, thus, explores how water's 'sacred' nature was also used in tandem with displays in religious spaces, in order to create new ways to view and interact with water that only enhanced its characteristic sacrality. The types of contexts considered in this chapter

<sup>&</sup>lt;sup>17</sup> Lennon 2014, 36-37. Water and fire were considered to be the two traditional purification elements to the Romans, although Lennon does note that both water and fire are not necessary in lustration.

<sup>&</sup>lt;sup>18</sup> Settis 1973, 685-689; Walker 1979, 107-122; Andò 2006; Poccetti 1996, especially 227-229; Jones 2005, 19; Giontella 2012, 191; *ThesCRA* 6.1.c.101-106, especially 106 (s.v., Mariage dans le monde romain, P. Moreau, A. Dardenay).

<sup>&</sup>lt;sup>19</sup> For more on this concept, especially in the Greek world, see the works of Cole (2004), Mylonopoulos (2008a, especially 65-67), Brulé (2012), and Sporn (2015). Brulé begins to explore nature and the divine partly through the concept of the 'archaeology of the senses,' even though he does not use the work of Hamilakis. Van Andriga (2007-2008) describes Roman religious practice in the context of forests and groves, which might be relevant to this discussion.

include entrances to sanctuaries, source sanctuaries, water-displays related to the imperial cult, and healing sanctuaries, especially those connected to Apollo.

## I. Roman Nymphs

Ασίδος εὐρείης προσφερέστατον οὖδας ἀπάντων, χαίροις, χρυσόπολι Ἱεράπολι, πότνια Νυμφῶν, νάμασιν ἀγλαίησι κεκασμέ(ν) - - - -

Of all far-reaching Asia, may you take pleasure in the most excellent ground everywhere, the golden city, Hierapolis, Mistress of the Nymphs, adorned with splendid springs ... (Trans. author)<sup>20</sup>

Inscribed on the diazoma of the theater of Hierapolis (Turkey), the epigram above stresses the abundance of water at the site. Hierapolis, because of her springs, is referenced here as the 'Mistress of the Nymphs,' which contributes to her renown across the Mediterranean basin. The connection of the powerful and plentiful waters to nymphs is evocative. Roman nymphs, deities most often associated with local water sources, are today still curious and enigmatic divinities. With a look at the salient features of the Roman cult of the nymphs, including its development along with the literary and archaeological evidence, the nymphs were a unique body of deities, with the power to heal, to destroy, and to divine. The nymphs have a cult throughout the Roman Empire, celebrating famous nymphs and local water sources.

Greek nymphs have been widely studied and contextualized to-date. While the definition of a 'nymph' in the Greek world is still somewhat ambiguous, there is a better understanding of them than of their Roman counterparts. Jennifer Larson presents a taxonomy of eleven characteristics that are important in recognizing Greek nymphs:

<sup>&</sup>lt;sup>20</sup> *CIG* 3909. The fullest discussions of the epigram are Ritti (1985, 114) and Merkelbach and Stauber (1998, 265). See also: Campagna (2006, 387) and Kerschbaum (2014, 18).

terminology used by ancient sources; parentage; mortality and the death narrative; gender restrictions and vulnerability to mortal men; role in heroic genealogies and narrative flexibility; association with a water source; special functions in relation to the gods; cultic functions; physical setting and significance of the cult places; objects commemorating cult; other narrative or cultic motifs.<sup>21</sup>

This taxonomy elucidates the most salient characteristics of the nymphs. In addition, it illustrates the complex nature of the cult of the nymphs. The study of the Roman nymphs up to the present has been done in a piece-meal fashion. There has been no systematic exploration of the cult of the Roman nymphs.<sup>22</sup> The present section, then, attempts to bring together available evidence, including literary, epigraphic, and archaeological, to begin to understand this cult in Roman thought and life.

Some gods in the Roman pantheon were native, indigenous deities, while some were borrowed from other neighboring peoples. When studying the Roman nymphs, however, it is difficult to discern exactly where their cult developed from, whether an indigenous Italic cult, or an import from abroad.<sup>23</sup> The Roman nymphs were certainly the products of various traditions coming together in one cult, which was multivalent and different from the Greeks, upon which it drew. Greco-Roman nature divinities inhabit powerful elements of the natural landscape (e.g., water, plants, mountains) and are found throughout not only the Mediterranean, but also the whole world. In the Greek pantheon, there were the Okeanides (the daughters of Oceanus), the Nereids, and the Naiads.<sup>24</sup> What separates the nymphs from these other classes of beings is that the nymphs were

<sup>&</sup>lt;sup>21</sup> Larson 2001, 4-6.

 <sup>&</sup>lt;sup>22</sup> In 2014, Kopestonsky gave a paper at the annual meeting of CAMWS, "Infiltrating the Empire: The Cult of the Nymphs in the Roman World," although she is not working on the subject currently.
 <sup>23</sup> Dumézil 1970, 387.

<sup>&</sup>lt;sup>24</sup> For more on the Okeanides, see Scott (1987), who explores their role in Aeschylus' *Prometheus Bound*, as members of the Chorus. Barringer (1995) investigates the iconography of the Nereids. Sourvinou-Inwood (2005) offers a succinct description of all of these water beings. The Naiads, she explains, are associated with "springs, wells, fountains, but also caves," which is remarkably similar to the purview of the nymphs (103).

associated with smaller bodies of fresh water, the stream or lake, and not the sea itself or other larger bodies of water.<sup>25</sup>

Greek nymphs were associated with a variety of natural features, including bodies of water, mountains, caves, and even trees. Arguably, the most popular worship of the nymphs was in their guise as water nymphs, or female figures associated with water. While there were male deities associated with water, such as Neptune, rivers, and Fons, the majority of the lesser-known water divinities are female. Varro reports that females are intimately associated with water, reasoning that the embryo develops in moisture, while the male is associated with fire.<sup>26</sup> Further, he states that marriage ceremonies both include fire and water in their ritual, because of this dichotomy. It has been argued further that terms in Latin for water (*aqua, lympha, unda*) are grammatically feminine, and there is a sensual, animated aspect to them, unlike their Greek counterpart,  $\delta\omega\rho$ .<sup>27</sup> While these connections may be tenuous, it is still nevertheless the fact that Greek and Roman nymphs were females, who often guide and aid in the lives of their female mortal counterparts.

In the Greek sphere, nymphs were often reported to be the daughters of Zeus or of local rivers, like the Acheloös, the longest in Greece.<sup>28</sup> Nymphs are often appear to be

<sup>&</sup>lt;sup>25</sup> Barringer 1995, 2, n. 13.

<sup>&</sup>lt;sup>26</sup> Varro Ling. 5.61. Inde omne corpus, ubi nimius ardor aut humor, aut interit aut, si manet, sterile. Cui testis aestas et hiems, quod in altera aer ardet et spica aret, in altera natura ad nascenda cum imbre et frigore luctare non volt et potius ver expectat. Igitur causa nascendi duplex: ignis et aqua. Ideo ea nuptiis in limine adhibentur, quod coniungitur hic, et mas ignis, quod ibi semen, aqua femina, quod fetus ab eius humore, et horum vinctionis vis Venus. "From this fact, everybody, when there is excessive heat or excessive moisture, perishes, or if it survives, is barren. Summer and winter are witnesses to this: in the one the air is blazing hot and the wheat-ears dry up; in the other, nature has no wish to struggle with rain and cold for purposes of birth, and rather waits for spring. Therefore, the conditions of procreation are two: fire and water. Thus these are used at the threshold in weddings, because there is union here, and fire is male, which the semen is, in the other case the water is the female, because the embryo develops from her moisture, and the force that brings their vinctio 'binding' is Venus 'Love.'" (Trans. R.G. Kent) <sup>27</sup> Poccetti 1996, 230.

<sup>&</sup>lt;sup>28</sup> Larson 2001, 4.

sexually promiscuous, such as in the myth of Hylas, or linked to heroic, local

genealogies, such as the famous eponymous nymphs of Sicily creating their own heroes, such as Kamarina.<sup>29</sup> Nymphs can inspire followers to intense religious devotion, such as with nympholept Archedamos at the Vari cave in Attica, who went as far as to cut a very metaphysical relief of himself within the cave, holding his stone-cutting tools.<sup>30</sup> In other respects, they have a maternal role in religious cult, particularly as the *kourotrophoi*, or wet-nurses, of Dionysos and Zeus.<sup>31</sup> Nymphs often accompany and support other Greek deities, ranging from Dionysos and the satyrs, to Hermes and Pan.<sup>32</sup> The word νύμφα reveals interesting insight into the cult, as the Greek can mean either 'nymph' or 'bride,' particularly with the use of water for the purification of the bride.<sup>33</sup> Places in the Greek world that are connected with the cult of the nymphs are usually natural caves in the Archaic and Classical periods, while the Hellenistic period saw the rise of the decorated artificial grotto, evoking the natural caves of the previous periods.<sup>34</sup> Cult practice is

<sup>&</sup>lt;sup>29</sup> For more on the sexual promiscuity of the nymphs, see Larson (2001, 87-90), Sourvinou-Inwood (2005), and Giacobello (2009). For heroic genealogies, see: Sourvinou-Inwood (2005, 112-118), Cordano (2009), De Francesco (2009), Inglese (2009), and Lambrugo (2009). For eponymous nymphs and the coinages of their cities, see Picard (2012); on the nymph Kamarina, see Sulosky Weaver (2015, 59-61).

<sup>&</sup>lt;sup>30</sup> Larson 2001, 11-20; Schörner and Goette 2004, 50; Pache 2011.

<sup>&</sup>lt;sup>31</sup> Larson 2001, 4-5. For more on the nymphs' role as *kourotrophoi*, see Larson (2001, *passim*) and Sourvinou-Inwood (2005, 106-108).

<sup>&</sup>lt;sup>32</sup> Larson 2001, 91-98. See Borgeaud (1988, 48) for associations between Pan and the nymphs, especially as Pan's cult was often centered in caves. In addition to the literature, the material culture of the nymphs supports these associations, as the nymphs are commonly shown with these deities.

<sup>&</sup>lt;sup>33</sup> It is known that Greek marriage ritual included a purification using water and sometimes performed at what is referred to as a 'nymphaion,' or the site of nymphs, which generally was connected to a source of water, like a natural spring. For more on marriage purification rites, see *ThesCRA* 2.3a.3b (s.v.,

Purificazione greca, Occasioni delle purificazione, Matrimonio; O. Paoletti), along with Poccetti (1996). For a brief overview of the Sanctuary of the Nymphs on the south slope of the Athenian Acropolis, see Travlos (1971, 361-365), along with new investigations into the material culture found in the precinct (Malagardis 2014). For purification in Greek sanctuaries, see Cole (1988). Settis (1973, 688); and see also Walker (1979, 107-221), who discusses the connections between nymphaea and pre-marital rites performed at these structures. Recent studies on Roman marriage (Hersch 2010) and Roman maidens (Caldwell 2015) are also helpful in understanding the institution of marriage that used water for purification.

<sup>&</sup>lt;sup>34</sup> For the natural caves, see the excellent discussions by Wickens (1986) and Larson (2001, 226-257). See also: Schröner and Goette 2004; Krasilnikoff 2008; Clendenon 2009, 281, 284; Ustinova 2009. On the

identified by durable votives, such as figurines of young girls or reliefs dedicated to the nymphs, while, at the same time, there were ephemeral gifts, such as cakes and foodstuffs.<sup>35</sup>

On the Italian peninsula, there was also an Italic tradition of water deities.<sup>36</sup> Of these, the best known were the *lymphae*. Varro states that *lymphae* are water-goddesses, probably deriving from *nympha*.<sup>37</sup> Varro makes the connection between the Latin verb *lymphare* ('to derange or drive crazy') and the power the nymphs can have on a human, driving them crazy. Modern linguistic interpretations have suggested that the word originally stemmed from something like *lumpae*, and with the Greek influence of the word *nympha*, shifted to become *lympha*.<sup>38</sup> There are indications of the *lymphae* in the archaeological record, including perhaps at the Sanctuary of Hercules at Tivoli.<sup>39</sup>

The city of Rome, at the heart of the Italian peninsula, had a number of nymphs associated with it. One of the most famous Roman nymphs was certainly Juturna. As the

transition to the Hellenistic period, see the work of Neuerburg (1965), Lavagne (1988), and Costabile (1991), the latter of which discusses the famous caves of Locri.

<sup>&</sup>lt;sup>35</sup> For the gamut of permanent votives, see: Costabile (1991), Salapata (2002; 2014), Gaifman (2008). On Attic nymph reliefs, see: Feubel (1936), Fuchs (1962), Neumann (1979), Edwards (1985), along with Muscettola (2002), for reliefs found on the island of Ischia. For more on ephemeral votives of the nymphs, see: Lambrugo 2009, 134; Larson 2001, 147, 205; and Wickens 1986, 176.

<sup>&</sup>lt;sup>36</sup> There are indications that the Etruscans had nymphs. See Dall'Aglio (2009, 79). In addition, Martianus Minneus Felix Capella's *De nuptiis Philologiae et Mercurii*, which describes the 16 regions of the Etruscan pantheon, included Fons and the Lymphae in the second region (Dumézil 1970, 686).
<sup>37</sup> Varro Ling. 7.87. Apud Pacuvius: Flexanima tamquam lymphata aut Bacchi sacris commota. Lymphata

<sup>&</sup>lt;sup>37</sup> Varro Ling. 7.87. Apud Pacuvius: Flexanima tamquam lymphata aut Bacchi sacris commota. Lymphata dicta a lympha; lympha a Nympha, ut quod apud Graecos Thetis, apud Ennium: In Graecia commota mente quos νυμφολήπτους, appellant, ab eo lymphatos dixerunt nostri. Bacchi, qui et Liber, cuius comites a Baccho Bacchae, et vinum in Hispania bacca "In Pacuvius: 'Deeply affected, as though frenzied by the Nymphs or stirred by Bacchus' ceremonies.' Lymphata 'frenzied by the Nymphs' is said from lympha 'water, water-goddess,' and lympha is from Nympha 'water-nymph,' as for example Thetis among the Greeks, mentioned by Ennius. Persons of disturbed (commota) mind, whom in Greece they call νυμφόληπτοι 'seized by the Nymphs,' our fellow-countrymen from this called lymphati. Bacchus; The wine was in Spain called bacca." (Trans. R.G. Kent, adapted)

 <sup>&</sup>lt;sup>38</sup> Deschamps 1983; Poccetti 1996, 228-231; Copani 2009, 182. See also Roscher 2<sup>2</sup>.2205-2206 (s.v., Lymphae, Wissowa); Daremberg-Saglio 1.2857-858 (s.v., Camenae, A. Bouché-Leclercq).
 <sup>39</sup> Santillo Frizell 2004, 81-85.

sister of Turnus, Juturna plays an important role in Book Twelve of Vergil's *Aeneid*.<sup>40</sup> We know that Juturna is a water-deity, the 'mistress of ponds and surrounding rivers' (*stagnis quae fluminibus sonoris praesidet*), and she was perhaps the mother of Fons.<sup>41</sup> It is believed that Juturna's cult came from Lavinium at a very early date, perhaps before the 600s BCE, before official state cults were established in consultation of the Sibylline Books, and before they were established under the supervision of the *duoviri sacris faciundis*.<sup>42</sup> At Lavinium, she might have been associated with healing waters, and in Rome she could have also been associated with healing as a statue of Asclepius was found at her spring site (**App. No. 1.112**).<sup>43</sup> Her cult was extremely important in Roman state cult, as the waters from her spring in the Forum Romanum were used in all state sacrifices and in times of drought.<sup>44</sup> The *luturnalia* was celebrated on 11 January, in conjunction with the *Carmentalia*, celebrating the obscure figure Carmenta.<sup>45</sup> We know that those who celebrated the *luturnalia* were primarily those whose business was connected with water (Ser. *Aen.* 12.139).

While Juturna's cult probably appeared in Rome sometime before the 600s, it became manifest in the built environment of the Forum Romanum sometime between the fifth and third century BCE. It is believed that Castor and Pollux watered their horses at the spring associated with Juturna in the Forum after the Battle of Lake Regillus in 494,

<sup>&</sup>lt;sup>40</sup> See Murgatroyd (2003) for more on how Ovid and Vergil depict the figure of Juturna differently in the *Fasti* and the *Aeneid*. Fratantuono (2011) explores the role of Juturna in the *Aeneid*, paying particular attention to how, when paired with the figures of Allecto and Camilla, they become a triad that brings about the downfall of Turnus.

<sup>&</sup>lt;sup>41</sup> Verg. *Aen.* 12.139-140. Arnobius (3.29) mentions that Juturna is the mother of Fons. For more on Juturna, see especially Ballentine (1904, 91-94) and Scullard (1981, 64-65).

<sup>&</sup>lt;sup>42</sup> Scullard 1981, 64.

<sup>&</sup>lt;sup>43</sup> Ser. *Aen.* 6.90; Varro *Ling.* 5.71. Scullard 1981, 64-65; Longfellow 2011, 13-15; *LTUR* 3.168-170. (s.v., Lacus Iuturnae, E.M. Steinby).

<sup>&</sup>lt;sup>44</sup> Ser. Aen. 12.139. Fowler 1916, 293; Scullard 1981, 64.

<sup>&</sup>lt;sup>45</sup> Ov. *Fast.* 1.463-586. Fowler 1916, 290-293; Scullard 1981, 62-65. See below (note 47) for more on Carmenta and her possible connections with the Camenae, another group of nymphs in Rome.

and then again after Pydna in 168.<sup>46</sup> From the time of Pydna on, the spring source was continuously built up and further monumentalized until at least the fourth century CE. Outside the Forum, somewhere in the Campus Martius, a Lutatius Catulus, perhaps consul of 241 BCE, dedicated a Temple of Juturna (sometimes also referred to as the Temple of the Nymphs).<sup>47</sup> Not much is known about the temple, but it is important to note that Juturna had two cult sites in the city of Rome, stressing her importance in Roman religion.

There are also the figures of the Camenae, an obscure group of water-goddesses. The Camenae were connected with a spring outside of the Porta Capena, the *fons Camenarum*, on the south slopes of the Caelian Hill in Rome (**App. No. 1.108**).<sup>48</sup> The famous nymph Egeria is believed to be numbered among the Camenae. Because Numa Pompilius and Egeria were lovers, Numa is thought to have instituted a cult dedicated on the site, in addition to monumentalizing the *fons Camenarum* by the Caelian Hill, which is discussed in full in Chapter 4. The site was of further religious and cultic importance, being the spring where the Vestal Virgins travelled daily for their water supply.<sup>49</sup> The Camenae have also been etymologically likened to music (*carmen/camena* meaning

<sup>&</sup>lt;sup>46</sup> Scullard 1981, 64.

<sup>&</sup>lt;sup>47</sup> Ballentine 1904, 90-93; Scullard 1981, 64-65; Coarelli 1997, 243-250. See below (page 287) for more on this temple.

<sup>&</sup>lt;sup>48</sup> Vitr. *De arch.* 8.3.1; Front. *Aq.* 4; Plut. *Vit. Num.*13.2; Liv. 1.21.3; Juv. *Sat.* 3.17-20; Schol. Juv. *Sat.* 3.17-18. For the presence of springs and fountains on the south slopes of the Caelian Hill, see *CIL* 6. 150, 154-156, 166. See also: Tölle-Kastenbein (1990, 14), Picklesimer (2004); Edlund-Berry (2006b, 164), Campbell (2012, 15), and de Mincis (2013, 238-243), along with Roscher 1.846-848 (s.v., Camenae, Wissowa); Daremberg-Saglio 1.2: 857-858 (s.v., Camenae, A. Bouché-Leclercq), *LTUR* 1.216 (s.v., Camenae, Camenarum fons et lucus, E. Rodríguez Almeida). There is discussion of a connection between the Carmentalia was celebrated the same day as the Juturnalia, 11 January. Carmenta is also associated with childbirth, and the Camenae are sometimes also conflated to aid women. Carmenta had her own *flamen*, and her temple, frequented by women, was located outside of the Porta Carmentalia, see: Fowler (1916, 290-292) and Scullard (1981, 62-64).

<sup>&</sup>lt;sup>49</sup> Wissowa 1902, 180.

song, poem) and, thus, to the Greek Muses, a group of nine female deities.<sup>50</sup> Whether or not that connection is sound, these goddesses are still believed to be related to water at their cult site in Rome.

Finally, there is the figure of Anna Perenna, a deity associated with water. She is a peculiar figure, as she has two possible backgrounds: she is either the sister of Dido, who later comes to Italy and becomes a deity there, or she is a native Italic mother goddess figure.<sup>51</sup> She was probably connected to marriage and premarital rites, in the same way that the Greek nymphs were.<sup>52</sup> Anna was also associated with magic. Her cult site in Rome, recently found near piazza Euclide (in proximity to the via Flaminia), is a fountain with two inscribed blocks (*nymphis sacratis Annae Perennae*), used for nearly ten centuries (fourth century BCE to sixth century CE) (**App. No. 1.104**).<sup>53</sup> The fountain itself was a simple basin, with a spout in the back wall. The structure was built in rough *opus vittatum* and the basin was lined in *opus signinum*. Four lead *fistulae* suggest a long period of use, along with the fact that the water from this basin probably fed other hydraulic structures in the area.<sup>54</sup> The finds, from the reservoir of the fountain that was closed off in the sixth century, include 549 coins, 74 oil lamps, *defixiones*, nine lead containers with seven anthropomorphic figurines inside, three ceramic jugs, egg shells,

<sup>&</sup>lt;sup>50</sup> Liv. Andr. Fr. 1 Mariotti, Enn. *Ann.* 15.487, Varro *Ling.* 7.27. For more, see: Camilloni (1998) and Copani (2009, 182-187). There are no iconographic parallels between the Camenae and the Muses, as there are no extant depictions of the Camenae known. Some believe that a relief dedicated to Fons and the nymphs, found in the vicinity of the Porta Capena, which shows a river god, Mercury, Hercules, the Three Graces, and Hylas being captured by the nymphs, was connected to the *fons Camenarum* (La Rocca 1998, 209). It has even been suggested that the depiction of the Three Graces was in fact the Camenae (Arnaldi 2000, 56).

 <sup>&</sup>lt;sup>51</sup> Copani 2009, 180-181; Piranomonte 2013, 152. See also Roscher 1.355-360 (s.v., Anna Perenna, Meltzer); Daremberg-Saglio 1.2: 270 (s.v., Anna Perenna, E. Saglio). For more on the fact that Anna and Juturna were important sister figures in the *Aeneid*, see West (1979) and Castellani (1987).
 <sup>52</sup> de Mincis 2013, 242-243.

<sup>&</sup>lt;sup>53</sup> Ovid also mentions the cult site (*Fast.* 3.523-540). For a detailed reading of the passage in Ovid, in conjunction with recent archaeological discovery of the cult site, see Egelhaaf-Gaiser (2012). <sup>54</sup> Piranomonte 2013, 152.

wood.<sup>55</sup> What marks this deposit is the magical nature of the cult of Anna Perenna, perhaps connected with her Punic origins and her sister Dido.<sup>56</sup> Regardless of her origins, Anna Perenna is still an important Italian water deity to consider in the development of the cult of the Roman nymphs.

The three nymphs, Juturna, Egeria, and Anna Perenna, are all unique to Roman mythology, especially in the writings of the Augustan poets Ovid and Vergil. All three figures become associated with water sources, tying these three females to the Italian and, probably more importantly, the Roman landscape. The three water deities, intimately connected to the mythical past of Rome, help to show the importance of water and its mythological associations in the Roman psyche.

Literary evidence demonstrates the prominence of the nymphs in the Roman psyche. Both Latin poetry and prose authors wrote mythological vignettes that include the figures of the nymphs as active participants. Oftentimes, nymphs featured in Latin literature have strong connections to Greek examples. Phloe escapes the libidinous advances of Pan by submerging herself into water (Stat. *Silv.* 2.3).<sup>57</sup> Vergil, in Book Four of the *Georgics*, presents an exchange between Aristeus and his mother, the nymph Cyrene (4.315-558). The ensuing passage is a catalogue of nymphs, showing them along the banks of a river working. Richard Thomas argues that the catalogue of nymphs featured in Vergil's *Georgics* 4 was based on the catalogue of Nereids in Homer and the catalogue of nymphs of Callimachus, whose poetry was an earlier model for Latin

<sup>&</sup>lt;sup>55</sup> Piranomonte 2013, 152.

<sup>&</sup>lt;sup>56</sup> Piranomonte 2013, 154. For more on the magical nature of water and its potential for divination, see Aupert (2012, 311).

<sup>&</sup>lt;sup>57</sup> For more on the violence associated with nymphs escaping the amorous advances of males, see: Larson (2001, 66-73) and Sourvinou-Inwood (2005, 109-112).

writers.<sup>58</sup> Other times, however, the nymphs are wholly a Roman conception. The hamadryad (a tree nymph) Pomona is celebrated in Ovid as a cultivator of fruit trees and fields (*Met.* 14.623-633), who also waters the plants in her care.<sup>59</sup> But what ties these different depictions of the nymphs together is that they are constantly associated with nature in some way, usually through the medium of water. Naturally, then, water is a connecting element of the cult of the Roman nymphs.

Statius also presents a catalogue of nymphs (*Silv*. 1.5). To describe the Baths of Claudius Etruscus, Statius rejects the typical deities one would include in such a poem, including the Muses, Apollo, Bacchus, and Mercury.<sup>60</sup> But he wants to be surrounded by attendants, namely the nymphs and Vulcan.<sup>61</sup> The nymphs are beautifully described: "Come, green goddesses, and turn this way your liquid faces, bind your glossy hair with tender clusters, covered by no clothes, as when you come out of your deep springs and torment your Satyr lovers with the sight."<sup>62</sup> He presents beings that have liquid faces, but also more human features like glossy hair that is styled. These are still Greek-like nymphs, however, with all the sexual allure that drives satyrs crazy. Statius enumerates a number of nymphs, some Greek and some Roman, including Salmakis and Cytherea. His invocation is of great importance:

vos mihi quae Latium septenaque culmina, Nymphae, incolitis Thybrimque novis attollitis undis,

<sup>&</sup>lt;sup>58</sup> Thomas 1986, 190-93. See also Griffin (1986, 88-90), Harrison (1989, 115), Morgan (1999, 37-38), Curley (2003), and Jones (2005, 85-88).

<sup>&</sup>lt;sup>59</sup> See Myers (1994), Gentilcore (1995), and Jones (2001).

<sup>&</sup>lt;sup>60</sup> Holtsmark (1973) provides the most in-depth commentary on this poem, illustrating its structure and placing it in a wider cultural context. Martial also wrote a poem about Claudius Etruscus' bath, which has striking similarities to Statius' discussion (6.42). See Holtsmark (1973, 218).

<sup>&</sup>lt;sup>61</sup> One is struck by this juxtaposition of water and fire. We can think back to the passage of Varro (*Ling*. 5.61), in which females are associated with water and males are associated with fire.

<sup>&</sup>lt;sup>62</sup> Stat. Silv. 1.5.15-18. ite, deae virides, liquidosque advertite vultus | et vitreum teneris crinem redimite corymbis, | veste nihil tectae, quales emergitis altis | fontibus et visu Satyros torquetis amantes. (Trans. D.R. Shackleton Bailey, adapted)

quas praeceps Anien atque exceptura natatus Virgo iuvat Marsasque nives et frigora ducens Marcia, praecelsis quarum vaga molibus unda crescit et innumero pendens transmittitur arcu (Stat. Silv. 1.5.23-28)

To me, you nymphs that dwell in Latium and the Seven Hills and raise Tiber with fresh waters, you that fast Anio delights and the Virgin who shall welcome swimmers [Aqua Virgo], and [Aqua] Marcia, bringer of Marsian snows and chills—you whose vagrant water multiplies on towering masses, transmitted in the air by countless arches. (Trans. D.R. Shackleton Bailey, adapted)

Here, Statius depicts the local Italic nymphs as those inhabiting the hills of Latium, which provide the water that supplies the aqueducts of the city of Rome. He then continues to describe the baths of Claudius Etruscus, which are full of water and, thus, nymphs, who have never lived in a 'wealthier style' (*aliis habitastis in antris ditius*; 1.5.30-31)—and the ensuing description of the bath is certainly opulent. In the context of this poem, we see how both Greek and Roman nymphs can be employed to illustrate the common nature of the nymphs, as beautiful, alluring female deities, who dwell in opulent homes of flowing water.

In Latin poetry, the word *nympha* is also a metonymy for water.<sup>63</sup> Statius mentions that in the villa of Manlius Vopiscus at Tibur, in addition to all of the luxurious decorative amenities, the nymphs are sent through every bedchamber (*emissas per cuncta cubilia nymphas*), meaning that every bedroom has access to water.<sup>64</sup> Propertius, in discussing the fountains of the Porticus Pompeiana, mentions that the water that supplies them is like the babbling nymphs that go through the streets of Rome (*leviter nymphis*)

<sup>&</sup>lt;sup>63</sup> In addition to the texts discussed below, see also the article of Scholz (1987) exploring a poem of the sixth-century writer, Luxorius.

<sup>&</sup>lt;sup>64</sup> Stat. *Silv*. 1.3.35-38. *auratasne trabes an Mauros undique postes | an picturata lucentia marmora vena | mirer, an emissas per cuncta cubilia nymphas?* "Shall I wonder at gilded beams or Moorish doorposts everywhere or marble lucent with colors or water discharged through every bedchamber?" (Trans. D.R. Shackleton Bailey)

*tota crepitantibus urbe*), signifying that the water flows through conduits in the city (Prop. *El.* 2.32.11-16; **Figs. 4, 5; App. No. 1.118**). Both examples depict moving water, which is given anthropomorphized characteristics. One can easily imagine a female water deity moving through the bedrooms of the villa or through the streets of Rome. The poets are able to create an evocative image through this metonymy. Poets also describe water that is not moving *per se* as nymphs, perhaps as a literary and poetic topos. For example, Statius describes the fresh water meeting the seawater near the villa of Pollius Felix near Sorrento as *Nymphas* (*Silv.* 2.2.18-19). While in all of these instances we are not to repopulate these ancient spaces with actual water deities, the images that the poets create by using the metonymy of nymphs for water is powerful, adding another element to the cult of these divinities.

Furthermore, the nymphs often take active roles in their landscape. Statius describes Nereids watering plants, using their own tears (*Silv*. 2.2.100-103). Pomona in Ovid's *Metamorphoses* is a nymph who cares only for the fields, as she "would [not] permit [the fields] to suffer thirst, but watered the twisted fibers of the thirsty roots with her trickling streams."<sup>65</sup> It is the actions of Pomona that contribute to the success of the field; without her, the cultivated fields would die for lack of water. In fact, it has been argued recently that Pomona, a nymph of cultivated land rather than wild lands, is a symbol of the woman in civilized Roman society, which is a curious interpretation, given that she is a deity intimately connected with nature—a wild element in and of itself.<sup>66</sup> One can also think of the catalogue of nymphs in Vergil's *Georgics*, shown working on the banks of the river (4.333-356). The nymphs of literature, then, are multivalent, active

<sup>&</sup>lt;sup>65</sup> Ovid *Met.* 14.623-33: *nec sentire sitim patitur bibulaeque recuvas radicis fibras labentibus inrigat undis.* (Trans. Miller)

<sup>&</sup>lt;sup>66</sup> Vesley 2005, 78.

figures. They not only can help the landscape around them, whether by watering plants or supplying the domestic quarters of a villa, but they are also pursued, becoming the victims of the amorous advances of lascivious males.

In order to begin to reconstruct the cult of the nymphs, we must turn to the available epigraphic evidence. Inscriptions reveal that the nymphs could receive sacrifice, along with offerings, which could include votive reliefs.<sup>67</sup> The epithets of nymphs can be divided into five main categories.<sup>68</sup> There are honorific and pious epithets, which include deae, divinae, sanctae, sanctissimae, venerandae, Augustae, dominae.<sup>69</sup> The variety of epithets that indicate that the nymphs were divine shows their sacred nature. As water deities, the nymphs were the mistresses of the waters with which they were associated. These epithets stress the sacrality of water and its mistresses, illustrating how the importance of water on the Roman psyche to warrant cult at its sources. Nymphs can be shown in terms of their physical properties (*perennes*, *aeternae*, *novae*).<sup>70</sup> It is easy to imagine celebrating nymphs associated with 'continual' and 'everlasting' waters—a trait that is surely desired in every water source. Epithets connect nymphs to thermal waters, such as *medicae*, *salutiferae*, and *salutares*.<sup>71</sup> The healing nature of some waters, especially hot ones, is important. The Romans clearly sought out waters that could cure their ailments, and then left behind votives thanking the nymphs for their help. There are

<sup>&</sup>lt;sup>67</sup> For sacrifice, *CIL* 6.547, along with a passage in Servius that alludes to sacrifice to the nymphs in times of droughts (Serv. *Aen.* 12.139). A number of well-preserved reliefs to the so-called Nitrodes Nymphs on Ischia illustrate the pairing of inscriptions and votive reliefs. See: *CIL* 10.6786-679; Luschi 1999; Arnaldi 2006, 60-65.

<sup>&</sup>lt;sup>68</sup> Four categories are found in the Daremberg-Saglio (4.1: 124-128, s.v., Nymphae, O. Navarre), especially 127-128. The last category, onomastic epithets, is added to the discussion here.

<sup>&</sup>lt;sup>69</sup> *Divinae: CIL* 7.757, 14.46a; *sanctae: CIL* 3.1396, 6.166, 6.551, 6.3706, 6.3707, 10.7860; *venerandae: CIL* 7.988; *Augustae: CIL* 3.1795, 3.3047, 3.3116, 3.4043, 3.4118-4119, 3.5678, 5.3106, 5.3915, 11.1162, 12.1328-1329, 12.2850, etc.; *dominae: CIL* 2.1164. Arnaldi (2006) has treated the salutary guise of the Roman nymphs systematically, collecting more epigraphic evidence.

<sup>&</sup>lt;sup>70</sup> Perennes: CIL 3.3882; aeternae: CIL 10.5163; novae: CIL 3.1129.

<sup>&</sup>lt;sup>71</sup> *CIL* 2.2530, 3.1129, 3.1397, 3.1957, 3.3044, 3.3662, 7.875, 8.4322.

epithets that connect some nymphs to their local landscapes (*Nymphae Varcilenae*, *Lupianae*, *Caparenses*, *Griselicae*, etc.).<sup>72</sup> Nymphs, because they are the personifications of water sources, would have been connected to the landscape that they inhabited, stressing their connection to nature. The *Nymphae Nitrodes*, found on the island of Ischia in the Bay of Naples, are believed to be connected to local salt resources (stemming from the Latin *nitron*).<sup>73</sup> Finally, there are onomastic epithets that tie a group of nymphs to a family. For example, the *Nymphae Geminae* were connected to the family of C. Fufius Geminus, whose freedman, C. Fufius Politicus, put up an inscription to these nymphs at Urbs Salvia in Italy.<sup>74</sup> There are also a number of nymphs related to the imperial family (*Augustae*, *Flavianae*, *Domitianae*).<sup>75</sup> The reason for onomastic epithets is unclear, but it could perhaps be related, again, to a sense of place, putting families and their nymphs

Often, nymphs were paired with other gods in inscriptions. Nymphs, as lesser deities in the Roman pantheon, evidently were added to litanies of other divine beings. More often than not, nymphs were paired with a male god, and usually an Olympian or another well-known deity. Nymphs can be paired with water deities, such as Neptune and Fons.<sup>76</sup> In healing contexts, nymphs appear with Apollo, Asclepius, Silvanus, and

<sup>&</sup>lt;sup>72</sup> Nymphae Varcilenae: CIL 2.3067; Lupianae: CIL 2.6288; Caparenses: CIL 2.883-884; Griselicae: CIL 12.961. Arnaldi 2006, 65.

 <sup>&</sup>lt;sup>73</sup> CIL 10.6789 (ILS 3875), 6790, 6792, 6793, 6794, 6795, 6798, 6799. For more, see: Arnaldi 2006, 65.
 <sup>74</sup> CIL 9.5744. See Arnaldi (2002, 246) for a discussion of this inscription.

<sup>&</sup>lt;sup>75</sup> *Augustae*: *CIL* 3.1795, 3.3047, 3.3116, 3.4043, 3.4118-4119, 3.5678, 5.3106, 5.3915, 11.1162, 12.1328-1329, 12.2850, etc. *Flavianae*: *CIL* 8.17725; *Domitianae*: *CIL* 11.3286. For more see: Arnaldi (2004, 1356, 1362)

<sup>&</sup>lt;sup>76</sup> For Neptune, see *CIL* 3.3662, 12.4186. See also: Arnaldi (1997, 94-96). For Fons, see *CIL* 12.3076. See Arnaldi (2004, 1360-1361) for more on this pairing. Arnaldi states that the nymphs and Fons are rarely seen together in inscriptions.

Belenus.<sup>77</sup> Local tutelary gods can also be paired with nymphs, particularly in the guise of the Genius Loci/Pagi.<sup>78</sup> Finally, nymphs can be found with Jupiter, and to a lesser extent Diana and Ceres.<sup>79</sup> By pairing the nymphs with other gods, the dedicator perhaps wanted to insure total protection by all the available deities or to insure that the deities were properly thanked for something that they gave. Nymphs and other gods in these inscriptions also tie cult to place, whether a water source, a healing site, or the genius of a place.

Inscriptions also indicate the built environment of the cult of the nymphs, that is, the kinds of structures associated with the nymphs. There are altars that could receive sacrifice and other ephemeral offerings.<sup>80</sup> One can easily imagine an altar near a water source in the countryside, where one can give appropriate sacrifices in honor of the adjacent life-giving waters, such as is depicted on a first-fourth century CE silver bowl of the healing waters associated with Salus Umeritana in Spain (**Fig. 86**).<sup>81</sup> The spring is shown at the top of the scene, while a young man makes a vow at the altar. He then gives an older man a drink of the healing waters, who, in turn, gives a thank offering at the altar.

There are also temples of the nymphs (**Appendix 2; Map 9**). The inscriptions do not reveal much about the structures themselves, just that they were set up by the

<sup>79</sup> For Jupiter, see *CIL* 2.1164, 3.4786, and 8.4322. For Diana, see *CIL* 5.4694; Ceres, see *CIL* 14.2.

<sup>&</sup>lt;sup>77</sup> For the citations regarding this pairing in the Italian peninsula, see Arnaldi (2006). A number of these inscriptions come from healing spa at Vicarello, Italy, on a series of metal beakers deposited at the site. See below (pages 344-347) for more on this site and the beakers found there.

<sup>&</sup>lt;sup>78</sup> For Genii associated with the nymphs, see *CIL* 5.4918, 8.120. See: Arnaldi (2006, 1358, 1361) and Fabre (2004, 148). There is also an inscription with a Genius Fontis (*CIL* 8.4291). For more on the cult of the Genius, see Kunckel (1974) and Ferri (2010, 159-184).

<sup>&</sup>lt;sup>80</sup> **App.** Nos. 2.5, 2.17, 2.23; Chellini 2002, 92. There is also the recently found altar to the nymphs and Anna Perenna in Rome (Piranomonte 2013). The Iberian Peninsula has a number of altars to nymphs. For a collection of these, see: Diez de Velasco (1998, 82-100).

<sup>&</sup>lt;sup>81</sup> Balil 1977, 78; Krug 1985, 180; Peréx et al. 2008, 351; Campbell 2012, 352-353.

dedicator. One can imagine, like the altars already mentioned, that these temples were small *sacella* in the countryside, near the sources, such as the *sacellum* of the Clitumnus river, discussed by Pliny and still visible in the landscape today. There is even a phenomenon of the third and fourth centuries CE of building temples dedicated to what are believed to be aquatic deities (perhaps nymphs?) in the area of modern Portugal.<sup>82</sup> In addition to these examples, it is known that Rome did have a Temple of the Nymphs, perhaps associated with Juturna.<sup>83</sup> Located in the ancient Campus Martius, there has been a debate of whether foundations on via delle Botteghe Oscure (and perhaps connected to the Porticus Minucia Frumentaria) or Temple D of Largo Argentina are in fact the Temple of the Nymphs.<sup>84</sup> While we do not know much about the temple itself in Rome, its prominence in the city—in the Campus Martius—demonstrates the importance of the cult to be included in the city center. Because of the lack of material remains of temples, some scholars have suggested that, in fact, the cult of the nymphs did not have temples and was relegated to only altars in the countryside near the spring sources.<sup>85</sup> But this certainly cannot have universally been the case. Evidently, temples were built for the nymphs, although probably not on the same scale or grandness as large state cult buildings, in addition to the altars that appear in the archaeological record.

<sup>&</sup>lt;sup>82</sup> The most famous of the temples is found across from a villa in Milreu, Portugal. For more on Milreu, see: Alarcão (1988, 207), Hauschild (1993), Teichner (1997), Hauschild and Teichner (2002), and Reis and Oliveira (2009, 46). Other sites in Portugal that are similar in form to Milreu include S. Cucufate and Quinta do Marim (Alarcão 1988, 190, 207-208).

<sup>&</sup>lt;sup>83</sup> We only know of the existence of the temple from literary and epigraphic evidence. The *Fasti Fr. Arv.* for 23 August mentions the temple. Furthermore, Cicero mentions that the temple was a victim of the fire set by Clodius between 57 and 56 BCE (Cael. 78, Mil. 73, Parad. 4.31, Har. resp. 57). Coarelli (1997, 243-250) offers a complete discussion of the scholarship on this issue.

<sup>&</sup>lt;sup>84</sup> LTUR 3.350-351 (s.v., Nymphae, aedes, D. Manacorda). For more, see Zevi (1995) for the interpretation of the attribution of Temple D, along with Coarelli (1997, 218-242) for a fuller discussion of the various associations of specific locations in the Campus Martius, and Albers (2013, 272-273).

<sup>&</sup>lt;sup>85</sup> Arnaldi 2006, 83; Garofoli 2013, 138.

Finally, there are examples of nymphs associated with fountains and aqueducts. It follows well that nymphs are included in inscriptions honoring their assistance in bringing water into the urban landscape. There are a number of inscriptions from North Africa illustrating that some fountains were dedicated to the nymphs and other deities.<sup>86</sup> An inscription on a fountain, dedicated by a Florentius and perhaps dated to the fourth or fifth century, from Ksar Mdudja, mentions how the aqueduct of sweet water makes its way to the city, making rocky seats for the nymphs (App. No. 2.19). At Capsa, an inscription relates how the aqueduct and its fountain are dedicated to both Neptune and the nymphs.<sup>87</sup> In Nîmes (France), at the Sanctuary of the Imperial Cult, with its great use of water and fountains related to the source there, inscriptions were dedicated to the nymphs, probably associated with the fountain (CIL 12.3108-3109; App. No. 1.78). In addition, inscriptions to the nymphs and their accompanying aqueducts can be seen on the Italian peninsula, Gaul, and even as far as Syria.<sup>88</sup> Again, the connection with the dedication to the nymphs on fountains and aqueducts, no matter its placement in the Empire, is to thank the nymphs for providing with the necessary water for survival.

This brief overview of the evidence for the cult of the nymphs has shown that, in addition to being the tutelary divinities associated with water sources, they also have other powers. The healing nature of the nymphs is clear from their associations to Apollo and Asclepius. There is also overwhelming evidence that healing sites (*Aquae*) throughout the Italian peninsula were associated with Apollo, Asclepius, and the

<sup>&</sup>lt;sup>86</sup> Arnaldi 2004, 1358, 1360. The sites include Timgad (Thamugadi), Capsa (Gafsa, Tunisia), and Ksar Mdudja (Tunisia).

<sup>&</sup>lt;sup>87</sup> AE 1934, 70 = ILTun 293; Arnaldi 2004, 1360.

<sup>&</sup>lt;sup>88</sup> Ballentine 1904, 96. CIL 9.5744 (Picenum), 6.551, 10.5163 (Casinum), 12.1093; CIG 4616 (Syria).

nymphs.<sup>89</sup> Healing sites were popular in the Roman world and could include waterdisplays to show the flowing water associated with the healing waters of the adjacent source.<sup>90</sup> Nymphs are also connected to divination and oracles, particularly in the Greek world, seen with the phenomenon of nympholepsy, or being taken over by the nymphs.<sup>91</sup> Roman nymphs could be associated with the oracles at healing sanctuaries of Apollo and Asclepius, sometimes with water being drunk to perform divination.<sup>92</sup> Further, river and spring water could be used to perform oracles, or in hydromancy, in which water gives signs directly.<sup>93</sup> Water, in this case, because of its magical properties of giving life, could be associated with the telling of the future.

Nymphs were also thought to be inherently sexual creatures. Their associations with water connect them to the abundance of water, making them beings associated with fecundity. Indeed, the Romans, and particularly the Greeks before them, linked nymphs to sexual allure, and the subsequent sexual encounters.<sup>94</sup> The sexual allure, however, comes down to the nakedness of the nymphs' (and women's) bodies, which can come in the form of simple nude bathing, pleasure parties on the shores (the liminal space between the land and the sea), sexual intercourse in water, and depictions of sexualized

<sup>&</sup>lt;sup>89</sup> Chellini 2002, 237; Arnaldi 2006. See also *CIL* 6.166, 6.551, 6.3706, 6.3707, 10.4374, 10.7860, 11.3288, 14.4322, for dedications to nymphs by those healed.

<sup>&</sup>lt;sup>90</sup> It seems, however, that the major hydrotherapy centers on the Italian peninsula did not have nymph cults or associations to them. See Arnaldi (2006, 82).

<sup>&</sup>lt;sup>91</sup> Larson 2001, 11-20; Pache 2011; Aupert 2012, 311. For more on oracles in the ancient world, see Curnow (2004), Johnston (2008), and Stoneman (2011). There is not, however, an overwhelming amount of evidence of this phenomenon with the Roman nymphs.

<sup>&</sup>lt;sup>92</sup> *ThesCRA* 3.3b.A (s.v. Consecration, 1. Consecration of natural elements and objects, Consecration of Water); Tölle-Kastenbein 1990, 12.

<sup>&</sup>lt;sup>93</sup> Jones 2005, 21. For more on hydromancy, see Johnston (2008, 98-99).

<sup>&</sup>lt;sup>94</sup> For more on the sexual promiscuity of the Greek nymphs, see Larson (2001, 87-90), Sourvinou-Inwood (2005), and Giacobello (2009). Griffin (1986, 88-111) explores the pleasure of water and its connection to the naked body, which also discusses sexual activities associated with water. See also, Zarmakoupi (2014, 163-166).

nymphs (e.g., Salmakis, Arethusa, the nymphs who drown Hylas).<sup>95</sup> While there is evidence for mixed bathing in Italy by the first century CE, usually only female slaves and prostitutes were seen nude in public, unlike their élite counterparts.<sup>96</sup> Thus, John Griffin has argued that the space of the seashore could have been a highly sexualized space, in that men could potentially see women (and perhaps even deities) in states of undress.<sup>97</sup> One only needs to look at any depiction of a nymph in Greek and Roman art: they are usually shown nude.<sup>98</sup> Further, it cannot be forgotten that nymphs are not only etymologically connected to marriage ('bride'), but there is evidence for water being connected with marriage and fertility rites throughout the Greco-Roman world, again, stressing the nymphs connection with sex (although, here, the sex connected with procreation).<sup>99</sup> The nudity of nymphs, along with the erotic associations of water, shows the fecundity and abundance that water can bring about. The male desire for the female form can most certainly parallel the same desire all individuals have for water and the bounty that it brings.

Finally, nymphs can be associated with revenge. Stemming from the Greek tradition, Roman nymphs could also be dangerous beings, despite their benevolent nature as water deities.<sup>100</sup> There is an anecdote that Nero, because of his bad character, upon

<sup>&</sup>lt;sup>95</sup> Griffin 1986, 88-111.

<sup>&</sup>lt;sup>96</sup> Crowther 1980-1981, 11-123; Griffin 1986, 103-111; Fagan 1999, 27-34; Hallett 2005, 83-87; Yegül 2010, 189-219.

<sup>&</sup>lt;sup>97</sup> Griffin 1986, 103-111.

<sup>&</sup>lt;sup>98</sup> The nude nymph is seen throughout the Mediterranean, see especially the recently edited volume of Neira (2013) on depictions of nudes in Roman mosaics. See also: Griffin 1986, 93; *LIMC* 8.1.891-902 (s.v., Nymphai, M. Halm-Tisserant, G. Siebert).

<sup>&</sup>lt;sup>99</sup> The water in marriage rituals would have been used to purify the bride, and the ritual was usually in the form of a bath. See: Settis 1973, 685-689; Walker 1979, 107-122; Andò 2006; Poccetti 1996, especially 227-229; Jones 2005, 19; Giontella 2012, 191; *ThesCRA* 6.1.c.101-106, especially 106 (s.v., Mariage dans le monde romain, P. Moreau, A. Dardenay).

<sup>&</sup>lt;sup>100</sup> See Larson (2001) for more on the Greek tradition of nymphs as seeking revenge. Nymphs in Greek culture persist today, as *nereïdes*, beings that enact revenge. See Larson's discussion for more on this phenomenon (2001, 61-64).

bathing in the source water of the Aqua Marcia became ill, as it was thought that he had desecrated the sanctity of the place and the sacred waters.<sup>101</sup> While not a violent physical attack, it was recognized that the gods of the water caused his illness due to his indiscretion. Festus in the second century CE tells us that one can go mad if they see an apparition of a nymph at a fountain.<sup>102</sup> Nymphs are powerful figures in the human psyche, incarnating "a dangerous and anomalous femininity often synonymous with premature death," especially the case when nymphs kidnap humans.<sup>103</sup>

By the imperial period, nymphs are firmly associated with revenge. We have a number of *defixiones*, or curse tablets, invoking nymphs to help the devotee in seeking revenge against another party.<sup>104</sup> Due to the chthonic—underground—nature of water sources, places related to water sources are often associated with the deposition of *defixiones*.<sup>105</sup> Curse tablets can be found at a number of sites throughout Italy, and as far north as the sanctuary of Aquae Sulis in Bath, Britain.<sup>106</sup> The curse tablets at the site of Anna Perenna in Rome have a variety of writing styles and requests, indicating that perhaps both non-élite and élite individuals were dedicating tablets at the fountain (**App. No. 1.104**).<sup>107</sup> Let one intricate tablet serve as an example of the nature of these curses found in the reservoir of the Anna Perenna fountain:

<sup>&</sup>lt;sup>101</sup> Tac. Ann. 14.22. Isdem diebus nimia luxus cupido infamiam et periculum Neroni tulit, quia fontem aquae Marciae ad urbem deductae nando incesserat; videbaturque potus sacros et caerimoniam loci corpore loto polluisse. secutaque anceps valitudo iram deum adfirmavit. "About the same date, Nero's passion for extravagance brought him some disrepute and danger: he had entered and swum in the sources of the stream which the Aqua Marcia (i.e., the aqueduct) conveyed to Rome; and it was considered that by bathing there he had profaned the sacred waters and the holiness of the site. The divine anger was confirmed by a grave illness which followed." (Trans. J. Jackson, adapted)

<sup>&</sup>lt;sup>102</sup> Festus s.v., *lymphae*.

<sup>&</sup>lt;sup>103</sup> Piranomonte 2013, 155.

<sup>&</sup>lt;sup>104</sup> Chellini 2002, 74, 211. See Ripat (2014) for a discussion of Roman women and their use of curse tablets, including the types of problems women report having (hence their uses of the *defixiones*). <sup>105</sup> Mylonopoulos 2008a, 67.

<sup>&</sup>lt;sup>106</sup> Tomlin 1988. See also: Cunliffe 1995, 54; Chellini 2002, 211.

<sup>&</sup>lt;sup>107</sup> Blänsdorf 2010.

sacras san<c>tas FU supteris et angilis, quod | rogo et peto magnam virtutem vestram, | tollatis pertolla{e}tis | oculus sive dextrum et | sinesteru Surae, qui nat(us) | maledicta modo ets (= est) de vulva. | fiat rogo et peto | magnam virtu/tem vestra(m). | tollite oculus | dextru sinesteru | ne possit dura/re virtus arbitri | Surae, qui natu(s) | est de vulva maledicta.

The sacred and holy (nymphs) through the infernal gods(?) and messengers, what I ask and demand from your great virtue: take, take completely the eyes, the right or left one of Sura, who was born from an accursed womb. May this happen, I ask and beg from your great virtue. | Take the eyes, the right (or?) left one, in order that the virtue of Sura the arbiter may not persist, who was born from an accursed womb. (Trans. C. Faraone 2010, 68-69)

In the original text, 'nymphs' are not explicitly cited in the invocation, but there is the corrupted "FU." Christopher Faraone asserts that the nymphs are being called upon here, given that the tablets were found in the spring that was dedicated to Anna Pernna and the nymphs (named on the two altars inscribed to *nymphis sacratis Annae Perennae*).<sup>108</sup> In the cache of *defixiones* found at the site, there were others that specifically name the nymphs.<sup>109</sup> The nymphs in the above inscription are used as mediators for the person cursing Sura, although the reason for this revenge is unclear. The fountain, in all likelihood, was staffed by a woman, who might be called a witch, ensuring that the curses were properly dedicated at the fountain.<sup>110</sup> Nymphs become powerful figures for the Romans, whether they provide fresh water, or can provide the revenge that some desire against those who malign them.

<sup>&</sup>lt;sup>108</sup> Faraone 2010, 69, and note 9.

<sup>&</sup>lt;sup>109</sup> Blänsdorf 2010, 52-53. ...*at* / [*S*]*eth: et h*[*oc ---*] / *et ille te* [---] / *rogat illi o*[*mnia*? ---] / *«uxor eam* [...]*rtu*[*r* --- *con-*] / *-filteatur fem*[*inam--- sa-*] / *-n*(*c*)*tas nimfa s---* / *so*[..]*uos*[---] / *bon* [...]*le*[---]. "...AT Seth and this [...] and this I ask you of [...] the others [...] the wife, the one that [...] the affair of the woman [to him/her] must confess, that the woman [...] the holy nymphs [...] you all [...] good." (Trans. J. Blänsdorf 2010, 53, adapted). The inscription above, regarding Sura, was chosen based on its good state of preservation, along with its plausible connection to the nymphs that were venerated at the site.

preservation, along with its plausible connection to the nymphs that were venerated at the site. <sup>110</sup> For more on the concept of this 'magic woman,' see Piranomonte (2012), along with Rocca and Treu (2015).

Regardless of their guise, the nymphs were omnipresent throughout the Roman world. It is natural to see the cult of the nymphs in all parts of the Empire, as most places had indigenous traditions of believing that water sources were sacred in some respect. Much evidence has been presented here from the Italian peninsula, where the nymphs were popular in a variety of contexts, such as the cults and sites associated with Juturna and Egeria, or at healing sites. But the nymphs are even found on inscriptions in places as far off as modern Bulgaria, Gaul, North Africa, and Portugal.<sup>111</sup> While nymphs were popular all throughout Gaul, they were particularly popular in the southern part of Gaul.<sup>112</sup> While nymph cult is seen throughout the Empire, it seems that arid places, such as North Africa and the Iberian Peninsula, had a pervasive nymph cult.<sup>113</sup> In the northern regions of Portugal, local water deities were syncretized with the Roman nymphs, taking on the names of the area, such as the Nymphae Castaecae and Nymphae Lupianae. In areas that were far from urban settings, the cult of the nymphs seems to be more popular, as is evidenced in examples from Portugal.<sup>114</sup> Perhaps this stems from the natural setting outside of the city, as we saw with altars in the countryside. The popularity might also develop from the fact that nymphs are able to provide the necessary water for survival, which a cult of a more major god might not be able to provide. Even the *nymphae* Augustae were more widespread outside Italy, illustrating how a state-sanctioned cult of

<sup>&</sup>lt;sup>111</sup> Alarcão 1988, 99; Bourgeois 1991, 26-27; Arnaldi 2004; Kopestonsky 2014.

<sup>&</sup>lt;sup>112</sup> Bourgeois 1991, 107.

<sup>&</sup>lt;sup>113</sup> For more on the Iberian Peninsula, see Costa Solé (2011b), Peréx and Miró (2011), Ruiz de Arbulo (2011). The project *VBI AQUAE IBI SALVS*, funded by the Universidad Nacional de Educación a Distancia (UNED), under the direction of María J. Peréx, is an online atlas of medicinal water sites, healing baths, and water cult throughout the Iberian Peninsula, still under construction. A number of Spanish and Portuguese scholars are working on the cult of the nymphs, including Andreu (2009a, 2009b), Andreu et al. (2010), and Peréx (2012). Andreu (2009a) offers a catalogue of nymph inscriptions.

 $<sup>^{114}</sup>$  For these examples, see Alarcão (1988, 99).

the nymphs could connect locals to the emperor.<sup>115</sup> In some regions, however, the evidence seems to suggest that Roman citizens themselves, not indigenous peoples, were putting up inscriptions to the nymphs.<sup>116</sup> Whatever the motivations behind the dedications, it is clear that nymphs were popular divinities throughout the Roman Empire.

In regions outside of Italy, native cults of female water beings were popular, as has been alluded to. In the area of modern France, the figure of the Divona was popular. Depicted as iconographically akin to a Greco-Roman nymph, Divona was a local Gallic water deity, whose name derives from a 'divine fountain' being (*div* for divine, and *ona/onna* for fountain or water source).<sup>117</sup> The Divona figure, it has been argued, symbolized the 'living' element of water, as it gave life and was constantly moving.<sup>118</sup> Thus, a Divona became associated with springs and fountains, as Ausonius calls the local water spirit a Divona in his poetical praise of his hometown of Bordeaux (Ordo urb. nob. 20.33-35). Throughout Gaul, a number of structures that enclosed water sources, even through the Roman period, are known as Divonas by the ancients, such as at source sanctuaries.<sup>119</sup> Over time, in Roman Gaul, traditional forms associated with the Divonae are combined with Roman forms to create unique architectural expressions of devotion to local water deities. Indeed, throughout the Roman Empire, local water deities are often either syncretized with Roman divinities, or the local gods are grafted onto Roman divinities, as is the case with the imperial cult and healing cults.

<sup>&</sup>lt;sup>115</sup> Arnaldi 2006, 77. For more on this phenomenon, see the sanctuary at Nîmes (App. No. 1.78).

<sup>&</sup>lt;sup>116</sup> Arnaldi 2004, 1363.

<sup>&</sup>lt;sup>117</sup> Bourgeois 1991, 24-25.

<sup>&</sup>lt;sup>118</sup> Bourgeois 1992a, 10-11; Roth Congès 1994, 400; Levagne 2012, 117.

<sup>&</sup>lt;sup>119</sup> For more on these structures, see especially Bourgeois (1992a), with Roth Congés's response (1994).

One final consideration regarding the cult of the nymphs is its nature as a 'public' cult. Some scholars have dismissed the cult as not being a 'public' one, because it had no built temples.<sup>120</sup> As we have seen, however, there were indeed temples built for the nymphs. Local nymphs throughout the Roman Empire would also have allowed local peoples to celebrate the adjacent waters through their local deities. One can imagine gatherings at the altars and small temples in the countryside throughout the Empire.<sup>121</sup> Given the importance to Roman religion and mythology of the famed nymphs Juturna, Egeria, and Anna Perenna, the nymphs certainly had a place in 'official' state cult of the Romans.<sup>122</sup> Juturna's ancient cult in Lavinium and Rome, along with her two cult sites in the highly trafficked parts of Rome (the Forum Romanum and the Campus Martius), elevated the cult of the nymphs past the simple, private devotion at water sources that was omnipresent in the Roman world. The mythical associations with the famous nymphs of Rome allowed Romans to craft an identity that celebrated their famed waters, necessary for survival and pleasure. The Roman nymphs can be viewed as a unique, pan-Mediterranean cult, pairing a larger state cult with smaller, private devotion.

## **II. Entrances to Sanctuaries**

The built environment of Roman religion allowed for the use of water-displays for decoration and utility in a religious space. When pilgrims entered a sanctuary, there was usually some sort of water basin (e.g., a *delabrum*) that would allow them to purify

<sup>&</sup>lt;sup>120</sup> Arnaldi 2006, 83; Garofoli 2013, 138.

<sup>&</sup>lt;sup>121</sup> One only has to think of modern Catholic and Orthodox festivals of saints that are held in the Italian and Greek countrysides, bringing local populations together to worship their local saints.

<sup>&</sup>lt;sup>122</sup> The term 'official' regarding Roman cult is problematic, but it encapsulates the fact that the nymphs were 'officially' sanctioned, as was shown with the ancient cult of Juturna in the city of Rome. For more on 'official' Roman cults, see Beard et al. (1998, 245-260) and Rives (2006). An interesting approach of applying network theory to how religious cults spread might be worth exploring in regards to the cult of the nymphs (Collar 2013).
themselves before entering the sacred precinct.<sup>123</sup> In some instances, a fountain with a water-display was installed. Thus, as the pilgrims moved from the non-sacred to the sacred, a liminal space was created, and the way station of the fountain provided a stopping point for pilgrims before they were able to proceed further.<sup>124</sup> The ability to include a water-display near an entrance to a religious sanctuary afforded the opportunity to signal to pilgrims the importance of the space that they are about to enter, while also providing them with the crucial water that could be used to purify, but also to refresh after a potentially long journey to the sanctuary.

While pilgrims could have used the fountain at the entrance of a sanctuary as a way station, they certainly would have used the water that was moving directly in front of them. We can recognize from the archaeological record of the parapets of basins in sanctuaries that have been worn down after the repeated movements of water jugs scrapping against the stone.<sup>125</sup> It is also evident through inscriptions. In one instance, a fountain in a religious sanctuary in Cirta (modern Algeria) lists the inventory of the fountain, in which there are at least six gold skyphoi and a gold cantharus, all of which were probably chained to the fountain, along with six hand towels (**App. Nos. 1.31**, **2.18**). We can imagine pilgrims drinking the refreshing waters of the fountain after they entered the sanctuary, and admiring not only the aesthetics of the fountain, but also the precious metals of the drinking vessels of the structure. In addition, the archaeological

<sup>&</sup>lt;sup>123</sup> *ThesCRA* 2.3a.IV.A (s.v. Purificazione, Romana, Mezzi impiegati nelle purificazioni, liquidi e unguenti; V. Saladino).

<sup>&</sup>lt;sup>124</sup> See Chapter 3 for more liminal spaces associated with water-displays. For way stations in Roman architecture, see MacDonald (1986, 99-107).

<sup>&</sup>lt;sup>125</sup> For more on these indications in the archaeological record, see: Dorl-Klingenschmid 2001, 104-108; Richard 2012, 118-130.

and epigraphic evidence of the use of fountains gives these structures agency, allowing us to repopulate the spaces with their actual ancient users.

One of the first known uses of multiple fountains at a religious sanctuary in the Greco-Roman world is at the Sanctuary of Fortuna Primigenia at Praeneste, modern Palestrina, in Italy from the mid-early second century CE (Fig. 87; App. No. 1.103).<sup>126</sup> A series of nearly ten fountains worked together to create an impressive water-display throughout the terraced religious complex, allowing for pilgrims to mark their progression up through the sanctuary, together with providing opportunities for purification along the way.<sup>127</sup> On the intermediate and upper terraces, four small paired fountains were placed in inconspicuous areas, such as in niches under stairways and along the grand ramps that move up the terracing. The repeated forms and symmetry of the placement of the water-displays were innovative and would have enlivened the sensorial experience of the sanctuary, especially the fountains placed on the long vaulted ramps that convey the pilgrim from the intermediate to the upper terraces. This use of symmetrical water-displays in a religious sanctuary did not necessarily become canonical, perhaps given the unique situation of the terrace complex at Palestrina; however, these fountains demonstrate how displaying water can have an impact on and alter an individual's experience in a religious space.<sup>128</sup>

In the imperial period, Pergamon, one of the most famous Hellenistic cities of the Mediterranean, was extremely well watered by a series of cisterns and aqueducts, and the

<sup>&</sup>lt;sup>126</sup> Neuerburg 1965, 33.

<sup>&</sup>lt;sup>127</sup> Berg 1994, 119.

<sup>&</sup>lt;sup>128</sup> Not considered in this discussion are the two examples lower down the terrace, the 'Antro delle Sorti' and the apsed hall that contained the famous Nile Mosaic. Both would have been water-displays, and they were installed ca. 125 BCE. But Meyboom (1995, 8-19) demonstrates how these two spaces, especially the apsidal hall were not part of the Sanctuary of Fortuna; they were, rather, part of a lower civic space, probably the upper forum. The Nile Mosaic could have in fact been associated with a sanctuary of Isis.

acropolis area housed a number of sanctuaries, such as those of Demeter, Athena, Dionysus, and Trajan.<sup>129</sup> The Sanctuary of Demeter's earliest beginnings were in the late fifth to early fourth centuries BCE, and it continued to flourish in the Roman period.<sup>130</sup> Buttressed against the southwest terrace of the acropolis, the sanctuary features a temple surrounded by two stoas, all of which is entered through a propylon (**Fig. 88a**). In the early first century CE, adjacent to the propylon, down a few steps, an omega-shaped exedra fountain was installed (10.14 m long) (**App. No. 1.88**). The exedra (6.32 m by 3.50 m) was covered in a half-dome, complete with three cascade-shaped openings for water to pour from, while the sides had wings with niches for the movement of water, which would have collected in a trapezoid-shaped basin in the front (**Fig. 88b**).<sup>131</sup> One can imagine the great movement of water through the openings into the large basin that fronted the small street leading to the propylon of the sanctuary. Nothing is known of this fountain's decorative program.

The placement of the fountain is crucial. As the fountain juts out into an already constricted space leading into the main entrance of the Demeter Sanctuary, the integration of the structure into an already existing landscape is like a sign-post for all those passing by. By installing the fountain here, the patron was sending a strong missive to all those who would potentially use the structure, namely that they should stop and use the waters before continuing into the sanctuary proper. While there have not been to date any decorations or inscriptions associated with the fountain, it is interesting to imagine

<sup>&</sup>lt;sup>129</sup> For more on the water infrastructure of Pergamon, see Garbrecht (2001).

<sup>&</sup>lt;sup>130</sup> For more on the sanctuary, see the monograph of Bohtz (1981), along with Radt (2011, 180-186). For more on the dating of the various phases, see Bohtz (1981, 56-60).

<sup>&</sup>lt;sup>131</sup> The form of the fountain is certainly not unique. Other examples are seen throughout the Mediterranean, including North Africa, Italy, and other parts of Turkey (e.g., the Hadrianic era fountain at Alexandria Troas). For more on the type, see Letzner (1999, 195-197). For the Fountain of Herodes Atticus at Alexandria Troas, see: Dorl-Klingenschmid 2001, cat. no. 2; Erol 2008; Longfellow 2011, 148-149; Richard 2012, cat. no. 1.

how exactly the structure would have been decorated. What would the patron have focused the pilgrim on visually? Or are we to imagine that the patron simply wanted the pilgrim to concentrate on the refreshing water? Regardless, the integration of the fountain into the space leading to the sanctuary is important for our understanding of how waterdisplays were encountered as one enters religious spaces like this one.

Under Hadrian, the forecourt of the Sanctuary of Demeter and Kore at Eleusis, in Greece, received a facelift, including the addition of a new fountain (App. No. 1.44). With the growth of the Penhellenion League, established in 131-132 CE, which connected the imperial cult and the Eleusinian Mysteries, the site of Eleusis would have presumably needed to respond to the growing numbers of initiates and pilgrims.<sup>132</sup> Thus, the repaying of the space, which was the terminus of the Sacred Way from Athens, monumentalized and altered the previous forecourt, along with adding new features, such as arches and the fountain on the south side of the space (Fig. 89). The fountain (11.40 m by 5.72 m) has a pi-shaped facade, with six freestanding Cipollino columns of the Corinthian order on marble bases (Fig. 90a). The basin, with its 1.50 m tall parapet, would have allowed water to flow through eight spouts into lower basins for consumption. The water is the focal point of the fountain, with its open-air design, unlike its closed fountain house predecessors on the Greek mainland (Fig. 90b).<sup>133</sup> The construction materials and techniques of the structure reveal that the same craftsmen were used to build this fountain as the Hadrianic nymphaeum in the Athenian Agora, which sits on the Panathenaic Way there (App. No. 1.14).<sup>134</sup>

<sup>&</sup>lt;sup>132</sup> Longfellow 2012, 135.

<sup>&</sup>lt;sup>133</sup> Longfellow 2012, 138.

<sup>&</sup>lt;sup>134</sup> Longfellow 2012, 138.

As part of a Hadrianic refurbishment of the forecourt at Eleusis, the fountain provided the necessary water for pilgrims. Of course, this fountain was not the first in this space, as the ancient Kallichoron Well, architecturally enclosed by the first half of the fifth century BCE, was the site where Demeter supposedly rested after searching frantically for Kore.<sup>135</sup> The construction of the new fountain at Eleusis, however, is important for the initiates. After traveling from Athens through the night on the Sacred Way, fasting and singing, the ability to drink the fresh water while waiting in the forecourt, before proceeding to the Telesterion, the most sacred and secret part of Eleusis, must have been a useful amenity for the initiates.<sup>136</sup> Its placement in the forecourt would have prompted pilgrims to stop, take in the refreshing water, see the new architectural setting of the forecourt, perhaps directing their gaze to the propylon, which would take them to the Telesterion. The fountain provided the pilgrims a way station to collect themselves *before* entering the sanctuary proper.

Past the Outer Propylon on the edge of the forecourt of the sanctuary lies the Inner Propylon, which also had an Antonine era water-display that could be used by celebrants upon *leaving* the sanctuary (**App. No. 1.45**). Appius Claudius Pulcher dedicated the so-called Inner Propylon in 54 BCE, during his consulship. The gate was Neo-Attic in style, with a number of ornate architectural details, like an intricate frieze over the north façade's distyle portal (**Fig. 91a**). The north façade would have offered the passer-by the visual incentive to continue on their forward journey to the inner part of the

<sup>&</sup>lt;sup>135</sup> Longfellow 2012, 136.

<sup>&</sup>lt;sup>136</sup> Longfellow 2012, 140. Palinkas (2008, 271-274) describes the experience one would have traveling from Athens to Eleusis.

sanctuary. During the Antonine period, however, the propylon underwent renovations, including the retrofitting of the south façade with a water-display.<sup>137</sup>

It was this south facade that one would have encountered *leaving* the sanctuary of Eleusis. The facade is marked by two pillars constructed of large caryatids, flanking the portal (Fig. 91b). Immediately adjacent to the pillars would have been two fountains, perhaps with a lion's head spout that would have allowed water to pour into an intermediate basin (1.32 m x 2.10 m), then into two smaller basins close to the ground (**Fig. 91c**).<sup>138</sup> The fountains were visible to those leaving the sanctuary, although it is certainly probable that one entering would have heard the flow of water and used the water, as initiates to the cult would have been thirsty and weary after their long overnight procession from Athens.<sup>139</sup> Initiates might have been able to retrieve water from the Kallichoron Well in the forecourt, but water access was only monumentalized in that space under Hadrian, when the forecourt fountain was added. The fountain on the south facade of the propylon, then, would have allowed initiates who were leaving, after their presumably transformative experience inside the Telesterion, to reenter into the world, travelling back to the city of Athens. The water, in a sense, would have prepared them to transition from the religious and secretive space, back to one that was familiar and quotidian.

The Nymphaeum of Herodes Atticus at Olympia in the Peloponnese presents an impressive water-display (**App. No. 1.83**). The Nymphaeum was situated within the ancient Altis of Zeus, against the slopes of Mount Kronion (**Fig. 92a**). The fountain was

<sup>&</sup>lt;sup>137</sup> See Hörmann (1932, 110) for the addition of the water-displays.

<sup>&</sup>lt;sup>138</sup> Evidence for the piping associated with the water-displays, however, was not found on the propylon during excavations (Glaser 1983, 43).

<sup>&</sup>lt;sup>139</sup> For more on the thirsty nature of the Eleusinian pilgrims, see Longfellow (2012, 136-137).

directly west of the terrace of the traditional Greek treasuries, immediately north of the Temple of Hera and the Metroon, and in direct sight of the Temple of Zeus.<sup>140</sup> The structure allowed water to pour into the main exedra-shaped basin, then into a long rectangular basin on an intermediary level, ending in a large, pedestrian-accessible trough at the bottom (**Fig. 92b**). The semicircular façade was decorated with figural sculpture. On the bottom level members of the imperial family were displayed, from Hadrian to Lucius Verus. Statues of the family of Herodes Atticus, however, were placed on the second level, sporting different styles of Greek and Roman dress, illustrating their complex identity in the Greco-Roman landscape of the sanctuary.<sup>141</sup> The center niche on each level, however, contained a statue of Zeus. Flanking the intermediary basin would have been two decorative monopteroi, containing statues of Herodes in one, and Marcus Aurelius in the other.

The dedication of the Nymphaeum is described in an inscription on a large bull sculpture, situated directly above the channels of the intermediary level (**Fig. 92c**).<sup>142</sup> We learn that Herodes' wife Regilla, priestess of Demeter, actually dedicated the structure. By using the form of the bull, a more Archaic-style votive offering is presented by Regilla. The inscription also reveals that the Nymphaeum is indeed dedicated to Zeus, a figure presented twice above in the façade.<sup>143</sup> The structure was probably dedicated in 153, the year that Regilla held the priesthood of Demeter. This particular priesthood would have granted Regilla special access to the sanctuary, since she was a Roman by

<sup>&</sup>lt;sup>140</sup> For more on the relationship between buildings in the sanctuary (the so-called 'spatial politics' of the space), especially in the Archaic and Classical periods, see Scott (2010).

<sup>&</sup>lt;sup>141</sup> For the construction of the identity of Herodes and Regilla in this particular example, see Gleason (2010, 130-134). For more on Regilla, see Pomeroy (2007). On the sculpture in general, see Bol (1984).

<sup>&</sup>lt;sup>142</sup> Dittenberger and Purgold 1896, no. 610. Ῥήγιλλα ἰέρεια | Δήμητρος τὸ ὕδωρ | καὶ τὰ περὶ τὸ ὕδωρ τῷ Διί. "Regilla, priestess of Demeter, (dedicated) the water and the things around the water to Zeus." (Trans. author) See also, Longfellow (2012, 142).

<sup>&</sup>lt;sup>143</sup> Longfellow 2012, 146.

birth—Greek women were forbidden to attend the Olympic Games throughout its history, unless they were acting in a priestly capacity.<sup>144</sup> The statues in the façade, however, are dedicated by different parties: Herodes dedicated those of the imperial family himself, while those of Herodes' family was given by the Elians.<sup>145</sup> The monument is a complex one, with its prominent dedication to Zeus by a Roman woman. Her well-known Greek husband, who was probably the driving force behind the structure, placed himself and his family above even the imperial family.

This Nymphaeum was prominently placed in the sanctuary, and it would have used its location to its advantage. Buttressed against Mount Kronion, the water-display was situated in one of the most conspicuous areas of the sanctuary, near the entrance associated with the Philippeion. The height of the façade of the Nymphaeum would have even been equal to that of the Zeus Temple. The Nymphaeum would have acted as a beacon for all those in the sanctuary during hot summer months, with its plentitude of water cascading down from on high into an accessible drinking trough at the bottom (**Fig. 92d**). As patrons, Herodes and Regilla, in addition to creating an aesthetic backdrop for the northern edge of the Altis, provided a magnificent way station for pedestrians. The accessibility of the trough implies that the Nymphaeum was used to provide drinking water, but also from other examples elsewhere, such as the inscription presented earlier. Clearly, the fountain was meant to be used, not just admired. In fact, in a famous passage of Lucan, the philosopher Peregrinus, noting that in the past there was no water access there, decries the soft, modern pilgrims who take in water!<sup>146</sup> The subsequent public

<sup>&</sup>lt;sup>144</sup> See Dillon (2000) for more on the role of women at Olympia and other religious festivals.

<sup>&</sup>lt;sup>145</sup> Longfellow 2012, 142. The sculptural reconstruction of the Nymphaeum is partially based on statue bases that contain inscriptions naming the dedicators.

<sup>&</sup>lt;sup>146</sup> Lucian De Morte Peregrini 19-20.

outcry against Peregrinus, who later committed suicide because of this episode, only stresses the importance of the Nymphaeum in this space and its water supply.

The audacious, large-scale fountain placed in one of the most famous Sanctuaries of Zeus in the Greco-Roman world would have made an impression on all the pilgrims interacting with the structure. They would have created memories of the time they travelled to the Pan-Hellenic religious site, perhaps for one of the famous Olympiads. The gift of Herodes and Regilla was a bold *tour de force* in a space already full of countless religious structures and dedications. The innovative building design and decorative program, let alone the freely accessible, flowing water must have caused quite the reaction for all—and even today, despite its ruined superstructure and lack of water, the Nymphaeum makes an impact. One can easily imagine the ancient pilgrims stopping and taking the water and the scenery, appreciating the patrons' benefaction, creating memories, and becoming refreshed to continue on their pilgrimage.

In Italy, to the west of the theater of Ostia is a precinct of four temples, along with a *sacellum* of Jove. North of the *sacellum* and south of the temples, adjacent to the entrance to the precinct, is a fountain building of the *camera* type (**Fig. 93; App. No. 1.84**). Dated to sometime between Trajan and Commodus, the structure's main room is marked on its three sides by semicircular niches and an entranceway with two wings. Not much remains of the superstructure, but it is believed that water would have flowed through a main, central niche into a basin on a podium there (**Fig. 94**).<sup>147</sup> Traces of the decoration of the room suggest that it was sumptuous, perhaps with a marble pavement

<sup>&</sup>lt;sup>147</sup> Letzner 1999, 311.

and the decorative and figural stuccowork on the ceiling (which might have been domed), along with columns framing the interior niches.<sup>148</sup>

The archaeological evidence of the interior of the Ostian structure suggests a highly decorated space that would have made its display of water a sight to behold. Further, the fact that the space is a *camera*-type fountain immediately evokes the grotto-like nymphaea of the Hellenistic period, as they were intimately associated with the nymphs. The fountain at Ostia presumably provided a space for pilgrims entering into the precinct the opportunity to stop and take water to drink, along with using the water for purification rites. The structure's placement on the east edge of the space near the *sacellum* relegates it to the side, but its importance in the precinct is highlighted by its close proximity to the northeast entrance, along with the fact that pilgrims would have encountered the nymphaeum if they were coming in from the south, through a columnar entrance. While the façades of the four temples situated together would have visually struck the visitor, the nymphaeum is placed in such a way that it attracts the eye of the viewer, inviting them to come closer, inspect the structure, and then use its waters. The fountain would have thus provided a vital role in the use of the space by the pilgrims.

Even in Egypt under the Romans there were fountains situated at the entrances of a religious sanctuary. There are twin fountains at the entrance of the Hathor Temple at Dendara in Upper Egypt (**App. No. 1.41**). On the processional way leading to the temple, the two asymmetrical fountains flank the sides of the road (west fountain 5.10 m wide, east fountain 4.97 m wide) (**Fig. 95**). In front of each is a set of four large Composite columns, which cover a three-niched façade. Water would have flowed from the niches, which are separated by columns, into a basin. The niches would have also been outfitted

<sup>&</sup>lt;sup>148</sup> Ricciardi and Scrinari 1996, 205-206.

with sculpture. The date of the fountains is believed to be early Severan. While there are not many other examples of Roman fountains known in Egypt, the fountains at the Hathor Temple still demonstrate the need to show the movement of water at the entrance to a religious space, along with employing a common architectural vocabulary (niched spaces with statuary, and a columnar façade) that is seen throughout the Roman world.

A final example at Gerasa along the colonnaded Cardo Maximus, next to the entrance of the Temple of Artemis, shows how large-scale water-display design also takes into consideration environmental concerns (Fig. 50; App. No. 1.57). Probably built around 190 CE, the Gerasa nymphaeum is an impressive omega-shaped exedra fountain, complete with a two-storied aedicular façade, topped by a half-dome (Fig. 96). Piped in from an aqueduct, water would have pooled in the exedra basin, and then it would have flowed into a circular basin, accessible on the street. The placement of the fountain took advantage of a central location, along the colonnade main thoroughfare of the city, next to the monumental entrance to the large Temple of Artemis complex, accessible by a large stairway.<sup>149</sup> Despite the grand facade, the structure had a low rate of water flow.<sup>150</sup> The small amount of water is probably determined by the environmental conditions of the Levant, which typically did not allow for water waste.<sup>151</sup> Despite the low flow of water at this example at Gerasa and throughout the Roman East, there was still a desire to incorporate large-scale fountain design with actual water-display, although environmental considerations were followed to prevent waste. The local populations adopted Roman architectural forms, but still grafted their own local features on fountains, reacting to the

<sup>&</sup>lt;sup>149</sup> On the Temple of Artemis, see Raja (2012, 162).

<sup>&</sup>lt;sup>150</sup> Richard 2012, 164. Richard's definition of a 'low rate of flow' is predicated on the fact the structure has seven small water inlets, a large exedra basin, and a few frontal spouts from the main basin.

<sup>&</sup>lt;sup>151</sup> Richard 2007; Richard 2012, 173-176; Kamash 2010, 7-14; Kamash 2012.

limited access of water. Further, even with a low rate of flow of water, the experience of passing the fountain along the main thoroughfare of the city, particularly if an individual was proceeding to the Temple of Artemis next door, must have been truly unique, given the surrounding arid climate and environment.

By placing water-displays at the entrances to sanctuaries, patrons were able to provide way stations and liminal spaces for pilgrims. A fountain in these areas would have not only provided the water necessary for purifications before entering such a space, but also allowed pilgrims to drink water, particularly in drier climates. In fact, a majority of the examples considered came from the eastern half of the Empire (**Table 9**), which suggests that it was more important in these areas to provide water for visitors. One only needs to think of a hot summer visit to Olympia today—and how much visitors crave water —which can help explain the placement of the Nymphaeum of Herodes Atticus there. Entrance fountains, because they were in liminal areas, allowed pilgrims the ability to transition from a secular to a religious space—and then into a secular space again (as at Eleusis). Further, water-displays around entrances would prompt movement of individuals, altering their experience in the physical landscape of the sanctuary itself.

## **III. Source Sanctuaries**

Source sanctuaries are important features of the Roman religious landscape throughout the Empire. As we saw from the passage of Pliny above, the source of the Clitumnus was highly revered in Pliny's time, with its *sacella* and votive offerings. The source of a body of water was often monumentalized and turned into a source sanctuary. This is what sometimes is termed a 'water sanctuary,' as the latter is traditionally associated with thermal water and its healing properties.<sup>152</sup> The source sanctuary, on the other hand, highlights the actual source of the water. Often, the source has its own deity, such as Clitumnus or Juturna in the Forum Romanum (**App. No. 1.112**), who, in its personified state, gave rise to the religious context of the structures.<sup>153</sup> The examples that are considered in this section include a nymphaeum outside the Sanctuary of Diana at Nemausus Aricinum (Nemi, Italy), complexes at Zaghouan (modern Tunisia) and Antioch-on-the-Orontes, a few sanctuaries in Gaul, and the source sanctuary of the Aqua Traiana in Italy.

At the site of Nemausus Aricinum, nestled into an adjacent terrace to the Sanctuary of Diana, a structure has been found recently that excavators have termed a nymphaeum (**Fig. 97; App. No. 1.81**).<sup>154</sup> This structure, not oriented with the other buildings of the sanctuary (i.e., the temple and theater), was constructed in two phases, on a mineral water source.<sup>155</sup> The first phase, probably Augustan in date, would have been a cistern, of an open circular basin form. But during the second phase, in the course of the period of monumentalization and construction under Caligula, a large three-terraced nymphaeum was installed, which was restored at some point in the reign of Hadrian or Antoninus Pius (**Fig. 98a**). The upper level (measuring 27 m by 54 m) consists of a large exedra basin with a back façade covered in marble veneer, from which water poured into

<sup>&</sup>lt;sup>152</sup> Scheid 1991; Gros 1996, 440; Ben Abed and Scheid 2003; de Cazanove and Scheid 2003, 6. See also Aupert (2012, 294-296).

<sup>&</sup>lt;sup>153</sup> For the chronology and development of the precinct associated with Juturna in the Forum Romanum, see the published excavations of the site (Steinby et al. 2012). A brief overview of the work can be found in the *LTUR* 3.168-170 (s.v., Lacus Iuturnae, E.M. Steinby).

<sup>&</sup>lt;sup>154</sup> For more on the excavations of Nemi, see Ghini (2000). The nymphaeum was thoroughly excavated between 1989 and 2009, and its final publication was edited by Braconi et al. (2013b).

<sup>&</sup>lt;sup>155</sup> Braconi 2013a, 247-248; Diosono 2013, 195.

the large basin (**Fig. 98b**).<sup>156</sup> The adjacent terrace would have been lined on the sides with columns, culminating at the ends in small covered spaces that probably housed fountains. Steps then led down to an intermediary terrace, where one could continue further down on a larger set of stairs. The bottom terrace, a monumental façade with five bays, included water-displays lining the back walls, along with mosaic pavings and shell decoration.<sup>157</sup>

The purpose of the nymphaeum at Nemi is puzzling. The structure is not situated in the sanctuary proper. The fountain complex was visually aligned with the Villa of Caligula located across the lake of Nemi, prompting suggestions that it was commissioned by Caligula himself (**Fig. 98c**).<sup>158</sup> Because the nymphaeum is not in the Diana sanctuary proper, it is suggested that it was not dedicated to Diana, but, rather, to the nymph Egeria.<sup>159</sup> Egeria has strong connections with Nemi, in addition to a spring just outside the city walls of Rome.<sup>160</sup> Egeria was famous for being a lover and advisor to the second king of Rome, Numa. During their relationship, Egeria became an intermediary to the gods for him.<sup>161</sup> When Numa died, Diana found Egeria wandering around Nemi, crying violently for her former lover. Ovid reports that Diana transformed Egeria into a spring at the base of the nearby mountain, with her limbs changed into streams, all of which could be depicted in this large-scale nymphaeum (*Met.* 15.550-551). Diana takes note of Egeria, because the lamentations of the nymph disrupt the religious

<sup>&</sup>lt;sup>156</sup> Disono 2013, 196-206.

<sup>&</sup>lt;sup>157</sup> Disono 2013, 208-209. See Palladino (2013) for the mosaics, which pre-existed any Hadrianic-Antonine restorations, and Quaglia (2013) for the shells, which might have been holdovers from the first phase of the structure.

<sup>&</sup>lt;sup>158</sup> Braconi 2013a, 2013b. The Lake of Nemi had other villas on its shores. See Bilde (2005) for the S. Maria Villa, which has been argued to have been a villa of Julius Caesar.

<sup>&</sup>lt;sup>159</sup> Disono 2013, 208; Ghini and Disono 2013, 235.

<sup>&</sup>lt;sup>160</sup> Livy 1.19.5; Ov. *Met*.15.487, *Fast.* 3.261; Plut. *Mor.* 321B. See also Picklesimer (2002), Green (2007, 222-231) and de Mincis (2013, 237-243). See above (page 279-280) for more on the nymph Egeria.
<sup>161</sup> Liv. 1.21; Ovid *Fast.* 3.277, 284; Plut. *Vit. Num* 13; De Mincis 2013, 238-239.

activities of Diana's sanctuary.<sup>162</sup> The sound of the natural mineral spring thus derives from the sound that Egeria makes. It is believed that the noise of the spring could be heard within the sanctuary itself, further connecting Egeria to the Sanctuary of Diana at Nemi, and introducing a constant presence of Egeria at the site.

We know from Ovid that Egeria's spring in Nemi was remote and protected, far from Rome (*Met.* 15.487-488). But here at Nemi, in addition to symbolizing the fountain into which Egeria was transformed, did the structure have religious associations? Because of the nymphaeum's placement outside of the sanctuary proper, this can certainly be considered a liminal space.<sup>163</sup> Perhaps worshippers and initiates could stop at the nymphaeum to ritually purify themselves—at a monumentalized *delabrum*.

The nymphaeum at Nemi fits in well with the other source sanctuaries. Terracing, originally a Hellenistic conception, but readily adopted on the Italian peninsula, is used quite effectively, reminding one of the sanctuaries at Gabii, Palestrina, Terracina, and Tivoli.<sup>164</sup> As worshippers continually move upwards, new spaces and sources of water are revealed. There is also an inventive use of covered and uncovered spaces for water (and its display). The covered spaces on the bottom terrace would presumably have been areas to purify ritually and cleanse, in effect, being more 'sacred.' The open basin on top demonstrated the awesome power of the adjacent water source of Egeria, framed by large-scale architectural forms.

The whole complex at Nemi is predicated on the actual display of the water of the source. This demonstration is effectively completed by utilizing the surrounding

<sup>&</sup>lt;sup>162</sup> For more on this episode, see Green (2007, 226-227).

<sup>&</sup>lt;sup>163</sup> De Mincis (2013, 237) suggests that the circular form of the first phase of the nymphaeum was akin to a *delabrum*.

<sup>&</sup>lt;sup>164</sup> Ghini and Disono 2013, 232.

landscape, along with characteristically Roman architectural forms. The terracing into the already existing landscape connects the nymphaeum here to older Italic complexes, such as at Praeneste, which by the Republic was using Roman technological advances to construct innovative architectural forms, such as annular vaults and large-scale stairways and terraces.<sup>165</sup> The semi-circular exedra shape of the top level at the complex at Nemi fits into the Empire-wide phenomenon of source sanctuary architectural forms. For the most part, the source sanctuaries all adopt a similar architectural form, namely a horseshoe shaped portico, with a temple-like structure at its center, presumably where the source is located (**Fig. 99**).<sup>166</sup> Thus, with the nymphaeum at Nemi, we see how the landscape, with its spring source, was exploited, while, at the same time, large terraces, long colonnades, stairways, and closed basins on the bottom level, create a large-scale complex.

Source sanctuaries are primarily found in the western half of the Empire, with a few exceptions, such as Antioch and Xanthos (**Table 10**). The western sanctuaries are present in Algeria, France, Spain, and Tunisia.<sup>167</sup> Given their semi-circular shapes, the architecture of these types of sanctuaries can be described as theatral, with the horseshoe shape mimicking the cavea of the Roman theater. The sanctuaries are linked by having similar religious structures, such as altars, small temples, and a cult space, which might include the display of water.<sup>168</sup> Letzner believes that, for the most part, source sanctuaries appear in fairly arid areas of the West, especially Africa and Spain, in order to celebrate

<sup>&</sup>lt;sup>165</sup> Berg 1994, 119-128.

<sup>&</sup>lt;sup>166</sup> Gros 1996, 440; Letzner 1999, 170; Von Falkenstein-Wirth 2011, 126.

<sup>&</sup>lt;sup>167</sup> Letzner 1999, 170, 214.

<sup>&</sup>lt;sup>168</sup> Von Falkenstein-Wirth 2011, 126.

the vital waters that sustain life in those regions.<sup>169</sup> Further, there are economic considerations: the costly nature of these building projects necessitated a rich patron, which North Africa received under the Severans, the period in which construction of a number of these source sanctuaries occurred.<sup>170</sup>

In addition to the source sanctuary proper, there are also sources that feed directly into an aqueduct, unlike the Clitumnus, which fed a larger river. The most famous example is the source at Mount Zaghouan, Tunisia, outside of Carthage (App. No. **1.151**). Thought to have been erected after 128 CE, when Hadrian visited the droughtprone region, the structure was probably built between 146-159 and dedicated in 160-161 (**Fig. 100a**).<sup>171</sup> The Zaghouan spring fed an important aqueduct to Carthage.<sup>172</sup> Dug into the hillside at the south end of the complex is a small barrel-vaulted shrine, accessed through frontal steps (Fig. 100b). A statue base found in the space suggests that there would have been a cult statue present.<sup>173</sup> On axis with the shrine is a figure-eight-shaped basin, at one of the lower entrances to the sanctuary (Fig. 100c). Water was channeled from the spring, where the shrine was located, into the front basin. From there, the water traveled by larger channels of the aqueduct down into Carthage. Steps flanking the basin allowed visitors to approach the central space and the vaulted Corinthian portico, which ended with the central shrine. The wall of the portico was lined with niches to allow for votive statues to be placed in them, however, only one fragment of a statue was found in

<sup>&</sup>lt;sup>169</sup> Letzner 1999, 214.

<sup>&</sup>lt;sup>170</sup> Letzner 1999, 215.

<sup>&</sup>lt;sup>171</sup> Rakob 1974, 65-70; Wilson 1998, 80; Longfellow 2011, 146.

<sup>&</sup>lt;sup>172</sup> Wilson (1998) believes that the construction of the aqueduct was begun sometime after Hadrian's visit, taking at least ten years to build, then placing the construction of the sanctuary after 145.

<sup>&</sup>lt;sup>173</sup> Rakob 1974, 60.

the complex.<sup>174</sup> The wall was also punctuated by pilasters that would have carried the groin vaulting of the portico.

The water-display at Zaghouan seems to have been rather minimal, relegated to the uncommon basin form situated at the front of the complex.<sup>175</sup> That being said, the entrance to the space is marked by moving water, which would have been an inviting way to entice visitors to continue into the inner spaces of the sanctuary. The terracing of the structure is familiar, such as with the Sanctuary of Fortuna at Praeneste. Other close parallels can be extended to similar architectural forms seen in élite residences on the Italian peninsula. For example, the Garden Stadium at Villa Adriana at Tivoli culminates in a water theater on two terraces (Fig. 101).<sup>176</sup> On the bottom terrace would have been a small grotto, with water-steps in place of the cavea behind. The water would have then pooled in a basin in the orchestral space in front of the shrine.

On the opposite end of the Mediterranean basin, at Antioch-on-the-Orontes, there was a Hadrianic water complex at the springs of Daphne (App. No. 1.4). Our only evidence of the complex is an unclear passage of John Malalas—explored fully in Chapter 6 (*Chron.* 11.14, 277-278). He suggests that the waters of the springs at Daphne were collected in a reservoir (*theatron*), flowed into a Temple of the Springs/Nymphs, then moved into a *theatridion* (some sort of structure that divided the water into five conduits), before being channeled down to the city of Antioch. According to Malalas, the Temple of the Springs/Nymphs contained a statue of Zeus, which some believe had the

<sup>&</sup>lt;sup>174</sup> Rakob 1974, 64.

<sup>&</sup>lt;sup>175</sup> Aristodemou (2011, 174) classifies this sanctuary, along with the Letoon of Xanthos (**App. No. 1.150**) and the sanctuary at Nîmes (App. No. 1.78), as a 'water-theater.' Along the same lines of the 'theatron' is an example from Antioch, in which the semicircular form of the structure can suggest a theatrical form (App. No. 1.4). But here there is no evidence of water moving from the shrine proper into the basin.

<sup>&</sup>lt;sup>176</sup> Rakob 1974, 81-88. For more on the Garden Stadium, see Hoffmann (1980).

head of Hadrian.<sup>177</sup> The Larissa Nymphaeum in Argos has been cited as a parallel for the Antioch example (**Fig. 102; App. No. 1.9**). Nestled into the Larissa Hill of Argos, the nymphaeum acted as the terminus of the newly constructed Hadrianic aqueduct (ca. 124 CE). Water would have entered at the back of the barrel-vaulted space in an apsed niche that contained a colossal statue of a heroically nude Hadrian. Flowing from the statue of the emperor, the water continued down the main basin, down a water stair, then into smaller draw basin, before then being channeled down to Argos. The two examples at Antioch and Argos, both from the Hadrianic period, were tapping into a common visual and architectural vocabulary that highlighted the actual water source in a similar built environment.<sup>178</sup>

A number of source sanctuaries in Roman Gaul do not conform to the more canonical forms of Zaghouan and Antioch. Integrating more local designs with Roman aesthetics and forms, sanctuaries that honored local water sources created innovative structures. While they may appear different than more traditional Roman sanctuary designs, local architects and patrons still incorporated a common visual vocabulary that is seen throughout the Empire. For example, the "Fontaine de la Pucelle" of Cenabum (modern Orléans, France) was a tempietto structure, with a small cella fronted by a covered portico of four columns (**Fig. 103; App. No. 1.30**). At least two of the columns were unusual in that they depicted in relief hanging heads of satyrs, theatrical masks, Bacchus, and Jupiter Ammon, in a network of lozenges formed from ribbons—almost like *oscilla* (hanging disks or masks) of a Roman garden. Despite using a familiar Roman

<sup>&</sup>lt;sup>177</sup> Chowen 1956; Boatwright 1999, 137-138; Longfellow 2011, 144-146. See Beaujeu (1955, 187) for more on the Temple of the Nymphs.

<sup>&</sup>lt;sup>178</sup> For more on this similarity of forms during the Hadrianic period, which could also be extended to the Hadrianic Lykabettos Nymphseum of Athens (**App. No. 1.15**), see Leigh (1997) and Longfellow (2009; 2011, 107-139; 2012).

vocabulary in the basic construction, the structure protected a source, which was covered by the front porch. To access the water, there was a series of five steps. The basin at the bottom, which was fed by a well, allowed water to trickle out into a hexagonal basin. By covering the water source, the patrons harkened back to the tradition of the Gallic Divona-type structures, while employing a Roman vocabulary to create a unique piece of architecture.

Staying in Gaul, the nymphaeum of Divodurum (modern Metz, France) provides a mid-first century example of a Gallo-Roman source structure (**App. No. 1.42**). An octagonal-shaped subterranean edifice was a hexagonal basin at the bottom that contained and displayed the source water of the site, which was accessible by stairs along the sides (**Fig. 104a**). Above ground, excavations found traces of columns and sculpture suggesting a temple was built either over or immediately adjacent the source. Among the finds of the sanctuary were votives to Icovellauna, a local goddess of beneficial waters, prompting excavators to call this a sanctuary of Icovellauna.<sup>179</sup> Sculpture found at the site includes a striding Victory statue, along with bas-reliefs of Apollo, Mercury, and Rosmerta, the latter of which are often found in Gallic sanctuaries related to water (**Fig. 104b**).<sup>180</sup> A famous inscription that describes a group of *seviri* Augustales giving a nymphaeum to Metz, has now been connected to these archaeological remains (**App. No. 2.26**). It is believed then that there was a temple of Roman design and decoration, associated with a subterranean edifice of Gallic conception, with its octagonal shape,

<sup>&</sup>lt;sup>179</sup> Lavagne 2012, 125-126. There were also votives to Mercury and Mogontia, another indigenous waterrelated deity.

<sup>&</sup>lt;sup>180</sup> Bedon, Chevallier, and Pinon 1988, 288; Lavagne 2012, 125-126.

hexagonal basin, and stairs that allow for the pilgrim to *descend* to the water.<sup>181</sup> Like with the example at Orléans, the water was the focal point, and one had to travel down into a specially built structure of eight sides to see and experience the water.

Another example in Gaul, a nymphaeum at Septeuil (Yvelines, France) of the second century CE provides an example of a water-display at a source that merges both Gallic and Roman forms to create an unusual piece of architecture at a source (App. No. **1.129**). The edifice is a *camera*-type structure, meaning it is closed off on one end (**Fig. 105a**). The nymphaeum's main axis, running north-south, includes a niche with a statue of a reclining nymph (on the south) and an octagonal basin for the water source (on the north) (Fig. 105b). While the southern half of the structure was walled up, making it appear like a grotto, the northern half was open, with low walls that supported columns that held up a roofing structure. The interior of the building was covered in marble veneer. The exposed north end would have highlighted the main focus: the water source. At Septeuil, different styles are merged to create something new. The Gallo-Roman style of the northern end (with its octagonal basin and open walls) meet with the closed south end, with its Greco-Roman style nymph and marble veneer.<sup>182</sup> The axis, a typical Roman architectural feature, focuses the viewer on the most important elements: the water and the nymph, from whom the water presumably comes.

<sup>&</sup>lt;sup>181</sup> Lavagne (2012, 125) shows that these are common features of other Gallo-Roman fountains, such as with the Fontaine de la Pucelle (**App. No. 1.30**) and the source associated with the Temple of Valeduto at Glanum (**App. No. 1.58**). There are examples of early Greek fountains, it should be noted, that also contained stairs that descend to water sources, such as at the Klepsydra (Athens), Minoe Fountain (Delos), and Fountain of Lerna (Corinth). See Glaser (1983, cat. nos. 2, 8, and 11), Berg (1994, 38-52), and Agusta-Boularot (2001, cat. nos. 18, 25, and 26). There are no examples from the Roman period of new constructions of fountains with descending steps in Greece.

<sup>&</sup>lt;sup>182</sup> Open walls can be seen on a variety of Gallic buildings, such as with the octagonal spring source at the Sanctuary of Ihn, which is open to the elements, but whose main focus is on the water (**App. No. 1.64**).

These Gallic examples show how different designs and styles of architecture can successfully be integrated into one type of structure. The Gallic elements we saw included hexagonal or octagonal basins, descending down into space, and more open walls. These design features focus the pilgrim on the water and its source. A visitor is drawn to investigate the source, to come to it, and to experience its power for him- or herself. When Gallic elements are grafted onto Roman-inspired architectural styles, such as a tempietto or a large marble-veneered space, new environments are created—and spaces that are rarely seen in the Roman world. Local identity is then expressed through the use of Gallic architectural forms, while by the same time tapping into a wider, more pan-Roman architectural style, crafting innovative and unusual places that focus the viewer on the water itself, the most important aspect of the source sanctuary.

Finally, a source sanctuary that is believed to be the head of the Aqua Traiana was recently found on the northern coast of Lago di Bracciano at Santa Fiora, immediately north of Rome (**Fig. 106a; App. No. 1.126**). Because of its location now on private property, a thorough survey of the area has not been completed, but a team documented the known main chambers of the shrine in 2009.<sup>183</sup> It is believed that the structure is a three-chambered space, constructed in *opus latericium* and vaulted in *opus caementicium*, with stucco decorated with Egyptian blue (**Fig. 106b**). Each chamber was cross-vaulted, suggesting a grotto-like appearance, evoking the watery homes of nymphs (**Fig. 106c**). The main room is constructed with a niche in the back wall, presumably for a water-display and statue, although that is hard to determine, given the centuries of accumulation in the interior (**Fig. 106d**). On the east would have been a springhouse, which is

<sup>&</sup>lt;sup>183</sup> The most complete report is by Taylor et al. (2010). There is an accompanying website by two of the team members, Ted and Mike O'Neill, that has more illustrations and text (http://aqueducthunter.com).

connected to a series of water channels that run downhill, in which the water would have fed into the aqueduct. There is evidence of building directly behind the three-chambered space, suggesting that this shrine existed in a larger complex. Because of the arrangement of the three rooms, it has been proposed that the shrine was architecturally similar to the Canopus in Villa Adriana.<sup>184</sup> The grotto-shrine would fit in well with other source sanctuaries in the Roman world with such an architectural configuration.

The shrine at the head of the Aqua Traiana, however, is unparalleled in Italy, being the only shrine known to have been at the head of an aqueduct. It must be remembered that the Aqua Traiana was dedicated on 24 June 109 CE, supplying waters especially to the Thermae Traiani in Rome, which opened just two days prior.<sup>185</sup> There are not many of these shrines at the start of aqueducts known anywhere in the Roman world, either, besides the one at Zaghouan (discussed above) and at a Hellenistic springhouse at Bir Abu Safa in the eastern desert of Egypt.<sup>186</sup> It is curious that more of these types of shrines have not been found in Roman contexts. It is likely that many of these shrines have been lost in the archaeological record, or are yet to be found, awaiting chance finds, such as in the case of the Santa Fiora source sanctuary. One can easily imagine the source sanctuary related to the Clitumnus described by Pliny—and how there must have been innumerable similar sites. Frontinus also hints at a sanctuary at the source

<sup>&</sup>lt;sup>184</sup> For more on the Canopus and its use of water, see MacDonald and Pinto (1995, 170-172), along with the essays of Fahlbusch, Heemeier, Placidi in the 2008 edited volume on the 'water culture' of Hadrian's Villa. <sup>185</sup> Taylor et al. (2010, 359) for the full bibliography on the Aqua Traiana. It is curious that the Baths

opened two days before the dedication of the aqueduct that supplied them. Presumably, water was flowing through the aqueduct (and hence into the Baths), before the official dedication.

<sup>&</sup>lt;sup>186</sup> Taylor et al. 2010, 367-368. For the Egyptian example, see Sidebotham et al. (1994), who also mentions a few Roman era Nabatean examples (149).

of the Aqua Virgo, including paintings of the maiden who showed the aqueduct workers the source to tap.<sup>187</sup>

Source sanctuaries are unusual in many respects. First, they are localized at spaces of known water sources, harnessing the water, and channeling it to use for other purposes, especially in urban contexts. Second, many source sanctuaries have a theatral or theater-like appearance. The architectural framework is akin to the semicircular appearance of the cavea of the ancient theater, with its focal point at the center, here usually in the form of a shrine. A source sanctuary, however, can be constructed using a combination of local and pan-Roman architectural forms, creating innovative waterdisplays. Such instances, such as the examples in Gaul, are expressions of both regional and Roman identities. Finally, these spaces are predicated on viewing, particularly as the *theatron* was intended as a place for seeing. These sanctuaries generally provide a wide, open space for large crowds, which then allow for viewing by visitors. As one continues to approach the central focal point of the structure, there is more to take in visually, whether the surrounding landscape, the colonnade, decorative architectural features, the sacred space, or the display of water. In the Gallic examples, the water sources were highlighted using hexagonal or octagonal basins, which are specific to that region of the Empire. The source sanctuary presents the sacred water in an architectural setting appropriate for worshippers to appreciate and perhaps revere it, in addition to using it for drinking and potential purification rites.

<sup>&</sup>lt;sup>187</sup> Front. Aq. 10.3-4. Virgo appellata est, quod quaerentibus aquam militibus puella virguncula venas quasdam monstravit, quas secuti qui foderant, ingentem aquae modum invenerunt. Aedicula fonti apposita hanc originem pictura ostendit. "It was called Virgo, because a young girl indicated certain water veins to the soldiers who were hunting for water, and the diggers who came after them summoned up an enormous quantity of water. A painting which represents this origin is displayed in a small shrine set up near the source." (Trans. R.H. Rodgers 2003, adapted). Robinson (2001, 52, n. 132) cites an ancient gem that might depict Agrippa, who constructed the aqueduct and the source sanctuary, drawing a parallel with this depiction and the Peirene fountain of Corinth.

## **IV. Imperial Cult**

There is sufficient archaeological evidence to connect water with the imperial cult structures throughout the Empire. We have already encountered an example at Antioch, in the Temple of the Nymphs (**App. No. 1.4**). Most believe that the statue of Zeus that Malalas mentions was a colossal statue of Hadrian in the guise of Zeus, as was the case with central sculpture in the Larissa nymphaeum at Argos (**App. No. 1.9**).<sup>188</sup> If the Antiochene temple was indeed a site of imperial cult activity, much is being said by placing the emperor at the focal point of a water-display. Is he the source of the water? Where does the emperor's power stem from? In effect, with the emperor in the guise of the ruler of the gods, we should believe that he controls the whole *oikoumene*, including the life-giving waters of the source.<sup>189</sup> We must also consider here how imperial cult easily grafted itself onto native cults, especially those of water deities.

Imperial cult is a phenomenon that binds the Roman world together. Cassius Dio observed that even during his lifetime the imperial cult was a unifying agent throughout the Roman Empire and, despite the differences in religious practices in the Mediterranean and further abroad, worshipping the emperor was a common element that went beyond geographical boundaries (51.20.7).<sup>190</sup> Much has been written on the imperial cult, and this is not the venue to survey the literature.<sup>191</sup> Of note is the widespread integration of the imperial cult into local cult throughout the Empire, oftentimes combining native

<sup>&</sup>lt;sup>188</sup> Boatwright 1999, 137-139; Longfellow 2011, 144-146; Longfellow 2012, 151.

<sup>&</sup>lt;sup>189</sup> Boatwright 1999, 137-139; Aristodemou 2012, 281.

<sup>&</sup>lt;sup>190</sup> See also Hopkins (1978, 197-242).

<sup>&</sup>lt;sup>191</sup> Of particular note, however, are Price (1984) and the multiple volumes of Fishwick, all which attempt to study the regional iterations of the imperial cult, whether in the East or West, respectively. Camia (2011) examines the imperial cult the province of Achaea, along with Evangelidis (2008) for the architecture of imperial cult buildings in Greek agoras. A good recent overview is Gordon (2011).

deities and imperial ones.<sup>192</sup> The examples considered here involve some sort of epigraphic proof of connection to the imperial cult, ensuring that the structures were in fact dedicated to the cult. Because of the commonplace occurrence of the imperial cult in most of the Empire, the presence of water-displays in areas tied to the cult is of particular importance.

The so-called 'macellum' of Praeneste (Palestrina, Italy) begins our discussion of the relationship between water and the imperial cult (**App. No. 1.102**). Located in the lower city of Praeneste, probably close to the lower forum and near the intersection of the cardo and decumanus, the 'macellum' is a horseshoe-shaped structure.<sup>193</sup> The 'macellum' includes a main rectilinear niche on axis with the entrance, with four semicircular niches located radially along the sides (**Figs. 107a, 107b**). The semicircular niches are plastered, while the main niche is veneered in marble, with marble mosaic paving throughout the space. Among the finds were an altar dedicated to Divus Augustus, and the famous Grimani reliefs, which are now located in Palestrina, Vienna, and Bucharest (**Fig. 107c**).<sup>194</sup> The altar is believed to have been in the main niche, while the reliefs would have been in the four other niches.

The four known Grimani reliefs show depictions of seasons. The main subject of each of the seasons is a female animal, including a sheep (winter), lioness (spring), wild sow (summer), and a cow (autumn). The identification of each of the animals with a season is based in Aristotelean and Platonic thought of seasonal allegories.<sup>195</sup> The style is

<sup>&</sup>lt;sup>192</sup> See particularly Beard et al. (1998, 317-318, 348-362).

<sup>&</sup>lt;sup>193</sup> Agnoli 1998, 158-160.

<sup>&</sup>lt;sup>194</sup> For the altar, see Agnoli (1998, 159). On the reliefs: Giuliano 1985; Simon 1986, 126-127; Coarelli 1996; Agnoli 1998; Letzner 1999, cat. no. 360; Agnoli 2002, 207-214; La Rocca et al. 2013, 248-249. Giuliano (1985) identifies a small fragment found in the storerooms of the Bucarest Museum as that of the depiction of the cow.

<sup>&</sup>lt;sup>195</sup> Agnoli 2002, 214; La Rocca 2013, 248.

very reminiscent of the reliefs of the Ara Pacis, especially the bucolic and idyllic setting of the animals in nature, leading scholars to associate the Grimani reliefs with sculptural workshop of the Ara Pacis.<sup>196</sup> Paul Zanker points out that the mother animals and their offspring stress the Augustan notions of the importance of motherhood and bearing children.<sup>197</sup> It is important that the abundance associated with the four seasons is being depicted in a space related to the emperor, as he is the figure who can bring about plenty in the Roman world.<sup>198</sup> On the back of the panel of the wild sow, there appears to be an inscribed *XI*, which has prompted some to suggest that this panel was the eleventh in a series of 12, standing for the 12 months.<sup>199</sup> Further, each of the reliefs has a hole drilled through the panel, such as through the mouth of the wild sow or an overturned urn. Thus, the reliefs would have been part of some sort of water-display.

But what was the purpose of this enigmatic space at Praeneste? Filippo Coarelli, on the one hand, has suggested that this is the monument of Verrius Flaccus (50 BCE-20 CE), a freedman who later became a famous teacher of rhetoric.<sup>200</sup> The assertion is loosely based on the fact that Suetonius mentions that there is a statue of Flaccus in the 'upper' forum of Palestrina, in a hemicycle, along with a set of *Fasti* that he dedicated (*Gramm. et rhet.* 17.4). But while there are hemicycles here, there is no secure archaeological evidence to connect this space to Flaccus. Nadia Agnoli, on the other hand, has suggested that this space was in fact dedicated to a *collegium* of the imperial

<sup>&</sup>lt;sup>196</sup> Coarelli 1996, 463; Agnoli 2002, 210; La Rocca 2013, 248.

<sup>&</sup>lt;sup>197</sup> Zanker 1988, 176-177.

<sup>&</sup>lt;sup>198</sup> For more on the notion of abundance and the emperor, especially Augustus, see: Zanker 1988, 172-192; Castriota 1995; Pollini 2012, 271-308.

<sup>&</sup>lt;sup>199</sup> Agnoli 2002, 214; La Rocca 2013, 248.

<sup>&</sup>lt;sup>200</sup> Coarelli 1996.

cult, because of the structure's central location, in addition to a number of altars with dedications to Divus Augustus, Jove Arcanus, Pax, and Securitas found there.<sup>201</sup>

Perhaps, then, we can imagine this space used for members of the local imperial cult. The area was nicely decorated, with marble and mosaic, along with altars and the reliefs. We can place the four reliefs, despite the fact that one has *XI* inscribed on its back, in the four niches, given their large rectangular shapes, and the fact that they are concave. Thus, we can imagine these niches housing the reliefs, along with some sort of water-display. The space must have been not only an inviting one, but also a sumptuous one, celebrating the imperial cult at the site of an important Italic cult (i.e., Fortuna Primigenia).

Just as the so-called 'macellum' building at Praeneste was located near the lower forum, the most common manifestation of water-display connected with imperial cult is seen in the fora of Roman cities, especially in the western half of the Empire, such as in modern France, Italy, Morocco, Portugal, and Spain, dated between the time of Augustus and Nero.<sup>202</sup> At the site of Conímbriga, one of the largest towns of Roman Portugal, the Augustan forum presents two fountains adjacent to the temple associated with the imperial cult (**Fig. 108a; App. No. 1.32**). The colonnaded area is divided into two spaces, with the main access point on the south side (**Fig. 108b**). Across the courtyard-like space, on the north side, was the temple complex on a higher elevation and on a raised podium.

<sup>&</sup>lt;sup>201</sup> Agnoli 1998, 162-165.

<sup>&</sup>lt;sup>202</sup> Reis 2009. The sites explored by Reis include: Ebora Liberalitas Julia (Évora, Portugal; App. No. 1.43), Civitas Igaeditanorum (Idanha-a-Velha, Portugal), Conímbriga (Portugal, App. No. 1.32), Colonia Augusta Emerita (Mérida, Spain; App. No. 1.20), Aeminium (Coimbra, Portugal), Eburobritium (near Óbidos, Portugal), Bobadela (Portugal), Olisipo (Lisbon, Portugal), Caparra (Spain), Ampurias (Empúries, Spain; App. No. 1.1), Colonia Augusta Firma Astigi (Spain), Baelo Claudia (Spain; App. No. 1.22), Bilbilis (Spain), Valeria (Spain), Clunia (Spain), Luna (Italy), Minturnae (Italy; App. No. 1.75), Ostia, Volubilis (Morocco), Rome, and Vienne. For more on early temples associated with the imperial cult, see Hänlein-Schäfer (1985).

Underneath the porticus triplex surrounding the temple was a cryptoporticus, which probably contained shops. The pseudoperipteral, tetrastyle prostyle temple's podium had stairs at its axial entrance. Flanking the stairs were two podia, perhaps for statues. On the other sides of the podia were water basins that presumably would have allowed for some sort of water-movement, although the present state of the superstructure does not allow us to confirm that today. Access to the basins would have been from the platform to the south, which was entered from the main courtyard by stairs. The water basins, therefore, would have been easily seen, but to them access was restricted.

Other Iberian examples of water-displays associated with the imperial cult also have basins in close proximity to the main temple of the forum. In a similar fashion to Conímbriga, the forum at Mérida has two large basins (12.20 m by 3.75 m, and 1.82 m deep) that flank the so-called 'Temple of Diana,' now believed to have been dedicated to the imperial cult, probably in the Julio-Claudian period (**Fig. 109; App. No. 1.20**).<sup>203</sup> There are other curious examples throughout the Iberian Peninsula that include waterdisplays that literally surround the sides of the temples, and which, in a sense, frame the temple in the space there.<sup>204</sup> At Ebora (modern Évora, Portugal), a basin of the mid-first century CE surrounds the three sides of the temple, with a width of almost 5.0 m and a depth of 1.0 m (**Fig. 110; App No. 1.43**).<sup>205</sup> The temple at Ampurias (modern Empúries, Spain) has a first century CE basin that runs on the north and east sides of the open area surrounding the temple, all of which is flanked by a cryptoporticus (**App. No. 1.1**).<sup>206</sup> On

<sup>&</sup>lt;sup>203</sup> For more on the 'Temple of Diana,' see: Alvarez Martínez and Nogales Basarrate (2003) and Trillmich (2007). Trillmich (2009) offers a succinct overview of Mérida, with bibliography up to 2007.

<sup>&</sup>lt;sup>204</sup> There is also an example of this basin type at Luna (modern Luni, Italy)—although the temple there is probably dedicated to Luna or Diana. See Ruiz de Arbulo (1991, 24-27) and Reis (2009, 207-208). <sup>205</sup> Hauschild 1991; Reis 2009, 290-292; Costa Solé 2011, 45.

<sup>&</sup>lt;sup>206</sup> For more on the development of the forum of Ampurias, see Aquilué et al. (1984), Ruiz de Arbulo (1991) and Aquilué et al. (2012).

the north, the basin measures nearly 25.0 m long and 2.0 m wide, which allows for a great show of water in this space. These examples of water-displays in the fora surrounding temples associated with the imperial cult are not only decorative elements ameliorating the space, but also practical water installations that would have brought necessary water to those areas of town.<sup>207</sup>

But was there something more concrete in the relationship of these water-displays and the imperial cult? It has recently been suggested by Pilar Reis that the basins were used by the processions related to religious activities associated with the imperial cult.<sup>208</sup> Processions were characteristic of the imperial cult in both the eastern and western halves of the Empire, employing imperial effigies and cult personnel, utilizing the built environment around them.<sup>209</sup> The religious architecture at Conímbriga, as in most of the Roman world, would have guided the worshippers in the ways they should use the space.<sup>210</sup> A procession, thus, might enter the space from the monumental south entrance, proceeding through the courtyard, up the stairs on the north side, past the basins, before approaching the temple proper. The procession would probably have included a mass of worshippers, including cult personnel, holding not only images and symbols of the emperor and his family, but also leading animals, which could have been slaughtered in the courtvard.<sup>211</sup> The water could have served various roles in cult practice, such as purification, as we have seen, or aiding in the act of sacrifice. The procession would have brought together the inhabitants of Conímbriga, promoting "social cohesion and imperial unity, to impress the crowd who lined the route with the might of the occupying power

<sup>&</sup>lt;sup>207</sup> Costa Solé 2011b, 45.

<sup>&</sup>lt;sup>208</sup> Reis 2009, 294.

<sup>&</sup>lt;sup>209</sup> Fishwick 2007.

<sup>&</sup>lt;sup>210</sup> Egelhaaf-Gaiser 2007, 209-210.

<sup>&</sup>lt;sup>211</sup> Fishwick 1991, 550-566; Fishwick 2004, 268-273.

and to evoke the august person of the emperor who was present in holy effigy if he could not be there in mortal person."<sup>212</sup> Water-displays and their basins associated with structures of the imperial cult would have then been subsidiary to the temple. While part of an overall aesthetic and architectural program, these fountains would have supported the activities of the temple complex. Access to the water, however, would have been an important aspect of these water-displays, providing the water necessary for ritual in the surrounding space.

One of the most famous water-displays associated with the imperial cult can be found at Nemausus in modern Nîmes, France (**App. No. 1.78**). The site has ancient beginnings, associated with its eponymous spring deity, Nemausus.<sup>213</sup> The architecture of the sanctuary is innovative in its forms, and its main focus is the water of the source of the Nemausus (**Fig. 111a**). The sanctuary seems to have been pre-Roman, followed by an Augustan monumentalization of the source by 25 BCE, and Hadrianic and Antonine renovations later on.<sup>214</sup> A central rectangular platform housed a large altar, probably similar in form to the Ara Pacis in Rome, complete with an inscription dedicating it to Roma and Augustus, from the Augustan period.<sup>215</sup>

Surrounding the platform was the so-called nymphaeum, a body of water that flowed into a large basin from the natural source nearby. The water was subsequently channeled into the city proper for other uses. The platform with the large altar was connected to the surrounding pedestrian platforms by small bridges. The basin was

<sup>&</sup>lt;sup>212</sup> Fishwick 2007, 44. See also: Van Andriga 2000b.

<sup>&</sup>lt;sup>213</sup> For inscriptions mentioning Nemausus: *CIL* 12.3070, 3072, 3093, 3095, 3096. Gros 1984, 129. For more on the rural cult of water near Nîmes, see Sebe-Blétry (1985).

<sup>&</sup>lt;sup>214</sup> There are a few inscriptions dated to 25 BCE, dedicated by Augustus, found close to the source itself. See Gros (1984, 129). As Gros mentions, such a date argues well with other early imperial religious dedications in Gaul, such as those at Lyon.

<sup>&</sup>lt;sup>215</sup> Gros 1984, 127-128.

contained by exedra-form niches on the sides, complete with Doric columns, which were partially submerged by the water of the spring. Some of this ancient architecture and its style can be seen today in the Jardin des Fountaines, located very near to the ancient sanctuary, with exedras and submerged columns (**Fig. 111b**).<sup>216</sup> The water continued to another platform on the northwest, which was, again, connected by a bridge. This area of water contained not only other exedra forms that mimic the shape and construction of the figure-eight basin at Zaghouan, but also some sort of square foundation, whose purpose is as yet unknown. The whole sanctuary would have been enclosed by a porticus triplex, with a propylon on the southern end.<sup>217</sup>

On the west side of the sanctuary at Nîmes is a barrel-vaulted rectangular space. This area, the so-called 'Temple of Diana,' is believed to be a structure associated with the imperial cult, given not only space at the back for a distyle niche to house a cult image, but also the inscriptions to the imperial family and the *Nymphae Augustae*.<sup>218</sup> The interior architecture, with its niches and entablatures, pilasters, and barrel vault, has prompted scholars to assign an Antonine date to the building (**Fig. 111c**).<sup>219</sup> More broadly, there is evidence, both architectural and epigraphic, to show that there were Hadrianic and Antonine restorations to and constructions in the whole complex.<sup>220</sup> There are also architectural similarities between the Hadrianic nymphaeum at Zaghouan and Nîmes, including the cella at the farthest point and surrounded by a portico, niched walls, the use of stairs, doorways, and the semi-circular basin shapes in both spaces (**Fig.** 

<sup>&</sup>lt;sup>216</sup> Anderson 2013, 186-188.

<sup>&</sup>lt;sup>217</sup> For the porticus triplex, see Gans (1990, 113-119) and Frakes (2009, 179-183).

<sup>&</sup>lt;sup>218</sup> CIL 12.3103-3109. Gans 1990, 119.

<sup>&</sup>lt;sup>219</sup> Gans 1990, 98-113; Thomas 2007b, 53-69; Anderson 2013, 190.

<sup>&</sup>lt;sup>220</sup> Inscriptions that indicate this building phase include: *CIL* 12.3183, 3232; *CIG* 2.6785-7688; *IG* 14.2495-2497. See also Anderson 2013, 190.

**111d**).<sup>221</sup> The space at Nîmes, in short, employs the architectural vocabulary that we have seen in the source sanctuaries of the Empire.

The sanctuary at Nîmes is well watered, perhaps unsurprisingly, given its ancient connections to Nemausus. So what can we make of the imperial cult here? The sanctuary is well integrated into the urban landscape of the city that was built up and monumentalized in the Augustan period. The sanctuary would have been in sight of the forum, where the Maison Carée is located, along with the Tour Magne, the large tower renovated in the Augustan period (**Fig. 111e**).<sup>222</sup> The importance of the sanctuary, thus, would have been highlighted within the developing and surrounding urban fabric. The water from the source would have also gone to supply the section of the city that was northeast and southeast of the forum, channeled by an aqueduct.<sup>223</sup>

What is of great importance, however, is what could be considered 'cult continuity.'<sup>224</sup> It appears that the Romans successfully grafted a native water cult onto their own uniquely Roman cult of the emperor. In fact, the incorporation of the cult went as far as to include the *Nymphae Augustae*. And while these may seem like nymphs that are somehow connected with the Augustan house, in all likelihood, this was in and of itself a form of emperor worship, with the nymphs being a guise for Augustus and his family. Duncan Fishwick has pointed out that as a "Neptunus Augustus" or a "Hercules Augustus," Augustus is in fact being worshipped in the form of Neptune or Hercules,

<sup>&</sup>lt;sup>221</sup> Veyrac 2006, 91.

<sup>&</sup>lt;sup>222</sup> Gros 1984, 127; Anderson 2013, 188.

<sup>&</sup>lt;sup>223</sup> Veyrac 2006, 78.

<sup>&</sup>lt;sup>224</sup> 'Cult continuity' is generally a term used by historians and archaeologists when describing the similarities of cult practice between the Aegean Bronze Age and the Archaic period of Greece. The idea has caused much debate in the scholarly community, as can be imagined, although it might be appropriate here to describe how the cultic practices of the Romans and their counterparts came together. For more on 'cult continuity,' see Whitley (2009).

rather than Neptune or Hercules being the recipients of cult to Augustus.<sup>225</sup> Or perhaps there was a more nuanced reciprocity between Augustus and the other deity, namely that "the place of the local deity within the Roman order was assured and, on the other hand, the local deity was a protector of the emperor."<sup>226</sup> Local populations could in this way use their own religious structures in conjunction with the imperial family, tying themselves more closely to Rome.<sup>227</sup> The water and its display here at Nîmes, then, provide the foundation for the construction and use of the site. By highlighting the water, the original catalyst for any sort of cult here, along with the site's subsequent monumentalization, the Romans emphasize its significance not only as a force perhaps possessed its own *numen*, but also the association of that *numen* with imperial power.

This survey of water-displays associated with the imperial cult has shown a number of points. First, fountains near imperial cult buildings were found throughout the Empire; however, there is a slightly greater number of them on the Iberian Peninsula (**Table 11**), although, the reason is unclear.<sup>228</sup> Second, water basins were placed in relation to imperial cult buildings to allow for ease of access during processions and cult. The water, while vital to the activities happening there, took a subsidiary role to the temple proper. The display of water in these contexts chiefly assisted what was occurring in these spaces. Further, imperial cult, when practiced in conjunction with a native water cult, could successfully incorporate water into a novel form of worship, to create

<sup>&</sup>lt;sup>225</sup> Fishwick 1991, 446.

<sup>&</sup>lt;sup>226</sup> Beard et al. 1998, 352.

<sup>&</sup>lt;sup>227</sup> The relationship between native and Roman gods is, of course, not a simple one. See Van Andriga (2011) for more of the nuances. One can also think of the dedication at El Madher (Algeria), in which indicates that the inscription was to the nymphs and Jupiter Optimus Maximus, on behalf of the health of Septimius Severus, Caracalla, Geta, and Julia Domna (*CIL* 3.4322 = 18527 = ILS 2484). For more, see Arnaldi (2004, 1358).

<sup>&</sup>lt;sup>228</sup> While there were not many public water-displays in the region, those that existed were located near imperial cult buildings, as well as inside theaters in Spain (**Tables 13 and 14**).

something new and peculiarly Roman. Finally, the use of water also advances notions of abundance, a popular theme starting with Augustus and used by subsequent emperors. When thinking about water, one cannot help but consider its wealth and fecundity, both of which the emperor gives his subjects; thus, using water in these spaces helps to stress the plenty that the emperor can provide.

## V. Healing Sites

Water in a healing capacity takes on religious associations throughout the Roman world. The ancient authors, such as Vitruvius, Seneca, and Pliny the Elder, discuss the importance of hot waters and their medicinal uses.<sup>229</sup> Pliny's introduction to the different classes of water, many of which are in fact medicinal, is important to consider:

emicant benigne passimque in plurimis terris alibi frigidae, alibi calidae, alibi iunctae, sicut in tarbellis aquitanica gente et in pyrenaeis montibus tenui intervallo discernente, alibi tepidae, egelidae, atque auxilia morborum profitentes et e cunctis animalibus hominum tantum causa erumpentes augent numerum deorum nominibus variis urbesque condunt, sicut puteolos in campania, statiellas in liguria, sextias in narbonensi provincia. nusquam tamen largius quam in baiano sinu nec pluribus auxiliandi generibus: aliae sulpuris vi, aliae aluminis, aliae salis, aliae nitri, aliae bituminis, nonnullae etiam acida salsave mixtura, vapore ipso aliquae prosunt, tantaque est vis, ut balneas calefaciant ac frigidam etiam in soliis fervere cogant. quae in baiano posidianae vocantur, nomine accepto a claudii caesaris liberto, obsonia quoque percocunt. vaporant et in mari ipso quae Licinii Crassi fuere, mediosque inter fluctus existit aliquid valetudini salutare. (Plin. NH 31.2)

On all sides, and in a thousand countries, there are waters bounteously springing forth suddenly from the earth, some of them cold, some hot, and some possessed of these properties united: those in the territory of the Tarbelli, for instance, a people of Aquitania, and those among the Pyrencaean Mountains, where hot and cold springs are separated by only the very smallest distance. Then, again, there are others that are tepid only,

<sup>&</sup>lt;sup>229</sup> Vitr. *De arch.* 8.3.1-5; Sen. *QNat* 3.2.1-2, 3.24; Pliny *NH* 31.1-2, 31.3.17, 31.32, 31.33-37. See Chapter 2 for more on the properties of water. See also: Peréx and Miró (2011, 60).

or lukewarm, announcing thereby the resources they afford for the treatment of diseases, and bursting forth, for the benefit of man and for all animals. Under various names, too, they augment the number of the divinities, and found cities; Puteoli, for example, in Campania, Statyellae in Liguria, and Sextiae in the province of Gallia Narbonensis. But nowhere do they abound in greater number, or offer a greater variety of medicinal properties, than in the Gulf of Baiae; some being impregnated with sulphur, some with alum, some with salt, some with soda, and some with bitumen, while others are of a mixed quality, partly acid and partly salt. In other cases, again, it is by their vapors that waters are so beneficial to man, being so intensely hot as to heat our baths even, and to make cold water boil in our sitting-baths; such, for instance, as the springs at Baiae, now known as "Posidian," after the name of a freedman of the Emperor Claudius; waters which are so hot as to cook articles of food even. There are others, too,—those, for example, formerly the property of Licinius Crassus—which send forth their vapors in the sea even, thus providing resources for the health of man in the very midst of the waves! (Trans. J. Bostock, adapted)

Pliny describes how waters can be hot or cold, despite their location, even close to other springs of different temperatures. Warmer waters, he notes, are helpful treatment for individuals. These waters, which are made these temperatures by a variety of elements (e.g., sulphur, alum, salt, soda, bitumen), can even be so hot as to cook meat, as is the reported case of those of the Posidian baths at Baiae. What is of particular interest in the passage, however, is the assertion that warm, therapeutic waters can be associated with not only certain divinities, but can also cause cities to form because of human's interest in the waters found at the site, such as at Puteoli and Statyellae (Italy), and Sextiae (Gaul).

Centers that grow out of warm waters are called *Aquae*. The Latin word for water (*aqua*) is given over to these sites that have therapeutic, mineral, or medicinal waters.<sup>230</sup> The *cognomen*, as it were, to *Aqua*, such as Aquae Apollinares, can come from a number of sources: the locality's name (e.g., Etruria), the site's founder (e.g., around Rome), or

<sup>&</sup>lt;sup>230</sup> Peréx et al. 2008, 350.
divine connections.<sup>231</sup> The divine connections perhaps associate the site with not only a divine being, such as the Aquae Apollinares or the Aquae Bormonis, but perhaps also tie it to a divine founder, giving the site a mythical background, an aition for the healing waters.<sup>232</sup> During the imperial period, the *Aquae*, especially of Italy, were generally associated with Apollo, Asclepius, and the nymphs.<sup>233</sup>

*Aquae* were also omnipresent throughout the Roman world, from the Italian peninsula and as far east as Pannonia, in Britain, and in North Africa.<sup>234</sup> One of the more famous *Aquae* sites was Aquae Granni (modern Aachen), which was established because of an ancient water cult and Temple of Apollo Grannus.<sup>235</sup> The *Tabula Peutingeriana*, a twelfth or thirteenth century CE map based on a mid-fourth century itinerary map, is helpful in placing *Aquae* in the landscape.<sup>236</sup> It lists over 100 *Aquae* settlements, which are identifiable by their name or an icon, that of a rectangular building with a blue pool indicated on the interior, of which there at least 38 separate examples on the map (**Fig. 112**).<sup>237</sup> The map is likely to have originally been used as a 'tourist map,' perhaps especially for those wishing to travel to various *Aquae* for their healing waters.<sup>238</sup>

<sup>&</sup>lt;sup>231</sup> For the locality's name and the site's founder, see: Chellini 2002, 239-240.

<sup>&</sup>lt;sup>232</sup> For the Aquae Bormonis, see Fabre (2004, 146).

<sup>&</sup>lt;sup>233</sup> Chellini 2002, 237.

<sup>&</sup>lt;sup>234</sup> Fabre 2004; Von Falkenstein-Wirth 2011, 69. For Panonnia, see: Arnaldi 2006, 65. For North Africa, see: Arnaldi 2004, 1356, 1360. See the list of *Aquae* sites in Peréx and Rodríguez Morales (2011, 155-168). For a brief discussion of these types of sites, see Aupert (2012, 307-308).

<sup>&</sup>lt;sup>235</sup> Krug 1985, 175; Zeidler 2003, 84. Zeidler does note that the name Aquae Granni only shows up in written records around 765 CE, but there is no reason that city at that point would suddenly take on a pagan name.

<sup>&</sup>lt;sup>236</sup> The *Tabula Peutingeriana* is now located in Vienna. It is a long document (measuring 6.75m long and 0.34m wide). The most recent treatments on the map have been Talbert (2010), with its accompanying website that allows for detailed study of the map (http://www.cambridge.org/us/talbert/index.html), and Albu (2014).

<sup>&</sup>lt;sup>237</sup> Allen 2003; Talbert 2010, 118-120; Peréx and Rodrígez Morales 2011, especially 155-168. Peréx and Rodrígez Morales offer the most in-depth examination of these sites on the map, complete with rich illustrations of the examples.

<sup>&</sup>lt;sup>238</sup> Allen 2003, 413. It is believed that the original artist was probably not only using another map to draw his information, but probably also an itinerary of the *Aquae*, with their locations prominently marked on the

The site of Aquae Sulis in Britain is one of the better known healing complexes in the Roman Empire (App. No. 1.6).<sup>239</sup> Because the modern city of Bath lies on the remains of the Roman city, only certain portions of the ancient remains have been found, but we have the temenos of the Temple of Sulis Minerva, with its famed male Gorgon pediment, and a sacred spring attached to a bath complex (**Fig. 113a**).<sup>240</sup> It has been argued recently that the dual focus of the complex, either on the temple and its altar, or the sacred spring, is a combination of Roman and native Celtic architectural forms, making this a strong example of Roman and indigenous forms coming together harmoniously.<sup>241</sup> The site was probably always a popular destination due to its hot (112- $120^{\circ}$  F = 44-49° C) and copious (nearly a third of a million gallons a day) waters and probably had some sort of built environment around it from long before the Romans arrived (Fig. 113b). But it was not until the second century CE that a large enclosure was added around the hot spring, with walls (complete with windows), concrete vaulting, and access steps (so pilgrims could perhaps go down to drink the waters), that would have made the spring seem like a vast natural grotto (Fig. 113c).<sup>242</sup> Within the space, water would have poured out of the natural spring, displaying the curative and sacred waters. Pilgrims could come to Bath not only to drink and bathe in the waters, but presumably also to communicate with Sulis Minerva through the waters, in which a variety of

map. See: Fabre 2004, 146; Talbert 2010, 110. *Itineria* would have supplied the information about stopping points on routes and the distances in-between for travelers and soldiers (Dueck 2012, 7).

<sup>&</sup>lt;sup>239</sup> New archaeological excavations are illustrating that Roman Britain had fountains similar to the rest of the Empire, despite climatic conditions. In some instances, it is believed that these fountains could have had religious uses before being transformed into decorative structures. For a greater discussion, see Andrews et al. (2013, 148-150).

<sup>&</sup>lt;sup>240</sup> Cunliffe 1971; Krug 1985, 180; Cunliffe 1995; Revell 2009, 118-129.

<sup>&</sup>lt;sup>241</sup> Revell 2009, 118-121.

<sup>&</sup>lt;sup>242</sup> Cunliffe 1995, 43-49. The construction of the original surrounding complex, however, occurred earlier, perhaps in the early first century by a local Togidubnus, after the Boudiccan rebellion, as a show of loyalty to Rome. For more, see Henig (1999) and Revell (2009, 119).

dedications have been found, including curse tablets, jewelry, pewter dishes, cups, ceremonial tin masks, and wood objects.<sup>243</sup> The preservation of the site of Aquae Sulis provides a glimpse into the popularity and importance of healing sites at a point on the far northern stretches of the Empire.

There are a number of other healing sites, naturally, in all parts of the Roman world. On the Italian peninsula, the site of Aquae Caeretanae (modern Pian della Carlotta, near Cerveteri), found in 1989, was used from the time of the Etruscans down to the imperial period. Aquae Caeretanae was a bathing site, complete with tepidarium and a caldarium, connected to the natural spring there.<sup>244</sup> There were number of inscribed votives found at the site that indicate that the area was associated with Jupiter and Fons, leading excavators to assert that near the spring there must have been a *sacellum* dedicated to these deities.<sup>245</sup> Interestingly enough, in the inscriptions from the site, one is dedicated by an imperial slave and another by a centurion from Rome—illustrating the social elevation of those worshipping at the site. The dedications at Aquae Caeretanae and Aquae Sulis help us to repopulate these spaces with pilgrims, who would come to these important springs, take in the waters and be healed.

While considering thermal healing waters, sanctuaries of Apollo are numerous throughout the Roman world, providing an opportunity to examine the display of water. The deity has a number of guises, but he is associated with water in a variety of contexts.<sup>246</sup> For example, the famous sixth-century BCE Etruscan tomb painting in the

<sup>&</sup>lt;sup>243</sup> Cunliffe 1971, 28; Cunliffe 1995, 54; Revell 2009, 122-129.

<sup>&</sup>lt;sup>244</sup> Gasperini 1988, 30; Cosentini and Tumolesi 1989; Arnaldi 2000, 49-50; Giontella 2012, 119-123. <sup>245</sup> There have been suggestions of the practice of theophany at the site, where pilgrims go to the *sacellum* to come into the presence of the divine, then proceed to the bathing complex. See: Gasperini 1988, 32; Dall'Aglio 2009, 77. For the text of the inscriptions, see Tumolesi (2006).

<sup>&</sup>lt;sup>246</sup> Frontinus reminds his readers of the ancient springs of the Camenae, Apollo, and Juturna (Aq. 4). Rodgers (2003, n. 13) suggests that 'Apollo' is problematical in the text, but it is easy to understand why

Tomba dei Tori in Tarquinia illustrates the episode in which Achilles kills Troilos in the sacred grove of Apollo, when Troilos was watering his horses (**Fig. 114**).<sup>247</sup> Within Apollo's sanctuary, we can see the fountain, in the form of an altar with recumbent lions, whose mouths pour water into basins.

But it is Apollo's associations with healing that connect him most loosely to water. Many Apollo sanctuaries throughout the Greek world include fountains and springs for a variety of purposes, whether healing, forming part of oracular ritual, or demarcating sacred spaces, such as the Kastalia spring as one approaches the site of Delphi.<sup>248</sup> Apollo is linked with a number of other healing gods in the Greco-Roman world, including more prominent healing deities, such as Asclepius, Bona Dea, Hygeia, and Minerva Medica, along with less traditional healing deities, such as Bacchus, Fons, Hercules, Jupiter, Priapus, Silvanus, and Venus.<sup>249</sup> Apollo, also like many of the Olympians, usually has an entourage, which could include the Muses, or even groups of nymphs, as we see in numerous inscriptions, or a solitary female consort, such as Sirona (**Figs. 115a, 115b**).<sup>250</sup> Especially in the case of the nymphs, Apollo is tied to nature and, more often than not, water.

<sup>247</sup> The scene is from an episode of a now lost portion of the Trojan epic cycle. Simon 2013, 500. For more on Apollo in Etruria, see Simon (1998). See also Holloway (1986) on this tomb in particular.

Apollo is placed back in the text, given his associations with springs throughout the Roman world. For more on the Roman god Apollo, see: Gagé 1955; Simon 1978; Athanassaki et al. 2009; Graf 2009.

<sup>&</sup>lt;sup>248</sup> There has been much scholarship on Apollo as a healing god: Tölle-Kastenbein 1990, 13; Diez de Velasco 1998; Chellini 2002, 211; Edlund-Berry 2006a, 81; Arnaldi 2006, 59-60; Fabre 2004, 152; Facchinetti 2008, 45; Peréx et al. 2008, 351; Diez de Velasco 2010; Peréx and Miró 2011, 61; von Falkenstein-Wirth 2011, 180-190.

<sup>&</sup>lt;sup>249</sup> Chellini 2002, 211; Edlund-Berry 2006a, 81. Fons is occasionally invoked as a healing god, but it is not popular (Arnaldi 2000, 54). One prominent example is Fons Beleni, the latter name is a local healing god, Belenus, seen on an inscription (*CIL* 5.754, 755; Arnaldi 2006, 71).

<sup>&</sup>lt;sup>250</sup> For Apollo and the nymphs, especially on votive reliefs, see: Arnaldi 2006, 59-66; Fabre 2004, 155; Ruiz de Arbulo 2011, 21. Muses and the nymphs are often conflated together, especially in the strong connection between the Muses and the Camenae, a group of nymphs from Rome. See: Wissowa 1902, 180; Dumézil 1970, 388. The Sanctuary of Apollo Maleatas at Epidauros is dedicated to both Apollo and the Muses (Lambrinoudakis 1994, 226; App. No. 1.53).

Apollo Medicus, who stems from his Greek counterpart (Ιατρός), is one of Apollo's main healing guises. There are a number of ways that Apollo can cure. Of course, Apollo throughout the Greco-Roman world is associated with the ability to not only inflict plague, such as at the beginning of the *Iliad*, but he is also associated with healing those who seek his help.<sup>251</sup> He is associated with religious pollution and the cleansing needed to rid oneself of such pollution.<sup>252</sup> Apollo Medicus appeared in Rome, according to the Roman legend, for the first time in 433 BCE, when his cult is brought to the city to aid in fighting a plague.<sup>253</sup> A temple was built to Apollo Medicus, which later became the Temple of Apollo Sosianus in subsequent renovations, and it was the only Apolline temple in Rome until Augustus' construction of the Temple of Actian Apollo on the Palatine, next to the *Domus Augusta*.<sup>254</sup>

It is the healing guise of Apollo that made him a popular figure for syncretization throughout the Roman West. Caesar in his *Gallic Wars* notes that Apollo Medicus aids in healing in Gaul.<sup>255</sup> And there were numerous native cults, particularly in the Gauls, Germany, and Britain, of male healing figures, including Belenus,<sup>256</sup> Borvo,<sup>257</sup>

<sup>&</sup>lt;sup>251</sup> Hom. *Il.* 1.1-21. See also: Parker 1983, 275-278.

<sup>&</sup>lt;sup>252</sup> Parker 1983, 393; Graf 2009, 99.

<sup>&</sup>lt;sup>253</sup> Simon 1978, 211; Graf 2009, 88.

<sup>&</sup>lt;sup>254</sup> Graf 2009, 88. For more on the Temple of Apollo Sosianus: Simon 1978, 208-210; Gurval 1998, 115-119. For more on the Temple of Apollo on the Palatine, see: Simon 1978, 216-220; Gurval 1998, 87-136; Bruno 2008, 199-242; Carandini 2008, 66-70, 84-88; Miller 2009, 185-252, who not only contextualizes the temple in its actual physical landscape, but also the poetic landscape of Augustan Rome.
<sup>255</sup> Caes. *BGall.* 6.17. See also Fabre (2004, 152).

<sup>&</sup>lt;sup>256</sup> Belenus might be of Celtic origins, but certainly was considered a protector of Aquileia. The name, 'Belenus,' has connotations of light and the heat that is derived from light that can then be associated healing. Green 1985, 162; Bourgeois 1991, 33; Zeidler 2003, 88; Arnaldi 2006, 69; Graf 2009, 91. *LIMC* 2.1.462-463 (s.v., Apollo Belenus, E. Simon and G. Bauchenss).

<sup>&</sup>lt;sup>257</sup> The name, 'Borvo,' is probably associated with bubbling or boiling water. Borvo can be found in the Loire and Rhône valleys, Provence, Alps, and Galicia. Green 1985, 161; Bourgeois 1991, 29-32; Fabre 2004, 152. *LIMC* 2.1.460 (s.v., Apollo Borvo, E. Simon and G. Bauchenss).

Grannus,<sup>258</sup> Moritasgus,<sup>259</sup> and Toutiorix that were syncretized with Apollo.<sup>260</sup>

Sometimes, in these areas, Apollo is also given epithets such as *salutaris*, *medicinaliis*, and *virotutis*, the healer of men.<sup>261</sup> Apollo is often seen with a consort, such as Damna or Sirona, who is often depicted in the guise and with the attributes of Hygeia, the daughter of Asclepius (**Fig. 115c**).<sup>262</sup>

In addition to local gods syncretized to Apollo, the West, especially Gaul and the Iberian Peninsula, certainly had its own indigenous water-related cults, which were outside Roman state cult.<sup>263</sup> At the site of Glanum (Gaul), the healing figure Glan was commemorated for his healing properties in a nymphaeum starting in the third or second century BCE (**Fig. 7b; App. No. 1.58**).<sup>264</sup> The nymphaeum was of a Gallic style, with a stairway leading to a subterranean basin, where the healing waters of Glan were located.

<sup>&</sup>lt;sup>258</sup> Grannus' name derives from the Indo-European roots that indicate something that is hot or bright. For inscriptions associated with Grannus, see the following various sites: Vogesen, *CIL* 13.5942; Faimingen an the Donau, *CIL* 3.5870, 5871, 5873, 5874, 5876, 5881; Arnheim, *CIL* 13.8712, Bonn, *CIL* 13.8007, Trier, *CIL* 13.3635, Branges bei Chalon-sur-Saône, *CIL* 13.2600, Musselburgh, Scottland, *RIB* 2132, and Brigetio, Hungary, *CIL* 3. 10972. Krug 1985, 175-177; Green 1986, 161; Bourgeois 1991, 38-42; Zeidler 2003; Fabre 2004, 152; Graf 2009, 91; Von Falkenstein-Wirth 2011, 181; Maier 2012, 282-283. *LIMC* 2.1.458-459 (s.v., Apollo Grannus, E. Simon and G. Bauchenss).

<sup>&</sup>lt;sup>259</sup> Like Belenus and Grannus, Moritasgus' name derives from the power of heat and light. Further, it may be of a Venetian-Illyrian origin. Moritasgus can be found in a cult site in Alésia (Mont Auxois near Alise-Ste-Reine), where an octagonal temple connected to a spring was found (de Cazanove and Dessales 2012). Julius Caesar tells us that there was a king of the Senons named Moritasgus (Caes. *BGall* 5.54.2). Krug 1985, 178; Green 1986, 162; Bourgeois 1991, 38-39; Zeidler 2003, 88; Fabre 2004, 152; Von Falkenstein-Wirth 2011, 181. *LIMC* 2.1.461-462 (s.v., Apollo Moritasgus, E. Simon and G. Bauchness).

<sup>&</sup>lt;sup>261</sup> Fabre 2004, 152.

<sup>&</sup>lt;sup>262</sup> Sirona is found at the following cult sites: Hochscheid (Rhineland), Nierstein (Rhinehessen), Augst (Aargau, Switzerland), Luxeuil-les-Bains (Dep. Haute-Saône), Graux (Dep. Vosges), spring sanctuary at Ihn. At Hochscheid, there are a few inscriptions dedicated to Sirona, in addition to Apollo: *CIL* 13.4129, 6272, 6753. Weisgerber 1975, 15-16; Krug 1985, 176; Bourgeois 1991, 38-42; Zeidler 2003, 84, Fabre 2004, 152; Von Falkenstein-Wirth 2011, 181-182. *LIMC* 7.1.779-781 (s.v. Sirona, Á.M. Nagy), compare with *LIMC* 5.2.554-572 (s.v. Hygeia, F. Croissant).

<sup>&</sup>lt;sup>263</sup> For Gaul, Bourgeois's two-volume work is still the seminal work to consult, whether on the divinities themselves and their cult (1991) or their built environment (1992a). See also: Thévenot (1968, 97-116) and Hatt (1983). There is a great deal of research coming out of the Iberian Peninsula, which is beginning to solidify our understanding of the nature of water cults there. For more on the Iberian Peninsula, see Costa Solé (2011b), Peréx and Miró (2011), Ruiz de Arbulo (2011).

<sup>&</sup>lt;sup>264</sup> For more on the figure of Glan, the eponymous divinity of the site, see Agusta-Boularot (1997, 279-281). Glan is also associated with the indigenous Mother Goddess figures.

In the Augustan building and renovations of the city, the nymphaeum was further monumentalized, with vaulting and arches added (**Figs. 116a, 116b**).<sup>265</sup> Agrippa, while in Gaul for his third consulship, dedicated the immediately adjacent small tetrastyle Temple of Valetudo.<sup>266</sup> His acts of euergetism here have been cited as one of the first dedications of a water-display by a Roman in Gaul.<sup>267</sup> The deity Valetudo was a healing god who seems to have taken on the qualities of a healing Apollo figure, especially given the sacred waters just below the temple. Typical Roman architectural features, such as the temple, are merged with the Gallic-style nymphaeum to create a complex that highlights the water source, which has the power to heal those in need.

The healing guise of Apollo is also manifested in Gaul with the appellation Grannus. Apollo Grannus is so well known that Caracalla, when he was ill in 213 CE, sent him, along with other, although unnamed, gods throughout the Empire, votive offerings and sacrifices.<sup>268</sup> The etymology of Grannus indicates that he is a deity associated with things that are hot and are bright.<sup>269</sup> Generally, Grannus cult, along with other healing Apollo cults, is tied to thermal waters. Further, heat generates light, and Apollo is a god intimately connected with the sun, as Phoebus or Helios Apollo.<sup>270</sup> Cult sites of Apollo Grannus are numerous and include Faimingen in Bavaria, Aquicum in

<sup>&</sup>lt;sup>265</sup> Anderson 2013, 183.

<sup>&</sup>lt;sup>266</sup> Roddaz 1984, 396-397; Agusta-Boularot 1997, 279-281.

<sup>&</sup>lt;sup>267</sup> Lavagne 2012, 123. Interestingly enough, the nearby Triumphal Fountain (**App. No. 1.59**), roughly contemporary, is the first known public exedra fountains. Perhaps Glanum was at the forefront of Roman water-display.

 <sup>&</sup>lt;sup>268</sup> Cass. Dio 78.15.5-7. For more on the relationship between Caracalla and Dio, see Davenport (2012).
 <sup>269</sup> Zeidler 2003.

<sup>&</sup>lt;sup>270</sup> In the guise of Phoebus, there are sites known throughout the Roman world associated with Apollo, such as Phoebiana in Raetia. See Kolb (2003).

Hungary, Saint-Fontaine in the Moselle, Hochscheid in the Rhineland, and the important Aquae Granni, modern Aachen.<sup>271</sup>

At Hochscheid, Apollo Grannus was worshipped with Sirona, his consort, in what seems to have been akin to a modern health resort (Fig. 117a; App. No. 1.63). The sanctuary was in use from the mid-first century to the fourth century CE.<sup>272</sup> There were two phases to the monumentalization of the spring: first, the source was lined and a simple cella added; then, the ambulatory was added, along the entrance being moved from the north to the east.<sup>273</sup> The second phase of the temple, which would have had a statue of Apollo Grannus and Sirona outside, was in the Gallo-Roman style, meaning the structure was square in plan, with an ambulatory around the focal point (i.e., the water source in a square basin) (Fig. 117b).<sup>274</sup> Sometimes, too, the focal point in Gallo-Roman healing sanctuaries can include hexagonal or octagonal basins, such as at the source sanctuary at Ihn (Kreis Saarlouis, Germany) (Fig. 117c; App. No. 1.64) or the Sanctuary of Apollo Moritasgus and its octagonal temple at Alésia (France).<sup>275</sup> The medicinal waters of Hochscheid attracted pilgrims, which prompted the construction of the adjacent hostel, bath complex, and priest's house. Among the finds is a collection of hand-beakers, which excavators believe were used to drink in therapeutic waters.<sup>276</sup> The source of the healing waters of the deity are emphasized, a practice seen in a variety of Celtic and Gallic examples, including the spring associated with the Temple of Aquae Sulis Minerva

<sup>&</sup>lt;sup>271</sup> Aachen is called Aquae Granni, although, only after 765 CE, but it is difficult to imagine that a Christian site would suddenly acquire a pagan name centuries later (Zeidler 2003, 85).

<sup>&</sup>lt;sup>272</sup> For the excavation and subsequent report of the sanctuary, see Weisgerber (1975).

<sup>&</sup>lt;sup>273</sup> Weisgerber 1975, 203.

<sup>&</sup>lt;sup>274</sup> Weisgerber 1975, 79, 203. Cunliffe also describes a little more about Gallo-Roman temple design (1971, 29-30).

<sup>&</sup>lt;sup>275</sup> de Cazanove and Dessales 2012, especially 320-324.

<sup>&</sup>lt;sup>276</sup> Weisgerber 1975, 153-154.

and bath complex of Bath.<sup>277</sup> In such structures, the awe-inspiring natural forms of the water source are the focal point, to be enclosed by building but never to lose their centrality.

Furthermore, water-displays are found in various Apollo sanctuaries throughout the Empire. What links the examples is the use of the power of healing, usually tied to thermal water, and the fact that most of the sanctuaries are extra-urban.<sup>278</sup> The sanctuary of Asclepius at Epidauros, in Greece, is a healing site that used water to heal its pilgrims, water being plentiful in the valley of the sanctuary, in addition to other practices, such as incubation (Fig. 118a).<sup>279</sup> In fact, the sheer amount of water at the site, both the natural resources of the valley, and conveyed through the built environment (e.g., aqueducts, cisterns, basins, bathing complexes), demonstrate how the cult of Asclepius here was believed to work its therapeutic magic.<sup>280</sup> The mysterious powers of the water served to "symbolize [...] the sacred character of Asclepius [and] served to purify the body and soul."<sup>281</sup> Thus, water and its display are crucial to the experience of the healing at Epidauros.

The sanctuary of Apollo Maleatas on the Kynortion Hill, directly east of the Sanctuary of Asclepius, is a religious space whose use extends back to the Bronze Age

<sup>&</sup>lt;sup>277</sup> Cunliffe 1971, 24-29; Cunliffe 1995, 43-54.

<sup>&</sup>lt;sup>278</sup> Birge suggests that most Apollo sanctuaries, especially groves, are extra-urban because Apollo was interested in being near the entrance points of cities (where order was already established), as the sanctuaries were in a place where order was not necessarily a fixed state (1994, 10). See also Cole (1988, 162).

<sup>&</sup>lt;sup>279</sup> Lambrinoudakis 1994, 226. For the most recent work on the sanctuary, see Melfi (2007, 17-209) and Prignitz (2014).

<sup>&</sup>lt;sup>280</sup> Lambrinoudakis 1994, 226-227. For more on the bathing complexes of the sanctuary, see Flemming (2013) and Trümper (2014). <sup>281</sup> Trümper 2014, 211.

(Fig. 1.118b; App. No. 1.53).<sup>282</sup> Apollo Maleatas is believed to be a father figure of Asclepius, thus tying him to the healing cult associated with the site, and the epithet 'Maleatas' is probably connected to Cape Maleas in Laconia, where the figure of Maleatas must have been a vegetation god.<sup>283</sup> Over the course of nearly a thousand years, the Sanctuary of Apollo Maleatas went through a series of expansions and destructions. When the Asclepius sanctuary started gaining momentum in the eighth century BCE, so too did the Sanctuary of Apollo Maleatas. The space sacred to Apollo was built up in the fourth to third centuries BCE, suffered destruction in the first century BCE, but was, like the Asclepius sanctuary, built up during the Julio-Claudian period, and especially in the second century, by the generosity of Sextus Iulius Maior Antoninus Pythodorus.<sup>284</sup>

Pythodorus plays a prominent role in Epidauros, and constructed a number of water-related structures. He was a wealthy senator of the middle of the second century CE, from Nysa-on-the-Meander in Asia Minor.<sup>285</sup> We know from Pausanias that Pythodorus heavily restored the Asclepius sanctuary, not least by building baths, and the Apollo sanctuary, in which he installed a large cistern and renovated the priest's house, where roof tiles with his name stamped in them were found.<sup>286</sup> Pythodorus, as a wealthy benefactor in the time of the Second Sophistic with connections to Pergamon and with the imperial family in Rome, was acting in a similar manner to his contemporaries, like Herodes Atticus, restoring older cults of the Greek world.<sup>287</sup> Among the buildings of the Apollo Sanctuary, there was a Temple of Apollo, a priest's house, or *skana*, with a bath

<sup>&</sup>lt;sup>282</sup> For the excavation of the sanctuary, see the various reports and articles by Lambrinoudakis (1984; 1987; 1988; 1989; 1994; 2002), along with Lambrinoudakis et al. (1999). For more on the Bronze Age origins of the space, see Riethmüller (2005, 152).

<sup>&</sup>lt;sup>283</sup> Riethmüller 2005, 157. Pausanias also mentions a Sanctuary of Apollo Maleatas in Sparta (3.12.8).

<sup>&</sup>lt;sup>284</sup> Lambrinoudakis 1994, 226-228; Riethmüller 2005, 156; Melfi 2010; Trümper 2014, 220-230.

<sup>&</sup>lt;sup>285</sup> Melfi 2007, 121-123; Melfi 2010, 334.

<sup>&</sup>lt;sup>286</sup> Paus. 2.27.6-7. For more on the stamped roof tiles (with the name ANTONEIN), see Melfi (2010, 334).

<sup>&</sup>lt;sup>287</sup> Melfi 2010, 338.

complex, a *Mouseion*, or temenos of the Muses, along with a monumental propylon, which led down to the Asclepius sanctuary. The area is well watered, like the space of Asclepius below, and the large cistern of Antoninus would have been fed not only with the waters of the Kynortion Hill, but also by rainwater (**Fig. 118c**).<sup>288</sup>

Immediately adjacent to the cistern is a structure identified by excavators as a nymphaeum, which Pythodorus is believed to have installed.<sup>289</sup> The construction of the cistern and the nymphaeum, along with the skana, probably occurred at the same time, since the construction techniques are very similar.<sup>290</sup> The form of the nymphaeum is unusual (Fig. 118d). One enters a columned opening, which then leads to a cross-vaulted interior, restricting access to the space. On the east and south ends are small barrelvaulted spaces, with fountains on their walls. The south side also contains a circular room, again, with a fountain on the back wall. It has been suggested the water displayed in these rooms was used for lustral activities, especially in connection with the immediately adjacent *Mouseion* and the Temple of Apollo.<sup>291</sup> The circular room reminds one of architectural forms that are found in bathing establishments. The architect was playing with common and familiar architectural shapes, but employing them in a novel manner.

<sup>&</sup>lt;sup>288</sup> Pausanias reports that the cistern was fed by rainwater, but modern excavations indicate that the water of the hill was tapped for the cistern. See also Melfi (2007, 120).

<sup>&</sup>lt;sup>289</sup> There is not much scholarship on this nymphaeum, other than its initial publication by Lambroudakis (1984, 229-230; 1989, 49-50, 54), Leigh (1997, 281-284), and Melfi (2007, 120-121; 2010, 336). Leigh compares the architectural form of the nymphaeum at Apollo Maleatas with that of the Hadrianic nymphaeum on Lykabettos in Athens, stating that there are two aisles, covered by double barrel-vaulted roof. The structure does not appear to have two aisles, however, making her parallel with the Athenian example not completely accurate.

<sup>&</sup>lt;sup>290</sup> Lambrinoudakis 1993, 37-43; Melfi 2007, 120. Pausanias might also indicate that the nymphaeum was constructed in connection with the cistern in the passage about Antoninus' activities at the site (ἕλυτρον κρήνης, "a reservoir of the fountain"). <sup>291</sup> Melfi 2007, 120.

The set of structures at the Sanctuary of Apollo Maleatas is unparalleled, locating a nymphaeum next a *Mouseion*. As we have seen elsewhere in these pages, it is not out of the question to see connections between water and the Muses, who were often conflated with the nymphs, particularly because the Muses were companions of Apollo. The wellwatered nature of this area indicates that while water was being used for display in the nymphaeum, it was also used for a variety of purposes in other structures, such as bathing in the priest's house or in the cultic activities of the *Mouseion*. The water-display in the nymphaeum, however, would have created an intimate and inviting space in this small sanctuary, using novel architectural forms. The patronage of Pythodorus would not have gone unnoticed by pilgrims, as even Pausanias reports the fact to us. The addition of a more 'Roman' space devoted to water-display would have certainly transformed the Sanctuary of Apollo Maleatas, used since the Bronze Age, into a truly Roman cult site, employing Roman architectural technologies, while still celebrating local Greek deities. Furthermore, it is important to note the role of Pythodorus, who was not a member of the local élite, but a visitor from Asia Minor, who put his mark on the local religious landscape of Epidauros. He was concerned with restoring not only older structures associated with water, such as bathing establishments, but also with building new water structures, like the nymphaeum in the Maleatas temenos. While promoting himself, he made sure to exploit water in this space for the benefit of all the pilgrims traveling there.

Turning to the Italian peninsula, the thermal waters of Vicarello were the site of a source Sanctuary of Apollo (**App. No. 1.5**). Located on the northern edge of Lago di Bracciano, this area was, and still is today, known for its healing thermal waters, which

can reach up to 48-50° Celsius.<sup>292</sup> This Apollo sanctuary is believed to be the Aquae Apollinares Novae, featured on the *Tabula Peutingeriana* (Fig. 112).<sup>293</sup> The site has been known since at least the nineteenth century, but only recently has there been systematic work on the remains.<sup>294</sup> Much of the sanctuary was probably built in the time of Domitian, with later renovations.<sup>295</sup>

The remains of the sanctuary at Vicarello are not fully preserved (Fig. 119a). What we do know, however, is that the space was divided into various halls, although only one is fully preserved, the so-called Apsidensaal I, which was supplied by a water channel. Other building remains might include a bath complex and hostel for pilgrims, similar to other sites, such as Hochscheid.<sup>296</sup> Apsidensaal I is an elaborately decorated structure (Fig. 119b): a central room, with a cross vault, flanked by two apses, with opus sectile pavements. The space opens to a triclinium on the west and a nymphaeum on the east. But access to the nymphaeum is restricted. The vestibule immediately to its west is blocked off, as the nymphaeum proper is raised (Fig. 119c). One can only enter from the south, off a side corridor, up a flight of steps. Inside, the room would have been barrel vaulted, with lighting provided by a window on the west wall, which joined with the roofing of the nymphaeum's vestibule. The east wall of the nymphaeum would have had

<sup>&</sup>lt;sup>292</sup> For the thermal nature of this area, see: Gasperini 1988; Sartorio et al. 1999, 73-79; Von Falkenstein-Wirth 2011, 64.

<sup>&</sup>lt;sup>293</sup> Allen 2003, 408; Peréx and Rodrígez Morales 2011, 161; Von Falkenstein-Wirth 2011, 52-55, 77. <sup>294</sup> For a history of the site, see Gasperini (2008) and Von Falkenstein-Wirth 2011, 43-49. A number of scholars mention the site and finds of Vicarello: Edlund 1987, 56; Arnaldi 2002, 246; Chellini 2002, 103, 211; Allen 2003, 408; Giontella 2012, 95-99. Von Falkenstein-Wirth (2011) is an extensive publication of past excavations and finds. <sup>295</sup> Von Falkenstein-Wirth 2011, 83, 98.

<sup>&</sup>lt;sup>296</sup> For the other parts of the sanctuary, see Von Falkenstein-Wirth (2011, 78-80, 108-123).

a niche, with a statue of Apollo (**Fig. 119d**).<sup>297</sup> Water poured from a channel underneath the statue, down a flight of water-steps, and into a basin below. The whole space would thus have had the appearance of grotto (**Fig. 119e**). It is not well understood who would have had access to the separate nymphaeum area, but the space was visible through an opening on the east wall of the central room and, by extension, the triclinium on the west.

Vicarello and its associated sanctuary were known for its healing waters, which prompted the sumptuous complex of buildings to be conceived and constructed in honor of Apollo. The complex is dated to the time of Domitian, based on architectural details and finds, including an inscription to the *Nymphae Domitianae*.<sup>298</sup> As at Hochscheid, a large number of vessels were found on the site, a majority of which were constructed from precious metals, such as silver. One set of beakers has inscriptions inscribed on the body indicate the best inns and their mile markers on the journey between Cadiz and Rome.<sup>299</sup> Many include inscriptions to Apollo and the nymphs, and even Silvanus (**Fig. 119f**).<sup>300</sup> Thus, again, the connection between Apollo and his companions, the nymphs, is made. The beakers also hint at the cult activity taking place at the site: people were coming to be healed by the thermal waters, using the cups that they were dedicating.

The water-display contained in Apsidensaal I was probably, however, not directly related to any cures that pilgrims took. Because of its restricted access and view of it from the central room and triclinium, it is almost like a decorative centerpiece for the Apsidal Hall. Presumably pilgrims came to the sanctuary and used the bath supplied by

<sup>&</sup>lt;sup>297</sup> Von Falkenstein-Wirth 2011, 159-167. It has been suggested that originally there was a statue of Domitian in the niche, which was moved after his *damnatio memoriae*, and replaced by the statue of Apollo (Von Falkenstein-Wirth 2011, 98).

<sup>&</sup>lt;sup>298</sup> Von Falkenstein-Wirth 2011, 83, 98. The inscription to the *Nymphae Domitianae* is found on one of the many silver beakers from the site (*Apollini et Nymphis Domitianis Q(uintus) Cassius Ianuarius d(onum)* d(edit)). For the beaker, see Von Falkenstein-Wirth (2011, 229-230).

<sup>&</sup>lt;sup>299</sup> Von Falkenstein-Wirth 2011, 195-213.

<sup>&</sup>lt;sup>300</sup> Von Falkenstein-Wirth 2011, 214-230.

the thermal waters, and then they used spaces like the Apsidensaal I to relax with others, and take in splendidly decorated spaces. The excavators have even gone so far as to suggest that the sanctuary was used by some sort of retinue connected with the emperor, which would warrant such nice surroundings in the space such as the Apsisal Hall.<sup>301</sup> While that assertion cannot be confirmed, we know that the water-display here highlighted the healing deity of the site: Apollo. He becomes the centerpiece of the space, with waters pouring forth below him, suggesting not only the abundance associated with water, but the healing that also comes from those waters.<sup>302</sup>

Across the Mediterranean, Apollo was associated with thermal water at Hierapolis in Phrygia (Turkey), a site known in antiquity for these waters.<sup>303</sup> The Sanctuary of Apollo was probably connected to thermal waters that released vapors that were used for some kind of oracle.<sup>304</sup> It is unclear how far back the sanctuary goes, as the current temple and its surrounding portico were dated to the Flavian period, with subsequent restorations and changes. But, the sanctuary was located almost at the center of the town, on the so-called Frontinus Street, with the portico offering access to the main thoroughfare of the city (**Fig. 82**). The front of the portico also had a large set of stairs

<sup>&</sup>lt;sup>301</sup> Von Falkenstein-Wirth 2011, 314.

<sup>&</sup>lt;sup>302</sup> Depicictions of the emperor, in particular Hadrian in the Larissa Nymphaeum at Argos (**App. No. 1.9**) or perhaps at the water complex at Antioch (**App. No. 1.4**), parallel this mode of proclaiming abundance through moving water and an accompanying decorative program.

<sup>&</sup>lt;sup>303</sup> Vitr. 8.3.10. Ad eundem modum Hierapoli Phrygiae effervet aquae calidae multitudo, e quibus circum hortos et vineas fossis ductis inmittitur; haec autem efficitur post annum crusta lapidea. "In the same way at Hierapolis in Phrygia, abundance of hot water boils up, from which a supply is taken by channels round the orchards and vineyards. After a year the water leaves a stony crust." (Trans. F. Granger)

<sup>&</sup>lt;sup>304</sup> D'Andria 2013, 115. It is also believed that the sanctuary could have suffered damage from the gases that were emitted by the water source (De Bernardi Ferrero 1999, 698). The most recent excavations of the temple within the sanctuary were by reported by Semeraro (2012). Next to the sanctuary is the so-called 'Plutonium,' where there is access to the underground waters, which Strabo mentions (13.4.14). See also D'Andria (2003, 142-144). There have been recent excavations to understand better the structure (https://www.hierapolis.unisalento.it/30/-/news/viewDettaglio/51021490/32464352).

that invited passers-by to enter the temenos of Apollo (along with assisting the architects in the terracing the complex).<sup>305</sup>

At some point in the late second century or early third century (perhaps in the Severan period) at Hierapolis, the stairs of the portico were changed into a large-scale fountain (App. No. 1.61). The fountain was a two-storied, pi-shaped façade fountain (30.5 m long), with three exedras on the back wall and one exedra on each of the side wings (Figs. 120a). The façade was articulated with the typical flourishes of architectural detail, with composite capital columns and Ionic-Asiatic bases, along with aediculae and tabernacles (Fig. 120b).<sup>306</sup> The aediculae had a large number of decorated pediments, depicting the major deities of Hierapolis, including Latona, Apollo, Artemis, Selene, and Hera.<sup>307</sup> A few of the niches of the façade might have housed statues of priestesses of Apollo that were found at the site, dated to the second century CE.<sup>308</sup> The architectural and sculptural details allowed excavators to posit the late second century date, which compares to the Severan phase of the theater at the same site (Fig. 120c).<sup>309</sup> The pishaped facade frames a large rectilinear basin (20.85 m by 11.10 m, with a depth of 2.20 m). Water would have flowed into the basin from the central niche, where there is still evidence of the water channel.<sup>310</sup> The movement and display of water is not elaborate, with the water simply going from one of the niches into the basin. But the grand façade and the siting of the fountain in the temenos of Apollo and adjacent to Frontinus Street

<sup>&</sup>lt;sup>305</sup> De Bernardi Ferrero 1999, 695.

<sup>&</sup>lt;sup>306</sup> De Bernardi Ferrero 1999, 697.

<sup>&</sup>lt;sup>307</sup> De Bernardi Ferrero 1999, 698; Campagna 2006, 392.

<sup>&</sup>lt;sup>308</sup> De Bernardi Ferrero 1999, 696.

<sup>&</sup>lt;sup>309</sup> Capagna 2006, 393. It has been suggested that the fountain is actually from the fourth or fifth centuries (De Bernardi Ferrero 1999, 700), but it is now believed that that the structural evidence that led to that view is actually from a restoration of that time period (Campagna 2006, 393-394).

<sup>&</sup>lt;sup>310</sup> Campagna 2006, 393. The hydraulic system of the fountain, however, is still not fully understood.

make this an impressive water structure integrated into the religious and urban landscape of Hierapolis.

The fountain placed in the portico of the Sanctuary of Apollo fronts on Frontinus Street, but it does not provide direct access to the actual sanctuary of the god. Indeed, the relationship between the fountain and the sanctuary is unclear. The proximity to the fountain to the temenos has led Lorenzo Campagna to assert that the waters were in fact used for rites associated with the sanctuary, such as purification.<sup>311</sup> It is certainly plausible that the generous water from the fountain could have been used, as pilgrims passed by into the sanctuary proper, as we have seen in the case of fountains placed at the entrances to sanctuaries. But the large fountain at Hierapolis also marks the sanctuary as important, signaling to those walking through the city that they should stop and come up to not only admire the large façade fountain, but also to explore the sacred space beyond. The fountain is like a monumental (albeit faux) entrance to the Sanctuary of Apollo, lending a sense of monumentality to the space, while also providing the useful resource of water for passers-by.

This investigation into the sites associated with healing waters, especially those connected to Apollo, has shown that the phenomenon of displaying and honoring the water of these sources existed throughout the Roman Empire. Because water was celebrated for not only giving life, but also the ability to make life better through healing, it is easy to understand the universal desire to honor and monumentalize therapeutic waters. While we surveyed a number of examples throughout the Empire, most of the healing sanctuaries were found in the West (**Table 12**). Each complex took its own built form, reflecting its placement in the Empire and its patronage: the Sanctuary of Apollo

<sup>&</sup>lt;sup>311</sup> Campagna 2006, 394.

Grannus at Hochscheid employed local Gallo-Roman traditions in the construction of the ambulatory around the spring, while still possessing a series of buildings that might be seen throughout the rest of the Empire (e.g., a hostel, a bathing complex, etc.). At Aquae Sulis, the local spring source was monumentalized in the High Roman Empire by employing truly Roman architectural forms, such as the use of vaulting and concrete. Vicarello is a site that might have been connected to the imperial court, which was made manifest in the sumptuous building materials of particularly Apsidensaal I. Finally, at Hierapolis, the large Baroque-style façade of the fountain added to the portico of the Sanctuary of Apollo placed the structure in the Empire-wide fad for façade style fountains, especially popular in Asia Minor.

What ties all of these examples together, however, is their functional and aesthetic use of water. While the actual water-displays in the examples we examined were not necessarily the therapeutic waters of the healing sites, their display would have evoked for the visitor the waters that had the potential to heal the body and mind. Each place used the water as part of an overall decorative scheme that often highlighted the awe inspired by water, such as at Hochscheid and Vicarello, the latter of which employs a separate hall to focus attention on the water. Water-displays found in curative sites, especially those connected with Apollo, a healing god *par excellence*, help us understand of not only the fascination of water and its curing properties, but also the desire to display therapeutic waters within the context of its source.

## **VI.** Conclusions

In conclusion, let one last example encapsulate a number of the issues presented in this chapter: the Letoön in Xanthos, located in the region of Lycia in Asia Minor. The story is that Leto took her two recently born children (Apollo and Artemis) to the area and was turned away by local peasants, whom Leto turned into frogs.<sup>312</sup> She took refuge eventually in the Xanthos River. And so, the Apolline triad became the patron gods of the Lycian League. Located four kilometers from the urban center of Xanthos, the Letoön probably received its first temple of Leto around 400 BCE, under the patronage of the local dynast Arbinas.<sup>313</sup> The site was used because of the spring there, associated with the ancient native Lycian nymphs, the Elyanas.<sup>314</sup> By the second century BCE, the Temple of Leto, along with its flanking temples of Apollo and Artemis, were monumentalized in stone. This restoration of the Leto Temple caused the spring source to be channeled and moved to the present location.<sup>315</sup> Between 128 and 131 CE, the Letoön was given its own nymphaeum by the local notable Claudius Marcianus, priest of the imperial cult on the site (**App. No. 1.150**).<sup>316</sup>

The structure of the Letoön is already familiar: a semicircular portico, which opens onto an open basin of the natural spring water. In the back is a small rectangular space, which was believed to have been used for imperial cult activities, given that a statue base of Claudius Marcianus was found there.<sup>317</sup> The structure immediately abuts the Sacred Road, which would have provided access to the sanctuary for pilgrims. The

<sup>&</sup>lt;sup>312</sup> Longfellow 2012, 147-148.

<sup>&</sup>lt;sup>313</sup> Longfellow 2012, 148.

<sup>&</sup>lt;sup>314</sup> Laroche 1980, 6; Longfellow 2012, 147. See also: Strabo 14.2.2, 14.3.6.

<sup>&</sup>lt;sup>315</sup> Des Courtils 2001, 220; Longfellow 2012, 149.

<sup>&</sup>lt;sup>316</sup> It has been suggested that the nymphaeum was started by 129 and that Marcianus' priesthood was in 131, although there is still some debate about the epigraphic evidence (Balland 1981, 57-66). See also: Longfellow 2012, 149.

<sup>&</sup>lt;sup>317</sup> Longfellow 2012, 150-151.

sanctuary at Xanthos is an interesting example of the integration of the Roman imperial cult into an already existing religious landscape, not only with Olympians, but native water deities, the Elyanas. It has been rightly argued that such a site allows the Xanthians, and perhaps by extension, the Lycians, the ability not only to honor the gods of their own Greek heritage, but also to pay homage to the emperor.<sup>318</sup> Marcianus' use of the common architectural vocabulary of the spring source forms does not mean, however, that he was quoting other spring source sanctuaries of Hadrian, as this architectural commonplace can be found throughout the Mediterranean basin.<sup>319</sup>

The use of water at Xanthos, again, is the driving force behind the construction at the site and all the examples of water-displays we have examined. We have seen how native water cults and deities can be appropriated for easy extension by Roman cults, whether of the nymph Egeria, the emperor, or Apollo Grannus. Innovative architectural forms, such as a semicircular portico or large cross-vaulted interiors, give these spaces not only monumentality, but also the ability to display effectively water. Often, we saw these structures in transitional spaces, especially in extra-urban settings, which allow the pilgrim to approach and use the water, whether for drinking or ritual. The focus is always on the water: the structures, whatever the reasons for their construction, are there to highlight water and accommodate cult practices of the worshippers, such as when closed space on the bottom terrace at Nemi would have allowed easy access to the water to purify oneself before entering the sanctuary proper.

<sup>&</sup>lt;sup>318</sup> Longfellow 2012, 151.

<sup>&</sup>lt;sup>319</sup> Longfellow argues that Marcianus was familiar with Hadrian's other spring sanctuaries, such as the one at Antioch (**App. No. 1.4**) and Zaghouan (**App. No. 1.151**), and she asserts that Marcianus, as a member of the local élite is, in effect, paying homage to the emperor by quoting the architectural forms that he uses (2012, 152).

This chapter started with a gloss of Servius that states that in the Roman world springs are sacred (*nullus enim fons non sacer*). Does that mean all forms of water are sacred, whether in what we would consider a 'religious' setting or not? Certainly, we cannot divorce water in any context of the Roman world from its sacred sources, and presumably an ancient Roman would never do so either. The fascination and celebration of water as a powerful natural substance was ubiquitous throughout the Empire, in a similar fashion to the cult of the nymphs. As the deities most closely associated with local water sources, the cult permeates all parts of the Empire, just as the notion of the sacredness of water does as well.

Some regional trends bear discussion in closing. Water-displays at entrances to sanctuaries are found primarily in the East, while the West has more examples of source sanctuaries and source water-displays. Fountains connected to the imperial cult, however, are ubiquitous throughout the Empire. Finally, healing sanctuaries using water are primarily found in the West, especially in the northern provinces. These trends can probably be connected to climatic conditions of these parts of the Empire: the semi-arid and arid East would need to have water at the entrance of a religious space to allow pilgrims to drink water and to wash themselves (both ritualistically and perhaps also to get dust off themselves). In the more temperate areas of the West, where spring sources were abundant, a clearer connection to water divinities and their cults developed around source and healing sanctuaries.

Many of the examples considered in this chapter were extra-urban sanctuaries and water-displays, removed from the built environment of the city—and the order that context could impose on a fountain, even though a fountain is a man-made structure.

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Sanctuaries that are removed from an urban context in a sense bring the water, its display, and the pilgrims coming to the space nearer to nature and, thus, closer to the divine. It is hard to imagine not enjoying and appreciating the 'sacredness' of water in a built context constructed in the middle of nature, that would highlight the specialness of that particular water, singling it out as different and perhaps important for the pilgrim.

## **Chapter Six: Entertainment and Spectacle**

The Roman entertainment complexes (e.g., theaters, amphitheaters, odeia, stadia, and circuses) used water for a variety of purposes, but the study and understanding of water-displays in and around them is overlooked in scholarship.<sup>1</sup> Perhaps such work is hampered by the fact that very rarely in the modern period is water used in the context of theatrical performances, making such a notion foreign to us.<sup>2</sup> Water-displays and fountains, however, often were placed inside or nearby Roman entertainment complexes. Using evidence primarily connected to the theater, this chapter examines the entertainment value and utility of water in the Roman theater.

The archaeological remains of Roman theaters show evidence that the theaters were equipped for the use of water.<sup>3</sup> Hydraulic installations in the theater could include cisterns for the storage of water, lead and terracotta piping, drainage channels, and fountains. First and foremost, the water that was provided from fountains was certainly used for drinking, ensuring that spectators were sufficiently hydrated while attending

<sup>&</sup>lt;sup>1</sup> The discussion of this chapter is limited to Roman theaters. There are examples of water in or near other entertainment structures throughout the Roman Empire. For example, there is an a fountain outside of the odeion of Lugdunum (Lyon, France) (Delaval and Savay-Guerraz 2004, 75). *Euripi* of circuses often had water-displays, for which, see the discussion of that term in Chapter 1 (pages 71-73).

<sup>&</sup>lt;sup>2</sup> Of note, however, is the 2007 Shakespeare in the Park (Public Theater, New York City) production of *Romeo and Juliet*, which featured the use of shallow pool of water on the floor of the stage. Over the course the of the play, the actors interacted with the water, sometimes even splashing the audience with a mist of water, due to their quick movements on stage. In addition, there is Robert Lepage's 1992 production of Shakespeare's *A Midsummer Night's Dream* at the Royal National Theater in London, which featured a 25 mm tall pool of water that covered 120 square meters, surrounded by mud on its edges, giving the production the nickname *A <u>Mud</u>summer Night's Dream*. (See Halio 2003, 122-133.) Mary Zimmerman's 1996 play, *Metamorphoses*, an adaption of the same work of Ovid, uses a pool of water as part of its set, which the actors interact with throughout the production.

<sup>&</sup>lt;sup>3</sup> Dorl-Klingenschmid 2001, 44, n. 225; Aristodemou 2011, 173. Sear's 2006 catalogue and synthesis of known Roman theaters is crucial for our understanding of the development of the features of the Roman theater, although he does not discuss hydraulic features of Roman theaters in any depth. Sear's catalogue is used in the subsequent discussion for specific theaters.

performances.<sup>4</sup> With drainage channels, especially those lining the perimeter of the orchestra, water could have been used for cleaning the theater space.<sup>5</sup> Water was evidently also used for cooling. Vitruvius states that in the *postscaenium*, where walking under porticos is healthy for spectators, water can be used to ensure cool spaces (*De arch*. 5.9.6). Valerius Maximus mentions that Pompey the Great was the first to use water channels to cool his Porticus, immediately adjacent to his theater complex (2.4.6, **App. No. 1.118**). Propertius also discusses the same colonnade, with shade from the columns and plane trees, along with water flowing from fountain sculptures (2.32.11-16).

Finally, there is the phenomenon of liquid *sparsiones* in the Roman theater.<sup>6</sup> Literally a "scattering," the liquid *sparsio* was generally perfumed water that was sprayed in order to cool air, cut down on dust, or to water vegetation.<sup>7</sup> Water for *sparsiones* could be held in small fountains or basins within the theater, or perhaps even in channels that ran down the cavea steps. In fact, Hadrian is reported to have ordered *sparsiones* of balsam- and crocus-perfumed water to be sent down the cavea steps of a theater in Rome.<sup>8</sup> In all reality, the *sparsiones* were probably dispersed using a siphon pump, akin

<sup>&</sup>lt;sup>4</sup> So-called 'spectator comfort' has only recently been explored in Roman entertainment structures by Rose (2005). Using modern specifications for entertainment complexes (in terms of seating arrangements and entrances and exits), Rose shows how Roman theaters, circuses, and amphitheaters were highly sophisticated structures that ensured the comfort and safety for their spectators, only allowing for a seating capacity that could actually exit the structure in a reasonable amount of time in the event of an emergency, while still being arranged in a physically comfortable manner. It is unclear if a spectator could obtain water inside an entertainment structure (akin to the modern concession stand), or whether they had to exit and retrieve water in one of the fountains outside.

<sup>&</sup>lt;sup>5</sup> For example, the Theater of Dionysus in Athens had a drainage channel from the pre-Lycourgan theater (pre-330s BCE), along with a later channel that flowed in a southeast direction from the east side of the orchestra. See: Csapo 2007, 112; Goette 2007, 116-117.

<sup>&</sup>lt;sup>6</sup> There were both liquid and solid *sparsiones*, the latter of which could come in the form of tokens (e.g., *tesserae*, coins, small objects) and gifts "in kind" (e.g., foods, flowers). For more on the solid *sparsiones*, see Nibley (1945).

<sup>&</sup>lt;sup>7</sup> Daremberg-Saglio 4.2, 1419 (s.v., Sparsio, Ph. Fabia). See also Spano (1913, 144-146), Fuchs (1987, 143), and Fleury (2008b).

<sup>&</sup>lt;sup>8</sup> SHA *Hadr.* 19.5.

to the *machina Ctesibica* described by Vitruvius (*De arch.* 10.7).<sup>9</sup> The mist of the *sparsiones* could have been directed at either the audience or the orchestra itself.<sup>10</sup> The *sparsio*, a great show of pneumatic technology, would have added to the entertaining atmosphere of the Roman theater, with its colored water slightly tinting the air. One can imagine the refreshing nature of a *sparsio* in the Roman theater, not only cooling the area, but also scenting the air.<sup>11</sup>

In order to explore water-displays in the Roman theater, three different contexts are investigated here. First, is an examination of water-displays on the stage and in the orchestra. Fountains were present on the *proscaenium* of a number of theaters throughout the Roman world, whether in the form of simple jets and basins, or with fountain sculpture. Next, fountains found in the vicinity of theaters are discussed. Finally, the later phenomenon of the aquatic spectacle is mentioned briefly. Due to the different levels of preservation of Roman theaters, whether because of a lack of evidence or because of the adaption of Roman theaters over time, including in the modern era, it can be problematic to reconstruct water-display in this context. There are certain characteristics, however, that aid in placing the water back into theaters, including structures such as drainage channels and water-display accouterment, which can include basins and sculpture, that offer clues to the nature of water-display in the Roman theater.

<sup>&</sup>lt;sup>9</sup> Fleury (2005; 2008a; 2008b, 106-112) investigates the *machina Ctesibica*. Vitruvius' description of the pump probably stems from a Hellenistic tradition of technological treatises (e.g., Hero Alex. *Pneum*. 1.28). For more on this tradition and water pressurizing devices, see Lewis (2000, 349-350, *passim*). See also Stein (2014) for an in-depth study of surviving wooden and metal water pumps of the Roman world. <sup>10</sup> Fleury 2008b, 97.

<sup>&</sup>lt;sup>11</sup> One can think of the use of incense at a modern Catholic or Orthodox mass as a parallel for this practice. As the incense passes through the church, the participant is enveloped in the smell, creating an olfactory experience that alters one's spiritual experience at the mass. See James (2004), who stresses the need to restore sights, smells, and sounds when reconstructing Orthodox churches, along with Pentcheva (2006).

When there is evidence for water-displays in the Roman theater, it is found on the *proscaenium* or in the orchestra. The *scaenae frons* of the Roman theater included a parapet at the *proscaenium*, which is often termed the *frons pulpiti*, or the front of the stage, an ideal place to include a water-display (**Fig. 122**).<sup>12</sup> While the *frons pulpiti* can be a plain, undecorated flat surface, many extant examples were recessed, with alternating rectilinear and semi-circular exedras.<sup>13</sup> The recessed *frons pulpiti* is only found in areas where the Roman- or Latin-style theater was adopted for use.<sup>14</sup> After the dissemination of the Roman-style theater type out of Rome and throughout the Italian peninsula, it was then found in southern France, southern Spain, North Africa, and some parts of the East, where a more Greek style theater usually still prevailed.<sup>15</sup> On the fringes of the Empire, the space of the theater, while being adopted as a place for entertainment, was not always used for Roman-style spectacles, but often for local rituals,

<sup>&</sup>lt;sup>12</sup> For more on the *scaenae frons*, see Sturgeon (1972, 124-29), Sturgeon (2004), Sear (2006, 83-95), and Di Napoli (2013, 101-102, 153-154). Klar (2006) argues that, while the architectural form derived from the Hellenistic *skene*, the decoration of the Roman *scaenae frons* is associated with the commemoration of military victories and the display of war booty by generals beginning in the second century BCE. There have also recently been a few conferences on the *scaenae frons*, including Moretti (2009) and Ramallo Asensio and Röring (2010).

<sup>&</sup>lt;sup>13</sup> The term "exedra" is preferred over "niche." Caputo rightly points out that most of the recesses of the *frons pulpiti* were not covered over with arches or semi-domed apses, more in line with the definition of a niche, not the open exedra-form (1959, 57). For a definition of "exedra," see Curl (1999, 453).

<sup>&</sup>lt;sup>14</sup> This claim is substantiated using Sear's 2006 catalogue of known Roman theaters. There are at least 65 examples of *frons pulpiti* known, along with others that have subsequently come to light. The list includes the following sites, using their ancient names (when available): Antium, Casinum, Herculaneum, Liternum, Minturae, Nemus Aricinum, Nuceria Aricinum, Nuceria Alfaterna, Ostia, Pausilypum, Pompeii, Suessa, Tusculum, Gioiosa Ionica, Saepinum, Falerio Picenus, Interamnia Praetuttiorum, Iguvium, Faesulae, Ferentinum, Volaterrae, Tergeste, Augusta Praetoria, Lugdunum, Arausio, Arelate, Vienna, Acinipo, Baelo, Italica, Malaca, Urso, Augusta Emerita, Olisipo, Segobriga, Tarraco, Tipasa, Cuicul, Ruiscada, Thamugadi, Bulla Regia, Calama, Carthago, Cillium, Hippo Regius, Leptis Magna, Sabratha, Sufetula, Thignica, Thuburiscu Numidarum, Thugga, Caesarea Maritima, Samaria, Scythopolis, Sephhoris, Bostra, Canatha, Gerasa, Petra, Philadelphia (Amman), Palmyra, Ephesus, Iasus, Troia, Nicaea, Argos, Corinth, Sparta, and Butrint.

<sup>&</sup>lt;sup>15</sup> Sear 2006, 96-97. Roman style theaters were found at sites in the East with close connections with Rome (e.g., Corinth, Ephesus, Miletus). It also appears that *frontes pulpiti* in the East, while not decorated with niches, could be articulated with small columns, such as at Ephesus, Hierapolis, and Perge. Albricci (1966, 96) claims that the recessed *fons pulpiti* only developed in the second century CE, which is not supported by the evidence. Albricci did not examine all known theaters, which is now easily facilitated by Sear's catalogue. For more on the integration of theaters into urban spaces in the western half of the Empire, see Gros (1994) and Laurence, Cleary, and Sears (2011, 231-252).

as was the case with "Gallo-Roman" theaters in northern and western Gaul, Britain, and Noricum.<sup>16</sup> In the same vein, it is in the same areas of the Empire that we do not see many examples of public water-displays that are familiar in other parts of the Empire.

## I. Theatricality and Spectacle

The notions of theatricality and spectacle offer interesting avenues of inquiry into the nature of public water-displays in the Roman world. Within the last two decades, the field of Classics has begun to investigate the relationship between theater and spectacle in the actual lives of the Romans. By briefly tracing the theatrical nature of the Hellenistic period, which leads directly to that of the Roman Empire, a concise definition of theatricality and spectacle is offered here. In addition, both notions stress the connections to place, which form the basis for an understanding of water-displays as spectacles. It is hoped, then, that Roman water-displays can be described and better understood in terms of theatricality and spectacle, especially through illusion, money, memory, and place.

Scholars, such as J.J. Pollitt, have recognized one of the characteristics of the Hellenistic period, particularly in terms of material culture, as having a "theatrical mentality."<sup>17</sup> In terms of architecture, the Hellenistic period was known for manipulating space for emotional effect, allowing for pronounced drama (e.g., the majestic site of Pergamon), through vistas, grand facades, dramatic locations of structures, and unusual interior spaces. This mentality is important for the Romans, who appropriate it, in order to combine the natural and artificial settings, creating completely new environments, such as with water-displays. Angelos Chaniotis, furthermore, has observed that while Archaic

<sup>&</sup>lt;sup>16</sup> Futrell 1997, 93-110; Sear 2006, 96. <sup>17</sup> Pollitt 1986, 230.

and Classical periods had elements of theatricality, it was Hellenistic Greece, with the rise of the delivery of political rhetoric and the notion of the statesman as an actor, that created a greater sense of show in Greek life, in which the society became one of 'onlookers.'<sup>18</sup> Thus, the Hellenistic period and its notion of theater in life, whether manifested in physical structures or public life in general, paved the road for the Romans to create an equally demonstrative way of living.

Theatricality is a term that derives from the illusion and deception inherent in human interactions.<sup>19</sup> The concept has been popularized in the study of the ancient Mediterranean by Shadi Bartsch, Chaniotis, and Janet Huskinson. Bartsch, exploring the idea of theatricality in the Roman theater when Nero assumed the role of actor, asserts that there must be the voyeuristic concept of someone being watched, along with the fact that in this relationship there must be superiors and subordinates.<sup>20</sup> In a sense, some sort of hierarchy is loosely defined with theatricality. Chaniotis, attempting to define Hellenistic theatricality, believes both that an image can deceive, because it distorts reality, and that emotion can create an illusion, thus promoting the notion of illusion and deception that is part of theatricality.<sup>21</sup> He also asserts that with the rise of Hellenistic urban centers, a society of 'onlookers' developed, in which an audience was present, constantly experiencing the political shows being displayed for them.<sup>22</sup> Finally, in a study investigating theatrical nature of some of the domestic mosaics of Antioch, Huskinson demonstrates that illusion and dramatic distance can influence the emotion of others,

<sup>&</sup>lt;sup>18</sup> Chaniotis 1997, 223-24. See also Wiles (2000) for more on the performativity of Classical Greek life in Athens, including oratory, religious ceremonies, and activities of everyday life.

<sup>&</sup>lt;sup>19</sup> For more on the notion of theatricality, see Postlewait and Davis (2003) and Littlewood (2015).

<sup>&</sup>lt;sup>20</sup> Bartsch 1994, 11-12.

<sup>&</sup>lt;sup>21</sup> Chaniotis 1997, 222.

<sup>&</sup>lt;sup>22</sup> Chaniotis 1997, 224, 252.

which can easily manipulate the gaze, and theatricality is thus based on the notion of roleplaying between two groups (e.g., patron and guest).<sup>23</sup> Huskinson, in fact, argues that theatricality can also be tied to place, such as through house layouts with dramatic vistas.<sup>24</sup>

While there are different facets to these definitions of theatricality in the ancient Mediterranean, there are some salient points to consider in the context of water-display. Of great importance is the idea of viewing. There must be at least one party viewing the show. Often, too, the notion of hierarchy is attached to this viewing, with one party being of greater importance than the other, which we will soon enough connect to a benefactor. The spectacle also manipulates the viewers' gaze in the creation of emotion or illusion of reality with the relationship of artificial and natural inherent in the Roman water-display. Theatricality, then, is a useful term to consider and potentially apply to fountains, given their intrinsically theatrical nature, and the fact that many actually looked like theaters.

In the same vein as theatricality, which brings in notions of theatrical space, there has been much discussion on the relationship between aedicular façades of theaters and so-called nymphaea.<sup>25</sup> Aedicular façades are characterized by the use of "walls decorated with columnar façades forming exedrae and aediculae and bearing horizontal architraves and triang[ular] pediments arranged in sequence."<sup>26</sup> They are also filled with sculpture. The subdivisions and articulation of the architectural members create a rhythm,

 <sup>&</sup>lt;sup>23</sup> Huskinson 2002-2003, 133.
 <sup>24</sup> Huskinson 2002-2003, 133.

<sup>&</sup>lt;sup>25</sup> See the work of Parra (1976), Letzner (1999, 202), Berns (2002), Burrell (2006), Lamare (2011), Aristodemou (2011).

<sup>&</sup>lt;sup>26</sup> Aristodemou 2011, 168.

illustrating what is sometimes called 'scenographic' architecture.<sup>27</sup> It is agreed that aedicular façades probably developed by the second century BCE in the West, first on theaters, then were used on façade-style large-scale fountains. The common visual vocabulary of the aedicular façade, used by both theaters and water-displays, is perhaps important to understand water-displays better. By quoting the architectural members seen on the stages of theaters, architects evoked the theatrical nature of water-display, not only observing the movement of water, but also in an environment that the audience would already associated with viewing, namely watching a theater production.

Spectacle is another important avenue of inquiry for understanding the waterdisplay. The Roman spectacle has received a great deal of scholarly attention in the last decade or so. Our English word derives from the Latin *spectaculum*, which, for the Romans had a variety of meanings, including a sight or manifestation, entertainment in the form of a performance, or the structures associated with entertainment.<sup>28</sup> The last definition is the most interesting for our purposes here. In Classical Latin, when *spectaculum* is used in the plural, *spectacula*, it is understood to mean "the places occupied by spectators in a theater, etc."<sup>29</sup> It is known that in the *Forum Romanum*, there were *spectacula*—from at least the censorship of C. Maenius (318 BCE), which would have been wooden structures, until the time of Pompey.<sup>30</sup> The dedicatory inscription of the amphitheater of Pompeii, dated to about 70 BCE, describes the structure as a

<sup>&</sup>lt;sup>27</sup> Lamare 2011, 28-29. See Beyen (1957, 147-148) and Stinson (2011, 406-407) for more on the Vitruvian concept of *scaenographia*, along with Camerota (2002). Small (2013) offers a concise overview of *scaenographia*.

<sup>&</sup>lt;sup>28</sup> D'Arms 1999, 301.

<sup>&</sup>lt;sup>29</sup> OLD<sup>2</sup> s.v., Spectaculum, 3. The associated literature for this definition is as follows: Pl. Cur. 647; Cic. Har. 22, Sest. 124; Vitr. 5.6.2; Liv. 1.35.9, 45.1.2; Ov. Met. 10.668; Calp. Ecl. 7.23; Tac. Ann. 14.13; Juv. 8.205; Fest. p. 84M; Suet. Cal. 31.

<sup>&</sup>lt;sup>30</sup> Welch 2007, 32-3, 43-58. Welch describes the development of the *spectacula* in the *Forum Romanum* over the course of the middle to the end of the Republic (43-58).

*spectacula*, not an amphitheater.<sup>31</sup> This naturally raises the question of whether the *spectacula* were in fact the buildings themselves, or the word refers to the entertainments taking place in that space.<sup>32</sup> Such early use of *spectacula* is important for our discussion, and we must consider it in our understanding of Roman spectacle and the space that it would have inhabited.

Spectacles have also been compared to literary works, in that they must follow a certain pattern to be intelligible to their viewers, along with the fact that the spectacle should amaze "by virtue of [its] nature, scale, or novelty."<sup>33</sup> The notion of spectacle, in and of itself, can be subsumed into three different types of cultural performances, including actual spectacles (e.g., theatrical productions), rituals, and festivals.<sup>34</sup> Indeed, spectacles are often first associated with entertainment, such as the famous *munera* of the Romans.<sup>35</sup> The notion of entertainment will be important for our considerations of water-display as a potential form of entertainment.

The Roman spectacle was intimately tied to money and power. Entertainments in the Roman world were sponsored by one party, the benefactor, and viewed by other

<sup>&</sup>lt;sup>31</sup> CIL 10.852. C(aius) Quinctius C(ai) F(ilius) Valgus / M(arcus) Porcius M(arci) f(ilius) duo vir(i) / quinq(uennales) coloniai honoris / caussa spectacula de sua / peq(unia) fac(ienda) coer(arunt) et coloneis / locum in perpetuom deder(unt). "Gaius Quinctius Valgus, son of Gaius, (and) Marcus Porcius, son of Marcus, duoviri quinquennales, have given, as a fee for being elected to their honorable office, the amphitheater [spectacula] at their own expense and gave the place to the colonists in perpetuity." (Trans. author)

<sup>&</sup>lt;sup>32</sup> Indeed, *spectacula* is used until Vitruvius first uses the neologism, *amphitheatrum* (Rawson 1987, 86-7). Davies (1997, 121, no. 83) argues that *spectacula* here would have only alluded to the entertainments taking place in the amphitheater, not the physical space, namely because of the attestation of *amphitheatrum* was by Vitruvius (1.7.1).

<sup>&</sup>lt;sup>33</sup> Edmondson 1999, 77.

<sup>&</sup>lt;sup>34</sup> Favro 1999, 205. See also Wiles (2003) for more on the performativity of space, including sacred, processional, and public spaces, among others. His discussion is tied intimately to conceptions of performativity and theatrical space throughout history. Weiss (2010) attempts to consider the Hydrekdocheion Traiani of Ephesus (**App. No. 1.51**)

<sup>&</sup>lt;sup>35</sup> See the work of Beacham (1991 and 1999) for more on the development of spectacle and entertainment in the Empire, including notions of how the emperor asserts his dominance through entertainments and how public life becomes more of a theatrical performance in the Empire. See Chapter 1 (pages 43-45) for more on the *munera*.

parties, the audience. The benefactors, given their economic ability to fund a spectacle, asserted their power and prestige through this benefaction, often gaining support, whether political or otherwise, from those in the audience, many of whom might be their own clients.<sup>36</sup> In a sense, entertainments were a way in which Romans of the élite classes could define their relationship with their subordinates, using these spectacles as "vehicles of self-representation," by depicting to their audience the way they wished to be viewed.<sup>37</sup> Often, the entertainments put on during the Empire would have pushed the boundaries of known and accepted spectacle, as has been demonstrated by Kathleen Coleman in her discussion of the aquatic displays of the Early Empire, such as the *naumachiae* of Augustus.<sup>38</sup> Such displays would have used entertainment in novel ways that would have been enjoyable to its audience, causing them to remember the event and appreciate the time and money given by the benefactor of said event.

An important Roman office connected with spectacle is that of aedile. Because the duties of the aediles originally included those of the *cura urbis* (Care of the City, connected with the urban prefect), *cura annonae* (Care of Grain Allotments), and *cura ludorum sollemnium* (Care of the Games and Religious Ceremonies), this meant that the aediles supervised public building, such as the upkeep of temples and water supply, and put on spectacles for the populace. In the city of Rome, the aedileship, however, was mainly relevant in the time before the Empire, before Augustus' internal government reorganization, including the institution of the *cura aquarum* that managed water, while

<sup>&</sup>lt;sup>36</sup> D'Arms 1999, 308-09. Bell (2004) believes that Greek and Roman public figures used spectacle in their own self-presentation to their audiences. Coleman (2006) offers a strong critique of Bell's articulation and presentation of his argument.

<sup>&</sup>lt;sup>37</sup> Beacham 1992, x; Kondoleon 1999, 321.

<sup>&</sup>lt;sup>38</sup> Coleman 1993, 69.

in Italian and provincial cities, the aedile's functions did not diminish.<sup>39</sup> It is the fact that aediles were intimately tied to public works and spectacle that are interesting for our purposes here. Agrippa in 33 BCE, when he was installing the Aqua Virgo and the accompanying *castella*, *lacus*, *salientes*, held the office of aedile. In addition, there are occasionally inscriptions that reveal that aediles sponsored building (or restored) water-displays, such as the two aediles, perhaps in the early Empire, in Urbinum Mataurense (modern Urbino), who restored a *saliens* there after four years of failure to function.<sup>40</sup> There is, thus, a strong link between fountain and the spectacle through the office of the aedile, a position intimately associated with public entertainments and the building of water-displays.

It is also important to consider the ephemerality of spectacle. Spectacles are part of cultural performance, which includes rituals and festivals, all of which often occur over the course of a day or series of days, relegating them to the memories of the audience following completion. While the audience certainly enjoyed and craved these public spectacles and entertainments, after they were done, there was no physical reminder of them, with the exception of structures specifically built to house them or souvenirs purchased at the event.<sup>41</sup> Given the ephemeral nature of most Roman entertainments, when they were captured in physical forms, the Romans (and their Hellenistic precursors) had to represent the spectacle effectively in a durable way.<sup>42</sup> For example, the famed Gemma Augustea celebrates Augustus' victories, but he is in the

<sup>&</sup>lt;sup>39</sup> For an overview of the aediles in the Republic, see Drogula (2000). For more on the imperial water administration, see Bruun (1991) and Peachin (2004).

<sup>&</sup>lt;sup>40</sup> CIL 8.2631. [...]isidi Aug L Figilius Secundus Fl Crispinus aediles lacum quod annis II II cessaverit ut saleret curaverunt.

<sup>&</sup>lt;sup>41</sup> For more on souvenirs in the Roman period, especially for tourists, see essays in the edited volume of Schmitz and Sieler (2013).

<sup>&</sup>lt;sup>42</sup> Kuttner 1999b, 97 and 118. Kuttner cites the Gemma Augustea as one of the pieces of Roman art for her argument.

guise of Jupiter, sitting with Roma, welcoming Tiberius, presumably in his triumph of 12 BCE. Below are all the captives and trophies that would have been part of the actual triumph that would have gone through the streets of Rome. Thus, the ephemerality of spectacle can be translated into durable forms that still allow its audience to understand the value of its entertainment. In a sense, given the lasting nature of the permanent waterdisplay, investment in that spectacle will last much longer for the patron, longer than the day of traditional spectacle took.

Finally, spectacle is intimately tied to the space that it occupies. The place in which spectacle occurs would surely evoke for its audience different associations, as Bartsch has stated:

including historic activities that have occurred in the same place; the way it may have been specially fashioned or altered to take on unaccustomed symbolic meaning; and its location relative to other areas of urban space and their significance.<sup>43</sup>

Diane Favro expands this idea by asserting that "ancient urban locales played a part in the creation, presentation, and interpretation of public performances" and that "Roman urban sites augmented self-awareness likewise by serving as repositories of human memory."<sup>44</sup> The places where spectacles took place, then, would not only have been vital in the creation of the actual entertainment, but they would have also created a memory for the audience, who could associate that memory with that place from that point on. For example, one can imagine approaching the Severan Septizodium in Rome, with its imposing three-storied façade, sumptuous statuary program, and cascading water on different levels (**App. No. 1.120**). Coming from the south, one would enter the city at the Porta Capena, with the monumental backdrop of the fountain, nestled into the slopes of

<sup>&</sup>lt;sup>43</sup> Bartsch 1994, 24.

<sup>&</sup>lt;sup>44</sup> Favro 1999, 205.

the Palatine Hill and the Circus Maximus. Passers-by, not only thirsty for the water there, also made memories of approaching the fountain when they entered the city—illustrating the wealth and grandeur of the imperial capital.

Further, the Roman street offers another example of spectacle. Barbara Kellum asserts that the "the street was the pivotal performative arena in a visual culture where viewership was active and confrontational."<sup>45</sup> Here, however, the line between the spectacle and the spectator begins to break down, as the spectator becomes an active participant in the spectacle of the street. Unlike the entertainments that might occur in the arena, the street, with its walls covered with paintings and graffiti, would have been a spectacle in and of itself, and a place intimately familiar to the inhabitants of that space. Thus, place is integral to the spectacle, not only allowing for the space for the performance to take place, but also creating associated memories and new performance spaces for its audiences.

Roman water-displays have yet to be connected to the modern scholarship on theatricality and spectacle. Fountains distort reality, specifically in their creation of the artificial, such as by the use of grotto-like forms in built water-displays. Fountains with jets of water would have distorted the laws of physics. In the same vein, there is an audience for a water-display, those who enjoy the aesthetic and utilitarian aspects of the structure. With the audience, then, naturally comes the benefactor, who paid for the structure, which helps to define the relationships between those with power and money and those dependent on them. Unlike other Roman spectacles, a fountain is not ephemeral, just as the amphitheater in Pompeii, known as a *spectacula* in an inscription, is not ephemeral, either. Water-displays are more than just a *monumentum*, a built

<sup>&</sup>lt;sup>45</sup> Kellum 1999, 283.

structure that can aid in the preservation of memories.<sup>46</sup> It might be suggested, then, that the water-display, like other permanent physical structures devoted to entertainment, could certainly be considered a *spectaculum*, too. Further, the fountain is tied to place, given that it is a 'living' part of the urban landscape, especially in that water constantly flows through it, making it a dynamic structure of the city. As memory is tied to place, the audience would have created memories of the water-display over time, with their interactions with the structure. Indeed, in the Roman city, because the fountain is located in the streets, an inherently performative place, the lines between the audience and the spectacle are blurred, allowing for the audience to become active participants in the spectacle that is the water-display, whether enjoying the fountain itself or collecting water from its basins. Perhaps, while not a traditional Roman spectacle, such as the *ludi gladiatori* in the arena, the actual water-display of the fountain would have nevertheless created a spectacle, along with a sense of theatricality.

## **II. Antioch-on-the-Orontes and Theatrical Waters**

To continue setting the stage for our ensuing discussion, the water of Antioch-onthe-Orontes, as depicted in the writings of Libanius and John Malalas, offers a glimpse into theatrical water-displays. Libanius (ca. 314 to 392-393 CE), a sophist from Antioch, wrote a series of orations about a variety of subjects, including the *Antiochikos (Oration XI*), an encomium on Antioch.<sup>47</sup> In lieu of public liturgies, Libanius offered this oration,

<sup>&</sup>lt;sup>46</sup> Feldherr (1998, especially 21-25, 31-35) explores how Livy's *History* is like a *monumentum*, a way to preserve history, which can be extended also to the built environment. See also Spencer (2007, 65).

<sup>&</sup>lt;sup>47</sup> For more on this encomium, see Downey (1959), who also provides a translation of the oration, along with the more recent Francesio (2004) and Saliou (2006a, 2006b). Libanius is beginning again to receive more scholarly attention. See the edited volume of Van Hoof (2014), especially Malosse (2014, 96-97) for the *Antiochikos*.
praising all of the amenities of his city. A theme throughout is the water of Antioch, especially the famed springs of Daphne, a suburb of Antioch, which were, according to Libanius, gifts of the nymphs (*Or.* 11.28, 240). Libanius stresses the importance of water to the city, which was not only essential for trade and commerce, but also for its restorative and aesthetic qualities, as each Antiochene home had a private water supply, making the large-scale fountains of the city, he claimed, purely decorative water-displays (*Or.* 11.244, 247). We must also use Libanius to reconstruct the ancient city, as the modern Antakya was built directly on top of it, making it virtually impossible to know the full town plan.<sup>48</sup> In the city center was a large public fountain, what Libanius calls the "Shrine of the Nymphs," which was where the two major thoroughfares of the city intersected (**Fig. 75; App. No. 1.2**).<sup>49</sup> Libanius describes the structure as "high as heaven and turning every eye with the dazzling light of its stones and the color of its columns and the gleam of its pictures and the wealth of its flowing waters."<sup>50</sup> The role of water in Antioch is evidently an important one, even in the context of an encomium.

John Malalas (ca. 491-578 CE), another native of Antioch, wrote a *Chronographia*, which is a history of the world until his time. In Book 11, Malalas recounts a history of Antioch. During the reign of Trajan, Antioch received a great deal of imperial attention:

θυσίσας ἐκεῖ παρθένον κόρην εὐπρεπῆ πολίτιδα ὀνόματι Καλλιόπην ὑπὲρ λύτρου καὶ ἀποκαθαρισμοῦ τῆς πόλεως, νυμφαγωγίαν αὐτῆ ποίησας. Καὶ εὐθέως ἀνηγειρε τοὺς δύο ἐμβόλους τοὐς μεγάλους, καὶ ἄλλα δὲ πολλὰ ἕκτισεν ἐν τῆ αὐτῆ Ἀντιόχου πόλει καὶ δημόσιον [λουτρὸν] καὶ ἀγωγόν, ἀποστρέψας τὸ ὕδωρ τὸ ἀπὸ τῶν τηγῶν Δάφνης ἐκχεόμενον εἰς τὰς

<sup>&</sup>lt;sup>48</sup> For more on the city plan of Antioch and its monuments, see Downey (1961), Lassus (1978), and Kondoleon (2000).

<sup>&</sup>lt;sup>49</sup> Lib. *Or*. 11.202. τὸ περὶ αὐτὰς Νυμφῶν ἱερον.

<sup>&</sup>lt;sup>50</sup> Lib. Or. 11.202. Οὐρανόμηκες λίθων αὐγαῖς καὶ κιόνων χρόαις καὶ γραφῆς αἴγλῃ καὶ ναμάτων πλούτῷ πάντα ὀφθαλμόν. (Trans. Downey 1959)

λεγομένας Άγρίας, ἐπιθήσας καὶ τῷ δημοσίῷ [λουτρῷ] καὶ τῷ ἀγωγῷ εἰς τὸ θέατρον δὲ τῆς αὐτῆς Ἀντιοχείας ἀνεπλήρωσεν ἀτελὲς ὄν, στήσας ἐν αὐτῷ ὑπεράνω τεσσάρων κιόνων ἐν μέσῷ τοῦ νυμφαίου τοῦ προσκηνίου τῆς σφαγιασθείσης ὑπ'αὐτοῦ κόρης στήλην χαλκῆν κεχγρυσωμένην, καθημένην ἐπάνω τοῦ Ὀρόντου ποταμοῦ, εἰς λόγον τύχης τῆς αὐτῆς πόλεως, στεφομένην ὑπὸ Σελεύκου καὶ Ἀντιόχου βασιλέων. (Malalas *Chron.* 11.9; 275-276)

[Trajan] sacrificed there [in the city] a beautiful virgin girl from Antioch, named Calliope, as an atonement and for the purification of the city, holding a bridal procession for her. He also immediately restored the two great colonnades, and he built many other things in the city of Antiochos, including a public bath and an aqueduct, having diverted the water pouring out from the springs of Daphne into what are known as the Agriai. He named both the baths and the aqueduct after himself. He completed the theater of Antioch, which was unfinished, and he placed in it a gilded bronze statue of the girl whom he had sacrificed. The statue stood above four columns in the middle of the nymphaeum in the *proscaenium*; she was seated above the river Orontes and was being crowned by the kings Seleukos and Antiochos in the guise of the city's *tyche*. (Trans. Jeffreys, et al., 1986, adapted)

The above passage reveals the imperial munificence of Trajan in Antioch, including the

restoration of colonnades, important in an earthquake-prone zone, and the construction of

baths and an aqueduct, the last of which channels the waters from the springs of Daphne,

here named as the Agriai springs.<sup>51</sup> Trajan also completes the city's theater, which had

been started by Julius Caesar.<sup>52</sup>

Of note in this passage, however, is the statue of Calliope. Malalas relates that

Trajan sacrifices the virgin there in Antioch, apparently just as Seleukus Nicator had

previously, also setting up a bronze statue in the guise of Tyche.<sup>53</sup> Trajan then placed a

<sup>&</sup>lt;sup>51</sup> For more on Trajan's, and then Hadrian's, interventions in Antioch, see Downey (1961, 211-223) and Longfellow (2011, 142-46).

<sup>&</sup>lt;sup>52</sup> The theater of Antioch has never been found. See: Downey (1961, 216-17) and Sear (2006, 317). The theater of Daphne has been found, however. Gruber, Molacek, Rogers, and Dobbins (forthcoming) propose that the Daphne theater is celebrated in the domestic nymphaeum found in the House of the Boat of Psyches.

<sup>&</sup>lt;sup>53</sup> Malalas *Chron.* 8.13; 201. Norris (1990, 2347) and Stansbury-O'Donnell (1994, 52-53) discusses the literary trope of human sacrifice by Malalas, which is probably Malalas trying to distance himself (and his Christian milieu) from pagan practices.

gilded statue of Calliope, in the form of Tyche, sitting on a personification of the river Orontes, crowned by two previous rulers of Antioch. Malalas also states that the statue was placed on four columns—and that she was situated in the "nymphaeum of the *proscaenium*" (**App. No. 1.3**). It is believed that this Calliope statue was modeled after the famous Tyche of Antioch by Eutychides in the Hellenistic period, perhaps even replacing the original statue, thought to have been destroyed in the earthquake of 115 CE.<sup>54</sup>

What can we make of this statue of a Tyche in the "nymphaeum in the *proscaenium*"? It is not out of place to find a Tyche statue in a water-display.<sup>55</sup> Naturally, the personification of the river Orontes underneath Tyche suggests the flow of water, and there is evidence on some surviving statues that water channels were added to the sculptures underneath the Orontes, such as with two second century CE examples found in Rome (**Fig. 123**).<sup>56</sup>

We can also turn to numismatic evidence for clues. A series of coins minted in Antioch, between 220-260 CE, depict a Tyche sitting atop an Orontes figure, situated underneath a Syrian arch, which is supported by four Corinthian columns (**Fig. 124**).<sup>57</sup> Directly underneath the stylobate, however, is a series of waterspouts. Giuseppe Spano has associated this coin type with the "nymphaeum in the *proscaenium*," probably

<sup>&</sup>lt;sup>54</sup> Spano 1952, 121-22; Downey 1961, 217, n. 74. For more on the form of the Tyche of Antioch, see Shelton (1979), Matheson (1994), Stansbury-O'Donnell (1994), Kondoleon (2000, 116-20), Christof (2001), Arya (2002), Thomas (2007b, 111-112), Gnoli (2013), and *LIMC* 1.1: 840-851 (s.v., Antiocheia, J.C. Balty).

<sup>&</sup>lt;sup>55</sup> Kapossy 1969, 20; Aristodemou 2011, 183; Aristodemou 2012, 142. Aristodemou, in her studies on the sculpture associated with fountains in Asia Minor, cites only a few examples of Tyche in water-displays: the Antioch example (known only from Malalas), a Tyche in the Trajanic Nymphaeum of Sagalassos, and a coin with a Tyche in a nymphaeum at Caesarea Maritima.

<sup>&</sup>lt;sup>56</sup> Dohrn 1960, 22-23; Arya 2002, 26.

<sup>&</sup>lt;sup>57</sup> *LIMC* 1.1: 840-851 (s.v., Antiocheia, J.C. Balty). See especially nos. 54-62; *BMC RE* Galatia p. 222, nos. 600-601, p. 229, nos. 656-657, p. 231, no. 665, p. 232, no. 667-668. See also Spano (1952), Dohr (1960, 26-29) and Stansbury-O'Donnell (1994, 56).

rightly.<sup>58</sup> The architectural vocabulary that the diemaker employed here immediately suggests a water-display, with the Tyche at the center of a theater setting, indicated by the four columns associated with the *porta regia* of the *scaenae frons* of the Roman theater, along with the arch suggesting an exedra.<sup>59</sup> There is also numismatic evidence that another water-display in the East at Caesaraea Maritima included a Tyche, which was also situated underneath a Syrian arch and four Corinthian columns.<sup>60</sup> Spano, however, argues that the nymphaeum would have been a sort of Septizodium, seeing some slight indications of tondi in the trabeation (beams of the superstructure), which could have contained images of the seven planetary gods.<sup>61</sup> While Spano's hypothesis is intriguing, it is still tenuous. We can, however, imagine that the diemaker has abbreviated the depiction of the water-display of the Antioch theater: on the *scaenae frons* itself is the statue of Tyche over the Orontes and on the *frons pulpiti*. We can then understand that the theater did in fact have a water-display, which is fitting, given Antioch's many ties to water. The coin series allows for the easy recognition of the water feature in the context of the theater, where the famed Tyche statue was housed in the Roman imperial period.

John Malalas also recounts Hadrian's construction projects at Antioch:

ἕκτισε δὲ ἐν Ἀντιοχεία τῆ μεγάλῃ καὶ αὐτὸς δημόσιον λουτρὸν καὶ ἀγωγὸν ἐπ' ὄνομα αὐτοῦ, καὶ τὸ θέατρον τῶν τηγῶν Δάφνης αὐτὸς ἐποῖησε καὶ τὰ

<sup>&</sup>lt;sup>58</sup> Spano 1952. Price and Trell (1977, 34) believe that the coin depicts a portable shrine of the goddess, with its carry bars at the base, not water spouts. For more on depictions of architecture on Roman coins, see Elkins (2015).

<sup>&</sup>lt;sup>59</sup> Spano 1913, 131; Downey 1961, 217; Sear 2006, 8. For more on the relationship between the architecture of theaters and water-displays, see below, along with Parra (1976), Aristodemou (2011), and Lamare (2011). For more on the depictions of water-displays on coins, see Price and Trell (1977, 44-46), Trell (1978), and Hill (1989, 97-99). Trell (1978) stresses the salient architectural details that must be included on a coin for the identification of water-displays, including "verkröpfte' facades, aediculae, attics, roofs, statues, niches, exedras, apses, columns, cornices, pediments, spouts, stairways, [and] water basins" (160).

<sup>&</sup>lt;sup>60</sup> Christof 2001, 171, fig. 32; Aristodemou 2011, 183.

<sup>&</sup>lt;sup>61</sup> Spano 1952, 164-166. Spano also argues that the bronze coin from Hadrianopolis in Thrace under Pertinax is a depiction of the theater's *scaenae frons*, with a water-display in the form of a reclining river god. In all likelihood, however, this is an illustration of a large-scale water-display.

έκχεόμενα ὕδατα ἐν ταῖς Ἀγρίαις ταῖς λεγομέναις φάραγξιν ὑπέστρεψε, ποιήσας πίλας και οικοδομήσας στερεάς και πολυδαπνήτους πρός τὸ νικήσαι τὰς ὁρμὰς τῶν ὑδάτων καὶ διὰ τοῦ γενομένου παρ'αὐτοῦ ἀγωγοῦ άχθῆναι εἰς τὴν αὐτὴν Ἀντιόχου πόλιν εἰς ἀφνίαν τῆς πόλεως. ἕκτισε δὲ καὶ τὸν ναὸν τῶν αὐτῶν πηγῶν, ὅθεν ἐξέρχονται τὰ ῥεῖθρα ἐν τῇ αὐτῇ Δάφνη, ἐγείρας ἐν τῷ αὐτῷ ναῷ τῶν Νυμφῶν ἄγαλμα μέγα καθήμενον καὶ κρατοῦν πῶλον τοῦ Διὸς εἰς τιμὴν τῶν Ναϊάδων, ὅτι ἐτελείωσε τὸ τοιοῦτο φοβερὸν ἔργον, ὑπὲρ εὐχαριστίας. ἐποίησε δὲ καὶ τὸ βλύζον ὕδωρ τῆς λεγομένης Σαραμάννας πηγῆς δι' όλκοῦ ἐξιέναι καὶ ἐκχεῖσθαι εἰς αὐτὸν τὸν τῆς πηγῆς ὁλκὸν ἐν τῷ θεατριδίω [...] τὸ ἐκ τοῦ ναοῦ ἐξιὸν ὕδωρ ἐν διαφόροις χεύμασι ε', ἄπερ ἐκάλεσεν ὁ αὐτὸς πενταμόδιον, τετραμόδιον, τριμόδιον, διμόδιον, μόδιον. Καὶ ἐπετέλεσεν ὁ αὐτὸς Ἀδριανὸς ἑορτήν τῶν πηγῶν μηνὶ δαισίω τῶ καὶ ἰουνίω κγ'. Καὶ τὰς θυσίας δὲ ὡσαύτως γίνεσθαι. Τὴν δὲ πηγὴν τὴν εἰς τὰς Ἀγρίας τὴν λεγομένην Παλλάδος άπολλυμένην περισφίγξας έποιησεν άγωγὸν εἰς μετάληψιν τοῖς οἰκοῦσι την ιεράν Δάφνην. (Malalas Chron. 11.14, 277-278)

[Hadrian] also built in Antioch the Great a public bath and aqueduct named after himself. He also built the "theater" (theatron) of the Springs of Daphne, and he diverted the waters flowing out into the ravines known as the Agriai. He constructed piers and made them solid at great expense, in order to withstand the force of the water and to convey it through the aqueduct made by him to the city of Antiochos as a plentiful supply for the city. He also built the temple of the Springs from which the streams flow out at Daphne, and he erected in the temple of the Nymphs a large seated statue of Zeus holding the celestial sphere, in honor of the Naiads; this was a thank-offering for having completed such a tremendous task. He made the water that bubbled from the spring known as Saramanna flow out through a channel and pour into the channel of the spring in the "Little Theater" (*theatridion*)  $[...]^{62}$  the water coming out of the temple in five different streams, which he called *pentamodion*, *tetramodion*, *trimodion*, dimodion, and modion. Hadrian celebrated a festival of the Springs on 23rd Daios-June, and the sacrifices were to take place likewise. He channeled the ruined spring in the Agriai, known as that of Pallas, and made an aqueduct for the use of the inhabitants of holy Daphne. (Trans. Jeffreys et al., 1986)

This passage is full of information for the modern reader, but reconstructing accurately the arrangement of the structures associated with the springs of Daphne is nearly

<sup>&</sup>lt;sup>62</sup> The translators Jeffreys, et al. (1986) suggest that there is a lacuna in the text, as the statement following does not make logical sense immediately after the "Little Theater."

impossible, especially because not all of the edifices have been found.<sup>63</sup> We learn that Hadrian, like Trajan, built a bath and an aqueduct, which, in all likelihood, completed those construction projects started by Trajan.<sup>64</sup> The series of structures that Hadrian builds here are numerous: the "theater" of the Springs of Daphne, two temples (of the Springs and of the Nymphs), a "Little Theater," along with a number of water channeling devices. In effect, it seems that there is a whole water complex associated with the springs of Daphne (**App. No. 1.4**).

There are two different interpretations of this Hadrianic ensemble of water structures. Glanville Downey is a proponent of the "theater" and the "Little Theater" being the same structure, a reservoir, perhaps in two parts. The name "theater" may be appropriate here, given the use of the word by Cassius Dio to mean a reservoir that had a viewing gallery for visitors at Hierapolis (Asia Minor).<sup>65</sup> Further, *theatron* might refer to a theatral form of the structure, or that it was decorated like a theater.<sup>66</sup> The famed fifthcentury CE Megalopsychia mosaic, which is a topographical border of a larger composition, shows a depiction of what could be the *theatron* or the *theatridion*: a semicircular structure, with what appear to be cavea around a basin (with a ship floating in it), along with a colonnade at the top of the cavea (**Fig. 125**).<sup>67</sup> Immediately flanking the *theatron* is a personification of the spring Kastalia, identified by an inscription, along with her depiction as a nymph (nude torso, water pouring forth into the *theatron* and

<sup>&</sup>lt;sup>63</sup> For more on the water infrastructure of Antioch, see Wilbur (1938), Downey (1951), and the forthcoming studies by Döring on the water system of the city.

<sup>&</sup>lt;sup>64</sup> Chowen 1956, 275; Downey 1961, 223. For more on Malalas' reports of imperial building (and their frequent inaccuracy), see Downey (1938) and Jeffreys (2000).

<sup>&</sup>lt;sup>65</sup> Cass. Dio 68.27.3. See also: Chowen 1956, 275; Downey 1961, 221, n. 96.

<sup>&</sup>lt;sup>66</sup> Downey 1961, 221-222, n. 101. See also Berlan-Bajard 2006, 220-221.

<sup>&</sup>lt;sup>67</sup> For more on the Megalopsychia mosaic, see Lassus (1934, 127-153), Levi (1947, 326-337), Downey (1961, 659-664), and Cimok (2000).

another basin), and the spring Pallas, as a personification, who swims in a rectangular basin below Kastalia.

What is clear from this depiction of a theatre-like structure near the springs of Daphne is that the springs are flowing into them, as Malalas reports. It is at some point in this channeling of water, and perhaps in the *theatridion*, that the five channels (the so-called *pentamodion, tetramodion, trimodion, dimodion,* and *modion*) would have emptied into the aqueduct that supplied the city of Antioch. Given their names, which are related to 'measures' (*modion*), it is thought that perhaps they could control the actual flow of water.<sup>68</sup> The *calix*, according to Frontinus, would have helped regulate water, especially in terms of exact amounts that were being tapped in an aqueduct.<sup>69</sup> The mosaic could in fact depict the *theatron-theatridion* complex, abbreviating the extent of the complex into one simple structure that evokes the theatral spirit of the reservoir.

Longfellow, on the other hand, proposes a reading of the edifices of Hadrian in Daphne as a complex suite of structures that all work together. Building on the work of R.H. Chowen, Longfellow asserts that the *theatron* was a reservoir, drawing from the springs, such as the Aigiai mentioned by Malalas, and then channeled into the Temple of the Nymphs, containing a statue of Zeus, with the head of Hadrian, which was also the case of the Larissa nymphaeum in Argos (**App. No. 1.9**).<sup>70</sup> The water in this scenario would have flowed from the Temple of the Nymphs to the "Little Theater," where the five channels would then proceed to the aqueduct directed to Antioch. The Temple of the

<sup>&</sup>lt;sup>68</sup> Downey 1961, 221.

<sup>&</sup>lt;sup>69</sup> Frontin. *Aq.* 1.23-24. See Hodge (1991, 294-300) for a discussion of the problems associated with Frontinus' description and our understanding of how *calices* actually functioned.

<sup>&</sup>lt;sup>70</sup> Curiously, Malalas lists that there is a 'Temple of the Springs' and a 'Temple of the Nymphs.' It is unclear if he means that there were actually two different temples there, or perhaps the two were one in the same, given that the springs of Daphne were personified forms of the local nymphs.

Nymphs is then used as an intermediate point in the duction of the water from the Daphne springs to the city of Antioch. Hadrian is reported to have offered it as a thank offering for the completion of the water infrastructure projects, dedicated to the Naiads. Chowen suggested a strong parallel with this temple and that of the spring sanctuary of Zaghouan outside of Carthage (**App. No. 1.151**).<sup>71</sup> Longfellow advances this notion, by interpreting the complex series of structures as a spring sanctuary in Daphne, where Hadrian's worldly dominance, along with his dominance over the local springs, is stressed.<sup>72</sup>

Given the lack of a complete archaeological record to date, we cannot be certain how to interpret this passage of Malalas.<sup>73</sup> There are important points that we can draw, however. There was a complex set of structures in Daphne that channeled water from their sources down to Antioch, probably taking on a theatral appearance (given the language of Malalas and the Megalopsychia mosaic). The springs and nymphs, in their personified states (as named by Malalas and the mosaic), were important figures in Antioch, who we saw was also present in the works of Libanius. The presence, also, of the two temples related to water deities suggests a religious aspect to this use of water, perhaps supporting the assertion that this was indeed a source sanctuary.

Regardless, however, of its actual function, the reservoir, called a *theatron*, is connected to the act of seeing. The water, while being collected in this place, was also placed there so that it could be viewed. Thus, the element of viewership is important to water-displays, which must be seen and enjoyed by an audience. Finally, the water

<sup>&</sup>lt;sup>71</sup> Chowen 1956, 275-276.

<sup>&</sup>lt;sup>72</sup> Longfellow 2011, 146. See also the work of Aristodemou (2012, 281) who interprets the representation of the emperor in these situations as a glorification of the emperor's ability to control not only water, but also the lives of his subjects.

<sup>&</sup>lt;sup>73</sup> In fact, it has been suggested that Malalas himself did not understand how the water infrastructure in Daphne actually functioned (Downey 1961, 222, n. 101).

edifices in Antioch play with the tenuous line of the natural being pulled into the realm of the artificial, such as with the local springs populating the built environment, whether depicted as personifications or as flowing waters themselves. It is clear, in short, that the wealth of the natural springs of Daphne was exploited not only for its utilitarian nature, but also for its aesthetic value, with the waters filling a reservoir to be seen, bubbling through the edifices, and creating a pleasing environment for viewers.

## III. Water-Displays on the Stage and in the Orchestra

The architectural structure of the recessed *frons pulpiti* would have easily facilitated water-display, although the precise reconstruction of that movement is not easy to interpret.<sup>74</sup> It is not clear just how and why the recesses were added to the stage, but there has been discussion on the relationship of the architectural form and other water-display related architectural examples. In Pompeii, there is a number of examples of basins in gardens that mimic the alternating form of recesses.<sup>75</sup> Maria Parra connects the so-called 'Bagni di Livia' on the Palatine Hill and theater architecture.<sup>76</sup> The 'Bagni di Livia,' dated to the Julio-Claudian period, was a two-storied fountain in an imperial residence, in which water came down water-steps in a large central niche, flanked by two semicircular niches (**Fig. 126; App. No. 1.106**). The water then flowed down into the first story, which was marked by a series of nine rectilinear and semicircular exedras, with a large basin in front that had a series of water jets for each of the nine exedras. The lower story clearly parallels the *frons pulpiti*, which aids our understanding of theatrical

<sup>&</sup>lt;sup>74</sup> It should be noted that it has been asserted that the recesses of the *frons pulpiti* could also be used to amplify the sound in the theater (Alvarez Martínez 1994, 240). See also Vitr. *De arch.* 5.5.1.

<sup>&</sup>lt;sup>75</sup> Spano 1913, 146. For example, the Casa di Meleagro (6.9.2) and the Villa di Diomede.

<sup>&</sup>lt;sup>76</sup> Parra 1976, 93-95.

examples, although the theater would have had drainage channels beneath, instead of a large basin.

In addition to the alternating forms of the recesses, the exedrae of the *frons pulpiti* were decorated with relief and freestanding sculpture, along with moldings, paintings, candelabras, colonnettes, and altars.<sup>77</sup> The exedras could also contain basins or sculpture for water-display, which is understandable, not only from archaeological evidence of the theaters themselves, but also from Roman wall painting.<sup>78</sup> Vitruvius, in fact, mentions that painted *scaenae frontes* were used in the Second Style of Pompeiian wall painting (*De arch.* 7.5). In the atrium of the *Casa dei Gladiatori* in Pompeii (8.2.23), a *scaenae frons* is depicted, complete with a *frons pulpiti* decorated with reliefs and free-standing sculpture in the alternating recesses, including what appears to be boy holding a goose, sometimes seen as fountain sculpture (**Fig. 127**).<sup>79</sup> Such an example can aid in reconstructions of the *frons pulpiti*. When the *frons pulpiti* has recesses, then, we should populate it with decoration, which could include freestanding and relief sculpture, in addition to water. In addition, there is evidence that not only were the exedrae covered in marble veneering, but could also include pumice stone, mimicking a grotto.<sup>80</sup> Some of

<sup>&</sup>lt;sup>77</sup> Fuchs 1987, 140-144; Di Napoli 2013, 153.

<sup>&</sup>lt;sup>78</sup> See Spano 1913, 129-131. The relationship between the theater and its depictions in wall painting has been the subject of much scholarly discussion, distilled in Beyen (1957). The 'illusionistic' Second Style of wall painting brought in representations of the *scaenae frons* into the home, while the Third and Fourth Styles quoted theatrical architecture, although in fanciful renditions (Ling 1991, 30-1, 77-78). Also, in the Third and Fourth Styles, there was interest to show 'backstage' scenes, with panels of actors (Ling 1991, 159-162, 219). Beacham has recently explored theater-related wall paintings, along with the theatrical nature of interactions within the Roman *domus* (2013).

<sup>&</sup>lt;sup>79</sup> Kapossy 1969, 43; Beacham 1991, 74-75. There is evidence that the *frons pulpiti* could also be adorned with sculpted reliefs. Most examples, however, are located in the East, with a few exceptions: Pergamon, Ephesus, Alabanda, Miletus, Side, Perge, Hierapolis, Aizanoi, Sagalassos, Athens, Corinth, Delphi, Thasos, Sabratha, Hippo Regius, Catania, Taormina, Orange, and Vienne (Sturgeon 1972, 125). Sturgeon states that the lack of these reliefs in Italy is surprising, but it might be due to a matter of bad preservation (Sturgeon 1972, 128-29).

<sup>&</sup>lt;sup>80</sup> For more on the invocations of natural grottoes in artificial water-displays, particularly using pumice stones, see: Neuerburg (1965, 92), Sear (1977, 37), and Rogers (2013, 157).

the exedrae of the *frons pulpiti* at the theater of Nemi include pumice stone, which the original excavators thought were indications of fountains (**Fig. 128; App. No. 1.80**).<sup>81</sup> With the system of drainage channels and large rectangular basin found in front of the front of the stage and extending into the orchestra, Nemi presents a strong case for water-display in the theater.

In order to restore the water to the archaeological remains of the *frons pulpiti*, and the orchestra proper, water infrastructures and related materials must be identified: these include pipes, drains, channels, spouts, basins, and the use of waterproof cement. One of the most prevalent forms of water infrastructure found in the theater is the lead water pipe. A number of examples of pipes were found in the recesses of the *frons pulpiti*, dating to the second half of the second century CE: Cuicul (Djemila, Algeria, App. No. **1.39**), Thamugadi (Timgad, Algeria, App. No. 1.143), and Calama (Guelma, Tunisia, **App.** No. 1.27). Lead piping found in the Large Theater of Pompeii, dated to the Augustan period renovations of the structure, was present not only in the area around the frons pulpiti (along with drainage channels), but also leading down from the top of the *cavea* (**App. No. 1.99**).<sup>82</sup> There are also numerous examples of drains, into which water could empty from water-displays, along with rainwater falling into the area of the orchestra. Examples of drains in theaters are numerous, ranging in dates from the first century BCE to the second century CE: Argos (App. No. 1.8), Augusta Emerita (Mérida, Spain, App. No. 1.18), Carthago Nova (Cartagena, Spain; Fig. 129; App. No. 1.28), Elis (Greece, App. No. 1.46), Philadelphia (Amman, Jordan; Fig. 130; App. No. 1.94),

<sup>&</sup>lt;sup>81</sup> Morpurgo 1931, 244, 295; Green 2007, 64; Braconi 2013c, 237. Morpurgo also discusses the drainage channels and basin (243-244), along with the pumice also found in the water-display found immediately adjacent to the south of the theater (253).

<sup>&</sup>lt;sup>82</sup> Spano 1913, 140-142; Berlan-Bajard 2006, 446-449.

Pompeii (**App. No. 1.99**), Sepphoris (Saffuriyye, Israel, **App. No. 1.128**), Sikyon (Greece, **App. No. 1.134**), and Thuburiscum Numidarum (Khamissa, Algeria, **App. No. 1.145**). Indeed, to prevent flooding in the center of the theater, drains led water to cisterns, which could be located underneath the *cavea*, the scene building proper, or outside the theater complex proper.<sup>83</sup> Presumably, the water collected in cisterns could then be used for secondary purposes, which is what is believed to be the case with the theater of Pompeii and its cistern immediately adjacent to the Sanctuary of Isis.<sup>84</sup>

Channels, which are generally open to the elements to carry water from one place to another, are also seen at a variety of sites: Casinum (Cassino, Italy, **App. No. 1.29**), Falerio Picenus (Falerone, Italy, **App. No. 1.54**), Montegrotto Terme (**App. No. 1.76**), Nemus Aricinum (Nemi; **Fig. 128; App. No. 1.80**), Thuburiscum Numidarum (Khamissa, Algeria, **App. No. 1.145**), Tusculum (**App. No. 1.146**), and Verona (**App. No. 1.148**). In front of the exedras of the *frons pulpiti* of the theater at Caesarea Maritima, dated to the Flavian period or a later reconstruction, there is a shallow channel constructed of marble, 7 cm tall (**Fig. 131; App. No. 1.26**). The exedras there were also lined with marble veneering. The excavators suggest that the channel could have been used for *sparsiones* or 'giochi d'acqua,' the former of which would have been an interesting water-display, with the water moving through the channel, not through a spout. Waterproof cement is also a sure sign of the use and potential display of water. An

<sup>&</sup>lt;sup>83</sup> For more, see Fakharani (1975, 395) and Fuchs (1987, 142). Cisterns under *cavea* can be found at Faesulae (Fiesole, Italy) and under the scene building in Brixia (Brescia), Philadelphia (Amman, Jordan), Pompeii, Segobriga (Cabeza del Griego, Spain), and Thugga (Dougga, Tunisia). See Hodge (1991) for cisterns (58-66) and rainwater drainage (335-336). One could also imagine that the drainage from some theaters connected into urban drainage and sewer networks. See Hodge (1991, 332-345) for more.

<sup>&</sup>lt;sup>84</sup> For the cistern at Pompeii, see Spano (1913), Fakharani (1975, 395), and Gasparini (2013, 197-201).

example of the cement within the context of the theater is at Thignica (Aïn Tounga, Tunisia), in which two rectangular basins, lined with waterproof cement, were found between the orchestra and scene building (**App. No. 1.144**).

Finally, there is the movement of water into containers that demonstrate waterdisplay in the Roman theater. The presence of basins, or more precisely *labra*, indicates that water was moved in a way to collect inside the basins themselves. The known examples of basins used to display and collect water seems to be localized to the theaters of the Italian peninsula, at the sites of Luna (Luni, **App. No. 1.73**), Parma (**App. No. 1.87**), Pompeii (**App. No. 1.99**), and Verona (**App. No. 1.148**). Unfortunately, most of these examples are in a fragmentary state, but there is enough to show that these were truly basins, of different shapes and decorated differently, and all dated to the first century CE. The *labrum* at Luna theater appears to be rectilinear. At the same time, the basin (measuring about 25 cm by 35 cm) from Verona is curvilinear, with a crouching hooved animal on top of the rim, all of which probably rested on a pilaster (**Fig. 132**). Given the shape and size of the basins, it appears that they would have fit nicely into the recessed exedrae of the *frons pulpiti*.

There is also limited evidence for the movement of water in the orchestra. During the excavations of Pompeii, a series of seven different basins was found in that location (**Fig. 133**). The basins were either circular (the largest of which was 7.10 m in diameter) or rectangular (the largest being 9.00 m by 1.68 m, and the smallest 5.90 m by 1.48 m).<sup>85</sup> The chronology of these basins has sparked much debate, with some suggesting that they were installed in the Sullan renovations of the theater, or that they were associated with

<sup>&</sup>lt;sup>85</sup> Spano 1913, 114-117; Berlan-Bajard 2006, 450; Gasparini 2013, 197-201.

the Augustan period, with the introduction of the aqueduct to the city of Pompeii.<sup>86</sup> It is unclear just why there were so many different basins in this space, all of which were probably installed in succession. What is clear, however, is that the basins would have displayed water, allowing the water to pool in the large containers.<sup>87</sup> Drains that flow underneath the skene building mean that the water could have been used later for other purposes.<sup>88</sup> At Nemi, too, there were channels immediately in front of the *frons pulpiti*, along with a large rectangular basin (8.70 m x 1.95 m, 0.80 m deep) (**Fig. 128; App. No. 1.80**).<sup>89</sup> Finally, at the theater of Daphne, in the center of the orchestra, a marble slab, decorated with two rows of marble inlay, there seems to have been a fountainhead, dated to the Trajanic period (**App. No. 1.40**).<sup>90</sup> There is terracotta piping running underneath the orchestra to the opening in the center, although it is unclear whether there was indeed a basin on top, in order to facilitate the display of water.<sup>91</sup> These two examples from Pompeii and Daphne show water-displays in the middle of the orchestra of the Roman theater, a space that had gone out of use in Roman drama.<sup>92</sup>

There are not many examples in the archaeological record of in situ waterspouts on the *frons pulpiti*. It is believed that at the theater in Pompeii, the *frons pulpiti*, with its

<sup>&</sup>lt;sup>86</sup> Spano 1913, 136-141; Berlan-Bajard 2006, 450; Gasparini 2013, 200. Richardson (1988, 79) associates the hydraulics of the theater with the Augustan period.

<sup>&</sup>lt;sup>87</sup> Gasparini (2013, 199-201) has supported an assertion of Traversari (1960, 68-72) that the basins at Pompeii were used for sacred hydromimes (see below) and *lavationes*, ritual washings, that would have occurred in connection to the adjacent Sanctuary of Isis.

<sup>&</sup>lt;sup>88</sup> See Richardson (1988, 218) for more on the drain.

<sup>&</sup>lt;sup>89</sup> Morpurgo 1931, 243; Sear 2006, 127. It has been suggested that the basin might have been connected to either an aquatic or religious spectacle (Traversari 1960, 94-95).

<sup>&</sup>lt;sup>90</sup> Wilbur 1938, 68-69. There has been much discussion on the chronology of the theater. John Malalas suggests that Titus started the theater (10.337-338), while the architectural remains that have been found indicate a later first century CE date, probably under Trajan. For more on this debate, see: Berlan-Bajard (2006, 464-465), Sear (2006, 319).

<sup>&</sup>lt;sup>91</sup> Berlan-Bajard 2006, 457-460. Berlan-Bajard rightly dismisses Wilbur's claim that the orchestra in this period would have been used as a large basin for water (akin to later uses of the orchestra for the *kolymbethra* spectacles) (2006, 465).

<sup>&</sup>lt;sup>92</sup> For more on this shift in the use and practice of the theatrical space, see: Bieber (1961, 167-189, especially 189), Beacham (1991), Sturgeon (2004, 51-55), Di Napoli (2013, 99-102).

seven exedras, would have had spouts, because directly in front of the exedrae was a gutter for run-off water (**App. No. 1.99**).<sup>93</sup> In the late first century CE theater of Tergeste (Trieste), the *frons pulpiti* was equipped with spouts, statues (including a *genius* of the seasons), and drains (**App. No. 1.141**). In addition, the exedrae of the stage front at Tergeste were stuccoed and painted red. Monika Verzár-Bass has suggested, then, that the front of the stage was a space symbolic of the earth, including red exedrae (the color of the interior of the earth), a personification of the *genius* of the seasons, and actual flowing water.<sup>94</sup> She also describes the *scaenae frons* as being a representation of illusion of the city (with its *valva regia* and *hospitalia* acting as city gates), along with the space of the cavea as the realm of the real. Regardless of the interpretation, the use of flowing water in the space would have added a sense of vitality.

A fairly well preserved example of waterspouts in the *frons pulpiti* is at Philadelphia (Amman, Jordan), dating from the second half of the first century CE, with later Antonine additions (**App. No. 1.94**). The *frons pulpiti* is recessed with alternating eight rectilinear and six curved exedras. In the upper part of each exedra was a waterspout (**Fig. 130c**).<sup>95</sup> Directly in front of the *frons pulpiti*, there are a series of decorative stone drain covers, along with a drain in the center of the orchestra, which would have allowed the water to drain into a cistern underneath the skene building.<sup>96</sup> From the available evidence, it appears that water would have flowed from the spouts in the *frons pulpiti*, emptying conveniently into the drains directly in front of the exedrae. It is easy to imagine water being turned on during, before, and after plays, and at

<sup>&</sup>lt;sup>93</sup> Berlan-Bajard 2006, 447.

<sup>&</sup>lt;sup>94</sup> Verzár-Bass 1991, 193.

<sup>&</sup>lt;sup>95</sup> Fakharani 1975, 392.

<sup>&</sup>lt;sup>96</sup> Fakharani 1975, 390, 395; Sear 2006, 314-315. For more on decorative stone drain covers, see Hodge (1991, 341-342).

intermissions, creating a pleasant sound and acting as a cooling device for the spectators. In addition, a gutter around the orchestra in Philadelphia would have allowed for easy runoff of rainwater, which would also have cleaned the theater.<sup>97</sup>

There are also extant fountain sculptures that have holes and channels to display water in the *frons pulpiti* of Roman theaters. The use of fountain sculptures within the theater would have been appropriate, given the often elaborate sculpture programs of Roman theaters, and the sculpture would have easily facilitated the movement of water around the *frons pulpiti*. As discussed above, the famous statue of Tyche in the *proscaenium* of the theater of Antioch was the centerpiece of a water-display in the theater there (**App. No. 1.3**). The watery nature of the Orontes below her would have been a playful reminder for spectators not only of the powerful river running through the town, but also of the artificiality of the sculpture and its water-display.

Much of the fountain sculpture found in theaters has Dionysiac imagery, which fits well within the context of the theater, a space sacred to Dionysus.<sup>98</sup> Georgios Bakalakis makes the connection between fountain sculpture, such as Silenoi, and a Hellenistic epigram:<sup>99</sup>

Εἰς Σάτυρον κρήνῃ ἐφεστῶτα καὶ Ἐρωτα καθεύδοντα

Τὸν Βρομίου Σάτυρον τεχνήσατο δαιδαλέη χείρ μούνη θεσπεσίως πνεῦμα βαλοῦσα λίθω.
Εἰμὶ δὲ ταῖς Νύμφαισιν ὁμέψιος, ἀντὶ δὲ τοῦ πρίν πορφυρέου μέθυος λαρὸν ὕδωρ προχέω.

<sup>&</sup>lt;sup>97</sup> Fakharani 1975, 395.

<sup>&</sup>lt;sup>98</sup> Fuchs 1987, 142; Loza Azuaga 1994, 279-280; Aristodemou 2011, 182; Cascella 2013, 81 (Nile statue found in fountain at Suessa, Italy). There is also an example of statues of the personifications of the rivers Nile and Tiber from Teanum Sidicinum (Teanum, Italy), which were found in the assemblage related to the stage building (Sirano 2010, 105, 111-112). It is unclear, however, whether they could have functioned as a pendent pair of fountain statues on the actual stage. For more on rivergod statues, see Klementa (1993), while Aristodemou (2013, 102-104, including cat. nos. 77, 108, 214) presents an overview of their presence in water-displays in the eastern half of the Roman Empire.

<sup>&</sup>lt;sup>99</sup> Bakalakis 1966, 21.

Εὔκηλον δ'ἴθυνε φέρων πόδα, μὴ τάχα κοῦρον Κινήσης ἀπαλῷ κώματι θελγόμενον. (Ath. Pal. 9.826)

On a Satyr Giving his Attention and a Sleeping Eros

A cunning hand crafted this satyr, son of Bromios,<sup>100</sup> a single (hand) implementing breath in stone in a godly fashion.
I am a playmate of the nymphs, and I pour forth sweet water, instead of the purple wine of old.
Keep your path straight and peaceful as you go, so that you do not perchance disturb the boy, as he is bewitched by gentle sleep. (Trans. author)

In this epigram, the monument of the fountain speaks to the passer-by, calling the spectator to examine the sculpture, placing it in a Hellenistic poetic milieu, which was predicated on a 'culture of viewing.'<sup>101</sup> The statue of a satyr, here, perhaps in the posture of a reclining Silenos, allows water to pour forth, probably from a wine skin. Thus, he literally changes wine into water. Indeed, extant examples of these fountain sculptures are presented so that water should pour forth from the wine containers, suggesting to the audience that water should in fact be understood as wine.

By far the most popular subject are pairs of sleeping Silenoi that would have been placed at the exedras at the two ends of the *frons pulpiti*, which have been found at eight different sites in Italy, France, and Spain.<sup>102</sup> In each example, the pairs of Silenoi are

<sup>&</sup>lt;sup>100</sup> For more on the 'cunning' hand of the artist, see Squire (2011, 293, n. 147).

<sup>&</sup>lt;sup>101</sup> Männlein-Robert 2007, 252. Indeed, the viewing here is an "act [...] expressed through a dramatic *mise en scene*, in dialogue form, and in expressly mimetic fashion" (Männlein-Robert 2007, 252). For more on the way a character of a subject can be expressed through sculpture and painting, see Zanker (2007, 243-245). On the 'culture of viewing,' see: Goldhill (1994) and Zanker (2004).

<sup>&</sup>lt;sup>102</sup> Fuchs 1987, 142; Loza Azuaga 1994; Aristodemou 2011, 185. The pairs of Silenoi are found at the following sites: Arelate (Arles, France; Fuchs 1987, 142; Sear 2006, 247-248; Carrier 2005-2006, 381; Moretti 2009, 144); Baelo (Bolonia, Spain; Fuchs 1987, 142; Loza Azuaga 1994, 269; Sear 2006, 260-261); Caere (Cerveteri, Italy; Fuchs 1987, 77-78, 142; Loza Azuaga 1994, 282; Sear 2006, 164); Augusta Emerita (Mérida, Spain; Fuchs 1987, 142; Loza Azuaga 1994, 275; Sear 2006, 264-265); Falerii Novi (Fabrica di Roma, Italy; Fuchs 1987, 89, 142; Sear 2006, 166); Olisipo (Lisbon; Fuchs 1987, 142; Loza Azuaga 1994, 273-275; Sear 2006, 265); Tergeste (Trieste, Italy; Fuchs 1987, 109-110, 142; Loza Azuaga 1994, 267; Sear 2006, 180); Vienna (Vienne, France; Fuchs 1987, 142; Sear 2006, 252-253). See Ajootian (1993) for more on this sculptural type, focusing on two imperial Silenoi that perhaps decorated a private fountain in Sparta, along with Aristodemou (2012, cat nos. 73, 74). Other Silenos fountain sculptures

sleeping, resting on a rocky landscape, with their heads either on a pillow or a wineskin from whose opening water would have flowed. At Arelate, in addition to the two sleeping Silenoi were placed at the ends of the *pulpitum*, there were three altars in three of the exedras of the *frons pulpiti*, decorated with Apollonine imagery, including Augustus in the guise of Apollo, Marsyas, and laurel trees (**Fig. 134; App. No. 1.7**).<sup>103</sup> On top of another altar placed on the other end of the orchestra (near the *cavea*), the Apolline imagery would have paired well with the Dionysiac images of the sleeping satyrs, creating a thematic program that was full of symbols of abundance.<sup>104</sup>

As well as the paired statues of the Silenoi, there are examples of single-figure fountain sculptures decorating the *frons pulpiti* of few theaters. At Italica and Leptis Magna, statues of nymphs are present. In the same sleeping pose as the Silenoi and positioned at the ends of the *pulpitum*, too, are a pair of sleeping nymphs at Italica (**Fig. 135; App. No. 1.65**).<sup>105</sup> In the theater of Leptis Magna, two standing female figures holding shells, which would catch water that flowed into them, were found (**Figs. 136a, 136b; App. No. 1.71**). The statue type of a semi-nude female figure, holding a shell, became popular in the Hellenistic period, and these females are usually identified as

<sup>(</sup>although not in a theater context) can be found at Sikyon (Aristodemou 2012, cat. no. 66), Thessaloniki (cat. no. 79), Hadrianoupoli (cat. no. 85), Mytilene (cat. no. 206), Antioch (cat. no. 289); also of note are similarly posed statues of small boys with wine jugs: Tarsus (cat. no. 218), Antioch (cat. no. 294), and Cyprus (cat. no. 357).

<sup>&</sup>lt;sup>103</sup> Carrier 2005-2006, 378-381; Moretti et al. 2010, 141. For more on the sculptural program of Arles, see Rosso (2009, 95-108) and Gros (2013).

<sup>&</sup>lt;sup>104</sup> Carrier 2005-2006, 381.

<sup>&</sup>lt;sup>105</sup> Fuchs 1987, 142; Loza Azuaga 1994, 270-273. Fuchs calls these sleeping female figures Venuses, but their iconography (e.g., non-descript female, resting on a rocky landscape) is more in line with that of the nymphs. For the most part, unless context provides a specific name or an attribute, nymphs, as female figures, are difficult to identify in the archaeological record. Nymphs can be conflated with water deities, maenads, and un-identified females. For more on the iconography of the nymphs, see: *LIMC* 8.1.891-902 (s.v., "Nymphai," M. Halm-Tisserant, G. Siebert), Becatti (1970-1971), Larson (2001, especially 92). For more on maenads, see *LIMC* 8.1.780-803 (s.v., "Mainades," I. Krauskopf, E. Simon). Fabbriciotti (1974-1975) offers a succinct iconographical analysis of the 'sleeping nymph' statue type.

nymphs, but sometimes as Venus figures.<sup>106</sup> The nymphs, along with the maenads, were part of Dionysus' retinue, especially given their connections to nature sites, such as bodies of water and caves. Occasionally, too the nymphs could be conflated with the Muses, who would also fit well in the setting of the theater.<sup>107</sup> At Bulla Regia, there is a statue of child holding a water or wine jug on his shoulder, which would have allowed water to flow freely (**App. No. 1.24**). Finally, at Sufetula (Sbeitla, Tunisia), in the middle exedra of the *frons pulpiti*, was displayed a statue of Dionysus riding a panther, a part of a water-display (**App. No. 1.139**).

There are a number of pieces of theatrical sculpture that indicate an association with Dionysus, whether as members of his retinue or in reference to an epiphany of the god himself. Sculpture that not only was connected to Dionysus, the patron of the ancient theater, but also displayed water in the area of the *frons pulpiti*, would have made for a cohesive iconographic program. Further, while having these types of fountain sculptures does not automatically indicate that there was running water in these spaces, the number and find spots across the Empire stress how pervasive the sculptures, and presumably the accompanying water-displays, were.

Water-displays inside the theater, as has been demonstrated, were found throughout the Empire (**Table 13**). Whether in the East or the West, we find moving water either in or on the *frons pulpiti* or in the orchestra. The largest number of examples come from Italy, North Africa (Algeria and Tunisia), and Spain. Perhaps the semi-arid and arid climates of Africa and Spain prompted the inclusion of water-displays inside the theater, deriving from Italian theater design. Interestingly, there are no examples in

 $<sup>^{106}</sup>$  LIMC 8.1.900-901. For an example of this sculpture type that was later retrofitted with a water channel in the area where the shell would have been held, see S-2063 at Corinth (Robinson 2013b, 371).

<sup>&</sup>lt;sup>107</sup> Loza Azuaga 1994, 281.

Turkey. As is demonstrated below, however, there are a number of examples in Turkey of water-displays immediately outside or adjacent to theaters.

## IV. Water-Displays in the Vicinity of the Theater

The next category of evidence to consider is the water-display located near a theater complex.<sup>108</sup> In addition to water-displays on the actual stage of the Roman theater, fountains could be found in the *porticus* of the *postscaenium*, around main entrances, in *paradoi* or *aditi*, and, finally, on sight lines with theaters within the urban fabric. The presence and locations of these water-displays demonstrate a number of points. The practicality of the water installations (e.g., collecting water or cooling a space) can help to explain these structures. Fountains could also demarcate a new space, showing a spectator that they were moving from one location to another. For example, when a spectator approached a theatrical complex, he could first stop in the *porticus* of the *postscaenium* before entering the theater proper, in order to rest, to take water, or to socialize with others in the space. Finally, water-displays interact with the urban armature to create nodes and cohesive urban units. Thus, the importance of fountains in proximity to theaters can be essential for our understanding of the use of theatrical space.

The Roman theater complex included not only the seating, orchestra, and skene building, but also other vital structures. Vitruvius mentions that when choosing the site for a theater, the builders must choose a healthy site, thinking about the wellbeing of the

<sup>&</sup>lt;sup>108</sup> As was stated at the beginning of this section, other entertainment complexes are not considered. Naturally, other such structures were often located near water-displays. For examples related to the amphitheater, see: Paestum (Neuerburg 1965, cat. no. 8; Letzner 1999, cat. no. 148; Schmölder-Veit 2009, 142, no. 6), Pozzuoli (Neuerburg 1965, cat. no. 46; Letzner 1999, cat. no. 243), and Syracuse (Letzner 1999, cat. no. 320); for the stadium, see: Ephesus (Dorl-Klingenschmid 2001, cat. no. 28), Sagalassos (Richard 2012, cat. no. 68).

future spectators (*De arch.* 5.3). Further, he states that the colonnaded space behind the scene building, a *porticus* or *postscaenium*, is essential to cool spectators off during hot weather, as a place of refuge during sudden rains, and as a storage space for theatrical equipment (De arch. 5.9.1, 6). Within the postscaenium, the presence of water-displays would have had a cooling effect on the spectators. An early example of this can be seen at the theater of Ephesus, dated from the Hellenistic into the early Roman periods.<sup>109</sup> Although not in a traditional porticoed area, the small covered fountain is near an entrance to the theater, along with the adjacent theater gymnasium, an area of congregation. In another example, the *porticus* associated with the Theater of Pompey in Rome has been described as the first public park of Rome, as it would have provided many amenities to the spectator, including refreshing and cooling waters in the courtyard, along with gardens, sculptures, and libraries (Figs. 4, 5; App. No. 1.118). While we cannot impose the same model of this large and impressive complex and its porticus on theaters outside of Rome, it is, nevertheless, a useful aid in reconstructing these types of spaces associated with theaters.

The theater complex at Tarraco (Tarragona, Spain) preserves a fountain complex directly to the south of the theater proper and west of the porticoed *postscaenium* (**Figs. 137a, 137b; App. No. 1.140**). Dated between the Augustan and Flavian periods, the fountain area near the theater was a small room, set into a façade decorated with pilasters (**Fig. 137c**).<sup>110</sup> The room and façade opened onto a large courtyard, with at least pilasters on the edges, and perhaps also covered as a true *porticus*, although it is difficult to discern given that the remains are under the modern city. Immediately adjacent to the

<sup>&</sup>lt;sup>109</sup> Dorl-Klingenschmid 2001, cat. no. 15. Another fountain basin is added to this area in the fourth century CE. See Dorl-Klingenschmid (2001, cat. no. 19) and Aristodemou (2011, 176-177).

<sup>&</sup>lt;sup>110</sup> Costa Solé 2011a, 153-55; Mar et al. 2012, 293, 301.

large *postscaenium*, this space, framed with inviting water-displays would have been the perfect area for spectators to retreat during the summer months during intermissions, if they in fact existed. The open space would have also allowed for a great number of people to populate the space. In addition, the architects of the water-display quoted the architectural elements also seen on the *scaenae frons* of the adjacent theater, creating a cohesive architectural ensemble.

Another early imperial example can be found at Sikyon, dated to the early Empire (**Fig. 138; App. No. 1.135**). The form of the fountain here is an exedra (nearly 6 m wide, 5 m deep), with four columns at the front of the structure, and a water connection located in the back of the basin. The structure is located at the north end of the *postscaenium*, immediately adjacent to the portico. The columns of the fountain, then, would have mimicked the porticoed area, creating a cohesive façade at the back of the stage building of the theater.

The *postscaenium* of the theater of Augusta Emerita (Mérida, Spain) included a portico, along with what is considered to be a *sacellum*, probably installed in the Julio-Claudian period (**App. No. 1.19**).<sup>111</sup> Inside the *sacellum* were a series of niches for statues of the imperial family, leading excavators to assign a use associated with the imperial cult in the space. Directly in front of the small room was a small fountainhead, perhaps installed in the second century CE. It is not clear, however, if the fountain was associated with the *sacellum*, and thus, the imperial cult, but its presence in the *postscaenium* puts water into the space for those gathering there.

On the other side of the Mediterranean, at Corinth, a fountain was located in the porticoed area to the north of the stage building. Recent excavations by Charles Williams

<sup>&</sup>lt;sup>111</sup> See also Trillmich (2009) for the urban development of Augustan Mérida.

have begun to clarify the theater's chronology (assigning to it 11 phases of activity), which aid in understanding when the fountain was installed and went out of use (App. No. 1.37).<sup>112</sup> In the second phase (ca. 22-77 CE), the North Peristyle Court was installed.<sup>113</sup> By the fifth phase dated to the Hadrianic period, subsidiary rooms on the east and west of the peristyle court were added. On the west side, the so-called Lesser Plaza was installed, with a fountain in the southwest corner (**Fig. 139**).<sup>114</sup> Not much is known about the actual structure of the fountain, although we have remains of its pebbled floor surface and some hydraulic installations, because in the eighth phase (the fourth century CE), the fountain was dismantled.<sup>115</sup> It is clear, however, that the water-display was incorporated into the edifices that made up the theater complex, especially in the North Peristyle Court area. The area must have been a comfortable place to congregate, not only with the refreshing waters associated with a fountain, but also the colonnaded space and sculpture (e.g., a large Amazon, a male figure wearing a hip mantle, a bronze statue of a boy actor, etc.).<sup>116</sup> Further, it appears that one could pass from the peristyle, through the *paradoi*, to enter the seating area of the theater. Again, we can imagine spectators congregating and using this space, enjoying the amenities provided for them before, during, and after theatrical productions.

The foundations of the theater and the *postscaenium* of Leptis Magna (modern Libya) were laid in the Augustan period, and subsequently renovated in the second

<sup>&</sup>lt;sup>112</sup> Williams 2013. See also Stillwell (1952) for the original excavations of the theater, along with Sear (2006, 392-393) and Bressan (2009, 158-172).

<sup>&</sup>lt;sup>113</sup> Williams 2013, 490.

<sup>&</sup>lt;sup>114</sup> Williams 2013, 538. The Lesser Plaza is discussed in full detail by Williams (2013, 535-546).

<sup>&</sup>lt;sup>115</sup> Williams 2013, 497.

<sup>&</sup>lt;sup>116</sup> Sturgeon 2004, 15-16.

century CE (**App. No. 1.70**).<sup>117</sup> The portico behind the scene building, which included a Temple of the Di Augusti in the central space, was installed around 43 CE, as is known from an inscription (**Fig. 136a**).<sup>118</sup> At the northeast corner of the *postscaenium*, a fountain was installed by Q. Servilius Candidus in 120 CE and later restored in 157-158 CE by L. Hedius Rufus Lollianus Avitus.<sup>119</sup> The fountain has a tetrastyle front, of the Corinthian order, with a semicircular niche, within which is another smaller semicircular niche; on the *alae* were projecting engaged columns; the structure would have been covered in marble (**Figs. 136c, 136d**). The archaeological evidence of the hydraulic system indicates that the movement of water was limited to a few spouts on the front side, and south *ala*, the water collecting in a basin running along the front of the fountain.<sup>120</sup>

The inscription of Lollianus refers to the fountain as a *lacus* and specifies that it was decorated in marble and ornamental columns (*columnis Cupidinibus*, "columns of Cupids").<sup>121</sup> In fact, during excavations in the area, three sculptures were found: Aphrodite Anadyomene (in the act of bathing, with a dolphin and an eros at her side), a shepherd on a rock, and a seated Nymph (**Fig. 136e**).<sup>122</sup> While there is not much space in the actual fountain, it is believed that the standing Aphrodite figure was placed in the main niche, while the seated shepherd on the north wing, and the Nymph on the south

<sup>&</sup>lt;sup>117</sup> Much work has been done on the theater complex of Leptis Magna. The major publication of the theater is by Caputo (1987). For other treatments of the complex, see Di Vita (1990), Sear (1990), Sear (2006, 281-282), Mar and Beltrán-Caballero (2010).

<sup>&</sup>lt;sup>118</sup> IRT 273; Caputo 1987, 57-59; Sear 1990, 378.

<sup>&</sup>lt;sup>119</sup> We know Lollianus was proconsul in 157-158 (see Tomasello 2005, 161, n. 319).

<sup>&</sup>lt;sup>120</sup> Tomasello 2005, 44.

<sup>&</sup>lt;sup>121</sup> IRT 533. Lacus pec[unia] pub[li]ca amplatus et m[armori]|bus et columnis itemque Cu[p]idinibus [exorna]|tus dedicatus est L(ucio) H[edio Rufo Lolliano Auito]| proco(n)s(ule) C(aio) Vibio Ga[ll]io[ne Claudio Sever]o leg(ato) pr[(o) pr(aetore)]. "A lacus was enlarged by public funds and ornamented in marbles and columns of cupids, dedicated by L. Hedius Rufus Lollianus Avitus, proconsul, and C. Vibius Gallionus Claudius Severus, propraetor legate." (Trans. author)

<sup>&</sup>lt;sup>122</sup> Tomasello 2005, 160-161. See also the catalogue of the sculpture in Tomasello (2005), cat. nos. 1, 2, 3.

wing.<sup>123</sup> It has been suggested that all the figures would have worked well iconographically in such a setting.<sup>124</sup> Aphrodite and Eros allude not only to water associated with bathing, but also to the decorated columns of the inscription, along with the bucolic shepherd seated on rocks and the nymph, with the latter two figures intimately associated with nature.

Finally, the *lacus* of the theater of Leptis Magna was at a crossroads at the northeast end of the *postscaenium* (Fig. 136f). Here, the decumanus that terminates in the Quadrifrons of Trajan and the cardo, ending in the Serapeum, came together. The city plan indicates here that the insula immediately to the northeast of the *lacus* (and across the cardo from the *porticus*) at some point changed shape. The northwest corner of the insula has clearly been altered to respond to the installation of the *lacus*, which would have drawn passers-by not only from the spectacles of the theater, but also those drawn in from the two major streets that intersect here. Following William MacDonald's model of urban armature, the fountain acts as a "way station" for pedestrians, allowing them to congregate at the fountain to collect water and refresh themselves, while also inviting them to continue either back into the theater or to the adjacent *porticus*.<sup>125</sup>

Water-displays may also be placed around the main entrances of theaters. Often, fountains were placed behind the cavea, near the entrances, or vomitoria, which would invite passers-by to stop, potentially inviting them to enter the theater, as did the *lacus* behind the scene building at Leptis Magna. Indeed, water-displays near theaters are placed in liminal spaces.<sup>126</sup> Here the fountains help to articulate boundaries between two

<sup>&</sup>lt;sup>123</sup> Tomasello 2005, 160. <sup>124</sup> Tomasello 2005, 160.

<sup>&</sup>lt;sup>125</sup> For more on the 'way station' as an element of urban armature, see MacDonald (1986, 99).

<sup>&</sup>lt;sup>126</sup> See Chapter 4 (page 218) for a definition and discussion of 'liminal spaces.'

different areas, allowing the passer-by a place to stop and transition from one type of space to another, such as from the street to the theater.

On the Italian peninsula, the theater of Suessa (Sessa Aurunca; 60 km north of Naples) was originally built in the Augustan period.<sup>127</sup> Between 139-150, after an earthquake at the beginning of the second century, Mindia Matidia, the half-sister of Vibia Sabina (the wife of Hadrian), restored the theater, which included the *porticus in* summa cavea, the scaenae frons, the porticus postscaenium (including adding the two basilicas there), paving the orchestra, revetting the theater in marble, and adding statuary (Fig. 140a).<sup>128</sup> Given the terracing of the area around the theater, an access ramp and marble stairway was added to the south side, which provided access from the cardo maximus to the *porticus postscaenium*. The first structure at the end of the ascent into the *porticus* was a three-niched fountain on the left and a basilica on the right (**Fig. 140b**). The southern basilica was impressively large, nearly 30 m long, with a central bay and two aisles. By going through this basilica, one would have been able to enter into the theater proper. Continuing past the fountain and southern basilica would have been a portico (directly behind the stage building), then a northern basilica connected to a latrine.

Although the water-display here is technically in the *porticus postscaenium*, its importance is derived from its liminal position in the complex (**App. No. 1.138**). Just as the rest of the theater was ornately decorated during its restoration by Matidia, the

<sup>&</sup>lt;sup>127</sup> Sear 2006, 138; Cascella 2012, 71-87; Cascella 2013.

<sup>&</sup>lt;sup>128</sup> [Matidia, Divae Matidi]a[e A]ug(ustae) fil(ia), / Diva[e] Marci[anae neptis] / [Divae Sabinae Aug(ustae) sor]or, [I]mp(eratoris) / Antonin[i] Aug(usti) Pii [p(atris) / p(atriae) matertera] / [theatrum terrae motu con]laps[u]m item / portico[m c]oniunc[tam s(ua) p(ecunia) / restituit.] Chausson 2008, 236-239; Cascella 2012, 71; Cascella 2013, 78; Wood 2015, 237. See Chausson (2008) for a full discussion of the inscription.

fountain, too, would have been sumptuous. The water-display was 10 m long, 6 m high, with a marble basin in front of three niches (semicircular central niche and two flanking rectilinear) (**Fig. 140c**).<sup>129</sup> The side niches were clad in marble, while the central one included blue glass tesserae in its vault.<sup>130</sup> There are also remains of a now fragmentary inscription, perhaps alluding to Matidia's role in the restoration of the local aqueduct.<sup>131</sup> Within the niches, there were two statues of Venus Marina in the side niches, with a statue of a reclining River Nile, that had a channel for the display of water. This fountain would have interacted with the opposite basilica across the path, creating a large, inviting space for those coming up from the town.

The large stairway at Suessa is an example of MacDonald's 'connective architecture,' transporting the spectators from the Cardo Maximus to the *porticus postscaenium*.<sup>132</sup> Upon arrival at the summit, a way station was created, with the fountain and basilica in an inviting, large, open space of the basilica beckoning the theatergoers to use the space. Further, this space marked a transition from the town below into this new theater-related area. The architecture here informs spectators that they have entered into a different type of space, where they will form new memories and experiences, which are different from any had before ascending.

West of the Sanctuary of Diana at Nemi, near Rome, is a theater complex, originally laid down in the late Republic, embellished in the Julio-Claudian period, and restored in the second century by Cornelia Volusia (**App. No. 1.79**). The theater was

<sup>&</sup>lt;sup>129</sup> Cascella 2012, 78; Cascella 2013, 80.

<sup>&</sup>lt;sup>130</sup> For more on the use of blue glass tesserae in fountains, see Neuerburg (1965, 91-97), Sear (1971, 39), and Rogers (2013, 157).

<sup>&</sup>lt;sup>131</sup> Cascella 2012, 78; Cascella 2013, 80.

<sup>&</sup>lt;sup>132</sup> MacDonald 1986, 66-71.

probably connected with *Rex Nemorensis*, the local priest of Diana.<sup>133</sup> The entire complex is surrounded by a trapezoidal wall, which would have ensured privacy for all participants (**Fig. 128**). On the south side, near the main entrance, directly behind the *cavea*, was a large rectangular water basin, divided into three compartments, covered with a blue tinted cocciopesto.<sup>134</sup> On the west end were amphorae embedded into the side wall, suggesting that perhaps fish were being raised in that particular compartment, while on the east end was an octagonal shaped basin, covered in marble veneer.<sup>135</sup> Across from the octagonal basin, laid against the wall of the theater complex, is a five-niched fountain. On the east wall, a semicircular niche is flanked by two rectangular ones, while the wings of the structure have one semicircular niche each. In this area, lead *fistulae*, stamped with VOLVSIAE Q F CORNELIAE and DARII REGIS, were found, which help to date the fountain to the second century restorations of the theater complex.<sup>136</sup> Immediately adjacent to the fountain is a small semicircular niche, decorated with blue pumice, with other lead *fistulae* found in the space, which suggests that this too was a water-display.

As a spectator or initiate of the cult of Diana entered into the theater complex, he was greeted with water. The three-compartment basin would have been the first structure seen when entering into the space. The walls of the area already indicate to those coming in that they are entering a new, demarcated area. The presence of a large amount of water stresses that this is in fact a liminal space. In order to leave this area, one must pass by the small water-displays on the eastern edge, which could prompt the spectator to stop further

<sup>&</sup>lt;sup>133</sup> Spineto 2000; Gentili 2001; Sear 2006, 45; Green 2007.

<sup>&</sup>lt;sup>134</sup> Morpurgo 1931, 251-252.

<sup>&</sup>lt;sup>135</sup> For more on fishponds, see Higginbotham (1997).

<sup>&</sup>lt;sup>136</sup> Morpurgo 1931, 252. The stamp "DARII REGIS" has been a puzzle, perhaps referring to the *Rex Nemorensis* or a Darius, son of the Parthian king Artabanus, who was invited to Rome during the reign of Caligula. For more, see: Leone (2000). See Bruun (1991, 20-60) for the importance of lead *fistulae* and their inscriptions for dating and reconstructing water infrastructures.

and not only take in the water-display visually, but also to drink the water. Then the spectator could pass to the theater proper. The water-displays in this theater complex do in fact mark a difference in the space for those interacting with the structures here, illustrating a physical change for them.

Furthermore, there are a number of examples of water-displays at the entrances of the theater.<sup>137</sup> Two examples from Anatolia would have created a facade-like entrance, inviting spectators to stop, beckoning them inside the theatrical space. Directly above the Lower Agora of Sagalassos was a two-story façade-style fountain, dated to the late Hadrianic period (Fig. 18e; App. No. 1.124). Immediately adjacent to the fountain was the odeion. While this water-display does not connect directly with the odeion, the fountain offered, in a sense, a monumental façade to the back of the stage building of the odeion, inviting spectators in the Lower Agora up to view productions in the space. At Perge, the exterior of the stage building of the theater was outfitted with a four-niched fountain, with basins in each niche (Fig. 141; App. No. 1.92). While the theater was built sometime before 120 CE, additions and changes to the *postscaenium* occurred in the late second-early third centuries, with the fountain probably acting as a buttress to an already weak *postscaenium*.<sup>138</sup> One would have approached the theater from either the south (coming from outside of the urban center) or from the north (from the city, by way of the stadium), so the monumental façade-like fountain added later in theater's life would have been an inviting site for potential spectators to stop. Indeed, deep grooves in the parapets

<sup>&</sup>lt;sup>137</sup> Not treated in the ensuing discussion is an example at Tusculum (Tuscolo, Italy). To the east of the theater, near the entrances to the top of the *cavea*, was a semicircular fountain connected to a large cistern. Also of note, there were two cisterns immediately behind the scene building, which would have led one into the adjacent forum. For more, see: Coarelli (1981, 123-125), Letzner (1999, cat. no. 262), and Sear (2006, 141-142). <sup>138</sup> Parra 1976, 95; Sear 2006, 372-373; Aristodemou 2011, 175; Richard 2012, 187.

of the niches suggest that the water from the fountain was being used by neighbors of the theater.<sup>139</sup> The evidence of actual activity populates the space with past human actions which add agency and vitality to the structure. The architectural forms of the water-display also mirror those forms seen on the other side of the stage building on the *scaenae frons*.<sup>140</sup> The fountain exploited a common visual vocabulary of the theater complex, unifying the architectural forms of both the interior and exterior of the structure.

At Palmyra, situated on the Middle Colonnade Street, near the intersection with the Tetrapylon and the Transverse Street, is the so-called 'West Nymphaeum,' dated to after middle of the third century CE (**Fig. 142; App. No. 1.86**). The *omega*-shaped fountain is incorporated into the colonnade of the street by including in that colonnade four of its own columns, whose intercolumnations are different than the main colonnade, differentiating the water-display from other spaces on the street. Directly across the street is the theater. Because of the nearby intersection of the two major streets of the city, it is clear that this was an extremely highly trafficked area. The fountain, nestled in a shady colonnade, would have provided not only water, but also a cool refuge, for those simply walking through the city or continuing on to the theater complex to the south.

On the Decumanus Maximus of Ostia, flanking the entrance to theater (which is dated to the Augustan period, with rebuilding and enlargements in the Severan period), are two exedra-style water-displays dated to the Domitianic era, with Severan restorations (**Fig. 143a; App. No. 1.85**). Each exedra measures about 9.50 m long, with a radius of about 6.15 m, and not much of the superstructure remains today. The exedrae would have

<sup>&</sup>lt;sup>139</sup> Richard 2012, 187.

<sup>&</sup>lt;sup>140</sup> Parra 1976, 95.

acted as basins, as they were full of water, with bases inside to hold statues, along with ornamental spouts, such as the prow of a ship seen today on the western exedra (**Fig. 143b**). Sculpture associated with these fountains includes a Scylla and a Venus Marina, who holds a shell with evidence of a water channel carved within.<sup>141</sup> The pendant water-displays, on the most important street in the city, frame the theater and its entrances. The placement, the pairing of two similar structures, and the scenographic backdrop of the exterior of the theater seating would have focused the attention of crowds going by, creating an open and inviting space.<sup>142</sup>

The next category to consider is fountains found in *paradoi* or *aditi*, the corridors that led to the orchestra space of the theater.<sup>143</sup> Of the known four examples, all come from the eastern half of the Mediterranean.<sup>144</sup> Three examples come from the Peloponnese. Argos has a fountain structure (perhaps related to the second century CE rebuilding of the stage building) in its northern *parados*, although not much is known about the structure (**App. No. 1.10**). At Elis, on the eastern *parados*, a small (roughly 2 m by 2 m) square fountain, with two engaged columns at the entrance to the basin, has been found (**App. No. 1.47**). Sparta preserves a long rectangular framed basin (15.10 m by 4.00 m, with an interior basin of 13.20 m by 2.20 m) on the west *parados* of the theater (**Fig. 144a; App. No. 1.36**). Because the fountain uses building material of the theater from the first century CE, along with the use of an inscribed statue base with a *terminus post quem* of first half of the third century, it is believed that the structure was installed

<sup>&</sup>lt;sup>141</sup> Ricciardi and Scrinari 1996, 203.

<sup>&</sup>lt;sup>142</sup> For more on the framing nature of Roman architecture, see Thomas (2007b, 117).

<sup>&</sup>lt;sup>143</sup> For more on the Greek and Latin terms, see Sear (2006, 6). The Latin form, *aditus*, is not common in the ancient sources, but attested, nonetheless.

<sup>&</sup>lt;sup>144</sup> There is reportedly a cistern in the *parados* of the theater at Casinum, which could have fed a fountain (Sear 2006, 122; Aristodemou 2011, 176). Also of note is a so-called 'source grotto' on the western *parados* of the theater of Miletus (Dorl-Klingenschmid 2001, cat. no. 138; Aristodemou 2011, 177). Because of the lack of clarity with regards to their current state, they are not considered in this discussion.

after the Herulian invasion of 267 (**Fig. 144b**).<sup>145</sup> The basin would have been clad in marble veneer, and decorated with statues of a seated lion (with a water-spout), a running boar, and a roughly finished Herakles on the back ledge of the fountain. The water that supplied the fountain probably arrived from an aqueduct that was situated above the theater. Five spouts on the front of the basin would have poured water into accompanying troughs, which would have allowed for collection by passers-by, or even by animals.<sup>146</sup>

Finally, at the site of Nea Paphos on Cyprus, another similar rectangular-form fountain has recently been excavated on the eastern *parados* (**App. No. 1.77**).<sup>147</sup> The structure, dated to the first century CE, measures 20m long by 5m wide, and there is evidence for a niche above the wall with sculpture, along with marble architectural members that were later dumped inside the basin.<sup>148</sup> The interior of the basin was covered with a star-pattern mosaic floor, along with being lined with chamfered plaster. The fountain was placed at a strategic point of not only at the *parados* of the theater, but also along a main in the city, indicating that this area would have been heavily trafficked.

It is intriguing that examples of water-displays in the *paradoi* were found only in theaters in the eastern half of the Mediterranean. We can perhaps explain this by actual theater usage. Greek theaters took advantage of the surrounding landscape and were usually situated in a hillside. The entrance to the structure was through the (uncovered) *paradoi*, often a highly trafficked area.<sup>149</sup> In the Roman theater, on the other hand, because of the technological advances in building materials and techniques, hillsides

<sup>&</sup>lt;sup>145</sup> Walker 1979, 214-215; Cartledge and Spawforth 1989, 122.

<sup>&</sup>lt;sup>146</sup> Walker 1979, 212.

<sup>&</sup>lt;sup>147</sup> Awaiting final publication of the theater, the ensuing discussion is pieced together using preliminary reports of Barker (2010a, 2010b, 2013).

<sup>&</sup>lt;sup>148</sup> Barker 2010b; Barker 2013, 18.

<sup>&</sup>lt;sup>149</sup> Bieber 1961, 189; Di Napoli 2013, 99-100.

were not needed. This shift allowed for the entrance of the theater to be shifted to the space below the *cavea*, and for the *paradoi* then to be covered and vaulted, in effect, closing up the stage building. What we see in these four examples are Greek-style theaters, originally built into the surrounding hillsides but subsequently adapted to become Roman-style theaters, allowing for easy access to the water at the entrances of the theaters.<sup>150</sup> Indeed, the eastern Mediterranean, even after the Roman conquest, continued to use more Greek-style theaters.<sup>151</sup> In fact, there are very few theaters constructed *de novo* during the Roman period in Greece.<sup>152</sup> In these four examples, we have Greek-style uncovered *paradoi*, which would have served as entrances to the theater. With the high traffic, builders were eager to provide easy access to water for all the spectators. Because the *paradoi* were not open in the West, we more often see fountains in the *postscaenium*, where the large crowds could congregate.

Finally, a mention should be made of water-displays that were on direct sight lines with theaters. There is an early example of Hellenistic fountain house on the ascent up to the Sagalassos theater from the Upper Agora.<sup>153</sup> One would have been able to stop to collect water, but also to see clearly the theater just a little above. In the second century, a small *omega*-shaped fountain, with a large (5 m x 19 m) rectangular decorative basin in front of the niche, was placed on the main colonnaded street of the city of Petra (**Fig. 145; App. No. 1.93**). The street then continued to the east, away from the city center, which would have intersected first the small theater and then the large theater, a

<sup>&</sup>lt;sup>150</sup> See Beacham (1991, 56-85, 154-198) for more on the transition from the wooden to permanent Roman theater stage, and how the Roman theater adapted to new styles of comedy and drama, made popular by Roman playwrights in the last few centuries BCE. See Manuwald (2011, 55-68) for Roman theater buildings in the Republican period.

<sup>&</sup>lt;sup>151</sup> Sear 2006, 113-115.

<sup>&</sup>lt;sup>152</sup> Di Napoli 2013, 102.

<sup>&</sup>lt;sup>153</sup> Dorl-Klingenschmid 2001, cat. no. 97; Aristodemou 2011, 177.

little farther to the southeast. Water for the fountain came from a cistern near the Palace Tomb, located directly to the northeast in an adjacent hillside. It is believed that the same channel that supplied the fountain with water would have also supplied the theater, suggesting that water was used for spectacles in the theater.<sup>154</sup> The display of water at this junction of the city would certainly have been impressive for those passing by, going from the city center to the theaters. Two other examples appear in Turkey in the Severan period. Ariassos in Pisidia has a small apsed fountain nestled into a corner of the street of the theater (**App. No. 1.13**). Ura/Olba in Cilicia has a large *camera* type fountain house leading to the theater (**App. No. 1.147**).

Like the water-displays situated in the *paradoi* of theaters, these examples of fountains located on sight lines with theaters also seems to be a largely eastern Mediterranean phenomenon (**Table 14**). The pedestrian is pulled from one monument to another in these urban landscapes, going from a water-display to a theater, or vice versa.<sup>155</sup> The edifices work in tandem, inviting the viewer to continue down urban axes. In addition, occasionally, the water infrastructure could be used not only for the fountain proper, but also for the theaters, allowing for the potential of more water-displays, such as at Petra.

## V. Aquatic Spectacles

While a full discussion will not be offered here, we should briefly mention the phenomenon of the aquatic spectacle found in Roman entertainment complexes, which is

<sup>&</sup>lt;sup>154</sup> McKenzie 1990, 110; Segal 1995, 27, 93; Segal 1997, 166.

<sup>&</sup>lt;sup>155</sup> Uğurlu 2004, 16-24; Aristodemou 2011, 177; Aristodemou 2012, 53-64.

an unusual use of water by the Romans.<sup>156</sup> There were many types of aquatic spectacles in the Roman world: naumachiae (mock naval battles), aquatic venationes (hunts), and hydromimes (either mythological tableaux or aquatic ballets). It is believed that naumachiae were started by Julius Caesar and exploited by Augustus after his Actian victory (and by extension, filial piety to Julius Caesar).<sup>157</sup> Hydromimes probably stemmed from Hellenistic traditions of the art of mime (Fig. 146).<sup>158</sup> One might imagine the hydromimes as a precursor to modern synchronized swimming. There is also the possibility that hydromimes were imported from the eastern half of the Mediterranean, where the aquatic spectacles there were somehow associated with religious rituals.<sup>159</sup> The kolymbethra (or piscina) was the name of the actual space within a theatrical area that was turned into a water basin for the purposes of the aquatic spectacles.<sup>160</sup> The orchestras of theaters were transformed into basins by means of walling up the orchestra, lining the space with waterproof plaster, and adding large drainage systems.<sup>161</sup> The *kolymbethra* appear in the later years of the Roman Empire, generally from the late third to the fifth centuries CE. By the Christian period, however, many Roman spectacles, including aquatic ones, earned the castigation by Church leaders. John Chrysostom (ca. 347-409)

<sup>&</sup>lt;sup>156</sup> The most detailed studies of these spectacles are by Traversari (1960) and Berlan-Bajard (2006), the latter of which was reviewed by Coleman (2008).

<sup>&</sup>lt;sup>157</sup> Berlan-Bajard 2006, 11-60, 153-216 (for archaeological evidence of the structures associated with *naumachiae*); Coleman 2008, 459. On the planned *Naumachia* of Caesar, see Cordischi (1999) and Tortorici (2012, 25-28). For the *Naumachia* of Augustus, see especially Taylor (2000, 169-200) and Tortorici (2012, 26-28).

<sup>&</sup>lt;sup>158</sup> Berlan-Bajard 2006, 218-234; Coleman 2006, 459.

<sup>&</sup>lt;sup>159</sup> See especially Berlan-Bajard (2006, 287-291) and Gasparini (2013, 197-201). It is still not entirely clear just how these spectacles would have functioned in a religious ritual.

<sup>&</sup>lt;sup>160</sup> For the *kolymbethra* of the Italian peninsula, see Traversari (1960). For an update of the *kolymbethra*, see Berlan-Bajard (2006, 255-278).

<sup>&</sup>lt;sup>161</sup> Sear 2006, 44.

likened the aquatic actors to prostitutes, exposing their bodies and performing reprehensible acts.<sup>162</sup>

## VI. Conclusions

The overarching theme of water-displays in the Roman theater is entertainment and practicality. The common visual vocabulary of the theater stage building and the Roman façade fountain is important, as the baroque and sumptuous aspects of both tend to illustrate the 'showy' nature of Roman architecture. But, there is more than just a shared architectural vocabulary. First and foremost, water-displays in the Roman theater were about entertainment. Beyond the actual theatrical productions, the spectacle of moving water in the theater and spaces associated with it was for the benefit of the spectators. The element of *viewing* is important here. The *theatron* was a place for seeing, which suits water-displays well, as they must be viewed to be fully appreciated. Secondly, there was the practical aspect of water in the theater. The moving, fresh water would have cooled the air in the theater and its *porticus*. One can only imagine the heat in a packed theater in southern portions of the Roman Empire. Further, *sparsiones* of perfumed water will have scented the air, adding another element of freshness to what might have been a sometimes unpleasant-smelling place.

Once a person moves from the theater proper to fountains in the *postscaenium* or adjacent to the theater, the practical aspect of collecting water comes into play. Again, we can repopulate the space of the *porticus* behind the theater. Fountains were placed in highly trafficked areas around the theater, so that as many passers-by as possible could take advantage of them. Indeed, the large spaces of the *postscaenium* would have allowed

<sup>&</sup>lt;sup>162</sup> Migne *PG* 57, cols. 79-82.
for the congregation of large numbers of people. While the practical aspects of the theater water-displays can include the collection of water for secondary purposes (i.e., consumption), this utilitarian element of water-display is not always necessary. In the water-displays in the *frons pulpiti* and orchestra, the water flowed into basins, overflow into drains, then channeled elsewhere. While the secondary use of this water is unknown, it was not being collected on the spot, such as with a fountain proper in the *postscaenium* or on the street.

The limited archaeological evidence of water-displays connected with Roman period theaters has meant that in previous scholarship this type of water-display has been overlooked. We have been able to conclude that fountain sculpture in these structures primarily focuses on Dionysiac and water-themed imagery. Both themes work well together, given the surrounding space, whether connected to the god of the theater and his retinue, or those beings associated with the water flowing forth. The functionality of the actual theater (whether Greek- or Roman-style) sheds light on the placement of waterdisplays. Only in the structures of the Roman-style theaters with recessed *frontes pulpiti* are water-displays found. The exedrae, where there was space to include waterspouts, drains, along with fountain sculptures, provide the area where water could actually flow and drain properly. In addition, the recesses mimic the elaborate *scaenae frons* directly behind on the stage, again, citing a common visual vocabulary. Only in Greek-style theaters are fountains found in the *paradoi*, where the most traffic would pass upon entering into the theater.

Finally, the water-displays associated with the theater highlight edifices and their features. The displays at the base of the stage focus the spectator not only on the show of

water, but also towards the stage. Presumably the water was turned on before and after a production, which would mean that the viewer was already engaged in the theatrical surroundings, at least visually. Outside the theater proper, the fountain could provide a node for gathering such as in the *postscaenium*, frame the theater (e.g., Ostia), guide the pedestrian on the street to the theater, and demarcate space, such as with the liminal south entrance of the Suessa theater complex. The water-display here, in addition to being an entertaining and practical, acted as of focus for the viewer, providing a means to guide his gaze to the stage proper or to pull them to another location, often where there was ample space to collect in a large group.

## Conclusion

Aqua vero non solum potus sed infinitas usu praebendo necessitates, gratas, quod est gratuita, praestat utilitates.

Water, moreover, by furnishing not only drink but all our infinite necessities, provides its grateful utility as a gracious gift.<sup>1</sup>

Vitruvius, in a similar quote to the one that began this study, again, informs us of the importance of water for the Romans. Not only do we as humans absolutely need it for its life-giving qualities, but it is truly a gift that has the power to delight the senses. This dissertation has sought to investigate the purposes of public water-displays during the High Roman Empire. By taking consideration of the *interaction* with and *reaction* to water, based on the *archaeology of the senses, memory*, and *identity*, we may begin to understand *why* the Romans placed fountains in certain urban and extra-urban locations throughout the Empire—bringing to light regional and chronological trends, while still stressing the importance of water in the daily lives of all Romans.

The term water-display was adopted to tap into a wider body of evidence than has been used previously to consider Roman fountains. Because past studies have used problematic appellations, such as *nymphaeum*, or charged adjectives, like 'monumental,' a large number of examples ripe for study in all parts of the Empire have been ignored. Here, public water-displays provide moving water that flows into a basin, with some sort of decorative element to a structure, while offering sensorial amenities (e.g., water to drink or air that is circulated on account of moving water) and so altering the space that the structure occupies. The water-displays included in the study have not been limited by size, allowing small- and large-scale fountains to be examined simultaneously. Thus, a

<sup>&</sup>lt;sup>1</sup> Vitr. *De arch.* 8.*praef.*3. (Trans. F. Granger)

variety of public fountains have been considered together providing insight into new contexts and trends in water-display, which can be evidenced through various regions in the Empire, from Asia Minor, Greece, Italy, the Levant, North Africa, the northern provinces (parts of modern Britain, France, and Germany), and the western provinces (the Iberian Peninsula and part of France). Through the use of 151 fountains in 17 modern countries, the present research reveals the meaning behind water-displays, which can be tied to chronology, placement in the landscape, and regional trends.

#### I. Time and Memory

The water-displays considered come primarily from the first three centuries of the Roman Empire. By categorizing the examples based on chronological periods in the High Empire, we begin to see how Roman water-displays were employed throughout the Empire (**Table 3**). Many regions of Roman world were accustomed to artificial water supplies before the advent of larger Roman water infrastructure systems, especially the Greek East, evident in the use of natural springs and built structures around them, such as with Peirene and Glauke fountains in Corinth, both of which had ancient, historiated, origins (**App. Nos. 1.34, 1.36**). From the collected evidence, however, we see how Roman water-displays seem at first to begin in the city of Rome then radiate out from the Italian peninsula. Rome certainly had a long history of moving water, with her first aqueduct being the Aqua Appia in 312 BCE.<sup>2</sup> Such an early connection to water helps to explain the numerous water-displays we noted in the area surrounding the Forum Romanum, such as the *lacus Curtius* and *luturnae* (**App. Nos. 1.111, 1.119**) and the

<sup>&</sup>lt;sup>2</sup> For more on the chronology of the aqueducts of Rome, see, for example, Koloski-Ostrow (2001, 5-6) and Wilson (2008, 296-297).

*sacellum* of Venus Cloacina (**App. No. 1.119**). The extreme antiquity of the waterdisplays of Rome—and other sites in the Empire—explains their long-lasting presence in the landscape, activating memories for onlookers of mythical, historical, and mythhistorical pasts, in addition to what was happening before their eyes in the present.

Outside the Italian peninsula, water-displays make appearances early in the Empire, especially in the western half. Particularly in southern Gaul, where we saw early imperial benefactions of Agrippa and Claudius, there were a number of important fountains, such as the Triumphal Fountain in Glanum, the first public use of an exedra in a fountain (**App. No. 1.58**), and the Cyclops Fountain dedicated to an emperor in Lugdunum (**App. No. 1.72**). The adoption of Roman architectural styles for waterdisplays in France and the Iberian Peninsula allowed provincial communities to claim membership in the larger, nascent Empire that seemed to be constantly growing—while still, at the same time, providing them the opportunity to incorporate their own more local styles of water-displays, often the result of local forms of worship. And these new spaces have the opportunity to create original memories for passers-by. While they may not be the ancient and mythical water-sources of Rome, local western examples could evoke indigenous building styles and connections to local water sources to craft firsthand memories for individuals using those fountains.

Other regions see the appearance of Roman-style water-displays, generally after the early decades of the Empire. Asia Minor has a number of early examples, but it is clear that under the Flavians, there is a marked increase in fountain-building in the region (particularly at Ephesus and Miletus). But it is not until after Hadrian, known for his water-related euergetism in Asia Minor and Greece, that more examples are seen in the East.<sup>3</sup> It is then under the Antonines, perhaps literally building on the water-related foundations begun by Hadrian, that water-displays are seen in great numbers throughout the Empire, including Greece, the Levant, and North Africa. Aresurgence also comes under the period of the Severans later in the second century and into the early third century, particularly in Asia Minor and North Africa. There are examples of Severan repairs to a variety of fountains in the empire that were considered in this study, including the macella of Gerasa and Puteoli (**App. Nos. 1.56, 1.101**), along with the exedra fountains in front of the theater of Ostia (**App. No. 1.85**). It is under the Severans that the city of Rome enjoys its first large-scale water-displays since the time of the Flavians, with the Septizodium (**App. No. 1.120**) and the Nymphaeum Alexandri (**App. No. 1.116**).

While water-displays were constantly being constructed throughout the Empire, there seem to be periods of greater activity. At the very beginning of the Empire, Rome (under Agrippa and Augustus) witnesses an explosion of water amenities and infrastructures, which seem to spread quickly to the West, an area known for its early imperial euergetism. The Italian Peninsula continues to install water-displays through the Flavian period, the time in which water-displays begin to be seen throughout the rest of the Empire. After the Flavians, there are marked increases in the presence of fountains under Hadrian, throughout the long period of the Antonines, then especially under the Severans. While the motives are not clear for the numbers of fountains in each of these eras, they could stem from political considerations. Perhaps, particularly the Severans who, coming out of a civil war, wanted to demonstrate imperial munificence throughout

<sup>&</sup>lt;sup>3</sup> For more on Hadrian's water benefaction in the East, see the work of Leigh (1997) and Longfellow (2009; 2011; 2012).

the Empire, harkening back to earlier times of the so-called 'Good Emperors,' activating memories of the recent imperial past.

#### **II. Focal Point versus Nexus**

Our survey of archaeological examples of Roman water-displays placed them into three different contexts, including civic, religious, and entertainment-related spaces (**Table 2**). When categorized into any of these contexts, the fountains themselves naturally have the capacity physically to *alter* the surrounding space. The water-displays considered in this study were primarily from Roman cities, but there are a number of examples that were found outside the urban setting, especially in religious settings. Regardless of the placement in urban or extra-urban landscapes, the fountains under consideration can either act as focal points or become part of the nexus of auxiliary structures in a built environment.

As focal points, water-displays *interact* with pedestrians and onlookers. Fountains have the ability to prompt movement, signaling, and thus suggesting, new or alternate routes to experience an architectural space. Often placed in liminal spaces, water-displays can provide transitions for both locals and visitors, allowing them the opportunity to transition both mentally and physically from one type of space to the next: urban to extraurban; secular to religious; street to central marketplace; outside to inside a theater. No matter the actual context of the fountain; as a focal point, there were naturally similar reasons for the viewer to focus on the water. When situated in a city, a large urban fountain at a crossroads might highlight a pathway to take or the monumental nature of the surrounding colonnade. The Arco di Germanico, at the northeast entrance of the forum of Pompeii, would invite pedestrians from the north on the via del Foro to enter the city center of the town (App. No. 1.98). Water-displays in religious source sanctuaries channel an individual's attention towards the awe and power associated with the water itself. Consider the example of the three-terraced Nymphaeum of Egeria at the Sanctuary of Diana at Nemi, not only with a large exedra basin of water on the top story, but also covered basins on the bottom level (App. No. 1.81). The water-display would have provided necessary water for purification, but would have focused the attention on the water itself, a potent symbol of the nymph Egeria. While, at the same time, in the Roman theater, water displayed in the *frons pulpiti* would beckon the audience member to enter into a relationship with the theatrical production about to take place. One can only imagine the power of the water-display situated in the *proscaenium* of the theater of Antioch-on-the-Orontes, with its show of water, literally flowing from the personification of the Orontes River under the statue of Calliope, in the guise of Tyche (App. No. 1.3). In these situations, the viewer comes away with a greater appreciation of the water, given an inevitable sensorial interaction and reaction to such structures.

Further, water-displays can be placed as auxiliary edifices in a space. In these instances, water-displays become part of a wider network, or nexus, of the built environment that allows them to interact with other structures, creating a greater, more cohesive urban unit. In the case of the Severan Plaza in Perge, the Hydreion of Aurelia Paulina (**App. No. 1.90**) and Nymphaeum F4 (**App. No. 1.91**) frame the west side of the space, interacting with the Magna Plancia Gate to the north and the agora to the east. A new urban node is created—which is a nexus of auxiliary structures working together to *alter* substantially the physical landscape at Perge.

Either as focal points or as elements in a nexus of other features, water-displays in these instances elicit sensorial responses. An individual is drawn to the display of water, whether it is singled out specifically in a structure that highlights is sensory pleasures, or it is placed with other edifices creating a more agreeable built environment. And, of course, an individual might be drawn to a fountain simply by thirst. The inherent sensorial nature of water aids in the understanding of its placement throughout the physical landscape of the Romans.

#### **III. Regional and Roman Identity**

By exploring water-displays in their different contexts, regional trends in their construction begin to emerge, aiding our quest to derive meaning from the placement of fountains in the landscape. In civic spaces, fountains are, of course, found throughout the Empire. In Asia Minor, a majority of the examples considered in this study were from inside or adjacent to the city. Of the 28 examples considered in this study of Asia Minor, moreover, only three were found in religious spaces and two were located near the entrances of theaters, meaning the remaining 24 were in civic spaces. We saw how, in that region in particular, water-displays were used to create unique urban nodes predicated on water. In religious spaces, fountains are seen throughout the Empire, too, in areas related to the imperial cult and healing cults. In the East, however, sanctuary entrances have a number of examples. Source sanctuaries exist primarily in the West, along with healing cults, which also extend into northern areas. Water-displays in and around theaters are frequent in Greece, North Africa, and Spain. While no fourtains are

found in theaters of Britain or Germany, there are no known ones in these spaces in Turkey either, an area of the Empire where water-displays are especially numerous.

There is clearly a divide in the employment of water-displays in the Empire, a divide between East and West. Past scholarship has often made this point, especially in recent studies that rely heavily, if not solely, on examples from Asia Minor, where some of the largest and most opulent fountains of the Empire are preserved. These studies have shown, however, that examples from Asia Minor and the Levant, while they may be considered 'monumental' in terms of their physical size, particularly when compared with smaller examples in the West, were not always generous in the flow of water coming through their spouts and into their basins.<sup>4</sup> For example, the two-storied façade fountain on the Cardo Maximus of Gerasa, near the entrance of the Temple of Artemis, despite its large scale and lavish use of columns and aediculae appears only to have had a low flow of water (App. No. 1.57). This was probably the case with other large-scale fountains in the eastern half of the Empire, which indicates that while local populations were exploiting a common Roman architectural style and tradition, there were still local concerns and resources to take into account. In the East, fountains appear to be large, perhaps to detract from the little amount of water flowing through the structures. Water in this region had to be preserved, given its scarcity and preciousness in a semi-arid or arid climate. Despite that fact, the local populations in the East still managed to display water.

It has been argued in previous studies that in the western half of the Empire, such as in France, that so-called 'monumental' fountains and *nymphaea* were not present. And while it is the case that we do not observe large-scale fountains of the same size and configuration as in Asia Minor, the West still uses water-displays in a variety of public

<sup>&</sup>lt;sup>4</sup> Richard 2007; Richard 2012, 173-176; Kamash 2010, 7-14; Kamash 2012.

built spaces. While the Iberian Peninsula has more semi-arid climatic conditions than areas north of it, there remains a show of water in all contexts, especially in religious and theatrical spaces. Farther to the north, it is clear that there are different associations with water, perhaps stemming from the colder, harsher climate. Thus, in the areas of modern Britain, France, and Germany, a majority of the water-displays discovered are connected to religious spaces.<sup>5</sup> Throughout the West, both source and healing sanctuaries inspired a greater number of water-displays (Tables 10, 12). Water obviously had different associations in the north, as it was connected to divine spirits of springs and of healing. Individuals did not need water for its cooling and refreshing effects, such as when it was used in more temperate areas of the Mediterranean basin. That being said, local populations not only incorporated Roman building techniques and architectural styles into their water-displays, but also retained their more local styles of construction. For example, we only need to remember the example from Septeuil, in which a *camera*-style space featured a reclining nymph statue in a marble-veneered space in the southern half, while the north half of the structure was an open colonnade, with an octagonal basin on a visual axis with the nymph (App. No. 1.129). At Septeuil, the patron was effectively able to focus the viewer on the source of the water, in its Roman and local expressions through the use of a canonical sleeping nymph and a polygonal basin.

<sup>&</sup>lt;sup>5</sup> Of course, we cannot disregard the fact that urban spaces had public fountains (just like the *lacus* of Rome and Pompeii) not considered in this study. For more on water in British contexts, see Burgers (2001, on water supply), Jones (2003, on Lincoln), and Rogers (2013, on waterscapes).

#### **IV. Water-Displays and the Empire**

Throughout the Roman Empire, water was valued on a number of levels. First, of course, was the utility of water in everyday life. In order to survive, humans must have water, and the Romans successfully harnessed the substance by artificial means to make access to it more convenient than it would be again in Europe until the nineteenth century. Second, we can deduce from the literary sources, the Romans simply had a fascination with water, enjoying it through all five of their senses, in both natural and artificial settings. But it is the archaeological evidence that allows us to explain the fascination and enjoyment of water in the Roman world.

This study has reached three separate, but related conclusions. First, in the High Roman Empire, no matter the location or the context, water-displays were present. While there were certainly fountains throughout the Mediterranean basin before the full Roman conquest of the whole of Empire, it was the advent of the Romans that mark a dramatic increase in the display of water in public settings. Fountains came in a variety of sizes and types, but they still showed the movement of water, creating sensorial *tours de force*, whether cascading through the three niches of the Septizodium in Rome, the gurgling of water pooling in a basin in the sanctuary at Ihn in Germany, or the trickling of water in the *frons pulpiti* of the theater of Philadelphia in Jordan. Second, these water-displays, which permeate all arenas of Roman public life, connected all the individuals living under the dominion of Rome. In each context, the *interaction* and *reaction* to the display of water are predicated on the sensorial pleasure that one derives from the actual substance itself. In effect, the Roman incorporation of water-displays in the public sphere stems from the desire to show the power and the awe-inspiring quality of this substance, physically altering built environments to include fountains. Finally, water-displays have the ability to *alter* the physical interaction an individual has with a particular space. The display of moving water allows for sensory reactions that all humans, generally regardless of their time or place, inherently and inevitably respond to in a positive way. Again, the focus on the power and awe of water was a driving force behind Roman water-displays in all of the public contexts that they were constructed.

The methodology employed in this study can be used when considering other settings with water-displays. The foundation established here, including the *archaeology of the senses, memory*, and *identity*, provides a strong framework to understand why fountains were placed in certain locations. In the ancient Roman world, this approach could be applied to other contexts, such as in public baths or domestic examples. As was demonstrated from the ancient literary sources, such as Seneca describing bathing establishments in *Letter* 86 or Pliny's two villas (*Ep.* 2.17 and 5.6), these two areas of Roman life were witness to water-displays that were placed there because of the sensorial responses people had with them. Further, the method of this study also has the potential application to fountains in other time periods and locations, such in Italian Renaissance villas, in Baroque Rome, in the Islamic Iberian Peninsula, in Venetian Crete, and even in modern cities throughout the world.<sup>6</sup> In these sets of examples, water-displays are used to change an individual's *interaction* and *reaction* to a space—while still being able to craft new memories and identities.

Water-displays in the High Roman Empire, the product of a wider phenomenon of advanced water technology and infrastructures, had the capacity to captivate an audience and provide them with sensorial pleasures. Fountains are seen in all contexts of Roman

<sup>&</sup>lt;sup>6</sup> The work of Moore (1994) on the architecture related to water began to initiate this dialogue.

public life, including civic, religious, and entertainment-related. By capitalizing on the natural response we all have to water, the Romans were able to create new spaces with deeper meanings, tied to a variety of elements, including myth, history, and memory. The display of water as a phenomenon taps into the inherent human desire to interact with the element, stimulating all of our senses—in effect transcending all regional characteristics and chronological periods, illustrating a greater human identity tied to water.

#### **Appendix 1: Water-Displays Presented in the Text**

The following appendix is a list of the water-displays that are discussed in the present study. Because of the number of water-display catalogues already available, this is not meant to be a complete inventory of all known water-displays. The goal of the appendix is to provide to the reader the relevant information for the water-displays presented the text in an easy-to-access list. The appendix is organized alphabetically by ancient place name, and when a site has multiple examples, the structures are then arranged alphabetically, according to their modern names. The information included in each entry is as follows: location (ancient site, modern site name, and modern country); name of water-display (common modern appellation of the structure, with any variations; ancient names are provided when known); date; type (e.g., Spouting Fountain with basin; Fountain house; Niche fountain; Exedra (semi-circular, curved fountain); Flat façade; Pi-shaped façade; Monopteros; other (details)); dimensions (if known); context (e.g., civic, religious, entertainment setting); references; brief description.

The types that are employed in this appendix to describe the basic shape and structure of a water-display are derived from Richard's simplified list of fountain types (2012, 35-45), with additions that are included, due to the new contexts of water-display in this study. There is no 'standard' typology used here, however, given the wide variety of evidence employed in this dissertation.

In the reference section, where available, catalogue numbers are included from the major sources (e.g., Neuerburg 1965, Walker 1979, Glaser 1983, Segal 1997, Riccardi and Scrinari 1996, Letzner 1999, Dorl-Klingenschmid 2001, Richard 2012). Other relevant and important published sources are mentioned, especially regarding water-displays that are not included in those catalogues.

*In the dissertation text, the following examples are referenced by the following in-text citation* (**App. No. 1.1**).

## **1.1 Ampurias** (Empúries, Spain) **Temple, with basin on two sides**

First century CE Spouting fountain with basin North basin: 25.0 m (long), 2.0 m (wide) Civic and religious (Imperial cult building and forum) *References*: Reis 2009, 300; Costa Solé 2011, 45.

A basin that on the north and east sides of the open area surrounding the temple dedicated to the imperial cult, all of which is flanked by a cryptoporticus and the forum.

**1.2 Antioch-on-the-Orontes** (Syria) Fig. 75 **"Shrine of the Nymphs" (Main Intersection)**  First century CE? Other (arch) Unknown dimensions Civic (crossroads) *References*: Lib. *Or.* 11.202; Malalas *Chron.* 10.19.36-43; Richard 2012, cat. no. 2.

While the archaeological remains of the nymphaeum at the intersection of the two main thoroughfares of Antioch are gone, we know from literary sources of its existence. Libanius describes the structure as "high as heaven and turning every eye with the dazzling light of its stones and the color of its columns and the gleam of its pictures and the wealth of its flowing waters" (*Or.* 11.202).

## **1.3 Antioch-on-the-Orontes** (Syria) Figs. 123, 124 "Nymphaeum in the *Proscaenium*" of the Theater

Trajanic? Exedra (with statue of Calliope) Unknown dimensions Entertainment setting (*proscaenium* of Antioch theater) *References*: Malalas *Chron.* 11.9 276; Spano 1913; Spano 1952; Dohr 1960, 26-29; Price and Trell 1977, 34; Stansbury-O'Donnell 1994, 56.

There is only one reference to the 'nymphaeum in the *proscaenium*' of the Antioch theater, installed by Trajan, with a bronze statue of Calliope in the guise of Tyche, in the writings of John Malalas. The water-display was probably illustrated on an Antiochene coin series minted between 220-260 CE.

## **1.4 Antioch-on-the-Orontes** (Syria) Figs. 125 Water Complex of Daphne (*Theatron*, Temple of the Springs/Nymphs, *theatridion*)

Hadrianic Other (theatral-like/exedra, source sanctuary) Unknown dimensions Religious (source sanctuary) *References*: Malalas *Chron*. 11.14, 277-278; Downey 1951; Beaujeu 1955, 187; Chowen 1956; Downey 1961; Agusta-Boularot 1997, 525-537; Boatwright 1999, 137-138; Longfellow 2011, 144-146.

John Malalas reveals that there were a series of edifices in Daphne that helped to channel the spring waters there, but also built structures that highlighted them. The passage of Malalas is not completely clear as to the actual layout of the structures, so the Megalopsychia Mosaic's topographical border has been used to aid in our reconstruction. Following the reading of Longfellow, water from the springs of Daphne probably entered a reservoir (*theatron*), then flowed into a Temple of the Springs/Nymphs (which also acted as a spring sanctuary), then flowed into the *theatridion*, with its five conduits, in order to channel the water down to Antioch. The Megalopsychia Mosaic illustrates a theatral-form structure, with water and the adjacent Kasalia spring. The building might be an abbreviated form of the *theatron* and *theatridion* there at Daphne.

## **1.5 Aquae Apollinares Novae** (Vicarello, Italy) Figs. 112, 119 Nymphaeum, Apsidensaal I, Sanctuary of Apollo

Domitianic Other (*camera* in Apsidensaal I) ca. 7 m by 7 m (nymphaeum in Apsidensaal I) Religious (healing sanctuary) *References*: Edlund 1987, 56; Sartorio 1999, 73-79; Arnaldi 2002, 246; Chellini 2002, 103, 211; Arnaldi 2006, 59; Von Falkenstein-Wirth 2011; Bassani 2012, 397-399.

Located north of Lago di Bracciano, Aquae Apollinares Novae is a healing site known for its hot waters. In Apsidensaal I, off of the central room, there is a triclinium on the west and a nymphaeum on the east. Access to the nymphaeum is restricted, as the vestibule immediately to its west is blocked off. One can only enter from the south, off a side corridor, up a flight of steps. Inside, the room was barrel vaulted, with lighting provided by a window on the west wall, which joined with the roofing of the nymphaeum's vestibule. The east wall of the nymphaeum had a niche, with a statue of Apollo. Water poured from a channel underneath the statue, down a flight of water-steps, and into a basin below.

## **1.6 Aquae Sulis** (Bath, England) Fig. 113 **Sanctuary of Aquae Sulis**

Second century CE (enclosure around the hot spring added)
Other (room highlighting water source)
48 m by 72 m (overall temenos), 12 m by 16 m (sacred spring enclosure)
Religious (healing water site) *References*: Cunliffe 1971; Krug 1985, 180; Cunliffe 1995; Revell 2009, 118-129.

The temenos of the Temple of Sulis Minerva, also contained a sacred spring attached to a bath complex. The site was probably always a popular destination due to its hot (112-120° F = 44-49° C) and copious (nearly a third of a million gallons a day) waters and probably had some sort of built structure around it. But it was not until the second century CE that a large enclosure was added around the hot spring, with walls (complete with windows), concrete vaulting, and access steps (so pilgrims could perhaps go down to drink the waters), that would have made the spring seem like a vast natural grotto. Within the space, water would have poured out of the natural spring, displaying the curative and sacred waters. A variety of dedications have been found at the site, including curse tablets, jewelry, pewter dishes, cups, ceremonial tin masks, and wood objects.

**1.7 Arelate** (Arles, France) Fig. 134 **Silenoi Statues at ends of** *Pulpitum* 

First century CE
Other (*pulpitum*)
1.62 m (silenos length, Inv. F.AN 92-00-537), 1.06 m (silenos length, Inv. F.AN 92-00-459), 30.63 m (orchestra diameter), 60.05 m (*pulpitum* length)
Entertainment setting (theater, *pulpitum*) *References*: Carrier 2005-2006, 378-381; Sear 2006, 247-248; Moretti 2010, 141.

Two sleeping Silenoi were placed at the ends of the *pulpitum*, there were three altars in three of the exedrae of the *frons pulpiti*, decorated with Apollonine imagery, including Augustus in the guise of Apollo, Marsyas, and laurel trees.

# **1.8 Argos** (Achaia, Greece) **Drains around** *Frons Pulpiti*

Second century CE (Hellenistic stage building demolished) Other (*frons pulpiti*) Unknown (chronology difficult to determine) Entertainment setting (theater, *frons pulpiti*) *References*: Di Napoli 2013, 52; Sear 2006, 386.

Drains were found around the *frons pulpiti*, suggesting a water-display. Alternately curved and rectangular exedrae on the *frons pulpiti*.

**1.9 Argos** (Achaia, Greece) Figs. 39c, 102 **Larissa Nymphaeum** 

124 CE
Fountain house
12.55 m (length), 15.50 m (façade width), 7.95 m by 3.73 m (upper basin), 9.25 m by
3.98 m (lower basin)
Religious (source sanctuary) *References*: Glaser 1983, cat. no. 60; Walker 1987, 60-71; Leigh 1997; Boatwright 1999,
137-139; Longfellow 2011, 112-120; Aristodemou 2012, cat. no. 9; Longfellow 2012,
151; Richard 2012, cat. no. 8.

North of the theater, this fountain was placed into the southeast slopes of the Larissa Hill, at the terminus of the Hadrianic aqueduct. The structure allowed water to pour from the back wall of the room, from underneath an apsed niche that contained a statue of heroically nude Hadrian. The water continued into an upper and then lower basin, via a water stair. At the façade of the lower basin were four Ionic columns, along with water pouring through a series of spouts that allowed water to continue to drain into a channel that went down into the city of Argos. The roofing of the room was a barrel vault, which also contained windows that allowed for diffuse light to come through. There was an associated inscription that detailed Hadrian's construction of the aqueduct.

# **1.10 Argos** (Achaia, Greece) *Parados* Fountain, Theater

Second century CE rebuilding of stage building Spouting fountain with basin? 11 m (south *parados*) Entertainment setting (*parados*) *References*: Glaser 1983, 40, 73; Sear 2006, 386-387; Bressan 2009, 76-85; Aristodemou 2011, 178; Di Napoli 2013, 51-54.

Argos has a fountain structure in its northern *parados*, though not much is known about the structure.

# **1.11 Argos** (Achaia, Greece) Figs. 39, 40 **Round Nymphaeum**

First phase: Domitianic; Second phase: second half of the second century (with the addition of the water-display)
Monopteros
16 m<sup>2</sup> peribolos, 7 m (diameter of circular structure)
Civic (agora) *References*: Walker 1979, 117-122; Glaser 1983, cat. no. 76; Walker 1987, 64-68;
Marchetti and Kolokotsas 1995; Pariente and Thalmann 1998, 219; Piérart 1999;
Aristodemou 2012, cat. no. 10; Richard 2012, cat. no. 9. See also App. No. 2.30.

The round monument is located on the northeast corner of the Argive agora. There were probably two building phases. In the first, the central building (a tholos) probably acted as a cenotaph for Danaos, with no water installation. In the second phase, the tholos was opened up to form a monopteros. The open building then was transformed into a proper water-display, with a basin installed on the interior of the monopteros that would have allowed water to flow over and down into a series of two basins on two different levels, before reaching the bottom basin for collection. An inscription associated with the second building phase indicates that this 'nymphaion' was part of a series of other water projects in Argos during the second century. The exterior eight columns of the monopteros were monolithic cipollino marble from Euboea, with Pentelic marble Corinthian capitals, which are similar to the capitals found in the Hadrianic baths.

**1.12 Argos** (Achaia, Greece) Figs. 39, 42 Square Monument

Second half of the second century CE Other (tetrapylon) 6.35 m<sup>2</sup> Civic (agora) *References*: Walker 1979, 201-206; Aupert 1985a, 257; Walker 1987, 64-68; Piérart and Touchais 1996, 79; Pariente and Thalmann 1998, 219; Piérart 1999, 262; Aupert 2001, 442-444; Piérart 2010, 35. The Square Monument has never been fully published, perhaps given the state of remains, as the structure was dismantled later in its life. One can consult reports on various phases of its excavation in the *BCH*: 99 (1975) 703-704; 100 (1976) 753; 101 (1977) 673; 102 (1978) 783; 115 (1991) 667-670.

The Square Monument was located to the southwest of the round Nymphaeum, north of the palestra, east of the Salle Hypostyle, and in the former location of the *dromos*. A podium would have raised four piers, which would have supported a superstructure that would have resembled a tetrapylon with a pedimented attic, or a gabled or pyramidal roof. The spacings between the piers were 2.35 m, which opened into an interior that suggests there were niches on the interior sides of the piers. Around the base of the podium, a marble paving was put down, along with at least one step (which might have provided access to the water). The construction of the structure included a rubble core, revetted in marble. There was probably a water-display in the middle of the structure, along with other displays on the interior niches. Found in the excavations was a piece of the marble veneer of the monument indicating that the Tiberii Iulii dedicated it.

**1.13 Ariassos** (Pisidia, Turkey) **Fountain near Theater** 

Early third century CE Exedra (*omega*-shaped) 9.35 m (length) Entertainment setting (near theater) *References*: Dorl-Klingenschmid 2001, cat. no. 12; Aristodemou 2011, 176; Richard 2012, cat. no. 10.

There is a small apsidal fountain nestled into a corner of the street of the theater.

### **1.14 Athens** (Greece) Figs. 13, 55 Hadrianic Nymphaeum in the Agora

Started under Hadrian, finished in 140 CE
Exedra
19.40 m by 15.10 m (lower podium), ca. 14 m (exedra diameter
Civic (Athenian Agora) *References*: Walker 1987, 60-71; Longfellow 2009; Longfellow 2011, 122-130;
Aristodemou 2012, cat. nos. 1-8; Richard 2012, cat. no. 12.

The nymphaeum was situated at the southeast corner of the Agora on the Panathenaic Way. The nymphaeum would have served as the terminus for the Hadrianic aqueduct. While the superstructure was not completely preserved, it is believed that the fountain would have been one story, with statue niches punctuated by pilasters on the façade. Water would have flowed into the exedra basin, then emptied into a pedestrian-accessible trough in front. At the middle of the parapet, there was probably a statue base that would have held a statue of Hadrian.

## **1.15 Athens** (Greece) **Lykabettos Nymphaeum**

Hadrianic, completed after 140 CE Fountain house (basilica type) 26.20 m by 9.35 m (reservoir), ca. 12.00 m by 3.20 m (façade) Civic? *References: CIL* 3.549; Walker 1987, 60-71; Leigh 1997; Longfellow 2011, 120-122; Richard 2012, cat. no. 12.

Situated on Lykabettos Hill in Athens, this nymphaeum received the water from the Hadrianic aqueduct. The main chamber of the structure acted as a settling tank and reservoir for the water. The reservoir was a basilica type, with three aisles, separated by two rows of five piers. The water would have been accessible by the tetrastyle Ionic façade. On the façade, there would have also been an inscription that mentions that Antoninus Pius completed the fountain in 140 CE, though started by Hadrian. After antiquity, a nineteenth-century reservoir was placed on top of its ancient precursor, which is why the modern surrounding plaza is called  $\Pi\lambda\alpha\tau\epsiloni\alpha \Delta\epsilon\xi\alpha\mu\epsilon\nu\eta\varsigma$  (*Plateia Dexamenis*, or Plateia of the Reservoir). Part of the architrave inscription can currently be found in the National Gardens of Athens, while the rest is lost.

## **1.16 Athens** (Greece) Fig. 13 **Plateia Street Fountain, Agora**

Late first century CE Other (small basin on arch) 0.77 m (basin's width, indicated on the west side of south arch pier), 0.22 m (basin's height) Civic *References*: Glaser 1983, cat. no. 65; Agusta-Boularot 2001, 174, cat. no. 8; Longfellow 2011, 109.

On Plateia Street, which goes from the old Agora to the Roman Agora, an arch was added north of the area of the Library of Pantainos and south of the Stoa of Attalos. On the west side of the south pier, there are traces for a small basin (indications of anathyrosis), above which is a small bronze pipe.

## **1.17 Athens** (Greece) Figs. 13, 14, 66 **Stoa Stoa Fountain, Roman Agora**

First century CE Fountian house ca. 4.5 m by 4.5 m, 3.0 m by 3.0 m (upper basin, not fully excavated), 2.95 m by 3.50 m (lower basin), 0.95 m (parapet height) Civic (South stoa of the Roman Agora) *References*: Walker 1979, 127-130; Glaser 1983 cat. no. 73; Agusta-Boularot 2001, cat. no. 7; Robinson 2013b, 363.

Constructed at some point in the first century, this fountain was located on the south stoa of the Roman Agora, nestled under the colonnade there. Water was channeled from a local spring to the south into the upper level (used as a settling tank), then into the lower basin for collection. The materials used in the construction include Piraeus poros for the walls, which was faced by blue, white, and grey Attic marble.

## **1.18 Augusta Emerita** (Mérida, Spain) **Drains around** *Frons Pulpiti*

Begun by Agrippa, *proscaenium* restored by Hadrian after fire Other (*frons pulpiti*) 52.35 m by 1.60 (*proscaenium*), 1.02 m (*proscaenium* height) Entertainment setting (theater, *frons pulpiti*) *References*: Sear 2006, 264.

Drains were found around the *frons pulpiti*, suggesting a water-display. Three curved and four exedrae on the *frons pulpiti*. Presence of drains noted by author on personal inspection of site.

## **1.19 Augusta Emerita** (Mérida, Spain) Fountain of *Sacellum* off of *Postscaenium* of the Theater

Second century CE Other (*porticus postscaenium*) 7.35 m by 5.98 m (*sacellum*), 64.00 m by 46.00 (*postscaenium*) Entertainment setting (*postscaenium*) *References*: Floriano 1944, 159; Loza Azuaga 1994, 265; Sear 2006, 264.

In the *postscaenium* of the theater, there was a *sacellum*, probably installed in the Julio-Claudian period, dedicated to the imperial cult. Directly in front of the small room was a small fountainhead, perhaps installed in the second century CE.

# **1.20 Augusta Emerita** (Mérida, Spain) Fig. 109 **Temple of Diana & Forum Fountains**

Julio-Claudian period Spouting fountain with basin 12.20 m by 3.75 m (each basin), 1.82m (basin depth) Civic and religious (Imperial cult building in forum) *References*: Reis 2009, 295-298; Costa Solé 2011, 45.

Two large basins flank the east and west sides of the so-called 'Temple of Diana,' which is now believed to be dedicated to the imperial cult. These structures were surrounded by the town's forum.

## **1.21 Avaricum** (Bourges, France) **Forum Fountain**

Mid-first century CE Spouting fountain with basin 8.40 m by 2.54 m (basin), 11.10 m by 4.25 m (hall) Civic (near entrance to forum) *References*: Adam and Bourgeois 1977; Bourgeois 1992a, 96-102; Letzner 1999, cat. no. 16; Agusta-Boularot 2004, 10.

In a space leading to the forum of Avaricum, there was a large basin in a long hall. The back wall of the space was decorated with arches and engaged Tuscan columns.

## **1.22 Baelo Claudia** (Baetica, Spain) Fig. 11 Forum Fountain

Second half of the first century CE Exedra (semi-circular basin) Exedra ca. 9.5 m by 4.0 m (basin measurements) Civic (forum space) *References*: Ponsich 1974; Reis 2009, 301-303.

On the north-side of the lower terrace wall of the forum of Baelo Claudia is a semicircular basin. On the east and west sides of the terrace wall were stairways that would have led to the temple terrace (*area sacra*) above.

## **1.23 Bosra** (Syria) Fig. 76 **Crossroads Fountain**

First or second century CE, with a refurbishment in the Severan period that integrated the structure into the surrounding colonnaded streets
Exedra
23.80 m (long)
Civic (crossroads) *References*: Segal 1988, 55; Segal 1997, 155-157; Bejor 1999, 54-55; Denzer, Blanc, and Fournet 2005; Richard 2012, 202-203, cat. no. 15.

The fountain was fully integrated into a newly constructed colonnade on the street there during the Severan period. The back of the fountain would have been a semi-circular apse, with wings that would have created a basin. Four columns on the façade would have fully integrated the structure into the later colonnade, and the extremely tall proportions of the height of the fountain would have added to its monumentality, rising up from the smaller, adjacent columns. Its placement at an angle at the corner would have also created a larger plaza in front of it.

## **1.24 Bulla Regia** (Tunisia) Child Holding Jug Fountain Sculpture

Second-half of second century CE Other (*pulpitum*) 23.80 m (orchestra diameter), 40.00 m (*pulpitum* length), Entertainment setting (theater, *pulpitum*) *References*: Fuchs 1987, 143; Sear 2006, 276-277.

There is a statue of child holding a water or wine jug on his shoulder, which would have allowed water to flow freely. Though it was found at the theater, its exact placement is unknown.

## **1.25 Caesarea** (Cherchell, Algeria) Fountain Decoration from Inscription

Unknown date Unknown type Unknown dimensions Unknown context *References: CIL* 8.21081; Aupert 1974; Letzner 1999, 56, cat. no. 245; Stirling 2012, 78, no. 28; Lamare 2014, 2.280-281, ins. no. 2.

Vitea quot longis sunt / tecta excepta columnis, / ac docili libra teretem q/uot flexus in arcum est, / marmore quot Pareo vi(v)unt / spirantia signa, Aequo[ris / et] vario quot [profluit unda meatu], /[.....]

A vine-like roof/trellis followed by as many long columns, and turned in a tapering arc in as many responsive levels, as many living statues from Parian marble, as much as the waves flow in various movement (of the Aequoris?) (Trans. author)

The inscription, found near a large brick masonry basin, with lead piping. Some argue, though, that it could be from a bath (Stirling).

## **1.26 Caesarea Maritima** (Israel) Fig. 131 Channels in front of the *Frons Pulpiti*

Flavian period or later Other (*frons pulpiti*) 30 m (orchestra diameter), 49 m (*pulpitum* length) Entertainment setting (theater, *frons pulpiti*) *References*: Albricci 1966, 114; Segal 1995, 64-69; Sear 2006, 302-303.

In front of the exedrae of the *frons pulpiti* of the theater at Caesarea Maritima, dated to the Flavian period or a later reconstruction, there is a shallow channel constructed of

marble, 7 cm tall. The exedrae were also lined with marble veneering. Excavators suggest that the channels could have been used for *spartiones*.

# 1.27 Calama (Guelma, Tunisia)Water Pipes in *Frons Pulpiti*

Second-half of second century CE
Other (*frons pulpiti*)
37 m (*proscaenium* length)
Entertainment setting (theater, *frons pulpiti*) *References*: Formigé 1923, 58, n. 2; Caputo 1959, 57; Fuchs 1987, 142; Sear 2006, 277.

Water pipes were found in the *frons pulpiti*, suggesting a water-display. Three curved and four rectangular exedrae on the *frons pulpiti*.

# **1.28 Carthago Nova** (Cartagena, Spain) Fig. 129 **Drains around** *Frons Pulpiti*

End of first century CE Other (*frons pulpiti*) 45.80 m by 2.04 (*proscaenium*), 1.20-1.30 m (*proscaenium* height) Entertainment setting (theater, *frons pulpiti*) *References*: Sear 2006, 267; Ramallo Asenzio et al. 2010, 237.

Drains were found around the *frons pulpiti*, suggesting a water-display. Ramallo Asenzio et al. (2010) specifically mention the holes in the exedrae were for the collection of rainwater runoff.

## **1.29 Casinum** (Cassino, Italy) Channels in the *Scaenae Frons*/Orchestra

First century CE Other (*scaenae frons*/orchestra) 16.9 m (orchestra diameter), 35.72 m (*pulpitum* length) Entertainment setting (theater, *scaenae frons*/orchestra) *References*: Fuchs 1987, 142; Sear 2006, 122-123.

Channels were found around the *frons pulpiti*/orchestra area, suggesting a water-display. Five curved and four rectangular exedrae on the *frons pulpiti*, columns between the exedrae.

## **1.30 Cenabum** (Orléans, France) Fig. 103 **Fontaine de la Pucelle**

Unclear date, first three centuries CE? Fountain house (covered hexagonal basin) 7.00 m by 3.00 m (tempietto), 1.60 m (basin width), 2.64 m (column height) Religious (source sanctuary) *References*: Follain 2004; Lavagne 2012, 132-135.

The tempietto form of this structure provided a small back cella. The front of the temple was supported by four columns, which covered a hexagonal basin. A series of five steps would descend down to the basin that was designed in a way that the source water there would slowly trickle out and pool there. At least two of the columns were carved with reliefs of hanging heads in a series of lozenges formed by ribbons. Of the heads, there are depictions of theater masks, satyr masks, Bacchus, and Jupiter Ammon—similar to the *oscilla* of the Roman garden.

### **1.31 Cirta** (Algeria) **Fountain** (inscription, religious sanctuary)

Severan date? Unknown type Unknown dimenstions Religious *References: CIL* 8.6982; Maass 1902, 56; Settis 1973, 732; Aupert 1974; Lavagne 1988, 285; Wilson 2008, 307; Lamare 2014, 2.286-288, ins. no. 6. See also **App. No. 2.18**.

The inscription lists the inventory of the fountain, in which there are at least six gold skyphoi and a gold cantharus, all of which were probably chained to the fountain, along with six hand towels, six bronze statues, six marble statues of Cupid, and six bronze Silenoi. The fountain was located in a religious sanctuary.

#### **1.32 Conímbriga** (Portugal) Fig. 108 **Augustan Forum Fountains**

Augustan Spouting fountain with basin 2.0 m by 3.0 m (east and west basins on temple podium) Religious (Imperial cult building) *References*: Alarcão and Etienne 1977, 28-24; Reis 2009, 294-295.

In the Augustan forum is the Temple of the Imperial Cult, which is raised on a podium and surrounded by a cryptoporticus. The frontal stairway of the temple was flanked on the sides by podia that included small rectangular water basins.

**1.33 Corinth** (Achaia, Greece) Figs. 15, 22 **Fountain of Poseidon** 

Augustan (late first century BCE-early first century CE); destroyed in the last quarter of second century CE Exedra

ca. 6.00 m (long), 5.42 m (wide), ca. 9.00 m (high) Civic (west side of forum) *References*: Agusta-Boularot 2001, 179-180; Aristodemou 2012, cat. nos. 29-31; Richard 2012, cat. no. 22; Robinson 2013b, 352-357.

Situated on the west side of the forum, in a line of temples and other monuments, this was one of the earliest *ex novo* fountains built in Greece under the Romans. It was a rectilinear structure, with a barrel-vaulted interior. The façade had a semi-circular opening, along with supporting an architrave, whose inscription mentions Cn. Babbius Philinus, a priest of Neptune. Water cascaded down a series of three basins from the interior. The inside would have been decorated with a standing sculpture of Neptune, and on the outside would have been two bases that supported dolphin sculptures.

**1.34 Corinth** (Achaia, Greece) Figs. 15, 21 Glauke

Mid-first century CE (though it is thought there could be third century BCE origins) Fountain house 15 m (long), 14 m (wide), 0.83 m (parapet height)

Civic (adjacent to the forum, west of the Temple of Apollo) *References*: Agusta-Boularot 2001, 190-191; Robinson 2005, 128-138; Richard 2012, cat. no. 21; Robinson 2013b, 349-352.

Glauke fountain celebrated the spot where Jason's new bride jumped into the spring, after wearing the poisoned garments given to her by Medea. The structure was constructed from a cube of local limestone, with four reservoirs cut into the back of the fountain, with a draw basin on the north side. The sides of the interior could have been stuccoed, but were not revetted in marble.

**1.35 Corinth** (Achaia, Greece) Fig. 15 **North Nymphaeum** 

First half of the third century CE ca. 9.00 m (long), 6.68 m (wide) Pi-shaped façade Civic (in the North Market) *References*: Robinson 2013b, 368-378 (for full bibliography to date).

When the southeast corner of the North Markets were partially dismantled and renovated in the first half of the third century, the North Nymphaeum was installed in the space. It seems that the water-display probably did not interact with the market, but acted as a way station for those coming into the city from the north. The plan was a pi-shaped fountain, with a rectilinear basin in the middle. On the south façade, would have been three niches, with the central one slightly larger; the east and west wings also had two niches each. It is believed that the niches would have held sculpture, which was not found in the excavations of the area.

## **1.36 Corinth** (Achaia, Greece) Figs. 15, 20 **Peirene**

Ancient origins, with heavy monumentalization in the High Roman Empire, though with its first rehabilitation by the Romans in the mid-first century CE Flat façade, with forecourt 16 m by 20 m (forecourt and façade of Peirene) Civic (north of the forum and east of the Lechaion Road) *References*: Agusta-Boularot 2001, 195-197; Robinson 2005, 116-127; Robinson 2011; Aristodemou 2012, cat. nos. 20-28; Richard 2012, cat. no. 20; Robinson 2013b, 347-349.

Ancient site where Pegasus is said to have been tamed by Bellerophon, becoming one of the most celebrated spring fountains in the ancient world. Peirene would have tapped into the spring system of natural, underground-running water, coming from the south near Acrocorinth. The water of the fountain, almost continually flowing, ran through a series of covered chambers that ran north-south. Under the Romans, from 146 BCE on, the fountain was monumentalized in at least four different phases (elucidated by Robinson 2011). Much of the rehabilitation of the water-display, which had fallen into disrepair in 146, included adding a columnar façade and a forecourt.

## **1.37 Corinth** (Achaia, Greece) Figs. 15, 139 *Postscaenium* of the Theater

Hadrianic Other (*porticus postscaenium*) ca. 10.0 m by 10.0 m (area around fountain), 59.0 m by 20.2-21.3 m (*postscaenium*) Entertainment setting (*postscaenium*) *References*: Stillwell 1952; Sear 2006, 392-393; Bressan 2009, 158-172; Williams 2013.

In the *postscaenium* of the theater, in the fifth phase of the theater (in the Hadrianic phase), subsidiary rooms on the east and west of the peristyle court were added. On the west side, the so-called Lesser Plaza was installed, with a fountain in the southwest corner.

## **1.38 Corinth** (Achaia, Greece) Figs. 15, 16 **South Stoa Fountain**

Early Roman; Antonine Fountain house ca. 10.00 m<sup>2</sup> (room), 3.04 m by 0.80 m (basin) Civic (South stoa of forum) *References*: Walker 1979, 113-117; Glaser 1983, 167; Agusta-Boularot 2001, 174-179, cat. no. 9; Robinson 2013b, 357-364.

Constructed in perhaps two phases, the south stoa fountain was located prominently in the city, near the main intersection of the cardo and decumanus. During the imperial

period, the fountain was decorated in polychrome marble, including green and yellow marbles, along with a parapet carved with a frieze of bucrania and myrtle garlands.

# **1.39 Cuicul** (Djemila, Algeria) Water Pipes on *Frons Pulpiti*

Antonine Other (*frons pulpiti*) 35.80 m by 1.70 m (*proscaenium*), 1.20 m (*proscaenium* height) Entertainment setting (theater, *frons pulpiti*) *References*: Formigé 1923, 58, n. 2; Caputo 1959, 57; Sear 2006, 273.

Water pipes were found in the *frons pulpiti*, suggesting a water-display. Three curved and two rectangular exedrae on the *frons pulpiti*.

# **1.40 Daphne** (Antioch, Syria) **Orchestra Fountain**

Late first century CE (original construction)? Other (orchestra fountain) 25 m (orchestra diameter), 57.00 (*pulpitum* length) Entertainment setting (theater, orchestra) *References*: Wilbur 1938, 68-69; Berlan-Bajard 2006, 457-465; Sear 2006, 319-320.

In the center of the orchestra, a marble slab, decorated with two rows of marble inlay, would have been a fountainhead, dated to the Trajanic period. There is terracotta piping running underneath the orchestra to the opening in the center, though it is unclear whether there was indeed a basin on top, in order to facilitate the display of water.

## **1.41 Dendara** (Egypt) Fig. 95 **Twin Fountains at Hathor Temple Entrance**

Early Severan Fountain house (colonnaded façade fronts that open to a basin) 5.10 m (west fountain width), 4.97 m (east fountain width) Religious (sanctuary entrance) *References*: Castel et al. 1984; Richard 2012, cat. no. 24.

On the processional way leading to the temple, the two asymmetrical fountains flank the sides of the road. In front of each structure is a set of four large Composite columns, which cover a three-niched façade. Water would have flowed from the niches, which are separated by columns, into a basin. The niches would have also been outfitted with sculpture.

**1.42 Divodurum** (Metz, France) Fig. 104 Nymphaeum

First-second century CE (ca. 150 CE?)
Other (octagonal subterranean edifice, with temple above)
6.50 m (deep of subterranean structure), 6.00 m (diameter of subterranean structure)
Religious *References: CIL* 13.4325; Settis 1973, 731; Burnand 1983; Bedon, Chevallier, and Pinon 1988, 289; Lavagne 1990, 138; Leveau 1991; Bourgeois 1992a, 73; Lavagne 1992, 218; Ghiotto 1999, 83; Letzner 1999, 55, cat. no. 162; Agusta-Boularot 2004, 10; Lavagne 2012, 123-126. See also App. No. 2.26.

An inscription names the *seviri* Augustales who dedicated a nymphaeum (and its ornament) and a porticus at their own expense. In the nineteenth-century excavations of Metz, at the site of Sablon, a small temple is believed the nymphaeum referred to in the inscription. The temple is an octagonal-shaped structure, which is a subterranean edifice, with stairs leading down on the sides. At the bottom is a hexagonal basin for the water source. Traces of columns are believed to be part of a superstructure around the subterranean structure, creating a temple outside. There were votives found in situ, including one to Icovellauna, two to Mercury, and one to Mogontia. Sculpture found in the vicinity is also believed to have belonged to the temple, including a statue of Victory and reliefs of Apollo, Mercury, and Rosmerta.

# **1.43 Ebora** (Évora, Portugal) Fig. 110 **Temple, with basin on three sides**

Mid-first century CE Spouting fountain with basin 5.0 m (wide), 1.0 m (deep) Civic and religious (imperial cult building in the forum) *References*: Hauschild 1991; Reis 2009, 290-292; Costa Solé 2011, 45.

A basin surrounds all three sides of the Temple of the Imperial Cult in the forum.

### **1.44 Eleusis** (Attica, Greece) Figs. 89, 90 Forecourt Fountain, Sanctuary of Demeter and Kore

Hadrianic Pi-shaped façade 11.40 m by 5.72 m, 1.50 m (parapet height) Religious (sanctuary forecourt) *References*: Eleusis 1979, 197-201; Glaser 1983, cat. no. 72; Clinton 1989, 63; Clinton 1997, 174-175; Palinkas 2008, 224-225; Longfellow 2012, 135-141; Richard 2012, cat. no. 26.

In the Hadrianic refurbishments to the Sanctuary of Demeter and Kore, a fountain on the south side was added. It was pi-shaped, with six freestanding Cipollino columns of the

Corinthian order on marble bases. The basin would have allowed water to flow through eight spouts into lower basins for consumption.

## **1.45 Eleusis** (Attica, Greece) Figs. 89, 91 **South Gate, Pulcher's Inner Propylon, Sanctuary of Demeter and Kore**

Antonine Other (basins on a gate) 1.32 m by 2.10 m (intermediate basins), 15 m by 5 m (south façade of the gate) Religious (gate leaving sanctuary) *References*: Hörmann 1932 (especially 110); Glaser 1983, cat. no. 34; Sauron 2001; Palinkas 2008, 268-271.

In the Antonine period, the south façade of the Inner Propylon (originally constructed in 54 BCE by Appius Claudius Pulcher) was retrofitted with two water-displays. Adjacent to two large pillars carrying caryatids, were two fountains, perhaps with a lion's head spout that would have allowed water to pour into an intermediate basin (1.32 m x 2.10 m), then into two smaller basins close to the ground. The fountains here would be encountered by those *leaving* the sanctuary, going back into the forecourt.

### **1.46 Elis** (Achaia, Greece) **Drains around** *Frons Pulpiti*

Originally fourth century BCE (theater construction), unclear date for the subsequent additions Other (*frons pulpiti*) 22 m (*proscaenium* length) Entertainment setting (theater, *frons pulpiti*) *References*: Sear 2006, 396; Di Napoli 2013, 64.

Drains were found around the *frons pulpiti*, suggesting a water-display. Napoli (2013) states that a drain was added directly in front of the *pulpitum* during the Roman period and connected to an older drain that ran under the scene building.

## **1.47 Elis** (Achaia, Greece) *Parados* Fountain, Theater

Second century CE rebuilding of stage building Spouting fountain with basin 2 m by 2 m (square fountain) Entertainment setting (*parados*) *References*: Glaser 1983, cat. no. 30; Sear 2006, 396; Bressan 2009, 134-140; Aristodemou 2011, 178; Di Napoli 2013, 63-64.

In the eastern *parados*, a small square fountain, with two engaged columns at the entrance to the basin, has been found.

## **1.48 Ephesus** (Ionia, Turkey) Figs. 19a, 19e, 19f **Fontäne**

#### Flavian

Other (semi-circular central structure, flanked by two rectilinear wings) 15.50 m (length, central structure), ca. 6.00 m (width, central structure), 17.50 m (total length of the lateral wings) Civic (near Upper Agora) *References*: Dorl-Klingenschmid 2001, cat. nos. 20; Richard 2012, cat. nos. 31.

Located on the Magnesia Road, to the south of the Upper Agora, the water-display was unique in its design, with a semi-circular central structure, flanked by two rectilinear wings that held water basins. The central structure was probably built first, during the Flavian period, as a *castellum aquae*, with the lateral wings added either later in the Flavian period or in the Antonine period. The lateral wings would have been decorated with some sort of sculptural program, along with aediculae.

## **1.49 Ephesus** (Ionia, Turkey) Figs. 19a, 19c Fountain of Domitian (Apsisbrunnen)

#### 92-93 CE

Exedra, with inner podium 6.21 m (length of exedra), 3.11 m (width of exedra), 9.54 m (height of exedra), 6.28 m (inner podium height), 1.67 m (parapet height) Civic (near Upper Agora) *References*: Dorl-Klingenschmid 2001, cat. no. 22; Longfellow 2011, 62-76; Aristodemou 2012, cat. nos. 113-117; Richard 2012, cat. no. 27.

At the northwest corner of the Upper Agora, along the *Domitianstraße*, is an exedrashaped fountain, with an interior podium that allowed for the display of statuary. The superstructure would have supported a semi-dome. The interior basin was fed from the back of the exedra that fed a small rectangular basin directly in front of the structure. An associated inscription reveals that the fountain was dedicated to Artemis Ephesia and Domitian, by the local Calvisius Ruso, proconsul of Asia. The sculpture included in the back of the exedra was the scene of Odysseus and his men offering wine to Polyphemus.

### **1.50 Ephesus** (Ionia, Turkey) Figs. 19a, 19d **Hydrekdocheion of C. Laecanius Bassus**

78-79 CE
Pi-shaped façade
ca. 16 m (long), ca. 14.60 m (wide), ca. 16 m (high)
Civic (near Upper Agora) *References: IvE* 3.695; Dorl-Klingenschmid 2001, cat. nos. 24; Chi 2002, 15-40; Jung 2006; Weiss 2011, 97-100; Aristodemou 2012, cat. nos. 98-112; Richard 2012, cat. nos. 34.

Located at the corner of the *Domitianstraße* and the Magnesia Road, this was a large, ornate pi-shaped façade fountain. The three sides were two stories, decorated in a columnar façade, with aediculae complete with sculpture. The large water basin supplied a smaller draw basin that was accessible from the sidewalk. Water would have been displayed through statues outfitted with spouts on the first story, along with some indications of waterspouts on the second story. An inscription names this structure as a *hydrekdocheion* of C. Laecanius Bassus.

## **1.51 Ephesus** (Ionia, Turkey) **Hydrekdocheion of Trajan/Nymphaeum Traiani**

102-114 CE, with modifications in the second half of the fourth century
Pi-shaped façade
16.45 m (long), ca. 8.00 m (wide), ca. 9.50 m (high), 11.90 m by 5.20 m (upper basin),
17.00 m by 0.90 m (lower basin)
Civic (Curetes Steet) *References*: Dorl-Klingenschmid 2001, 188-189, Cat. No. 26; Chi 2002, 41-57; Ng 2007,
199-209; Weiss 2010; Longfellow 2011, 77-95; Quatember 2011; Weiss 2011, 106-115;
Aristodemou 2012, cat. nos. 120-132; Richard 2012, 267, cat. no. 35; Thomas 2014, 7679. Of note: Longfellow (and adopted by Weiss (2011) and Thomas (2014)) breaks with the traditional nomenclature of this monument, calling it the Hydrekdocheion of Trajan, instead of the Nymphaeum.

This water-display was prominently placed on Curetes Street, and it was the terminus of the aqueduct built by Tiberius Claudius Aristion. The pi-shaped façade was two stories, which framed a two-story tabernacle (where the main waterspout was located and a colossal statue of Trajan). There was an upper basin that fed a smaller draw basin below.

## **1.52 Ephesus** (Ionia, Turkey) Figs. 19a, 19b **Pollio-Bau & Niche Fountain**

Augustan original, with Domitian demolition and construction of new structure on top Niche Fountain, then Fountain house Augustan: 8.03 m (long), 6.57 m (wide), 6.40 (height), 1.20 m (parapet height); Flavian: 11.90 m (long), 10.50 m (wide) Civic (near Upper Agora) *References*: Dorl-Klingenschmid 2001, cat. nos. 21, 27; Weiss 2011, 86-89; Richard 2012, cat. nos. 30, 36.

The first structure built was the so-called "Pollio-Bau," which was a pedestal that supported a columnar superstructure. The monument had a bi-lingual inscription to honor C. Sextilius Pollio and his grandson, C. Offilius Proculus. On the west face, a semicircular niche would have allowed for a small basin. In the Flavian period, probably under the time of Domitian, the space was opened up, allowing for tabernacles, with basins below, to be installed on the three walls.

### **1.53 Epidauros** (Greece) Fig. 118 Nymphaeum, Sanctuary of Apollo Maleatas

Second century CE Fountain house ca. 10 m (width)? Religious (healing site) *References*: Lambroudakis 1984, 229-230; Lambroudakis 1989, 49-50, 54; Leigh 1997, 281-284; Melfi 2007, 120-121; Melfi 2010, 336.

The sanctuary of Apollo Maleatas on the Kynortion Hill, directly east of the Sanctuary of Asclepius, was renovated in the second century CE by Sextus Iulius Maior Antoninus Pythodorus, from Nysa-on-the-Meander in Asia Minor. In addition to installing a large-scale cistern and priest's house, it is believed Atoninus constructed a nymphaeum in the sanctuary. The nymphaeum's form is unique: a columned opening, which then leads to a cross vaulted interior, restricting access to the space. On the east and south ends are small barrel vaulted spaces, with fountains on their walls. The south side also contains a circular room, again, with a fountain on the back wall.

## **1.54 Falerio Picenus** (Falerone, Italy) **Channels in the** *Scaenae Frons*/**Orchestra**

Augustan, with Claudian and Antonine restorations Other (*scaenae frons*/orchestra) 19.0 m (orchestra diameter), Entertainment setting (theater, *scaenae frons*/orchestra) *References*: Fuchs 1987, 142; Sear 2006, 156.

Channels were found around the *frons pulpiti*/orchestra area, suggesting a water-display. Three curved and four rectangular exedrae on the *frons pulpiti*, columns between the exedrae.

# **1.55 Genainville** (Val-d'Oise, France) Fig. 72b Nymphaeum

Second century? Other (series of three basins) 5.00 m by 3.00 m (first basin), 2.35 m (first basin depth), 2.00 m by 1.70 m (second basin), 7.50 m by 3.30 m (third basin), 2.65 m (third basin depth) Religious (source sanctuary?) *References*: Bourgeois 1992a, 181-185; Mitard 1993, 185-208, 284-310; Lavagne 2012, 126-129.

A series of three different basins were located to the south of a double-cella temple, which was dedicated to the local Mother Goddesses—leading scholars to believe that this

is a source sanctuary. The decoration associated with this nymphaeum, as excavators call it, includes reliefs of Neptune and Amymone, and three heads of Cyclopes.

## **1.56 Gerasa** (Jordan) Figs. 50, 51 **Macellum Water-Display**

Second century CE; Severan restorations Spouting fountain with basin ca. 5 m by 5 m (main basin), ca. 47 m<sup>2</sup> (macellum dimensions), ca. 5 m by 2 m (Severan fountain basins) Civic (macellum) *References*: Uscatescu and Martín-Bueno 1997; Raja 2012, 158-160; Richard 2012, 263.

Located on the Cardo Maximus, between the Oval Piazza and the South Tetrapylon, the macellum's courtyard is octagonal. In the center of the courtyard is a 'pseudocross-shaped basin' that mimics the octagonal shape of the courtyard. There were traces of a spout and a pipe hole found on the basin. Severan restorations also added two more fountains to the entrance of the macellum. Inscriptions on those fountains are dedicated to Julia Domna and a local Strator M. Aurelius Philippus, dating the fountain to between 193 and 211.

# **1.57 Gerasa** (Jordan) Figs. 50, 96 Nymphaeum

Late second century CE Exedra 22 m (long), 11 m (exedra diameter) Civic and religious (near entrance of the Temple of Artemis) *References*: Raja 2012, 162; Richard 2012, 164-165, 171-176, cat. no. 40.

Located along the colonnaded Cardo Maximus, the nymphaeum is adjacent to the Temple of Artemis, which has a monumental entrance composted of a great stairway. The exedra is omega-shaped, with an aedicular and columnar two-story façade. Each level of the façade has nine alternating semi-circular and recti-linear niches. The façade would have been topped by a semi-dome. Water would have flowed into the large basin of the exedra, then into a circular basin in the middle of the structure on the sidewalk.

# **1.58 Glanum** (Gallia Narnonensis, Saint-Rémy-de-Provence, France) Figs. 7, 116 Nymphaeum and Temple of Valetudo

Temple dedicated 19 BCE by Agrippa, though source was in use from third-second century on Other (subterranean source and temple) 10.24 m (nymphaeum length), 3.80 m (nymphaeum west width), 5.05 m (nymphaeum east width), 3.90 m by 5.55 m (Temple of Valetudo) Religious (healing source, though in city) *References*: Rolland 1958, 89-106; Roddaz 1984, 396-397; Bedon, Chevallier, Pinon 1988, 290; Lavagne 1992, 221; Agusta-Boularot 1997, 279-281; Letzner 1999, cat. no. 40; Lavagne 2012, 120-123; Anderson 2013, 183.

Located on the southern side of the site, the nymphaeum is a rock-cut, subterranean structure, with a basin at the bottom of a flight of stairs. During Augustan era renovations of the structure, vaulting was probably added over the structure. Agrippa also dedicated the adjacent tetrastyle Temple of Valetudo, a healing god. The nymphaeum was probably dedicated to Glan, the eponymous water deity of the city, who was akin to a healing Apollo figure.

**1.59 Glanum** (Gallia Narnonensis, Saint-Rémy-de-Provence, France) Figs. 7, 8 **'Triumphal Fountain'** 

ca. 20 BCE
Exedra
Hemicycle 5.86 m (diameter), front rectangular basin 1.75 m by 4.75 m
Civic (entrance to forum) *References*: Rolland 1958, 37-42; Adam and Bourgeois 1977, 138; Bedon, Chevallier, and Pinon 1988, 287; Roth Congès 1992, 50; Bourgeois 1992, 85-92; Lavagne 1992, 221;
Gros 1996, 435; Agusta-Boularot 1997, 255-270; Agusta-Boularot and Paillet 1997, especially 66-74; Agusta-Boularot, Follain, and Robert 2004; Anderson 2013, 184.

The 'Triumphal Fountain' is placed at the south end of the forum of Glanum, acting like an entrance. It is situated to the east of twin temples dedicated to the imperial cult and south of the portico and basilica. The exedra's back wall is decorated with Corinthian columns, and in front of which are various sculptural pieces, including two kneeling Gallic captives and two trophies. There might have been more statues in this group.

### **1.60 Gortyn** (Crete, Greece) Nymphaeum F25

First phase: second-half of second century CE Pi-shaped façade 15.98 m (length), ca. 12 m (width), 13.91 m by 5.03 m (basin) Civic (north of Praetorium) *References*: *CIL* 3.13566 = *IC* 4.334; Ortega 1986-1987; Di Vita 2010, 224-231; Longfellow 2011, 136-137, 206-207; Aristodemou 2012, cat. nos. 335-352; Richard 2012, cat. no. 41. See also **App. No. 2.4**.

Located north of the Praetorium, this nymphaeum was a pi-shaped façade with a columnar decoration (10 columns on the back, 4 on the sides). On the middle of the façade and on the wings, there were niches that held statues, which also had waterspouts.

**1.61 Hierapolis** (Phrygia, Turkey) Figs. 82, 120 Nymphaeum, Sanctuary of Apollo
Late second century or early third century (Severan?) Pi-shaped façade 30.50 m (long), 13.05 m (wide), 20.85 m by 11.10 m (basin), 2.20 m (basin depth), 1.90 m (parapet height) Religious (entrance to Sanctuary of Apollo) *References*: De Bernardi Ferrero 1999; D'Andria 2001; Dorl-Klingenschmid 2001, cat. no. 34; Campagna 2006, 291-394; D'Andria 2011; Aristodemou 2012, cat. nos. 141-145; Richard 2012, cat. no. 44.

Located off of Frontinus Street, the nymphaeum was added probably during the Severan period, cutting off the original Flavian entrance. The fountain was a two-storied, pi-shaped façade fountain, with three exedrae on the back wall and one exedra on each of the side wings. The façade was articulated with the typical flourishes of architectural details, with Composite capital columns and Ionic-Asiatic bases, along with aediculae and tabernacles. There was a large number of decorated pediments of the aediculae, including major deities of Hierapolis, including Latona, Apollo, Artemis, Selene, and Hera. A few of the niches of the façade might have housed statues of priestesses of Apollo found at the site, dated to the second century CE. Water would have flowed into a large, deep basin from the central niche.

## **1.62 Hierapolis** (Phrygia, Turkey) Figs. 82, 83 Nymphaeum of the Tritons

Early third century CE Pi-shaped façade 65.00 m (long), 6.40 m (wide), 51.10 m by 4.7 m (basin) Civic (urban node) *References*: D'Andria 2001; Dorl-Klingenschmid 2011, cat. no. 35; Campagna 2006, 387-391; Campagna 2007; D'Andria 2011; Longfellow 2011, 189-190; Aristodemou 2012, cat. no. 140; Richard 2012, cat. no. 43.

Located on Frontinus Street, next to the main agora, the nymphaeum was the one of the longest fountains in Asia Minor. The pi-shaped fountain is believed to have been at least two stories tall, with perhaps a third added in a subsequent renovation. There are two inscriptions, one of which dates the structure to sometime between 220-222 and the other dedicates the fountain to Agatha Tyche, Apollo Archigetes, and Alexander Severus.

### **1.63 Hochscheid** (Germany) Figs. 117a, 117b **Sanctuary of Apollo Grannus**

Mid-first century to the fourth century CE Spouting fountain with basin 12 m by 12 m (Temple of Apollo and Sirona), 1.5 m by 1.5 m (water source inside temple) Religious (healing site) References: Weisgerber 1975.

The medicinal waters of the site attracted pilgrims, which prompted the construction of the Temple of Apollo Grannus and Sirona (with its natural spring inside), hostel, bath complex, and priest's house. Among the finds is a collection of hand-beakers, which excavators believe were used to drink in the therapeutic waters. There were two phases to the monumentalization of the spring: the source was lined and a simple cella added; then, the ambulatory was added, along the entrance being moved from the north to the east. The second phase of the temple, which would have had a statue of Apollo Grannus and Sirona outside, was in the Gallo-Roman style, meaning the structure was square in plan, with an ambulatory around the focal point (i.e., the source here).

# **1.64 Ihn** (Kreis Saarlouis, Germany) Fig. 117c Water Source, Source Sanctuary

Mid-first century to third/fourth century CE Other (pergola-like structure) 4.5 m by 4.5 m (octagonal structure), 3.5 m by 3.5 m (hexagonal basin) Religious (healing sanctuary) *References*: Miron 1994 (series of essays about the architecture and finds of the site).

At this Sanctuary, where Apollo and Sirona and Mercury and Rosmerta were worshipped, there was a temple, bath complex, and an octagonal structured that housed a hexagonal basin of the water source there. The octagonal structure would have appeared like a pergola, with a series of columns to support a roof to cover the water basin. There was probably also a statue of a standing female deity there, too. Whether she was Sirona or Rosmerta is unclear.

### **1.65 Italica** (Spain) Fig. 135 **Silenoi Statues at ends of** *Pulpitum*

Early first century CE Other (*pulpitum*) 25.40 m (orchestra diameter), 49.65 m (*pulpitum* length), Entertainment setting (theater, *pulpitum*) *References*: Fuchs 1987, 142; Loza Azuaga 1994, 270-273; Sear 2006, 261-262.

There were two sleeping Silenoi were placed at the ends of the *pulpitum*.

**1.66 Kos** (Greece) Fig. 17 **Agora Nymphaeum** 

Mid-second century CE (post-142 earthquake) Niche fountain ca. 20 m (long), 3 m (wide); each niche is ca. 3 m wide Civic (agora space) References: Rocco and Liviadotti 2011, 414-416; Evangelidis 2014, 343.

On the south side of the temple that was constructed as part of the propylon of north entrance of the agora of Kos, was located a three-niched nymphaeum. The niches were lined in cipollino verde and white marbles. From each niche, water would have flowed down into a lower channel, which would have drained underneath of the agora.

# **1.67 Laodicea-on-the-Lycus** (Phrygia, Turkey) Fig. 73, 74 **Caracalla Nymphaeum**

Early third century CE Other (2 façades that make a corner) 20.50 m (north façade length), 18.50 m (west façade length), 10.00 m by 8.50 m (main basin), 4.50 m by 3.45 m, 4.20 m by 3.45 m (lateral draw basins), 1.35 m (main basin parapet height), 0.80 m (lateral draw basin parapet height) Civic (crossroads) *References*: Des Gagniers et al. 1969; Dorl-Klingenschmid 2001, cat. no. 57; Longfellow 2011, 188-189; Aristodemou 2012, cat. nos. 150-156; Richard 2012, cat. no. 47; Şimşek 2013, 163-167.

This fountain was located at the crossroads of Stadium and Syria Streets. The plan reacts to its placement on the corner of two important streets: a main square-shaped basin, with two-storied columnar facades and smaller draw basins in front, is flanked by two semicircular basins on the street.

# **1.68 Laodicea-on-the-Lycus** (Phrygia, Turkey) Fig. 73, 81 **Severan Nymphaeum**

Severan Pi-shaped façade 41.60 m (long), 14.30 m (wide), ca. 10.50 m (height), 31.40 m by 8.20 m (basin) Civic (urban node) *References*: Longfellow 2011, 188; Richard 2012, cat. no. 48; Şimşek 2013, 147-159; Şimşek 2014.

The nymphaeum was located on Syria Street, across from the Central Agora, and near to the Caracalla Nymphaeum. The pi-shaped façade would have been well appointed with polychrome marbles, along with a variety of sculpture (including free-standing lions). The large rectangular basin would have emptied into three smaller circular draw basins for pedestrians.

**1.69 Leptis Magna** (Libya) Figs. 77, 136f **Great Nymphaeum** 

Dedicated by 216 CE Flat façade ca. 45 m by 20 m, 16 m (remaining height of façade) Civic (crossroads) *References*: Jones and Ling 1993; Longfellow 2011, 183-185; Lamare 2014, 2.136-144, cat. no. 27, 2.315-318, ins. No. 25-26.

Dedicated in 216 CE by Caracalla, this nymphaeum was a large two-storied aedicular façade fountain. The semi-circular settling basin would have allowed water to pour into a trapezoidal-shaped basin in front, which responds to the preexisting streets.

## **1.70 Leptis Magna** (Libya) Fig. 136 **Lacus del Teatro** (*postscaenium*)

120 CE, later restorations in 157-158 Exedra ca. 10.0 m by 3.5 m (*lacus*), ca. 50.0 by 40.0 m (*postscaenium*) Entertainment setting (*postscaenium*) *References: IRT* 273, 533; Caputo 1987, 106-109; Sear 1990, 378; Letzner 1999, cat. no. 384; Tomasello 2005, 37-56; Sear 2006, 281-282; Aristodemou 2011, 176; Richard 2012, 188; Lamare 2014, 2.158-169, cat. no. 30, 2.318-319, ins. no. 27.

At the northeast corner of the *postscaenium*, a fountain was installed by Q. Servilius Candidus in 120 CE and later restored in 157-158 CE by L. Hedius Rufus Lollianus Avitus. The fountain has a tetra-style front, of the Corinthian order, with a semicircular niche, within which is another smaller semicircular niche; on the *alae* were projecting engaged columns; the structure would have been covered in marble. The archaeological evidence of the hydraulic system indicates that the movement of water was isolated to a few spouts on the front side, and south *ala*, collecting in a basin running along the front of the fountain. The sculpture found with the fountain included an Aphrodite Anadyomene, a shepherd on a rock, and a seated Nymph. The inscription of the *lacus* is as follows:

Lacus pec[unia] pub[li]ca amplatus et m[armori]|bus et columnis itemque Cu[p]idinibus [exorna]|tus dedicatus est L(ucio) H[edio Rufo Lolliano Auito]| proco(n)s(ule) C(aio) Vibio Ga[ll]io[ne Claudio Sever]o leg(ato) pr[(o) pr(aetore)]. IRT 533.

A *lacus* was enlarged by public funds and ornamented in marbles and columns of cupids, dedicated by L. Hedius Rufus Lollianus Avitus, proconsul, and C. Vibius Gallionus Claudius Severus, propraetor legate. (Trans. author)

# **1.71 Leptis Magna** (Libya) Fig. 136 **Two Female Fountain Sculptures**

Dedicated in 1-2 CE, with renovations and additions throughout the first two centuries Other (*pulpitum*) 1.46 m, 1.09 m (height of statues), 24.80 m (orchestra diameter), 45.70 m (*pulpitum* length), Entertainment setting (theater, *pulpitum*) *References*: Caputo and Traversari 1976, 59-60, cat. nos. 38, 39; Bejor 1979; Fuchs 1987, 142; Sear 2006, 281-282. See also Tomasello (2005, 171-172) for discussion of Caputo-Traversari's cat. no. 39.

Two standing female figures holding shells, which would catch water that flowed into them, were found at the theater, though their exact placement is unknown.

# **1.72 Lugdunum** (Lyon, France) Fig. 72a **Cyclops Fountain**

41-44 CE
Spouting fountain with basin
1.48 m by 0.43 m (terminal block of fountain, with inscription)
Civic (crossroads) *References*: Bedon, Chevallier, Pinon 1988, 286; Bourgeois 1992a, 46-48; Bérard,
Cogitore, Tarpin 1998; Delaval and Savay-Guerraz 2004, 77-78; Darblande-Audoin
2006, cat. no. 388; Levagne 2012, 135-138.

Found at what appears to be a crossroads, this is a unique fountain, which only preserves the back block of the *lacus*. The decoration includes an inscription at the top that dedicates the structure to Jupiter, by the emperor Claudius and two local men. The water would have flow into the basin through the mouth of a frontal Cyclops head, which is sculpted in relief below the inscription. The inscription reads: *Ioui O(ptimo) M(axiom)* sa[crum] | quod Ti(berius) Claud(ius) | Caesar Aug(ustus) est | Imperator | M(arcus) Caprilius Iuc[und]u[s]/Luc[---u]s | Tib(berius) Dubnatius Aed(uus)/aed[ifcauerunt].

# **1.73 Luna** (Luni, Italy) *Labra* in Theater

Julio-Claudian Other (*frons pulpiti*) ca. 20 m (orchestra diameter) Entertainment setting (theater, *frons pulpiti*) *References*: Frova 1973, 265; Fuchs 1987, 97, 142; Sear 2006, 168-169.

There is a *labrum* at the Luna theater, which is rectilinear and was found in the area of the *frons pulpiti*.

# **1.74 Miletus** (Caria, Turkey) Fig. 79 Nymphaeum

Flavian Pi-shaped façade 20.45 m (long), ca. 12 m (wide), 16.90 m (estimated height), 16.15 m by 6.39 m (main basin), 15.60 m by 1.60 m (draw basin), 1.18 m (main basin parapet height), 0.87 m (draw basin parapet height) Civic (urban node) *References*: Dorl-Klingenschmid 2001, cat. no. 64; Tuttahs 2007, 168-173; Aristodemou 2012, cat. nos. 160-186; Richard 2012, cat. no. 50; Thomas 2014, 75-78.

This nymphaeum was placed at the intersection, where the North Agora, the Ionic Stoa, the *bouleuterion*, the South Agora, and the Sacred Way could be found. The structure itself served as the *castellum aquae* and terminus of the city's aqueduct. The main façade was three stories tall, ornamented with niches. There would have been wings to the rear façade decorated by columns. Water would have flowed into the main basin, then the smaller draw basin in front via lion-headed waterspouts.

# **1.75 Minturnae** (Minturno, Italy) Fig. 12 **Forum Fountains**

Hadrianic-beginning of third century CE Fountain house (basins that open on to the street) ca. 9.0 m by 3.0/4.0 m (basin measurements) Civic (forum space) *References*: Neuerburg 1965, cat. nos. 53, 54; Letzner 1999, cat. nos. 129, 169; Reis 2009, 308.

The forum, bifurcated by the via Appia, had two temples that were flanked by two fountains that are like fountain houses. The two fountains are not the same plan, but acted in tandem to demarcate the *area sacra* of the forum, with the theater lying to the north. The basins were veneered in marble.

### **1.76 Montegrotto Terme** (Italy) Channels in the *Scaenae Frons/*Orchestra

Augustan, with later changes Other (*scaenae frons*/orchestra) 10.00 m (orchestra diameter), 28.00 m (*pulpitum* length) Entertainment setting (theater, *scaenae frons*/orchestra) *References*: Fuchs 1987, 142; Sear 2006, 177; Bonomi and Malacrino 2011, 44.

Channels were found around the *frons pulpiti*/orchestra area, suggesting a water-display.

### **1.77 Nea Paphos** (Cyprus) *Parados* Fountain, Theater

First century CE Spouting fountain with basin 20 m by 5 m Entertainment setting (*parados*) *References*: Barker 2010a, 2010b, 2013. The structure is located in the eastern *parados*, and there is evidence for a niche above the wall with sculpture, along with marble architectural members that were later dumped inside the basin. The interior of the basin was covered with a star-pattern mosaic floor, along with being lined with chamfered plaster.

# **1.78 Nemausus** (Nîmes, France) Fig. 111 **Imperial Cult Sanctuary**

Augustan period (started by 25 BCE), with Hadrianic and Antonine restorations Other (source sanctuary)

ca. 120 m by 150 m (overall sanctuary), ca. 30 m by 30 m (so-called nymphaeum around the main platform), ca. 60 m by 40 m (larger northern basin) Religious (source sanctuary and imperial cult buildings)

*References*: *CIL* 12.3108-3109; Roman 1981; Gros 1983; Roth Congès and Gros 1983; Gros 1984; Bedon, Chevallier, and Pinon 1988, 289; Gans 1990; Bourgeois 1992, 231-247; Veryac and Pène 1994-1995; Agusta-Boularot 1997, 286-294; Boatwright 1999, 139; Veryac 2006; Frakes 2009, 179-183; Anderson 2013, 186-190. The bibliography on this sanctuary stems primarily from archaeological work in the 1980s, along with a renewed interest in the water infrastructure of site and the city of Nemausus in 1990s.

This sanctuary is well-integrated into the urban landscape of Nemausus, in direct sight lines with the forum (and Mason Carée) and the Tour Magne (and the fortification walls). Inside the sanctuary, there was a central rectangular platform housing a large altar dedicated to Roma and Augustus. Surrounding the platform would have been the socalled nymphaeum, a body of water that flowed into a large basin from the natural source very nearby, then channeled into the city. The platform with the large altar would have been connected by small bridges. The basin would have been contained by exedra-form niches on the sides, complete with Doric columns, which would have been partially submerged by the water of the spring. The water would have continued another platform on the northwest, again, connected by a bridge. This area of water contained not only other exedra forms that mimic the shape and construction of the figure-eight basin at Zaghouan, but also some sort of square foundation, whose purpose is yet unknown. The whole sanctuary would have been enclosed by a porticus triplex, with a propylon on the southern end. On the west side of the sanctuary is a barrel-vaulted rectangular space, perhaps dedicated to the imperial cult, with innovative designs that date its construction to the Antonine period.

## **1.79 Nemus Aricinum** (Nemi, Italy) Figs. 97, 128 Entrance to Theater (*Postscaenium*)

Second century CE renovations Other (*postscaenium*) 10 m (fountain length), 6 m (fountain height), ca. 100 m by 35 m (*postscaenium*), ca. 70 m (total of the ascent up the *postscaenium*) Entertainment setting (*postscaenium*) *References*: Morpurgo 1931, 251-252; Sear 2006, 127-128; Braconi 2013c. The entire theater complex is surrounded by a trapezoidal wall. On the south side, near the main entrance, directly behind the *cavea*, was a large rectangular water basin, divided into three compartments, covered with a blue tinted cocciopesto. On the west end were amphorae embedded into the side wall, for fish cultivation (?), while on the east end was an octagonal shaped basin. Across the space, laid against the wall of the theater complex, is a five-niched fountain. On the east wall, a semicircular niche is flanked by two rectangular ones, while the wings of the structure have one semicircular niche each. Immediately adjacent to the fountain is a small semicircular niche, decorated with blue pumice, with other lead fistulae found in the space, which suggests that this too was a water-display.

#### **1.80 Nemus Aricinum** (Nemi, Italy) Figs. 97, 128 *Labra*, Channels in the *Scaenae Frons*/Orchestra

Julio-Claudian, with renovations in the early second century CE
Other (*scaenae frons*/orchestra)
8.70 m x 1.95 m (rectangular basin), 0.80 m (rectangular basin depth), 11.5 m (orchestra diameter), 22.5 m (*pulpitum* length)
Entertainment setting (theater, *scaenae frons*/orchestra) *References*: Morpurgo 1931, 243-244, 295; Traversari 1960, 94-95; Fuchs 1987, 142; Sear 2006, 127-128; Braconi 2013c.

Some of the exedrae of the *frons pulpiti* at the theater of Nemi include pumice stone, which the original excavators thought were indications of fountains. With the system of drainage channels and large rectangular basin found in front of the front of the stage and extending into the orchestra. Channels were found around the *frons pulpiti*/orchestra area, suggesting a water-display. Three curved and four rectangular exedrae on the *frons pulpiti*, with columns between the exedrae. There was a large rectangular basin in front of the *frons pulpiti*, which has been suggested that the basin might have been connected to either an aquatic or religious spectacle (Traversari).

### **1.81 Nemus Aricinum** (Nemi, Italy) Figs. 97, 98 **Nymphaeum of Egeria, Sanctuary of Diana**

Augustan; Caligulan. Exedra 27 m by 54 m (upper level of Caligulan structure) Religious (near entrance to sanctuary) *References*: Livy 1.19.5; Ov. *Met.* 15.487-488, 550-551, *Fast.* 3.261; Plut. *Mor.* 321B; Green 2007; Braconi 2013b; Braconi 2013b; de Mincis 2013; Disono 2013; Ghini and Disono 2013; Palladino 2013; Quagli 2013.

The nymphaeum is situated outside the sanctuary proper on an adjacent hill terrace, which had access to a natural mineral water source. There were two phases of construction: Augustan (an open, circular basin cistern); Caligulan (large three-terraced nymphaeum installed). The upper level would have a large exedra basin, whose back façade, covered in marble veneer, would allow water to pour into the basin. The upper

level terrace had a colonnade along the sides, which culminated at the ends with covered spaces that housed fountains. The intermediate terrace included stairs to the bottom terrace, whose monumental façade of five bays hid water-displays on the back walls, also decorated with mosaic paving and shells. It is believed that this fountain is the Nymphaeum of Nemi known from the ancient sources.

**1.82 Nikopolis** (Epirus, Greece) Fig. 54 Nymphaea Πα, Πβ

Hadrianic (Πα); Early third century (Πβ)
Pi-shaped façade
ca. 17 m by 13 m
Civic (city gate) *References*: Walker 1979, 138-148; Zachos and Georgiou 1997, 588-590; Zachos 2008, 102-107; Longfellow 2011, 131-134.

Nymphaea  $\Pi\alpha$  (south) and  $\Pi\beta$  (north) were located inside of the West Gate, and they are separated by the road, set about 24 m apart. Both structures are of similar form: pi-shaped aedicular façade fountains, with seven niches on the back wall and two niches on the side walls. The niches were of alternating forms (rectangular and apsidal), with two waterspouts found in each. The brickwork shows evidence of stucco and marble veneering. Recent excavations have placed the date of the structures in the second and third centuries, not the Augustan as had been previously thought.

### **1.83 Olympia** (Elis, Greece) Fig. 92 Nymphaeum of Herodes Atticus and Regilla, Sanctuary of Zeus

Dedicated in 153 CE Exedra (with aedicular façade) 16.80 m (diameter apse), 30.00 m by 6.00 m (lower basin) Religious (entrance area of sanctuary) *References*: Walker 1979, 183-284; Glaser 1983, cat. no. 75; Bol 1984; Walker 1987, 60-71; Tobin 1991, 244-272; Aristodemou 2012, cat. nos. 40-65; Longfellow 2012, 142-146; Richard 2012, cat. no. 51.

The Nymphaeum is near the north entrance of the sanctuary, placed against the slopes of Mount Kronion. The structure is immediately adjacent to the Temple of Hera, the Metroön, and the Treasuries Terrace, and in sight of the Zeus Temple. The two-storied facade behind the exedra was decorated on the bottom with statues of the imperial family, while Herodes Atticus and his wife, the patrons, along with other family members, stood on the top story. Water would have poured from the top exedra basin, down into an intermediate basin, which was flanked on the sides by monopteroi (that in a later period held statues of Herodes and Septimius Severus). Water then continued into the lower draw basin, accessible to pilgrims. In the middle of the ledge of the top basin was a marble bull, whose inscription named Regilla as the dedicator of the fountain.

#### **1.84 Ostia Antica** (Italy) Figs. 93, 94 **Temple Precinct Fountain House (west of theater)**

Between the reigns of Trajan and Commodus Fountain house (*camera*) 5.15 m by 5.35 m (interior space), 2.10 m (door width) Religious (temple precinct forecourt) *Referenes*: Ricciardi and Scrinari 1996, 205-207, cat. no. 7; Letzner 1999, cat. no. 80.

The fountain house was located in the forecourt of a precinct of four temples, west of the town's theater. The fountain was *camera*-style, and its main room is marked on its three sides by semicircular niches and an entranceway with two wings. Not much remains of the superstructure, but it is believed that water would have flowed through main, central niche into a basin on a podium there. Traces of the decoration of the room suggest that it would have been decorated sumptuously, perhaps with a marble pavement and the decorative and figural stuccowork on the ceiling (which might have been domed), along with columns framing the interior niches

### **1.85 Ostia Antica** (Italy) Fig. 143 **Two Exedrae on Decumanus Maximus, Theater Entrance**

Domitianic, with Severan restorations Exedra 9.50 m (long), 6.15 m (radius) Entertainment setting (across the street from the theater) *References*: Ricciardi 1996, 202-204, cat. nos. 5, 6; Letzner 1999, cat nos. 229, 230; Sear 2006, 129.

On the Decumanus Maximus of Ostia, flanking the entrance to theater are two exedrastyle water-displays. The exedrae would have acted as basins, as they were full of water, with bases inside to hold statues, along with ornamental spouts, such as the prow of a ship seen today on the western exedra. Sculpture connected with these fountains includes a Scylla and a Venus Marina, who holds a shell with evidence of a water channel carved within.

#### **1.86 Palmyra** (Syria) Fig. 141 West Nymphaeum (Near Theater)

Mid-third century CE Exedra 22.00 m by 7.50 (fountain), 5.60 m by 2.25 m (basin) Entertainment setting (across the street from the theater) *References*: Browning 1979, 159; Schmid-Colinet 1995, 19; Richard 2012, 202, cat. no. 52. Situated on the Middle Colonnade Street, near the intersection with the Tetrapylon and the Transverse Street, at Palmyra is the so-called West Nymphaeum, directly across from the theater. The *omega*-shaped fountain is incorporated into the colonnade of the street with four of its own columns, whose intercolumnations are different than the main colonnade, which differentiates the water-display from other spaces on the street.

**1.87 Parma** (Italy) *Labra* in Theater

Late Augustan/Julio-Claudian Other (*frons pulpiti*) 90 m (cavea diameter) Entertainment setting (theater) *References*: Frova 1973, 265; Fuchs 1987, 104; Sear 2006, 172.

There are remains of a *labrum* to display water in the Parma theater.

#### **1.88 Pergamon** (Ionia, Turkey) Fig. 88 Entrance Fountain of Sanctuary of Demeter

Early first century CE Exedra (omega-shaped) 6.32 m by 3.50 m (basin), 10.14 m (long) Religious (entrance to sanctuary) *References*: Bohtz 1981, 15-16, 58-59; Letzner 1999, 197; Dorl-Klingenschmidt 2001, cat. no. 81; Radt 2011, 184-185; Weiss 2011, 203-213; Richard 2012, cat. no. 54.

The omega-shaped exedra was located across from the propylon of the sanctuary. In the half-dome of the exedra were three cascade-shaped opening for water to pour from, while the sides had wings with niches for water movement. In front, there would have been a trapezoid-shaped basin. Nothing is known of the decorative program.

#### **1.89 Perge** (Pamphylia, Turkey) Figs. 56, 57 Hadrianic North Nymphaeum (Nymphaeum F3)

Hadrianic

Flat façade (like a three-bayed triumphal arch) 19.90 m (length), 8.75 m (wide), 7.90 m (central section length), 8.75 (central section width), 6 m (basin length), 3.55 m (basin width), 0.95 m (parapet height) Civic (city gate) *References*: Dorl-Klingenschmid 2001, cat. no. 85; Chi 2002, 164-185; Ng 2007, 57-67; Longfellow 2011, 156-161; Aristodemou 2012, cat. nos. 234-242; Richard 2012, cat. no. 59.

The nymphaeum was situated at the city gate that led to the acropolis of the city. The structure was fed by an aqueduct of the nearby Kestros River, which supplied a reservoir

behind the façade of the fountain. The central bay included a statue of the personified Kestros, from which the water of the structure poured down into the *euripus* that ran through the city to the Plancia Magna Gate. The main façade was two stories, in the Corinthian order, decorated with statues of Hadrian, Artemis, and Zeus.

### **1.90 Perge** (Pamphylia, Turkey) Figs. 56, 58, 59 **Hydreion of Aurelia Paulina (Nymphaeum F2)**

198-204 CE

Flat façade

16.40 m (fountain and adjacent well façade length), 4.30 m (width), ca. 8 m (height),
14.85 m (basin length), 2.85 m (basin width), 0.83 m (parapet height)
Civic (south of the Plancia Magna Gate, near Nymphaeum F4) *References*: Mansel 1975a, 65-72; Mansel 1975b, 367-369; Abbasoğlu 2001, 182; Dorl-Klingenschmid 2001, cat. no. 86; Chi 2002, 186-199; Ng 2007, 67-76; Gliwitzky 2010,
35-55; Erol 2011, 46; Longfellow 2011, 185-188; Aristodemou 2012, cat. nos. 224-233;
Richard 2012, cat. no. 58.

The plan of the fountain is asymmetrical (with the south side at an angle), which some have suggested is due to the fact that the structure was literally squeezed into this space. The fountain's façade is two-storied, with alternating aediculae and projecting single columns, all of which are punctuated by statue niches that might have contained sculpture of either the imperial family or Aurelia Paulina's family. Two of the niches have waterspouts. On the north side there is a small wing. Directly adjacent to the waterdisplay was a well associated with Artemis Pergaia. The subterranean well was incorporated into the façade of the fountain, complete with two aediculae holding statues of Septimius Severus and Julia Domna that mimicked the architecture of the Hydreion's façade. An inscription names Aurelia Paulina as the donor of the structure

# **1.91 Perge** (Pamphylia, Turkey) Figs. 56, 58, 60 Nymphaeum F4

ca. 203-204 CE
Flat façade
20.34 m (length), 3.54 m (width), ca. 3.50 m (preserved height), 0.79 m (parapet height)
Civic (south of the Plancia Magna Gate, near Hydreion of Aurelia Paulina) *References*: Gliwitzky 2010, 35-55; Dorl-Klingenschmid 2011, cat. no. 87; Richard 2012, cat. no. 60.

The asymmetrical plan of Nymphaeum F4 mimics the Hydreion of Aurelia Paulina, with off-center aediculae, and only a southern wing. Not much is known about the structure itself, as it has never been fully published.

**1.92 Perge** (Pamphylia, Turkey) Figs. 56, 141 **Theater Entrance/Nymphaeum F1**  Late second-early third centuries addition to 120 CE original construction Flat façade 59.45 m by 5.30 m, ca. 18.00 m (preserved height), ca. 6.90 (exedra height), 0.80 m (parapet height) Entertainment setting (*postscaenium*) *References*: Spano 1913, 120; Dorl-Klingenschmid 2001, cat. no. 84; Sear 2006, 372-373; Richard 2012, cat. no. 57.

The fountain, with four large niches and basins, probably acted as a buttress to a weak *postscaenium*, built a century before. One would have approached the theater from either the south (coming from outside of the urban center) or from the north (from the city, by way of the stadium), so the monumental façade-like fountain added later in theater's life would have been an inviting site for potential spectators to stop at. Indeed, deep grooves in the parapets of the niches suggests that the water from the fountain was being used by neighbors of the theater

#### **1.93 Petra** (Jordan) Fig. 145 **Omega-Shaped Fountain (Near Theater)**

Second century CE Exedra (*omega*-shaped) 5 m by 19 m Entertainment setting (near theater) *References*: McKenzie 1990, 110; Segal 1995, 27, 93; Segal 1997, 165-166.

The small *omega*-shaped fountain, with a large rectangular decorative basin in front of the niche, was placed on the main colonnaded street of the city of Petra, in direct sight of the theater.

### **1.94 Philadelphia** (Amman, Jordan) Fig. 130 Waterspouts and Drains on/around Frons Pulpiti

Second-half of first century CE, with Antonine additions
Other (*frons pulpiti*)
44.00 m by 2.40 (*proscaenium*), 1.50 m (*proscaenium* height)
Entertainment setting (theater, *frons pulpiti*) *References*: Fakharani 1975, 390, 392, 395; Segal 1995, 82-85; Sear 2006, 314-315.

The *frons pulpiti* was recessed with alternating eight rectilinear and six curved exedrae. In the upper part of each exedra was a waterspout. Directly in front of the *frons pulpiti*, there are a series of decorative stone drain covers, along with a drain in the center of the orchestra, which would have allowed the water to drain into a cistern underneath the scene building. From the available evidence, it appears that water would have flowed from the spouts in the *frons pulpiti*, emptying conveniently into the drains directly in front of the exedrae. Seven curved and eight rectangular exedrae on *frons pulpiti*, columns between the exedrae. A gutter around the perimeter of the orchestra would have allowed for water run-off.

# **1.95 Philippi** (Macedonia, Greece) Fig. 9 **Rectilinear Fountains of Forum**

161-175 CE
Spouting fountain with basin
22 m by 3.10 m, nearly 0.80 m deep
Civic (focal point of forum) *References*: Glaser 1983, cat. no. 91; Evangelidis 2010, 259-275; Sève and Weber 2012, 72.

Two rectilinear fountains were installed in the second monumentalizing phase of the forum of Philippi (ca. 161-175 CE). The long basins were nestled into the row of structures that were already built on the northern end of the forum's open space, which included a *rostrum*, two small temples, and two ramps, which lead up to the via Egnatia and a temple terrace. The basins had a solitary pillar in their center, which would have provided for the movement of water, from a lion-head spout. An inscription naming a Decimus as the patron of the fountains (for a total of 30.000 sesterces) has been a matter of debate among modern scholars (some of whom believe it belongs to a funerary monument).

# **1.96 Pisidian Antioch** (Phrygia, Turkey) Figs. 67, 80 **Upper Nymphaeum**

First half of the first century CE, with later renovations Pi-shaped façade 27.20 m (long), 10.70 m (wide), ca. 9.00 m (estimated height) Civic (urban node) *References*: Owens and Taşlılan 2008, Owens and Taşlılan 2009; Ossi 2011; Ossi and Harrington 2011; Richard 2012, cat. no. 63.

This fountain was added to the Cardo Maximus, which created a large open plaza, similar to the example at Miletus. The pi-shaped podium supported a façade above. There are two phases, for which the second is undatable.

# **1.97 Pisidian Antioch** (Phrygia, Turkey) Figs. 67, 68 Water-Display at Arch of Hadrian and Sabina

Hadrianic (post 129 CE visit of Hadrian to Asia Minor?) Other (flat façade fountain, *euripus*, small semi-circular fountain) *Euripus*: series of basins, each measuring 6.50 m x 2.00 m, for a total of 90 m; semicircular basin: 3.06 m (wide), 1.70 m (deep); dimensions of the façade fountain are unclear *References*: Dorl-Klingenschmid 2001, cat. no. 7; Owens and Taşlıalan 2009, 315-317; Ossi 2011, 91, 104; Ossi and Harrington 2011, 20-21.

On the west side of the city, a complete water-display was added at the Arch of Hadrian and Sabina. From the top, a flat-façade fountain would have supplied a *euripus* that would have flowed down the 3 m gradient of the city into a small semi-circular fountain. The arch would have framed the whole water-display, and it would have evoked the abundance and wealth associated with water through its sculptural reliefs, which included genius figures, bound captives, thyrsoi, hippocamps, and garlands.

#### **1.98 Pompeii** (Italy) Figs. 48, 49, 65 **Arco di Germanico**

Third quarter of first century CE Niche fountain (on arch) Northeast niche: 2.50 m (high), 1.70 m (deep), 1.43 m (wide) height, depth, width Civic *References*: Neuerburg 1965, cat. no. 33; Letzner 1999, cat. no. 440; Müller 2011, 55-82; Rogers 2013, 160.

The arch, situated at the northeast entrance of the forum, abuts the Jupiter Temple, and opens on to the north to via del Foro and the Porticus Tulliana. On the north side, in the piers, were two basins that would have allowed for the movement and display of water.

### **1.99 Pompeii** (Italy) Fig. 133 Large Theater: Lead Piping, Drains, *labra*, waterspouts in/around *Frons Pulpiti*

Augustan renovations

Other (frons pulpiti, orchestra)

7.10 m (diameter of largest circular *labrum*), 9.00 m by 1.68m (largest rectangular *labrum*), 5.90 m by 1.48 m (smallest *labrum*), 20.0 m (orchestra diameter), 33.36 m by 0.95 (*proscaenium*), 1.25 m (*proscaenium* height)

Entertainment setting (theater, *frons pulpiti*, orchestra) *References*: Spano 1913; Berlan-Bajard 2006, 446-453; Sear 2006, 130-132; Gasparini 2013, 197-201.

Lead piping found in the Large Theater of Pompeii, dated to the Augustan period renovations of the structure, was present not only in the area around the *frons pulpiti* (along with drainage channels), but also leading down from the top of the *cavea*. Drains were found around the *frons pulpiti*, suggesting a water-display. One curved and four rectangular exedrae on the *frons pulpiti*, with columns between the exedrae. On the *frons pulpiti*, it is believed that there would have been waterspouts, because directly in front of the exedrae was a gutter for run-off water. There were also found a series of seven different rectangular and circular basins found in the orchestra.

1.100 Pompeii (Italy) Figs. 44, 48, 49

#### **Monopteros**, Macellum

First century CE (under restoration at the time of the 79 CE eruption)
Monopteros
ca. 12 m (monopteros diameter), 31 m by 58 m (macellum total dimensions)
Civic (macellum) *References*: De Ruyt 1983, 137-149; Dobbins 1994, especially 668-679; De Ruyt 2000, 181; Holleran 2012, 170.

Pompeii's macellum lies off the northeast corner of the forum, lined with shops on the interior, a monopteros with a fountain, and a shrine on the east side. At the decorated fountain of the monopteros, a large number of fish scales were found, confirming that fish were in fact sold in the space.

# **1.101 Puteoli** (Pozzuoli, Italy) Fig. 45 **Monopteros, Macellum**

Flavian, with Severan restorations
Monopteros
ca. 20 m (monopteros diameter), 58 m by 68 m (macellum total dimensions)
Civic (macellum) *References*: De Ruyt 1983, 150-158; Demma 2007, 77-113, especially 95-97.

The elegantly decorated monopteros came complete with Corinthian columns of African marble, decorated friezes, sculpted dolphins, and columns bases with marine animals. The monopteros would have been at the center of an octagonal socle constructed of marble, where a drain allowed for the discharge of water, which suggests the presence of a fountain.

### **1.102 Praeneste** (Palestrina, Italy) Figs. 87, 107 **"Macellum"/Imperial Cult Structure**

Augustan Fountain house ca. 16 m by 16 m Religious (Imperial cult building) *References*: Giuliano 1985; Simon 1986, 126-127; Coarelli 1996; Agnoli 1998; Letzner 1999, cat. no. 360; Agnoli 2002, 207-214; La Rocca 2013, 248-249.

Located in the lower city of Praeneste, probably close to the lower forum and near the intersection of the cardo and decumanus, the 'macellum' is a horseshoe-shaped structure. Inside there is a main rectilinear niche on axis with the entrance, with four semicircular niches radiating off the sides. The semicircular niches are plastered, while the main niche is veneered in marble, with marble mosaic paving throughout the space. Among the finds were an altar dedicated to Divus Augustus, leading scholars to now assert that this was an imperial cult building. The famous Grimani reliefs were also found in this space, which

are believed to depict the four seasons. There are indications on the reliefs that they were part of a water-display in this structure.

#### **1.103 Praeneste** (Palestrina, Italy) Fig. 87 Water-Displays, Sanctuary of Fortuna Primigenia

Republican period (mid-late second century BCE) Other (fountain house, niche fountain, *camera*) Range from: ca. 2 m by 2 m (fountains under the hemicycle terrace), to ca. 6 m by 9 m (apse of Nile Mosaic), 18 m by 29 m (room associated with the Nile Mosaic) Religious (entrance to sanctuary) *References*: Neuerberg 1965, cat nos. 96-103; Berg 1994, 119-128; Meyboom 1995; Letzner 1999, cat. nos. 14, 31, 44, 49, 55-57, 281.

The Sanctuary of Fortuna Primigenia offers a number of fountains that show marked progressions through space, while allowing for purification as an individual continues farther up the terrace of the sanctuary. At the entrance of the lower terrace, there were at least two small fountains. At the entrances of the intermediate and upper terraces, there were a series of another eight small fountains. The structures of the water-displays were nestled into walls and recesses (under stairs, especially). Lower down in the town, in what was probably the upper forum of the town, there were another two fountains that took on grotto-like appearances, including the 'Antro delle Sorti' (that included rock-like wall decoration, moving water, and mosaics) and the nymphaeum that contained the famous Nile Mosaic. Meyboom (1995, 8-19) rightly argues that the two lower fountains were not connected to the upper sanctuary and its water-displays, but probably formed part of the lower civic space (and perhaps even a Sanctuary of Isis).

**1.104 Rome** (Italy) Map 10 **Anna Perenna Site** 

Fourth century BCE to sixth century CE Spouting fountain with basin 2.93 m by 2.50 m (basin) Religious *References*: Ov. *Fast.* 3.523-540; Mart. 4.64.16-17; Wiseman 2006; Blänsdorf 2010; Faraone 2010; Blänsdorf 2012; Egelhaaf-Gaiser 2012; Piranomonte 2013; Rocca and Treu 2015.

Recent archaeological excavations have discovered the cult site of Anna Perenna adjacent to the via Flaminia (near modern piazza Euclide). The fountain there included two inscribed blocks (*nymphis sacratis Annae Perennae*). There are a number of finds from the reservoir, which include 549 coins, 74 oil lamps, *defixiones*, nine lead containers with seven anthropomorphic figurines inside, three ceramic jugs, egg shells, wood, etc. The fountain was a simple basin, with a spout in the back wall. The structure was built in rough *opus vittattum* and the basin was lined in *opus signinum*. Four lead *fistulae* suggest

a long period of use, along with the fact that the water from this basin probably fed other hydraulic structures in the area.

### **1.105 Rome** (Italy) Figs. 25, 34, Map 10 **Appiades Fountain, Temple of Venus Genetrix, Forum Iulium**

Augustan; Hadrianic Spouting fountain with basin 2.90 m (east/west basin width), 3.95 m by 4.15 m (central basin), ca. 20.00 m (wall running along front of the temple), ca. 30.00 m (temple width) Civic (Forum Iulium) *References*: Ov. *Ars am.* 1.81, 3.451-452; Plin. *HN* 36.4.33; Ulrich 1986; Amici 1991, 97-100; Ulrich 1993; Ulrich 1994; Reis 2009, 310; Longfellow 2011, 18-20; Delfino 2010; Delfino 2014.

The Temple of Venus Genetrix had a series of water-displays in front of its *rostrum*. Ovid mentions that an Appian nymph strikes the water there, implying there was a statue as part of the fountain—which also why the modern name is the Appiades Fountain. A marble basin was installed on the east and west sides of the *rostra*, which are connected by a masonry wall that contains yet another basin in the middle. The current water-display has been dated to the Hadrianic period, based on masonry styles, but believed to be modeled on an Augustan original, as indicated by the passage of Ovid.

# **1.106 Rome** (Italy) Fig. 126, Map 10 **Bagni di Livia**

Julio-Claudian Flat façade 14.0 m (width), 14.0 m by 11.5 m (room that contains the Bagni façade) Private setting *References*: Neuerburg 1965, cat. no. 174; Parra 1976, 93-95; Tomei 1992, 925; Agusta-Boularot 1997, 311-312; Manderscheid 2004; Tomei 2013, 70.

The Bagni di Livia was a two-storied fountain in an imperial residence, in which water came down water-steps in a large central niche, flanked by two semicircular niches. The water then flowed down into the first story, which was marked by a series of nine rectilinear and semicircular exedrae, with a large basin in front that had a series of water jets for each of the nine exedrae.

1.107 Rome (Italy) Map 10 *Euripus* of Agrippa

Agrippan (late first century BCE) Other (*euripus*) Perhaps 800 m long Civic (running from Stagnum Agrippae to Tiber River) *References*: Lloyd 1979; Evans 1982; Richardson 1992, 146-147; Coarelli 1997, 549-554; Owens and Taşlıalan 2009, 316; Filippo 2010; Filippo 2014, 66-70; *LTUR* 2.237-239 (s.v., Euripus, F. Coarelli).

Not much is known about *Euripus* of Agrippa. It was probably used as a drainage channel for the Stagnum Agrippae, a large pool located in the Campus Martius. The *Euripus* is believed to have drained the water directly into the Tiber River. Excavations that are currently taking place in Rome on the Linea C of the underground Metropolitana hope to elucidate more about the course and structure of the *Euripus*. Preliminary results have uncovered various parts of the channel in the ancient Campus Martius, suggesting that the *Euripus* could have been nearly 800 m long, running from the Stagnum to the River Tiber.

## **1.108 Rome** (Italy) Figs. 52, 53, Map 10 *fons Camenarum*

Unclear date (High Empire? on ancient foundations?)
Other (large basilica structure, with apsed ends)
Unknown dimensions, but Lanciani's *Forma Urbis Romae* suggests that it is half the length of the nearby Septizodium
Civic (outside Porta Capena and along the via Appia) *References*: Colini 1944, 217-218; Lanciani 1990, 225-226; Tölle-Kastenbein 1990, 14; Tortorici 1993b, 167-170; La Rocca 1998, 209-210; Edlund-Berry 2006b, 164; Bruno 2008, 132-138; Carandini 2008, 25-27; Campbell 2012, 15; de Mincis 2013, 238-243; Lusnia 2014, 122-123; Roscher *Lexikon* 1.846-848 (s.v., Camenae, Wissowa); Daremburg-Saglio 1<sup>B</sup>.857-858 (s.v., Camenae, A. Bouché-Leclercq); *LTUR* 1.216 (s.v. Camenae, Camenarum fons et lucus, E. Rodríguez Almeida).

The structure is a large basilica, with a nave culminating in an apse with niches, flanked by two small side aisles, along with two apsed aisles on the end. Water-displays are believed to have been located in the apses. The structure was excavated in the sixteenth century, though not well documented. Further excavations in 1670 and 1676, turned up piping, hypocausts, and a black-and-white mosaic of Tritons and Nereids; however, it is still unclear if these features had anything to do with the larger basilica. Some have argued that the structure was the Thermae Severianae (Tortorici; Lusnia).

**1.109 Rome** (Italy) Map 10 *fornix Scipionis* 

190 BCE
Other (*labra* adjacent to an arch)
Unknown dimensions
Civic space (entrance to Capitoline) *References*: Liv. 37.3.7; Spano 1950; Briscoe 1981, 294-295; Letzner 1999, 215;
Haimson Lushkov 2014, 121-126; *LTUR* 2.266-267 (s.v., fornix Scipionis, F. Coarelli).

There are no archaeological traces of this example, only what we know from the passage of Livy. The arch was located at the entrance to the Capitoline on the *clivus Capitolinus*. It was decorated with seven bronze statues, two equestrian statues, and two marble *labra*.

## **1.110 Rome** (Italy) Figs. 25, 35, Map 10 **Fountains, Forum Augustum**

37-2 BCE
Spouting fountain with basin
ca. 3 m by 3 m?
Civic (Forum Augustum) *References*: Ulrich 1986, 340; Robinson 2001, 53; Meneghini and Santangeli Valenzani
2007, 47; Ungaro 2007, 130; Longfellow 2011, 20-21.

At the east and west ends of the temple podium were two water-displays that consisted of a waterspout in the podium pouring water into an adjacent basin. The area was fenced off by a metal grating.

**1.111 Rome** (Italy) Figs. 24, 30, 33 *lacus Curtius* 

184 BCE-Severan period
Other (no water-display in the Imperial period)
ca. 12 m by 9 m (at its greatest length and width)
Civic and religious (Forum Romanum) *References*: Coarelli 1985, 226-229; Richardson 1992, 229-230; La Regina 1995; Köb
2000, 27-30; Haselberger 2002, 159; Spencer 2007; *LTUR* 3.166-167 (s.v., Lacus
Curtius, C.F. Giuliani).

The *lacus* commemorates at least three different myths or historical events, of which the most famous are the episode of Mettius Curtius, the Sabine, fleeing the Romans under Romulus gets stuck in the swamp there, and the episode of Marcus Curtius riding his horse into the open chasm of the earth in the Forum. By the imperial period, it seems that there was no flowing water on the site, as there had been previously, though Romans still threw coins into the puteal for the emperor's health on his birthday. There were at least four phases of development of the monument: (1) tuff period dated to 184 BCE (Liv. 39.44.5); (2) travertine period dated to 78-74 BCE, with the repaving of the Forum by Aurelius Cotta; (3) Augustan (ca. 12 BCE); (4) Severan, with the new repaving of the Forum of 203. The structure was an irregular polygonal plan, with an enclosure for a puteal, a number of square altars, and a relief depicting Mettius Curtius. Three successive layers of repaving under the floor of the structure suggest a monument of longevity in the Forum.

1.112 Rome (Italy) Figs. 24, 29 *lacus Iuturnae* 

Second century BCE-fourth century CE Other (puteal, *sacellum*) 8 m by 8 m (spring), 4 m by 3 m (*sacellum*) Civic and religious (Forum Romanum) *References*: Lanciani 1975, 225-226; Coarelli 1983, 227-255; Katjava 1989; Ammerman 1990a; Berg 1994, 112-117; Corazza and Lombardi 1995, 198-199; Köb 2000, 30-36; Haselberger 2002, 159; Steinby et al. 2012; Kalas 2015, 57; *LTUR* 3.168-170 (s.v., Lacus Iuturnae, E.M. Steinby).

The spring of Juturna was located in the Forum Romanum between the Temple of Castor and Pollux and the House of the Vestal Virgins, near the *vicus Tuscus* that leads to the Velabrum. After the epiphany of Castor and Pollux after the Battle of Pydna in 168 BCE, the spring and the surrounding area were subsequently monumentalized over time, at least into the fourth century CE. During the Augustan period a marble puteal was installed, and, later, a square enclosure was added over the actual spring. By the time of Trajan, a small *sacellum* was constructed immediately adjacent to the spring. In the fourth century, based on epigraphic evidence found on site, the area is connected to the *statio aquarum*, or the water department of Rome.

1.113 Rome (Italy) Fig. 70, Map 10 *lacus Orphei* 

Augustan? Flat façade Unknown dimensions Civic (crossroads) *References*: Mart. 10.20.5-9; Del Chicca 1997, 251; Ghiotto 1999, 74-5; Longfellow 2011, 22-3; *LTUR* 3.171 (s.v., Lacus Orphei, F. Coarelli).

The Severan Marble Plan indicates that the *lacus* would have been located at a fork in a road that faces the *clivus Suburbanus*, which led to the Esquiline Gate, perhaps built in the Augustan period. There would have been three basins abutting a wall with statue niches—and the fountain stood alone at the crossroads, marking its importance at the edge of two *vici*.

**1.114 Rome** (Italy) Fig. 24 *lacus Servilius* 

141/123-Agrippan; destroyed in fire of 12 BCE
Spouting fountain with basin?
ca. 3 m by 3 m?
Civic (Forum Romanum) *References*: Fest. *Gloss. Lat.* 370; Richardson 1992, 232; Haselberger 2002, 66; *LTUR*3.172-173 (s.v., Lacus Servilius, A. La Regina).

Located at the northwest corner of the Basilica Julia, the *lacus* was at the end of the *vicus Iugarius*. The name *Servilius* probably derives from a Republican figure that gave his

name for the fountain, whether Cn. Servilius Caepio (consul in 141 BCE) or by a Servilius Caepius, who might have given the structure as a *munus* in 125 BCE, in connection with the construction of the Aqua Tepula. During the Sullan proscriptions, the heads of senators were displayed in some fashion on the *lacus*. Agrippa also added a statue of a Hydra to the fountain. Because the fountain was destroyed by a fire in 12 BCE, not much is known about the structure, except for its foundations.

**1.115 Rome** (Italy) Figs. 1, 2, Map 10 **Meta Sudans** 

Augustan; Flavian Other (Meta Sudans) Flavian: 16 m (diameter), 17 m (high) Civic and Entertainment setting (when the Colosseum is built) *References*: Gabbrielli 2000; Longfellow 2010; Longfellow 2011, 23-25, 31-49; Conte 2013.

The 'sweating conical marker' or 'sweating turning post' of Rome had two iterations, with an Augustan original, followed by a new Flavian monument. Both structures, though, were large conical markers, who displayed water from the top of their cones, allowing it to pour over the sides, appearing to 'sweat.' After the Augustan restructuring of the neighborhoods of Rome, the Meta Sudans was located at the crossroads of four of the fourteen regions of Rome.

### **1.116 Rome** (Italy) Fig. 71, Map 10 Nymphaeum Alexandri

Before 226 CE
Other (unclear from archaeological evidence)
Currently 25 m (long), 15 m (wide), 20 m (high), but believed to have measured 67.27 m in antiquity
Civic (crossroads) *References: CIL* 6.31893, 6.31898; Neuerburg 1965, cat. no. 151; Tedeschi Grisanti
1977; Cattalini 1985; Aicher 1995, 59-61; Letzner 1999, cat. no. 337; Longfellow 2011, 190-204. See App. Nos. 2.9, 2.10.

The nymphaeum was located at the intersection of via Labicana and via Tiburtina, outside of the Esquiline Gate. It would have also been situated at the termination of the Ramus Aquae Juliae, a branch of the Aqua Julia, on the Esquiline Hill. The fountain was placed at a crossroads in a residential neighborhood. The structure has fallen into disrepair since antiquity, but it is believed to have had four different levels, with a basin at the bottom. The decoration is currently unknown. In the Renaissance, though, the fountain was called the 'Trophei di Mario,' because it was decorated with the marble trophies of the Domitianic period that now adorn the piazza del Campidoglio.

1.117 Rome (Italy) Figs. 1, 52, Map 10

#### Porta Capena

Date? Other (gate) Dimensions? Civic (beginning of the the via Appia) *References*: Front. Aq. 1.5, 19. Richardson 1992, 29; *LTUR* 1.107 (s.v., Arcus Stillans, F. Coarelli); 3.325 (s.v., Murus Servii Tullii, Mura Repubblicane, Porta Capena, F. Coarelli).

The gate was not a traditional water-display, but acted with a variety of features to show off water. Both the Aqua Appia and the Aqua Marcia passed over the top of the gate, which sometimes leaked, giving the structure the name *Arcus Stillans*, or 'dripping gate,' in antiquity. The gate was located to the northwest of the *fons Camenarum*, and through the gate lay the Septizodium. This study argues that the Porta Capena would have then been its own type of water-display by the Severan period, interacting with the other elements of water in the urban node.

# **1.118 Rome** (Italy) Figs. 4, 5, Map 10 **Porticus Pompeiana**, *postscaenium*

Dedicated 55 BCE Other (theater *postscaenium*) 180 m by 135 (*postscaenium*) Entertainment setting (Theater of Pompey *postscaenium*) *References*: Prop. 2.32.11-16; Val. Max. 4.2.6; Spano 1952; Fuchs 1987, 141; Sear 1993; Berg 1994, 128-137, especially fig. 44; Gleason 1994; Loza Azuaga 1994, 265; Kuttner 1999a; Sear 2006, 57-61, 133-135; Gagliardo and Packer 2006; Schröter 2008; Cadario 2011; Davies 2012; Albers 2013, 276-278. Di Napoli 2013, 153, n. 79; Zarmakoupi 2014, 111. Spano (1952) first suggests that the *scaenae frons* of the Theater of Pompey had a 'nymphaeum' in its two large exedrae; Sear (1993; 2006, 57) shows that the two exedrae belong to a later rebuilding of the structure. Davies (2012, 75-76) argues that the garden space of the Porticus was part of a program to create green spaces in the city that offered a respite from the surrounding urban landscape.

The *porticus postscaenium* of this theater would have included gardens, art (e.g., statuary), and a number of water-displays.

**1.119 Rome** (Italy) Figs. 24, 28, 31 *sacellum Venus Cloacina* 

Begun in late eighth century BCE (under Titus Tatius)? Other (*sacellum*, but no water-display) ca. 2.40 m (diameter) Civic and religious (Forum Romanum) *References*: Pliny *HN* 15.119-120; Liv. 3.48.5; Plaut. *Curc*. 471; Coarelli 1983, 83-89; Richardson 1992, 92; Köb 2000, 36-40; Haselberger 2002, 93; Hopkins 2012, 96-97; *LTUR* 3.290-291 (s.v., Cloacina, Sacrum, F. Coarelli); *BMC RR* 1.577-578, nos. 4242-4254.

Located in front of the Basilica Aemilia, the *sacellum* marks the spot where the Cloaca Maxima turned to the west. There were a long line of shrines and other small religious-related structures in front of the Basilica Aemilia. The shrine is circular with an open balustrade. Inside, there are two draped female statues, whose right hands are lowed, perhaps supporting thymiateria, or incense burners, and their left hands are raised to hold perhaps the leafy branches of the myrtle.

**1.120 Rome** (Italy) Figs. 6, 52, Map 10 **Septizodium** 

202-203 CE Flat façade ca. 16.4m (wide), ca. 93-95 m (long), ca. 31.5m (high) Civic (slopes of the Palatine, next to the Circus Maximus, near the Porta Capena) *References*: Hülsen 1886; Dombart 1922; Aupert 1974, 114-126; Iacopi and Tedone 1993; Letzner 1999, cat. no. 336; Gorrie 2001; Lusnia 2004; Thomas 2007a; Hamdoune 2009; Longfellow 2011, 164-82; Lusnia 2014, 117-132.

The large three-niched and three-storied façade fountain was placed at the bottom of the Palatine Hill, near the intersection of the Circus Maxmius and the Porta Capena.

**1.121 Rome** (Italy) Figs. 1, 25, 36, Map 10 **Templum Pacis** 

71-75 CE
Other (*euripi*)
80 m by 4.7 m (each of the six *euripi*)
Civic (Templum Pacis) *References*: La Rocca 2001, 195-196; Rizzo 2001, 238-239; Meneghini and Santangeli
Valenzani 2007, 61-63; Meneghini 2009, 81; Corsaro 2014a, 259; Meneghini 2014b, 285.

In the plaza of the Templum Pacis, there were six large *euripi* that ran east to west. Each *euripus* was constructed of brick to about a height of 1 m, then covered in marble veneering. Water would have flowed from the middle part of the *euripus*, presumably pooling in a shallow basin on top, with overflow trickling down the sides into a marble drainage channel that was found in situ. Lead piping was also found in the masonry. On the sides of each *euripus*, were amphorae used as planters for roses. Until recent Italian excavations, the channels were believed to have been large planters.

**1.122 Rome** (Italy) Fig. 37, Map 10 **Terrace of Domitian** 

Domitianic Other (exedra, water steps) ca. 20 m by 26 m Civic (adjacent to Forum Augustum) *References*: Tortorici 1993a; Anderson 1997, 267; Longfellow 2011, 49-56; Meneghini 2009, 111-116.

The so-called Terrace of Domitian is situated next to the west hemicycle of the Forum Augustum, next to late Republican housing. The original form of the fountain is unclear (and perhaps unfinished), because the Forum of Trajan was installed immediately adjacent, obstructing the structure. At the bottom, there was probably a monumental stair, which originally would have passed to the Subura, but then was transformed into a water stair, with an apsidal exedra added above. It is believed that the structure could have been the terminus point for the Aqua Marcia.

## **1.123 Sagalassos** (Pisidia, Turkey) Figs. 18a, 18d, 18e **Antonine Nymphaeum**

160-180 CE, with sculptural program changed in the late fourth-early fifth century Flat façade
27.70 m (length), 3.94 m (width), 7.80 m (height), 1.23 m (height of parapet) Civic (Upper Agora) *References*: Dorl-Klingenschmid 2001, cat. no. 99; Aristodemou 2012, cat. nos. 259-269; Richard 2012, cat. no. 67 (for the full bibliography).

The façade of the fountain was single-storied, ornamented with a central niche (with waterspout), flanked by four aediculae on the front and two aediculae on the side. Each aedicula had a staute inside. In front of the façade was a long, rectangular draw basin. The fountain would be on a visual axis with both the Trajanic/Severan (**App. No. 1.125**) and the Hadrianic (**App. No. 1.124**) Nymphaea.

# **1.124 Sagalassos** (Pisidia, Turkey) Figs. 18a, 18c **Hadrianic Nymphaeum**

Late Hadrianic (ca. 128-132 CE) Pi-shaped façade 16.92 m (length), 5.77 m (width), 5.5 m (height, still preserved) Civic (above Lower Agora) and Entertainment Setting (flanking odeion) *References*: Spano 1913, 120; Dorl-Klingenschmid 2001, cat. no. 98; Mägele et al. 2007; Longfellow 2011, 151-156; Aristodemou 2012, cat. nos. 248-258; Richard 2012, cat. no. 66 (for the full bibliography).

The two-storied pi-shaped façade was constructed with alternating semi-circular and recti-linear niches, complete with sculpture, including a three-meter enthroned Apollo and a statue base dedicated to Hadrian. Inscriptions on two other statue bases in the

niches reveal that the fountain was dedicated posthumously by the local Tiberius Claudius Peison. On the parapet, there were reliefs of reclining river gods, Nereids, and muses. The fountain would be on a visual axis with both the Trajanic/Severan (**App. No. 1.125**) and the Antonine (**App. No. 1.123**) Nymphaea.

#### **1.125 Sagalassos** (Pisidia, Turkey) Figs. 18a, 18b **Trajanic/Severan Nymphaeum**

First Phase: Trajanic date; Second Phase: Severan
Flat façade
18.80-19.05 m (length), 3.20 m (width of basin), 0.90 m (height of parapet)
Civic (Lower Agora) *References*: Aristodemou 2012, cat. nos. 245-247; Richard 2012, cat. no. 65 (for the full bibliography).

The water-display was built in two phases, with the later Severan simply replacing the older Trajanic, built in a similar style. The façade would have been marked with nine alternating semi-circular and recti-linear niches, with the main waterspout in the central niche. The fountain would be on a visual axis with both the Hadrianic (**App. No. 1.124**) and the Antonine (**App. No. 1.123**) Nymphaea.

#### **1.126 Santa Fiora** (near Lago di Bracciano, Italy) Fig. 106 **Aqua Traiana Source Sanctuary**

Trajanic Fountain house (related to a source sanctuary) Dimensions not published Religious (source sanctuary) *References*: Taylor et al. 2010; accompanying website (http://aqueducthunter.com).

Located north of Lago di Bracciano, it is believed that this complex was the source sanctuary of the water used in the Aqua Traiana that led south to Rome. The structure is a three-chambered space, constructed in *opus latericium* and vaulted in *opus caementicium*, with stucco decorated with Egyptian blue. Each chamber was cross-vaulted, suggesting a grotto. The main room is constructed with a niche in the back wall, presumably for a water-display and statue, though it is hard to determine in its present state. On the east would have been the springhouse, which is connected to a series of courses that run downhill into the aqueduct. There is evidence of building directly behind the three-chambered space, suggesting that this shrine existed in a larger complex.

# **1.127 Scythopolis** (Beth-Shean, Israel) Fig. 78 **Crossroads Nymphaeum**

First phase: second half second century CE; Second phase (with addition of waterdisplay): fourth century Exedra (omega-shaped) ca. 23 m (long), 13 m (estimated height) Civic (crossroads) *References*: Segal 1997, 157-160; Bejor 1999, 60-63; Foerster and Tsafir 2002; Richard 2012, 203, cat. no. 75.

This structure was originally built in the second century, but a fountain was added at some point in the fourth century. The fountain was placed on a relatively short street, which is fed, though, by two other larger thoroughfares on both the east and west sides, putting the nymphaeum at the crossroads of five streets in total. The overall plan is omega-shaped, with a main basin in the back exedra, fronted by a rectangular draw basin.

# **1.128 Sepphoris** (Saffuriyye, Israel) **Drains around** *Frons Pulpiti*

Early first century CE, rebuilt in second century CE Other (*frons pulpiti*) ca. 31.00-34.00 m (*proscaenium* length), 0.90 m (*proscaenium* height, though was probably higher) Entertainment setting (theater, *frons pulpiti*) *References*: Waterman 1937, 10; Sear 2006, 307.

Drains were found around the *frons pulpiti*, suggesting a water-display. Sear (2006) states that a lead pipe in the *proscaenium* (of 0.04 m diameter) perhaps supplied a fountain in the middle of the *proscaenium* wall.

### **1.129 Septeuil** (Yvelines, France) Fig. 105 Nymphaeum

Second century CE Fountain house (*camera*) 10.00 m by 15.00 m (room), 3.50 m (diameter of octagonal basin) Religious (source sanctuary) *References*: Lavagne 1992, 222; Agusta-Boularot 2004, 10; Cholet and Gaidon-Bunuel 2004; Lavagne 2012, 129-132.

The nymphaeum is a rectangular *camera*-type structure, whose north end is not completely flat (but broken into two sides, making the whole edifice five sided). Also on the north is an octagonal basin (lined in white limestone and covered by white marble), which canalized the water from a local source. The walls on the northern half of the building would have been low to allow for columns to hold up the roofing, making the north side very open. The southern half was closed off with walls. A niche on the south wall would have held a statue of a reclining nymph who holds an urn, making the space appear like a grotto. The whole structure was covered in marble veneer. The nymphaeum is probably connected to a nearby Temple of the Mother Goddesses.

## **1.130 Side** (Pamphylia, Turkey) Figs. 61, 85 **Drei-Becken-Brunnen**

Second-half of the third century CE Other (three basins, separated by aediculae) 17.50 m (long), 1.12 m (wide), ca. 5.50 m (estimated height), 3.55 m (central basin length), 3.30 m (lateral basin lengths), 0.88 m (parapet height) Civic (urban node) *References*: Dorl-Klingenschmid 2001, cat. no. 105; Gliwitzky 2010, 132-139; Aristodemou 2012, cat. nos. 281-287; Richard 2012, cat. no. 72.

Located on the end of the colonnaded street that runs south from the city gate (and Main City Gate Nymphaeum), this fountain included three basins that were punctuated by four aediculae.

### **1.131 Side** (Pamphylia, Turkey) Figs. 61, 62 **Main City Gate Nymphaeum/ Nymphaeum G**

Severan (Caracalla?) Flat façade 52 m by 15 m Civic (across from main city gate) *References*: Mansel 1963, 53-64; Dorl-Klingenschmid 2001, cat. no. 106; Chi 2002, 252-265; Gliwitzky 2010, 87-122; Aristodemou 2012, cat. nos. 270-278; Richard 2012, cat. no. 70.

The large façade-style fountain was originally two stories, with a third perhaps added later in the third century. The façade is punctuated by three large niches, with large consoles that allowed for water movement, along with a Corinthian column screen. Though a flat façade, there were two short wings on the sides that had aediculae. A large plaza was created in front of the draw basin, which was lined with a long series of rounded draw vessels, interspersed by reliefs of dolphins, fish, Medusa heads, and theater masks.

#### **1.132 Side** (Pamphylia, Turkey) Figs. 61, 64, 85 **Monument of Vespasian**

Original structure built in 74 CE, with conversion into a fountain in the late fourth century Pi-shaped façade 6.40 m (length), 1.30 m (width), ca. 5.50 m (height) Civic (near Late Antique city gate) *References*: Dorl-Klingenschmid 2001, cat. no. 107; Richard 2012, cat. no. 71. The structure was moved to its present location at some point in the fourth century. The pi-shaped façade, with a semi-circular niche in the center of two aediculae, was then outfitted with spouts for water display. There would have been a T-shaped draw basin.

## **1.133 Side** (Pamphylia, Turkey) Figs. 61, 85 **Round Fountain**

After late fourth century CE Niche fountain 3.80 m (basin depth), 4.80 m (apse height) Civic (urban node) *References*: Dorl-Klingenschmid 2001, cat. no. 108; Richard 2012, cat. no. 73.

This round basin, integrated into an apsidal niche of the late fourth century wall, would have interacted across the plaza from the Drei-Becken-Brunnen.

## **1.134 Sikyon** (Greece) Fig. 138 **Drains around** *Frons Pulpiti*

First century BCE rebuilding of second century BCE original Other (*frons pulpiti*)
23.75 m (stage length), ca. 3.10-3.25 m (*proscaenium* height)
Entertainment setting (theater, *frons pulpiti*) *References*: Fiechter 1931, 22; Sear 2006, 405.

Drains were found around the *frons pulpiti*, suggesting a water-display.

### **1.135 Sikyon** (Greece) Fig. 138 **Exedra off of** *Postscaenium* of the Theater

Early Empire Other (*porticus postscaenium*) 6 m by 5 m (exedra) Entertainment setting (*postscaenium*) *References*: Fiechter 1931, 22; Glaser 1983, 40, cat. no. 92; Sear 2006, 405; Bressan 2009, 228-231.

The form of the fountain here is an exedra, with four columns at the front of the structure, and a water connection located in the back of the basin. The structure is located at the north end of the *postscaenium*, immediately adjacent to the portico. The columns of the fountain, then, would have mimicked the porticoed area, creating a cohesive façade at the back of the stage building of the theater.

**1.136 Sparta** (Greece) Fig. 144 *Parados* Fountain, Theater

First-half of the third century CE

Spouting fountain with basin 15.10 m by 4.00 m (fountain), 13.20 m by 2.20 m (basin) Entertainment setting (*parados*) *References*: Walker 1979, 211-217; Sear 2006, 405-406; Bressan 2009, 233-240; Aristodemou 2011, cat. nos. 67-75; Di Napoli 2013, 86-93.

Sparta preserves a long rectangular framed basin on the west *parados* of the theater. The basin would have been clad in marble veneer, and decorated with statues of a seated lion (with a water-spout), a running boar, and a roughly finished Herakles on the back ledge of the fountain. The water that supplied the fountain probably arrived from an aqueduct that was situated above the theater.

#### **1.137 Stratonicea** (Caria, Turkey) Fig. 63 North Gate Fountain

Early Severan Exedra 42.50 m (entire gate and fountain length), ca. 16 m (fountain length), ca. 10 m (fountain width, including front draw basin), ca. 12 m (estimated height) Civic (city gate) *References*: Dorl-Klingenschmid 2001, cat. no. 113; Mert 2005; Aristodemou 2012, cat. nos. 195-203; Richard 2012, cat. no. 76.

In the middle of two bays of the city gate along the fortification walls of the city was a large exedra-shaped fountain. The two-storied tabernacle-style façade of the fountain had a series of semi-circular niches on the bottom level and rectilinear niches on the top. The niches were punctuated by a series of Corinthian capitals, along with a tendril frieze in the architrave. The niches would have been filled with statues, including two Muses, an Apollo, and a variety of portrait busts, along with some figural reliefs. Water would have poured into the large basin from a throne in the central niche, whose arms were decorated with dolphins. The water then would have flowed into a large central draw basin immediately at the front, along with a smaller trough-like basin on the southeast corner of the basin.

## **1.138 Suessa** (Sessa Aurunca, Italy) Fig. 140 **Entrance Fountain of Theater**

139-150 CE renovations (Augustan original)
Flat façade
10 m (fountain length), 6 m (fountain height), ca. 100 m by 35 m (*postscaenium*), ca. 70 m (total of the ascent up the *postscaenium*)
Entertainment setting (*postscaenium*) *References*: Sear 2006, 138; Cascella 2012, 71-87; Cascella 2013; Wood 2015.

Because of the terracing of the area around the theater, an access ramp and marble stairway was added to the south side, which provided access from the cardo maximus to the *porticus postscaenium*. The first structure at the end of the ascent into the *porticus* 

was a three-niched fountain on the left and a basilica on the right. The fountain is a marble basin in front of three niches (semicircular central niche and two flanking rectilinear). The side niches were clad in marble, while the central one included blue glass tesserae in its vault. There are also remains of a now fragmentary inscription, perhaps alluding to the role of the benefactor Mindia Matidia. There were also two statues of Venus Marina in the side niches, with a statue of a reclining River Nile, which had a channel for the display of water.

### **1.139 Sufetula** (Sbeitla, Tunisia) **Dionysus Riding Panther Fountain Sculpture**

Antonine or earlier Other (*pulpitum*) 23.0 m (orchestra diameter), 31.5 m (*pulpitum* length), Entertainment setting (theater, *pulpitum*) *References*: Fuchs 1987, 143; Sear 2006, 285.

In the middle exedra of the *frons pulpiti*, would have been a statue of Dionysus riding a panther, which would have been part of a water-display.

# **1.140 Tarraco** (Tarragona, Spain) Fig. 137 **Theater** *Postscaenium*

Augustan-Flavian periods Other (*postscaenium*) ca. 60 m by 65 m (west *postscaenium*), ca. 25 m (façade of water-display of west *postscaenium*) Entertainment setting (*postscaenium*) *References*: Sear 2006, 270; Mar et al. 2010; Mar et al. 2012, 286-327.

On the west side of the *postscaenium*, the fountain area near the theater was a small room, set into a façade decorated with pilasters. The room and façade would have opened onto a large courtyard, which has evidence for at least pilasters on the edges, and perhaps also covered as a true *porticus*.

# **1.141 Tergeste** (Trieste, Italy) *Frons Pulpiti* Waterspouts

Late first century CE Other (*frons pulpiti*) 20.34 m (orchestra diameter), 33.25 (*pulpitum* length) Entertainment setting (theater, *frons pulpiti*) *References*: Verzár-Bass 1991, 193; Sear 2006, 180.

The *frons pulpiti* was equipped with spouts, statues (including a *genius* of the seasons), and drains. In addition, the exedrae of the stage front at Tegeste would have been stuccoed and painted red, two of which were curved and six were rectangular. In the

center of the orchestra, a marble slab, decorated with two rows of marble inlay, would have been a fountainhead, dated to the Trajanic period. There is terracotta piping running underneath the orchestra to the opening in the center, though it is unclear whether there was indeed a basin on top, in order to facilitate the display of water.

### **1.142 Thamugadi** (Timgad, Algeria) Figs. 45, 47 **Macellum Water-Display**

Trajanic Niche fountain 2.27 m wide space for the basin Civic (macellum) *References*: De Ruyt 1983, 198-203.

The central space of the market is broken into two spaces, with two colonnaded islands. The semicircular wall of the islands is then mimicked by the back wall of shops of the macellum. At the intersection of the two rows of shops is a niche with a basin in the back wall. One must ascend two steps to enter a space 2.27 m wide, with a semicircular basin at the back.

## **1.143 Thamugadi** (Timgad, Algeria) Water Pipes on *Frons Pulpiti*

Antonine Other (*frons pulpiti*) 30.60 m by ca. 0.80 m (*proscaenium*), 1.27 m (*proscaenium* height) Entertainment setting (theater, *frons pulpiti*) *References*: Formigé 1923, 58, n. 2; Caputo 1959, 57; Fuchs 1987, 142; Sear 2006, 274.

Water pipes were found in the *frons pulpiti*, suggesting a water-display. Three curved and two rectangular exedrae were found on the *frons pulpiti*.

### **1.144 Thignica** (Aïn Tounga, Tunisia) Waterproof Basins in front of the *Frons Pulpiti*

Imperial Other (*frons pulpiti*) 3.0 m (basin width), 13.8 m (orchestra diameter) Entertainment setting (theater, *frons pulpiti*) *References*: Lachaux 1979, 124; Sear 2006, 286.

There is waterproof cement lining two rectangular basins, found between the orchestra and scene building. Sear (2006) states that there is a line of stones (0.30 m high) around the basins.

### 1.145 Thuburiscum Numidarum (Khamissa, Algeria)

#### Drains and Channels around Frons Pulpiti

Late second-early third century CE Other (*frons pulpiti*) 43.97 m by 1.49 m (*proscaenium*), 1.19 m (*proscaenium* height) Entertainment setting (theater, *frons pulpiti*) *References*: Gsell and Joly 1914, 106; Lachaux 1979, 131, Fuchs 1987, 143; Sear 2006, 286-287.

Drains were found around the *frons pulpiti*, suggesting a water-display. Three curved and four rectangular exedrae on the *frons pulpiti*, columns between the exedrae. Sear (2006) states that a drain from the middle of the orchestra under the central niche of the *proscaenium* and the stage.

### **1.146 Tusculum** (Italy) Channels in the *Scaenae Frons*/Orchestra

Late Republican/early Augustan Other (*scaenae frons*/orchestra) 17.5 m (orchestra diameter), 34.0 m (*pulpitum* length) Entertainment setting (theater, *scaenae frons*/orchestra) *References*: Fuchs 1987, 142; Sear 2006, 141.

Channels were found around the *frons pulpiti*/orchestra area, suggesting a water-display. Two curved exedrae on the *frons pulpiti*.

# **1.147 Ura/Olba** (Cilicia, Turkey) **Fountain near Theater**

Early third century CE Fountain house ca. 19.35 m by 14.90 m (*camera*), ca. 13.60 m by 1.10 m (fountain basin), ca. 9.00 m (preserved height) Entertainment setting (near theater) *References*: Dorl-Klingenschmid 2001, cat. no. 118; Aristodemou 2011, 177; Richard 2012, cat. no. 78.

A large *camera* type fountain house leading to the theater.

#### **1.148 Verona** (Itlay) Fig. 132 *Labra*, Channels in the *Scaenae Frons*/Orchestra

Mid-late first century CE Other (*scaenae frons*/orchestra) 0.25 m by 0.35 m (*labrum* dimensions), 30.70 m (orchestra diameter), 57.00 (*pulpitum* length) Entertainment setting (theater, *scaenae frons*/orchestra) *References*: Frova 1973; Fuchs 1987, 117 142; Sear 2006, 180-181.

Channels were found around the *frons pulpiti*/orchestra area, suggesting a water-display. There was also a curvilinear *labrum*, with a crouching hooved animal on top of the rim, all of which probably rested on a pilaster.

# **1.149 Volubilis** (Morocco) Fig. 69 Arch of Caracalla

216-217 CE Other (niches on an arch) Arch is 9 m (high), 19 m (wide); some reconstructions have the height at 13.75 m Civic *References*: Thouvenot 1949, 39-41; Domergue 1963-1964; Romanelli 1970, 134-135; Letzner 1999, cat. no. 441; Riße 2001; Schmölder-Veit 2009, 152-154; Lamare 2014, 2.30-35, cat. no. 5.

The arch is situated near the center of the city, in direct sight lines of the Forum Novum and the Tangier Gate (via the Decumanus Maximus that heads east). The form of the arch is one-bayed. On the east side, water-displays would have been located in the piers there, between two columns, and flowing into basins below. It is unclear if there were waterdisplays on the west side. The attic would have been decorated with reliefs related to abundance, such as personifications of the seasons.

# **1.150 Xanthos** (Lycia, Turkey) Figs. 99, 121 **Letoön**

128-131 CE Exedra ca. 35 m by 35 m Religious (source sanctuary, site of imperial cult) *References:* Balland 1981, 57-66; Agusta-Boularot 1997, 294-298; Des Courtils 2001; Aristodemou 2012, cat. nos. 220-223; Longfellow 2012, 116-151.

Located outside of Xanthos, the Letoön was a cult site associated with Leto, along with the local nymphs (the Elyanas) and, later, the imperial cult. The sanctuary underwent various building phases over the centuries from 400 BCE on. The local Claudius Marcianus, the priest of the imperial cult of the site, between 128-131 CE installed a nymphaeum. The structure contains a semicircular portico, which opens on to an open basin of the natural spring water. In the back is a small rectangular space, which was believed to have been used for imperial cult activities, given that a statue base of Claudius Marcianus was found there. The structure immediately abuts the Sacred Road, which would have provided access to the sanctuary for pilgrims.

1.151 Zaghouan (Tunisia) Figs. 99, 100, 111

#### **Source Sanctuary Complex**

Probably built between 146-159 CE and dedicated in 160-161 Other (source sanctuary type)

Religious (source sanctuary) *References*: Rakob (1969; 1969-1970; 1974); Gros 1996, 442; Wilson 1998; Longfellow 2011, 146-147.

Located on Mount Zaghouan, outside of Carthage, the water from this source supplied the city of Carthage below. At the south end of the complex is a small barrel-vaulted shrine with a statue base, accessed through frontal steps. On axis with the shrine is a figure-eight basin, at one of the lower entrances to the sanctuary. Water would have been channeled from the spring, where the shrine was located, into the front basin, from where it went to Carthage by means of an aqueduct. Steps flanking the basin would have allowed visitors to approach the central space and the vaulted portico in the Corinthian order, which ended with the central shrine. The wall of the portico would have been lined with niches to allow for statues to be placed in them. The wall was also punctuated by pilasters that would have carried the groin vaulting of the portico.

#### **Appendix 2: Nymphaeum Inscriptions**

The following appendix is a list of the inscriptions that mention nymphaea or related structures in the present study. The goal of the appendix is to provide to the reader the relevant inscriptions presented the text in an easy-to-access list. The appendix is organized numerically by the CIL, the IG, the IGRR, etc. The information included in each entry is as follows: publication number (e.g., CIL, etc.); location (ancient site, modern site name, and modern country); date (when known); references; inscription in its original text; translation (done by the author, with the assistance of Prof. Elizabeth A. Meyer of the University of Virginia, unless otherwise stated); notes (where relevant).

*In the dissertation text, the following examples will be referenced by the following in-text citation* (**App. No. 2.1**).

**2.1** *CIL* **2.3786** Liria, Spain *References*: Letzner 1999, 52; Arnaldi 2006, 82.

Templum Nympharum Q. Sert(orius) Euporistus Sertorianus et Sert(oria) Festa uxor a solo, ita uti exculptum est, in honorem Edetanorum et patronum suorum s(ua) pecunia fecerunt.

Q. Sertorius Euporistus Sertorianus and Sertoria Festa, (only) his wife, as it has thus been carved from the ground up, in honor of the Edetani and of their patrons, made [this] temple of the nymphs with their own money.

### 2.2 CIL 3.1958

Salona, Dalmatia Imperial *References*: Arnaldi 2006, 82.

Aedem N[ymphis?] et Silvano Aug(usto) sac(ram) L. Aprofennius Circitor v(oto) s(oluto) p(osuit).

L. Aprofennius Circitor dedicated this Temple as sacred to the Nymphs and Silvanus Augustus, in fulfillment of his vow.

### 2.3 CIL 3.10496 = ILS 7124

Aquincum, Pannonia Inferior (Budapest, Hungary) Septimius Severus, early third century CE *References*: Settis 1973, 731; Lavagne 1988, 285; Ghiotto 1999, 83; Fishwick 2002, 277, 283.
C. Tit(ius) Antonius Peculiaris dec(urio) col(oniae) Aq[uinci] dec(urio) m(unicipii) [Sin]g(iduni), II vir, flam(en), sacerdos arae Aug(usti) n(ostri) p(rovinciae) P(annoniae) infer(ioris) nymp(heum) pec(unia) sua fecit et aquam induxit.

C. Titius Antonius Peculiaris, *decurio* of the colony of Aquinicum, *decurio* of the *municipium* of Singidunum, *duovir, flamen*, priest of the altar of our Augustus of the province of Pannonia Inferior, made [this] nymphaeum with his own money and supplied the water.

Priest of the imperial cult. Cf., *CIL* 3.10495/*ILS* 7124a, which lists Antonius Peculiaris' benefaction in the forum.

**2.4** *CIL* **3.13566** = *IC* **4.334** Gortyn, Crete Second century CE (Commodus) *References*: Settis 1973, 727; Letzner 1999, 52, 65; Aristodemou 2011, 193. See also **App. No. 1.60**.

[D]ivi Ne[rvae] / [abnepos? M. A]u[r]elius / [Commodus A]ntoninus A(ug) / (T)rib Pot(estas) / [P P] viam a / usque ad nym/[pheum] ex pecuni(a) / [D]eae Dict[n-] / [nae fieri i]ussit.

M. Aurelius Commodus Antoninus Augustus, grandson of the deified Nerva, holding the tribunician power, *pater patriae*, ordered a road to be made up to the nymphaeum, to be built from the treasury of Dea Dictina.

The fragmentary nature of the inscription does not indicate which time Commodus held the tribunician power.

### 2.5 CIL 6.414b, ILS 2.1.4315b

Sanctuary of Jupiter Dolichenus, Rome 191 CE *References*: Settis 1973, 729; Letzner 1999, 52, 65.

Item auxit / [s]alvo imp. [L. Aur(elio) Commodo Ant(onio)] pio Fel(ice) Aug(usto) n(ostro) / M. Caecilius M(arci) f(ilius) Iul(ia) Rufus Concord(ia, centurio) leg(ionis tertiae) Cyrenaicae, ex corniculario / Aeli Iuliani pr(aefecti) vig(ilum) tetrastylum nymphaeum,/ crateram cum columella et altarium cum columella / marmorea et aliam columellam, item orbiculum cum colu/mella et cetera ornavit I(ovi) D(olicheno) d(onum) d(edit). Dedicavit per / Clodium Catullum pr(aefectum) vig(ilum), adsistente Orbio Laetiano sub pr(aefecto) et / Castricio Honorato trib(uno) coh(ortis secundae) vig(ilum) pr(idie) kal(endas) Aug(ustas) / Aproniano et Bradua co(n)s(ulibus); c(uram) a(gente) Herculanio Liberale va[l(etudinario)]. Likewise he added: M. Caecilius, son of Marcius, from the Julia tribe, Rufus Concordia, centurion of the third Cyrenaic legion, honored our saved emperor L. Aurelius Commodus Antonius Pius Felix Augustus, former head clerk of Aelius Julianus, prefect of the guards, dedicated a tetrastyle nymphaeum, a crater with a small column and an altar with a little marble column and another little column, and similarly decorated with an *orbiculum* with a small column and other things, as a gift to Jupiter Dolichenus. He dedicated through Clodius Catullus, prefect of the guards, with Orbius Laetianus, sub-prefect, and Castricius Honoratus, tribune of the second cohort of the guards, on the day before the Kalens of August, when Apronianus and Bradua were consuls; Herculanius Liberale, the sickbay attendant, was taking care [seeing that it was done].

# 2.6 *CIL* 6.1728a

Rome ca. 391 CE (post Diocletian) *References*: Neuerburg 1965, 23; Lavagne 1988, 285; Ghiotto 1999, 78.

*Fl(avius) Philippus v(ir) c(larissimus) praefectus urbi nymphium sordium squalore/ foedatum et marmorum nuditate deforme | ad cultum pristinum revocavit.* 

Flavius Philippus, *vir clarissimus*, urban prefect, restored [this] nymphaeum, defiled with the squalor dirt and made ugly by the nakedness of its marbles, to its pristine condition.

An urban prefect restores a fountain on the Subura. Connected with *CIL* 6.1728b (**App. No. 2.7**) and 6.31912 (**App. No. 2.11**)

### 2.7 CIL 6.1728b

Rome ca. 391 CE (post Diocletian) *References*: Lavagne 1988, 285; Ghiotto 1999, 78.

*Flavius Philippus vir clar/issimus praefectus urbi nymfi/um sordium squalore foeda/tum et marmorum nuditate | deforme ad cultum pristinum | revocavit.* 

Flavius Philippus, *vir clarissimus*, urban prefect, restored [this] nymphaeum, defiled with the squalor dirt and made ugly by the nakedness of its marbles, to its pristine condition.

Connected with CIL 6.1728a (App. No. 2.6) and 6.31912 (App. No. 2.11).

**2.8** *CIL* **6.31893** Rome 375-376 CE *References*: Letnzer 1999, 56, 72-73; Orlandi 2004, 28. See also **App. No. 1.116**. Ad Nymf Alexandri

At the Nymphaeum Alexandri

Possibly connected to CIL 6.31898 (App. No. 2.8).

2.9 CIL 6.31898

Rome 375-376 CE *References*: Letnzer 1999, 56; Ghiotto 1999, 80-81; Orlandi 2004, 28. See also **App. No. 1.116**.

[ad n]umfium

At the nymphaeum

Possibly connected to CIL 6.31693 (App. No. 2.8).

2.10 CIL 6.31901

Rome 375-376 CE

*Per Laurentiu[m et] |nymphicum |et veneren |per Crescentione[m] |[...]nenses et [...]zatei[...] |per Gorgon[ium]* 

Through the Laurentine and the place of the nymphs and the (place of Venus); through the Crescentionine (and) the (-)nenses and (...) through the Gorgonium

Part of the Edict of Terracius Bassus?

**2.11** *CIL* **6.31912** Rome ca. 391 CE (post Diocletian) *References*: Lavagne 1988, 285; Ghiotto 1999, 78.

*Flavius Philippus v(ir) c(larissimus) praef(ectus) urbi nymphium sordium squalorem foedatum et marmorum nuditate deformem ad cultum pristinum revocavit.* 

Flavius Philippus, *vir clarissimus*, urban prefect, restored [this] nymphaeum, defiled with the squalor dirt and made ugly by the nakedness of its marbles, to its pristine condition.

Connected with *CIL* 6.1728a (**App. No. 2.6**) and 6.1728b (**App. No. 2.7**). This is, in fact, the third inscription in that series of inscriptions.

## 2.12 CIL 8.2657

Lambaesis, Numidia, Africa 247-248 CE *References*: Settis 1973, 713; Gros 1996, 439; Letzner 1999, 55; Lamare 2014, 2.291-292, ins. no. 10.

[Pro salute Imppp(eratorum) Caesss(arum) --- M.] Aur(elius) Cominius Cassia[nus leg(atus) Auggg(ustorum) pr(o) pr(aetore) c(larissimus) v(ir)] septizonium marmorib(us) musaeo et omni cultu vetustate dilabsum restituit.

For the health of the emperors Caesares [names missing], M. Aurelius Cominius Cassianus, *legatus Aug. pro praetor*, *vir clarissimus*, renovated the septizonium, decayed because of old age, with marbles, a museum and all its decorations.

### 2.13 CIL 8.2658

Lambaesis, Numidia, Africa 226 CE *References*: Gros 1996, 439; Wilson 1998, 92; Letzner 1999, 55, 65; Arnaldi 2004, 1358-1360; Lamare 2014, 2.290-291, ins. no. 9.

[I]mp(erator) Caes(ar) [divi Seve]ri [ne]po[s] divi mag[ni Antonini filius M. Aurelius Alexander pius feli]x Augustus pont[ifex maxi]mus tribuniciae potestatis V co(n)s(ul) II pate[r patriae] | aquam Lu[---]nsem Mellariensem [in civitatem ab originibus] suis induxit aquae ductus et nymphaei opu[s] | villae Mi[---]topensem columb(os) [milites leg(ionis) III Aug(ustae?) numini maiestatique] eius dicati[ssimi me]nsib(us) VIII per m(ilia) p(assuum) XXV feceru[nt].

Imperator Caesar, grandson of the deified Severus, son of the great deified Antoninus, M. Aurelius Alexander Pius Felix Augustus, Pontifex Maximus, holding the tribunician power for the fifth time, consul for the second time, Pater Patriae, brought the Lu[-]nsa Mellariensa water into the city (i.e., of Lambaesis) from its springs; the soldiers, (stationed at?) the Villa Mi(...)topenses, of the third Legion Aug., absolutely devoted to the *numen* and the *maiestas* of the emperor, did the work of the aqueduct and the nymphaeum over eight months and 25 miles.

### 2.14 CIL 8.2659

Lambaesis, Numidia, Africa 222-235 CE *References*: Wilson 1998, 92; Lamare 2014, 2.293, ins. no. 11.

[[M. Aurellius Severus Alexander pius]] / [[(aquas) Alexandrianas]] Lambaesita(nis dedit).

M. Aurelius Severus Alexander Pius gave the Aqua Alexandrina to the Lambaesians.

**2.15** *CIL* **8.2660** Lambaesis, Numidia, Africa 290-293 CE *References*: Lamare 2014, 2.294-295, ins. no. 12.

Impp(eratores) Caess(ares) C. Aur(elius) Valerius Diocletianus p(ius) / f(elix) invictus Aug(ustus) et M. Aurelius Valerius Ma/ximianus p(ius) f(elix) invictus Aug(ustus) aquae ductum / Titulensem ab origine[m] usque ad civita/tem longa vetustate corruptum / per Aurelium Maximianum v(irum) p(erfectissimum) p(raesidem) p(rovinciae) N(umidiae) ad melio/rem statum additis limis restituerunt curantibus Ae/milio Lucino augure cur(atore) rei p(ublicae) et Iulio Aurelio.

Imperator Caesares C. Aurelius Valerius Diocletian Pius Felix Invictus Augustus and M. Aurelius Valerius Maximianus Pius Felix Invictus Augustus restored the Titulensa aqueduct, to a better state here, corrupted by long old age and having been added with filth, through Aurelius Maximianus, *vir clarissimus*, governor of the province of Numidia, under the care of the augur and curator of the *rei publicae* Aemilius Lucinus and Julius Aurelius.

### 2.16 CIL 8.2661

Lambaesis, Numidia, Africa 270-75 CE *References*: Letzner 1999, 55; Lamare 2014, 2.295-296, ins. no. 13.

Aquam Titulensem quam ante annos / plurimos Lambaesitana civitas in/terverso ductu vi torrentis amiserat / perforato monte instituto etiam a / solo novo ductu Severinius Apronianus v(ir) p(erfectissimus) p(raeses) p(rovinciae) N(umidiae) / pat(ronus) col(oniae) restituit cur(ante) Aelio Rufo v(iro) e(gregio) fl(amine) p(er)p(etuo) cur(atore) r(ei) p(ublicae).

Severinius Apronianus, *vir perfectissimus*, governor of the province of Numidia, patron of the colony, restored the Titulensa aqueduct, which the Lambaesis *civitas* has lost many years ago, the direction [of the aqueduct] having been directed by the force of the torrent; (he restored it) with a new *ductus* established from the ground up, a mountain having been pierced; under the curatorship of Aelius Rufus, *vir egrregius*, perpetual *flamen*, curator of the *rei publicae*.

**2.17** *CIL* **8.2662** Lambaesis, Numidia, Africa 226 CE *References*: Ballentine 1904, 95; Ghiotto 1999, 81-82; Arnaldi 2004, 1358-1360; Lamare 2014, 2.296-297, ins. no. 14.

Numini aquae/ Alexandrianae. / Hanc aram Nymphis extruxi, / nomine Laetus, / cum gererem fasces patriae / rumore secundo: / plus tamen est mihi gratus / honos, quod fascibus annus / is nostri datus est, quo sanc/to nomine dives / Lambaesem largo perfu/dit flumine Nympha.

To the numen of the Aqua Alexandrina. I, Laetus by name, have raised this altar to the nymphs, when I was managing the *fasces* of the fatherland by popular acclaim for the second time: this honor was nevertheless even greater for me because the year in which I held the *fasces* was the one in which, by her sacred *numen*, the abundant nymph flooded Lambaesis with a great river.

Found on a fountain.

### 2.18 CIL 8.2663

Cirta, Algeria Unknown date: Severan? *References: CIL* 8.6982; Maass 1902, 56; Settis 1973, 732; Aupert 1974; Lavagne 1988, 285; Wilson 2008, 307; Lamare 2014, 2.286-288, ins. no. 6. See also **App. No. 1.31**.

... sub ins[crip]tione [no]minis Longani. / [I]tem in Nymphaeo in corona summa / [in] circumitu litterae n(umero) XXXX auro inlumi/natae; hederae distinguentes incoctiles / n(umero) X. Scyphi dependentes auro inluminati n(umero) VI. / Cantharum auro inluminatum. Statuae / aerae n(umero) VI et Cupido marmoreae n(umero) VI. / Silani aerei n(umero) VI. Manualia n(umero) VI.

[...] Under the inscription of the name Longanus. Likewise, on the nymphaeum, on the highest corona, running in a circle, are forty letters inlaid in gold letters; garlands decorating overlaid (with metal) vessels, 10 in number. Skyphoi, hanging down, inlaid in gold, six in number. A cantharus inlaid in gold. Bronze statues, six in number, and marble statues of Cupid, six in number. Bronze Silenoi, six in number. Hand towels, six in number.

See a similar fountain of Mummius in Corinth (Pliny NH 35.151).

### 2.19 *CIL* 8.23673 = *ILS* 5732a

Ksar Mduga (Ksar Madoudja), Africa Fifth century CE *References*: Letzner 1999, 50; Arnaldi 2004, 1360.

Intus aque dulces biboque sedilia sax<o> Nimfarum que Florenti fundata labores de donis dei.

Inside, the sweet waters and seats of living rock of the nymphs, which were begun as the labors of Florentus, as a gift for the god.

An inscription from a lost monument. It was the back part of a basin, where the water came in a spring. The text is based on the *Aeneid* (1.167-168): *intus aquae dulces vivoque sedilia saxo, nympharum domus*. Without the text of the *Aeneid*, this inscription would be wholly illegible.

### 2.20 CIL 8.26568 (= CIL 8.1490)

Thugga, Proconsularis, Africa 375-378 CE *References*: Settis 1973, 731; Lavagne 1988, 285; Ghiotto 1999, 83; Letzner 1999, 52; Lamare 2014, 2.335-337, cat. no. 45.

Ddd(ominis) nnn(ostris) Valente Gratiano et Valen[tini]ano Auggg(ustis) proconsu[latu et i]nstantia Decimi Hilariani Heserii v(iri) c(larissimi) v(ice) s(acra) i(udicantis) canali qui [vetustate labsus ...]alis aquae meatibus non serviebat ad integram f[ormam restituto ---] | nymfium etiam quod aquas red[ucta]s in usum civitatis effun[deret] porticibus circumiectis incohavit perfecit excoluit L. Napotius Felix [Antonianus ---] ex curatore rei p(ublicae) pro ho[n]ore flamonii perp(etui) gratiam pat[riae ---].

When Valens, Gratian, and Valentinian, Augusti, in the proconsulship and at the urging of Decimus Hilarianus Hesperius, *viri clarissimi*, substitute for the judge of sacred matters, by the worn channel, which, ruined by age, [something] of water moved, was not preserving (itself) in complete form [...], L. Napotius Felix Antonianus, former curator of the *rei publicae* for the honor of the perpertual *flamen* and gives gratitude to the fatherland, started, finished, and tended even the nymphaeum (porticoes having been placed around it), which poured forth water, returned to the use of the city

## 2.21 CIL 9.4969

Cures Sabini, Correse, Italy Third-fourth century CE *References*: Settis 1973, 731.

[....]us Atticus Patronus / [..]sab[...]suis pecuniis nimpheum / cur(am) ag(ente) r(ei) p(ublicae) cur(atore) S. Octavio

[...]us Atticus Patronus [... gave] a nymphaeum with his own money [...curators?]

**2.22** *CIL* **10.7017** = *IG* **14.453** Catania, Sicily

Late third century CE *References*: Settis 1973, 721-731; Ghiotto 1999, 82; Letzner 1999, 57, 65.

[Plurium saeculor]um in[iur]ia nymphaeum [informi l]abe foedatum, cuius etiam aqua [licet antiq]uo meatu tamen corruptione [formaru]m ita fuerat poll[u]ta, ut quondam [quasi nox]am haurientibus inferre videretur, [providenti]a Fl(avii) Arsini v(iri) c(larissimi) consularis p(rovinciae) S(iciliae) [restitu]tum adque usui populi splendidissimi [Catinensiu]m redditum reformatumque est [cur]ante Fl(avio) Ambrosio v(iro) p(erfectissimo) d(efensore?) perp(etuo?).

Βαιὸν ἐμὲ Νύμφαις ἔργον κάμ[εν..... | οὐ γάρ μοι σθεναρὴν χεῖρ'ἐπέ[οικε φέρειν· | ἀλλ'ἐν ἐμοὶ καμάτων εὖρεν τέ[λος, εὖρε δὲ τύμβον | ἀγχόθι λαινέης αὔλακος ὑδρο[φόρου, | τὴν αὐτὸς ποίησεν ἐς ἠέρα πολλ[ὸν ἀείρας | νᾶμα φέρειν καθαρὸν ἐνναέται[ς Κατάνης. | Ἐννοίου.

By the injury of many centuries, [this] nymphaeum was defiled by ugly slippage, of which (nymphaeum) the water had been so polluted as much by ancient movement, as by a decay of its shape that once it seemed as if a delict were perpetuated on those drawing water. By the providence of Flavius Arsinius, *vir clarissimus*, of the consular province of Sicily, it was restored and returned to the use of the most splendid people of Catania, and it was rebuilt when, Flavius Ambrosius, *vir perfectissimus*, defender in perpetuity, was taking care.

They built me, a small structure, for the nymphs [...], for it is not proper for me to carry the strong hand: but in me he found the end of toils, discover the tomb near the stone furrow of the aqueduct; he himself made it, having lifted much into the air, to bring clear running water to the inhabitants of Catania. Keep this in your thoughts.

### 2.23 CIL 11.2595

Clusium, Montalcino, Italy Imperial *References*: Chellini 2002, 161; Arnaldi 2006, 80.

*Nymphis sacr(um)* L Trebonius Pater[o]n(i) Lib Fortunatus voto posuit signum cum basim et aedem f(ieri) cur(avit)

Sacred to the nymphs, L. Trebonius Fortunatus, freedman of Pateronus, because of a vow, put up a statue with a base and undertook that there should be a shrine.

The inscription, on an altar, was found in the hot springs of Vignoni.

**2.24** *CIL* **11.6068** = *ILS* **5782** Urbino, Italy Unknown date References: Settis 1973, 731; Ghiotto 1999, 76, 83.

*C* Vesidieno *CN* / Basso aed(ili) IIII vir iur(is?) dic(cundi) / IIII vir quinq(ennali) / publice / d(e)d(icavit) / quod aquam novam conquirendam et in municip(ium) perducend(am) et nymphaeum faciend(um) pec(unia) pub(lica) c(uravit)

To C. Vesidienus, grandson of Gaius Bassus, aedile, *iuris dicundi* (for the speaking of the law), *quattuorvir quinqennalis*, dedicated at public expense; because he undertook at public expense the searching for new water, its directing into the municipality, and the making of a nymphaeum.

This was evidently a statue base.

### 2.25 CIL 12.2926

Ucetia, Uzès, France Unknown date *References*: Arnaldi 2006, 82.

Sex(tus) Pompeius [d(ictus)] cognomina Pandus, quoius et hoc ab avis contigit esse solum, aediculam hanc Numphis posuit, quia saepius ussus hoc sum fonte sexex ta(m)bene quam in(v)enis.

Sextus Pompeius, called according to his cognomen 'Pandus,' whose land this happened to be from his grandparents, built this building/chapel to the Nymphs, because I used this more often, as well as you find it.

### 2.26 CIL 13.4325

Divodurum, Metz, France First-second century CE *References*: Settis 1973, 731; Burnand 1983; Lavagne 1992, 218; Leveau 1991; Ghiotto 1999, 83; Letzner 1999, 55, 65. See also **App. No. 1.42**.

[In h]onorem domu[s Augustae | [---] Carat]hounus Sex(tus) Massius Gen[- | -]lianus C(aius) Celsius Matt[us | IIIIII viri Au]gustales aquam ab origin[e | sua usque Diuodurum | perduxeru]nt et nymphaeum cum su[is omnibus ornamentis | et] por[ticu suo impendio dedicaverunt.]

In honor of the *domus Augusta*, [---] Carathounus, Sextus Massius Gen-, ---lianus, Caius Celsius Mattus, *seviri* Augustales, introduced the water from its spring to Divodurum and dedicated at their own expense a nymphaeum with all its ornaments and a *porticus*.

This is the only known inscription naming a 'nymphaeum' in Roman France. The text here follows that of Burnand (1983), which has come to be the most commonly accepted.

**2.27** *CIL* **14.300** Ostia, Italy Period of Theodoric *References*: Ghiotto 1999, 84.

Arpagius Lupus v[ir clarissimus (?)] / petentib[us] civib[us] locum ca[] / ad splendorem nynfii sua om[ni impensa] / a solo constructum popu[lo] / largitus est qua celerit[ate] /[publica] est vota [executus].

Arpagius Lupus, *vir clarissimus*, the citizens having made entreaty, bestowed the place [...] to the splendor of the nymphs, built from the ground up with all his own money, having fulfilled a vow made publicly with (great) celerity.

On the reverse of this inscription is an inscription of Acholius Abydus, a prefect of the *annonae urbis* in Rome (*CIL* 14.157).

### 2.28 IGRR 3.1273

Soada, Syria 104-105 CE *References*: Settis 1973, 708-709; Ghiotto 1999, 79; Longfellow 2011, 99-100; Rogers 2013, 156.

Αὐτοκράτορι Νέρουα Τραιανῷ Καίσαρι, Σεβ(αστοῦ) υἰῷ, Σεβαστῷ | Γερμανικῷ Δακικῷ τὸ τ[έμενος] καὶ τὸ νύμφαιον ἀφιέρωσεν ἡ πόλις, τὸν ἄγωγον τῶν ὑδάτων [κατασκευάσασα], | ἐπὶ Α. Κ[ορωηλίου Πάλμα] πρεσβ(ευτοῦ) Σεβ(αστοῦ) ἀντιστρ(ατήγου), | [ἐπισκοπούσης] φυλῆς [Σομαιθηνῶν].

The city, having provided a canal of waters [aqueduct], dedicated a *temenos* and a *nymphaeum* to the Emperor Nerva Trajan Caesar, son of Augustus, Augustus Germanicus Dacicus, in the magistracy of A. Cornelius Palma, elder and proconsul of the emperor, under the oversight of the tribe of the Somaithenoi.

**2.29 IGRR 3.1276** Soada, Syria 187 CE

Έτους η κυρίου | Καίσαρος Μ. [Κομόδου] Άντωνίνου, ἐπὶ Δο|μιττίου Δέξτρου ὑ|πατικοῦ ἡ πόλις τοὺς | ἀπὸ τῶν πηγῶν ἀγω|γοὺς Ἄρρων, Καινά|θων, Ἀφετάθων, Ὀρ|σούων, ἐπεσκεύα|σεν καὶ κατεσκεύσεν, καὶ τὸν ναὸν | τῷ Ἀθηνῷ ἐν Ἄρ|ροις σὺν τοῖς ἀγάλ|μασιν ἀνέστησε, | ἐπισκοπούσης φυ|λῆς Σομαιθηνῶν.

In the eighth year of the master Caesar M. Commodus Antoninus, when Domitius Dexter was consul, the city got ready and equipped the canals of springs [aqueducts] of the Arra,

Caenatha, Aphetatha, and Orsoua, and set up a temple to Athena in Arra with statues, under the oversight of the tribe of the Somaithenoi.

### 2.30 Argos Inv. E. 266

Argos Second half of second century CE *References*: Settis 1973, 712; Walker 1987, 64; Marchetti and Kolokotsas 1995, 110-115; Piérart 1999, 246; Richard 2012, 6; *SEG* 37.282, 48.391, 49.358. See also **App. No. 1.11**.

[...τ]ῶν πήγων καὶ τῶν νυμφαῖον μετὰ τῶν δοχε[ίων]

"of the springs and of the nymphaeum in the midst of the reservoir"

Found on the Monopteros of Argos agora; perhaps referencing the Hadrianic aqueduct up the hill. At the beginning of the fragment, Settis reconstructs "the water of the springs" and Walker reconstructs the "aqueduct of the springs."

### 2.31 Lanckoronski Vol. 1, Ins. No. 107

Side, Pamphylia, Turkey Unclear, perhaps end of third century CE, or of the era of Diocletian or later *References*: Foss 1977.

Βρυωνιανὸν Λολλιανὸν [τὸν κράτιστον] | δουκηνάριον πρειμιπειλά[ριον, ἀπὸ] | ἐπιτρότων συγγενῆ, ὑπατι[κῶν], | κτίστην καὶ φιλόπατρι· [γερουσία τῶν] | Μεγαλοπυλει τῶν. | Νηοῦ Νυμφάων σε παρασχεδὸν ἐστήσα[ντο] | ἡγεμόνες πυλέων, Κτίστιε, τῶν [μεγάλων,] | τερπόμενον ῥείθροισι διειπετέος πο[τάμοιο] | θεσπεσίῃ τ'ἠχῇ ὕδατος ἀενάου· | ὑψηλῇ κραδίῃ γὰρ ἐδείμαο σοῖσι τέλεσσ[ι] | αὐτῶν ἐκ πηγῶν ὁλκὸν ἀπειρέσιον. | Εὐτύχι κτίστι.

Bryonianus Lollianus, the strongest ducenarius, primipilarius, kinsman from procurators and consuls, founder and lover of his city: the *gerousia* of the Megalopulians [honors Bryonianus]. The leaders of the great gates built for themselves a structure of the temple of the nymphs, o Founder, delighting with the streams of the conversing river and with the divinely sounding roar of the ever flowing water: for the endless furrow from these springs you made by your construction with a lofty heart. Luck to the founder.

Not much is known about Lollianus (including how he obtained his prominence in Side, whether by his family or working his way through the army and marrying well, or the dates he was active); he was married to Quirinia Patra, and their son was Bryonianus Jasonianus Seleucus. Quirinia received the name of a nymph, Pegasis, as a signum.

**2.32** *RevArch* **34** (1949) 186, no. 49 Henchir-el-Left (Tunisia)

Constantinian *References*: Lavagne 1988, 285.

[Jussu/pro salute ddd. nnn. Constant]ini maximi....[...]litum fastidi(o) opus erectum est deductum(que) longo tractu (a) nimfio. [Haec ab illo et ...]lio Florentio v(iro) p(erfectissimo) proc(uratore) pat(ronis) devotissimis dedicata sunt.

By order/for the health of our *domini*, Constantine, Maximi[...], the work (with a pediment?) was constructed, and led forth over a long distance from the nymphaeum. These things were dedicated by this one and [by...] Florentinus, a *vir perfectissimus*, procurator, both men the most devoted patrons.

Modern Country	Total Examples
Algeria	6
Britain	1
Cyprus	1
Egypt	1
France	10
Germany	2
Greece	28
Israel	3
Italy	42
Jordan	4
Libya	3
Morocco	1
Portugal	2
Spain	8
Syria	6
Tunisia	5
Turkey	28
Total	151

# Appendix 3: Tables of Water-Displays Used in the Text

Table 1: Totals of each of the modern countries (17 in total) used in this study.

Context	Number of Examples
Civic Spaces	68
Religious Spaces	34
Entertainment-related Spaces	48
Total	

**Table 2:** Number of examples of water-displays based on their appearance in chapters of the text related to civic spaces (Chapters 3 and 4), religious spaces (Chapter 5), and entertainment-related spaces (Chapter 6).

6 Examples
1
2
2
1 (App. No. 1.31)
1 Example
1
1 Example
1
1 Example
1
10 Examples
3
3
1
2
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**Table 3:** Chronological Date Ranges of Examples of Water-Displays, divided by modern country.

Modern Country	Total
France	2
Greece	11
Italy	9
Spain	1
Turkey	7
Total	30

**Table 4:** Number of examples of water-displays found in fora and agoras, arranged by modern country (5 total). Of the above numbers the following sites have more than one water-display in its forum or agora: Argos (2), Corinth (5), Ephesus (4), Rome (8), Sagalassos (3).

Modern Country	Total
Algeria	1
Italy	2
Jordan	1
Total	4

**Table 5:** Number of examples of water-displays found in macella, arranged by modern country (3 total).

Modern Country	Total
Greece	1
Italy	3
Turkey	3
Total	7

**Table 6:** Number of examples of water-displays found in and around gates, arranged by modern country (3 total). The three examples from Italy come from the area around the Porta Capena of the early third century CE, which included the *fons Camenarum* (App. No. 1.108), Porta Capena (App. No. 1.117), and the Septizodium (App. No. 1.120), creating an urban node there.

Modern Country	Total
Greece	1
Italy	2
Morocco	1
Turkey	1
Total	5

**Table 7:** Number of examples of water-displays found in and around arches, arranged by modern country (4 total).

Modern Country	Total
France	1
Israel	1
Italy	4
Libya	1
Syria	1
Turkey	2
Total	10

**Table 8:** Number of examples of water-displays found at crossroads, arranged by modern country (6 total).

Modern Country	Total
Algeria	1
Egypt	1
Greece	3
Italy	1
Jordan	1
Turkey	1
Total	8

**Table 9:** Number of examples of water-displays at the entrances of religious sanctuaries, arranged by modern country (6 total).

Modern Country	Total
France	3
Germany	1
Greece	2
Italy	2
Syria	1
Tunisia	1
Total	10

**Table 10:** Number of examples of water-displays found in source sanctuaries, arranged by modern country (6 total).

Modern Country	Total
France	1
Greece	1
Italy	1
Portugal	2
Spain	2
Syria	1
Total	8

**Table 11:** Number of examples of water-displays found around areas dedicated to the imperial cult, arranged by modern country (6 total).

Modern Country	Total
England	1
France	1
Italy	1
Germany	2
Greece	1
Turkey	2
Total	8

**Table 12:** Number of examples of water-displays found in healing sanctuaries, arranged by modern country (6 total).

Modern Country	Total
Algeria	3
France	1
Greece	3
Israel	2
Italy	9
Jordan	1
Libya	1
Spain	3
Syria	2
Tunisia	4
Total	29

**Table 13:** Number of examples of water-displays found in theaters (i.e., on the *frons pulpiti*, in the orchestra, through the cavea), arranged by modern country (10 total).

Modern Country	Total
Cyprus	1
Greece	5
Italy	4
Jordan	1
Libya	1
Spain	2
Syria	1
Turkey	4
Total	19

**Table 14:** Number of examples of water-displays found in the vicinity of theaters (i.e., in the *postscaenium*, in the *parados*), arranged by modern country (8 total).

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Map 10 Map of Rome in the Time of Constantine:
Anna Perenna Site (A), *Lacus Orphei* (B), *Euripus* of Agrippa (C),
Stagnum Agrippae (D), Porticus Pompeiana (E), *Fornix Scipionis* (F),
Palatine Hill/Bagni di Livia (G), Septizodium (H), Porta Capena (I), *Fons Camenarum* (J), Meta Sudans (K), Nymphaeum Alexandri (L),
Imperial Fora (M), Baths of Trajan (N), Baths of Caracalla (O),
Naumachia of Augustus Site (P), Baths of Diocletian (Q).
(After Ancient World Mapping Center Map, "Rome in the Age of Constantine")

Figures







Figure 2a Flavian Meta Sudans, Rome (Longfellow 2011, Fig. 7)



**Figure 2b** Female Attendants around *Baetyl* Terracotta Plaque, Temple of Apollo, Palatine, Rome (Miller 2009, Fig. 6)

**Figure 3** Reconstruction of the *Nymphaeum* of Arsinoë II (McKenzie 2007, Fig. 84)



Figure 4 Plan, Theater of Pompey and *Postscaenium*/Porticus Pompeiana, Rome, Italy (*LTUR* 4, Fig. 24)



**Figure 5** Fountain Reconstruction, *Postscaenium*/Porticus Pompeiana, Theater of Pompey, Rome, Italy (Berg 1994, Fig. 44)



**Figure 6** Septizodium Reconstruction, Rome (Rome Reborn Project, University of Virginia)



Figure 7a Forum Plan: Triumphal Fountian (A), Glanum, France (After Bromwich 1993, 71)



**Figure 7b** Plan: Triumphal Fountain (A), Temple of Valetudo and Nymphaeum (B), Forum Area (C), Glanum, France (After Rolland 1958, Plan 1)



**Figure 8** Triumphal Fountain Reconstruction, Glanum, France (Agusta-Boularot et al. 2004, Page 97)



**Figure 9a** Forum Plan: fountains (15, 19), *rostrum* (17), temples (16, 18, 27), ramps (15, 20), via Egnatia (26), Philippi, Greece (Sève and Weber 2012, Fig. 67)



**Figure 9b** East Fountains, with Lion Head Waterspout in Basin, Terracing on the North Side to via Egnatia and Temple Terrace, Forum, Philippi, Greece (Photo Author)



**Figure 9c** View from North down into Forum from Temple Terrace, Philippi, Greece (Photo Author)



**Figure 10** Forum Plan, Brescia, Italy (Laurence, Esmonde Cleary, Sears 2011, Fig. 7.2)



Figure 11a Forum Plan, Baelo Claudia, Belo, Spain (Ponsich 1974, Fig. 1)



**Figure 11b** Forum Fountain, Forum, Baelo Claudia, Belo, Spain (Ponsich 1974, Fig. 3)



**Figure 12a** Forum Plan, with via Appia (A), Minturnae, Minturno, Italy (After Ruiz de Arbulo 1991, Fig. 11)



**Figure 12b** Forum Plan, with Fountains (A, B), Capitolium (C), Temple of Roma and Augustus (D) Minturnae, Minturno, Italy (After Ruiz de Arbulo 1991, Fig. 12)



**Figure 13** Agora and Roman Agora Plan: Panathenaic Way (1), Stoa of Attalos (2), Library of Pantainos (3), Plateia Street (4), Roman Agora (5), Library of Hadrian (6), Roman Stoas (7), Hadrianic Nymphaeum (8), Plateia Street Fountain (9), Athens, Greece (Evangelidis 2014, Fig. 2, adapted)



Figure 14a South Stoa Fountain (View from North), Athens, Greece (Photo Author)



**Figure 14b** South Stoa Fountain (View from Southeast), with Arch of Athena Archegetes to the Northwest, Athens, Greece (Photo Author)



**Figure 15** Forum Plan, with North Market Nymphaeum (A), Monopteros (B), South Stoa Fountain (C), Theater *Postscaenium* (D), Corinth, Greece (After Robinson 2011, Pl. 2)



Figure 16a South Stoa Fountain, Corinth, Greece (Photo Author)



**Figure 16b** Frieze with Bucrania and Myrtle Branches Detail, Parapet, South Stoa Fountain, Corinth, Greece (Photo Author)



Figure 16c Polychrome Marble Detail, North Parapet, South Stoa Fountain, Corinth, Greece (Photo Author)



Figure 17a Agoras and Harbor, Kos, Greece (Rocco and Liviadotti 2011, Fig. 1)



**Figure 17b** Agora Nymphaeum (Indicated by Arrow), Kos, Greece (After Rocco and Liviadotti 2011, Fig. 25)



**Figure 18a** Axionometric View: Trajanic/Severan Nymphaeum (2), Hadrianic Nymphaeum (3), Antonine Nymphaeum (4), Sagalassos, Turkey (Richard 2008, Fig. 2)



Figure 18b Trajanic/Severan Nymphaeum (View from Southeast), Lower Agora, Sagalassos, Turkey (Photo Regina Loehr)



Figure 18c Hadrianic Nymphaeum, Terrace above Lower Agora, Sagalassos, Turkey (Photo Author)



Figure 18d Antonine Nymphaeum, Upper Agora, Sagalassos, Turkey (Photo Author)



Figure 18e View North from Lower Agora, Sagalassos, Turkey (Photo Regina Loehr)



Figure 19a Upper City Plan: Pollio-Bau (6), Fountain of Domitian (7), Hydrekdocheion of C. Laecinius Bassus (8), Fontäne (9), Ephesus, Turkey (Dorl-Klingenschmid 2001, 85a)



**Figure 19b** Pollio-Bau and Niche Fountain, Ephesus, Turkey (Dorl-Klingenschmid 2001, Fig. 116)

Figure 19c Fountain of Domitian, Ephesus, Turkey (Photo Author)



**Figure 19d** Hydrekdocheion of C. Laecinius Bassus, Ephesus, Turkey (Dorl-Klingenschmid 2001, Fig. 113a, b)



Figure 19e Fontäne Plan, Ephesus, Turkey (Dorl-Klingenschmid 2001, Fig. 109a)



Figure 19f Fontäne, Ephesus, Turkey (Photo Author)



Figure 20a Peirene Fountain Plan, Corinth, Greece (Robinson 2011, Pl. 4)



Figure 20b Peirene Fountain, Corinth, Greece (Author Photo)





Figure 21b Glauke Fountain, Corinth, Greece (Photo Author)



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Figure 57a Hadrianic North Nymphaeum (Nymphaeum F3) Facade, Perge, Turkey (Photo Author)



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**Figure 83b** Nymphaeum of the Tritons Reconstruction, Hierapolis, Turkey (D'Andria 2001, Fig. 4-22)



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Figure 84 Map of Severan Forum Romanum, with Sight Lines Indicated (Shaded), Rome, Italy (Lusnia 2014, Map 3)



**Figure 85a** Late Antique City Gate Plan: Monument of Vespasian (A), Round Fountain (B), Drei-Becken-Brunnen (C), Colonnaded Street (D), Agora (E), Theater (F), Side, Turkey (After Mansel 1978, Plan 1)



Figure 85b Drei-Becken-Brunnen Reconstruction, Side, Turkey (Dorl-Klingenschmid 2001, Fig. 170b)



Figure 86 Line Drawing, Silver Bowl Depicting the Salus Umeritana (Spain), Fourth Century CE (Wikipedia Commons)



Figure 87 Water-Displays of the Sanctuary of Fortuna Primigenia (B-G), Praeneste, Palestrina, Italy (Berg 1994, Fig. 37)



**Figure 88a** Entrance Fountain (Indicated by Red Arrow), Sanctuary of Demeter Plan, Pergamon, Turkey (Bohtz 1981, Plate 43)



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**Figure 89** Forecourt Plan: Inner Propylon (1), Outer Propylon(2), Kallichoron Well (3), Fourcourt Fountain (4), Temple of Artemis Propylaea and Poseidon (5), Eschara (6), Commemorative Arches (7), Sanctuary of Demeter and Kore, Eleusis, Greece (Longfellow 2012, Fig. 1)



Figure 90a Forecourt Fountain Reconstruction, Sanctuary of Demeter and Kore, Eleusis, Greece (Longfellow 2012, Fig. 4)



Figure 90b View from Northeast, Forecourt Fountain, Sanctuary of Demeter and Kore, Eleusis, Greece (Photo Author)



Figure 91a North Façade, Inner Propylon, Sanctuary of Demeter and Kore, Eleusis, Greece (Sauron 2001, Fig. 1)



**Figure 91b** South Façade, Inner Propylon, Sanctuary of Demeter and Kore, Eleusis, Greece (Sauron 2001, Fig. 2)



**Figure 91c** Detail of Fountain Basin (Superstructure Robbed out since Antiquity), South Façade, Inner Propylon, Sanctuary of Demeter and Kore, Eleusis, Greece (Photo Author)



Figure 92a Plan, with Sight Lines to Nymphaeum of Herodes Atticus, Sanctuary of Zeus, Olympia, Greece (After Wikipedia Commons)



Figure 92b Nymphaeum of Herodes Atticus Reconstruction, Sanctuary of Zeus, Olympia, Greece (Longfellow 2011, Fig. 44)



Figure 92c Bull Statue with Regilla Dedication, Nymphaeum of Herodes Atticus, Sanctuary of Zeus, Olympia, Greece (Photo Author)



Figure 92d View from South, Nymphaeum of Herodes Atticus, Sanctuary of Zeus, Olympia, Greece (Photo Author)



**Figure 93** Plan of Temple Precinct Adjacent to the Theater (left) and Detail of Fountain inside the Precinct (right), Ostia Antica, Italy (Ricciardi and Scrinari 1996, Figs. 361, 362)



Figure 94 Temple Precinct Fountain House, Ostia Antica, Italy (Photo Jan T. Bakker, Ostia-Antica.org)



**Figure 95** Entrance Plan: Fountains (A, B), Dromos (B), Pylon (D), Hathor Temple, Dendara, Egypt (After Castel, Daumas, and Golvin 1984, Plan 2)



Figure 96 Nymphaeum Plan/Elevation, Gerasa, Jordan (Raja 2012, Fig. 79)



**Figure 97** Plan: Sanctuary (A), Theater (B), Nymphaeum of Egeria (C), Sanctuary of Diana, Nemus Aricinum, Nemi, Italy (After Ghini and Diosono 2013, Fig. 1)



**Figure 98a** Nymphaeum of Egeria Plan and Elevation, Sanctuary of Diana, Nemus Aricinum, Nemi, Italy (Ghini and Diosono 2013, Fig. 4)



**Figure 98b** Nymphaeum of Egeria Reconstruction, Sanctuary of Diana, Nemus Aricinum, Nemi, Italy (Ghini and Diosono 2013, Fig. 5)



**Figure 98c** Sanctuary of Diana, with sight lines to Villa of Caligula, Nemus Aricinum, Nemi, Italy (Moltesen and Poulsen 2013, Fig. 1)



**Figure 99** Source Sanctuary Plans of the Imperial Period: Thuburiscum Numidarum (1); Henchir Tamesmida (2); Hammam Berda (3); Zaghouan (4); Xanthos (5) (Gros 1996, Fig. 499)



Figure 100a Source Sanctuary Complex, Zaghouan, Tunisia (Wikipedia Commons)



Figure 100b Source Sanctuary Complex Plan, Zaghouan, Tunisia (Longfellow 2011, Fig. 51)


**Figure 100c** Source Sanctuary Complex Reconstruction, Zaghouan, Tunisia (Rakob 1974, Plate 73.2)



Figure 101 Garden Stadium Reconstruction, Villa Adriana, Tivoli, Italy (Digital Hadrian's Villa Project)



Figure 102 Larissa Nymphaeum (From East), Argos, Greece (Photo Author)



**Figure 103** Fontaine de la Pucelle Reconstructions, including Tempietto (left) and Relief Columns (right), Cenabum, Orléans, France (Lavagne 2012, Figs. 8, 9)





Figure 104a Nymphaeum Section and Plan, Sanctuary of Icovellauna Divodurum, Metz, France (Bourgeois 1992a, Fig. 35)

**Figure 104b** Statue of Victory, Nymphaeum, Sanctuary of Icovellauna, Divodurum, Metz, France (Lavagne 2012, Fig. 3)



**Figure 105a** Nymphaeum Reconstruction, Septeuil (Yvelines), France (Cholet and Gaidon-Bunuel 2004, Page 32)



Figure 105b Nymphaeum, Septeuil (Yvelines), France (Lavagne 2012, Fig. 5)



Figure 106a Map, Santa Fiora, Lago di Bracciano, Italy (Aqueducthunter.com)



Figure 106b Aqua Traiana Source Sanctuary Plan, Santa Fiora, Lago di Bracciano, Italy (Aqueducthunter.com)



**Figure 106c** Aqua Traiana Source Sanctuary Section, Santa Fiora, Lago di Bracciano, Italy (Aqueducthunter.com)



**Figure 106d** Aqua Traiana Source Sanctuary, Santa Fiora, Lago di Bracciano, Italy (Aqueducthunter.com)



**Figure 107a** Reconstruction, Imperial Cult Structure, Praeneste, Palestrina, Italy (Agnoli 1998, Fig. 7)



**Figure 107b** View, Imperial Cult Structure, Praeneste, Palestrina, Italy (Agnoli 1998, Fig. 21)



**Figure 107c** Grimani Panels (Clockwise from Top Left): Sheep (Winter), Lioness (Spring), Sow (Summer), Cow (Autumn), Imperial Cult Structure, Praeneste, Palestrina, Italy (Agnoli 1998, Figs. 11-14)



Figure 108a Forum, Conímbriga, Portugal (Photo Author)



Figure 108b Forum Plan: Water basins shaded, Conímbriga, Portugal (Reis 2009, Fig. 3)



Figure 109 Temple of Diana and West Basin, from Northwest, Forum, Augusta Emerita, Mérida, Spain (Photo Author)



**Figure 110** Forum Plan, with Water-Diplay Shaded, Ebora, Évora, Portugal (Reis 2009, Fig. 1)



Figure 111a Imperial Cult Sanctuary, Nemausus, Nîmes, France (Gros 1984, Page 126)



Figure 111b Jardin des Fontaines, Nîmes, France (Wikipedia Commons)



Figure 111c Temple of Diana Interior, Imperial Cult Sanctuary, Nemausus, Nîmes, France (Wikipedia Commons)



Figure 111d Architectural Comparison of Imperial Cult Sanctuary of Nemausus with the Source Sanctuary Complex of Zaghouan (Veyrac 2006, Fig. 39)



**Figure 111e** Town Plan: Tour Magne (A), Maison Carée and Forum (B), Area of Town Supplied by Sanctuary Water (C, shaded), Nemausus, Nîmes, France (After Veyrac 2006, Fig. 29)



**Figure 112** Aquae Apollinares (far left), Roma (enthroned personification on right), *Tabula Peutingeriana*, Twelfth-thirteenth Century CE (Wikipedia Commons)



**Figure 113a** Plan: Sacred Spring (A), Temple of Sulis (B), Temenos (C), Sanctuary of Aquae Sulis, Bath, England (After Revell 2009, Fig. 4.1)



Figure 113b Flowing Hot Spring, Sanctuary of Aquae Sulis, Bath, England (Photo Author)



**Figure 113c** Reconstruction of Reservoir, Sacred Spring Sanctuary of Aquae Sulis, Bath, England (Cunliffe 1995, Fig. 32)



Figure 114 Achilles and Troilos, Tomba dei Tori, Sixth Century BCE, Tarquinia, Italy (Wikipedia Commons)



Figure 115a Nymphae Nitrodes Relief, Ischia, Italy (Wikipedia Commons)



Figure 115b Apollo and Sirona Bronze Statuettes (Wikipedia Commons)



Figure 115c Sirona Relief (Weisgeber 1975, Plate 51)



Figure 116a Nymphaeum and Temple of Valetudo Plan, Glanum, France (Rolland 1958, Plan 8)



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**Figure 117a** Plan: Temple and Source (A), Baths (B), Hostel (C), Sanctuary of Apollo Grannus and Sirona, Hochscheid, Germany (After Weisgeber 1975, Plate 3)



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**Figure 117c** Reconstruction of Sirona Fountain, Sanctuary of Apollo, Ihn, Kreis Saarlouis, Germany (Miron 1994, Fig. 73)



Figure 118a Sanctuary of Asclepius Plan, Epidauros, Greece (Melfi 2007, Fig. 4)



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Figure 119b Apsidensaal I Plan: Nymphaeum (A), Cross-Vaulted Central Room (B), Triclinium (C), Sanctuary of Apollo, Aquae Apollinares, Vicarello, Italy (Von Falkenstein-Wirth 2011, Fig. 63)



Figure 119c Apsidensaal I Section, Nymphaeum Window Indicated by Arrow, Sanctuary of Apollo, Aquae Apollinares, Vicarello, Italy (Von Falkenstein-Wirth 2011, Fig. 65)



**Figure 119d** Apollo Statue and Reconstruction, Apsidensaal I, Sanctuary of Apollo, Aquae Apollinares, Vicarello, Italy (Von-Falkenstein-Wirth 2011, Figs. 132, 135)



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**Figure 120a** Sanctuary Plan (left): Nymphaeum (1), Temenos (2), Temple of Apollo (3), and Nymphaeum Plan (right), Sanctuary of Apollo, Hierapolis, Turkey (De Bernardi Ferrero 1999, Plate 176)



**Figure 120b** Nymphaeum Reconstruction, Sanctuary of Apollo, Hierapolis, Turkey (De Bernardi Ferrero 1999, Plate 177, Fig 2)



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Figure 122 Diagram of the Roman Theater (Sear 2006, Fig. 1)



Figure 123 Antioch and Orontes Statues with Water Channels (Indicated by Arrow), Second Century CE, Rome (Dohrn 1960, Plate 4)



"Nymphaeum in the *Proscaenium*" of the Theater of Antioch-on-the-Orontes (Indicated by Arrow), Syria (Price and Trell 1977, Fig. 42; BM Antioch Pl. 25 No. 12, Pl. 26 No. 5)





Figure 125 Water Complex? Topographical Border, Megalopsychia Mosaic, Yakto Complex, Antiochon-the-Orontes, Syria (Cimok 2000, Page 274)

Figure 126 Axonimetric View, Bagni di Livia, Domus Augustana, Palatine Hill, Rome, Italy (Manderschneid 2004, Fig. 124)



Figure 127 Scaenae Frons, Atrium, Casa dei Gladiatori (8.2.23), Pompeii, Italy (PPM 8.178)



**Figure 128** Theater and *Postscaenium*, Sanctuary of Diana, Nemus Aricinum, Nemi, Italy (Braconi 2013c, Fig. 5)



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Figure 132a Plan, Theater, Verona, Italy (Sear 2006, Plan 96)



Figure 132b Basin with Animal relief from the *Frons Pulpiti*, Theater, Verona, Italy (Fuchs 1987, Plate 57.7)


Figure 133a Plan, Large Theater, Pompeii, Italy (Sear 2006, Plate 22)



**Figure 133b** Seven Basins in Front of *Frons Pulpiti* and in the Orchestra, Large Theater, Pompeii, Italy (Berlan Bajard 2006, Fig. 10)



Figure 134a Altars in *Frons* Pulpiti and Orchestra, Theater, Arelate, Arles, France (Morretti 2010, Fig. 3)



**Figure 134b** Sleeping Silenos Statue, *Frons Pulpiti*, Theater, Arelate, Arles, France (Carrier 2005-2006, Fig. 26)



Figure 135a Plan, Theater, Italica, Spain (Sear 2006, Plan 227)



Figure 135b Sleeping Nymph, Frons Pulpiti, Theater, Italica, Spain (Photo Author)



**Figure 136a** Plan: Lacus del Teatro (A), *Postscaenium* (B), Fountain (C), Theater and *Postscaenium*, Leptis Magna, Libya (After Ward Perkins 1977, Fig. 247a)





Figure 136b Standing Nymph Statues, Theater, Leptis Magna, Libya (Caputo and Traversari 1976, Plate 35)



## Figure 136c

Plan (top), Lacus del Teatro, *Postscaenium*, Theater, Leptis Magna, Libya (Tomasello 2005, Fig. 14)



Figure 136d Reconstruction (bottom), Lacus del Teatro, *Postscaenium*, Theater, Leptis Magna, Libya (Tomasello 2005, Fig.16)



**Figure 136e** Statues: Seated Nymph, Aphrodite Anadyomene, Seated Shepherd (left to right), Lacus del Teatro, *Postscaenium*, Theater, Leptis Magna, Libya (Tomasello 2005, Plates b 3, b 5, c 1)



Figure 136f Urban Context of Theater and *Postscaenium*: Lacus del Teatro (A), *Porticus Postscaenium* (B), Cardo (C), Decumanus (D), Quadrifons of Trajan (E), Great Nymphaeum (F), Leptis Magna, Libya (After Tomasello 2005, Fig. 2)



**Figure 137a** Plan of the Area around the Theater: Theater (A), Water-Display of *Postscaenium* (B), Tarraco, Tarragona, Spain (Mar 2012, Fig. 161)



Figure 137b Plan, Theater and *Postscaenium*, Tarraco, Tarragona, Spain (Mar 2012, Fig. 175)



Figure 137c Postscaenium Reconstruction, with Water-Displays, Theater, Tarraco, Tarragona, Spain (Mar 2012, Fig. 176)



Figure 138 Plan: Fountain (A), Theater, Sikyon, Greece (After Feicheter 1931, Plate 2)



**Figure 139** Plan of Phase 5, with area of Water-Display (A), Theater, Corinth, Greece (After Williams 2013, Fig. 3)



**Figure 140a** Plan: Cardo Maximus (A), Entrance Ramp (B), Entrance Fountain (C), South Basilica (D), *Porticus* (E), North Basilica (F), Latrines (G), Theater and *Postscaenium*, Suessa, Sessa Aurunca, Italy (After Cascella 2013, Plate 13)



**Figure 140b** Plan: Ramp (A), Entrance (B), Entrance Fountain (C), South Basilica (D), Entrance to Theater (E), Aqueduct (F), *Postscaenium*, Suessa, Sessa Aurunca, Italy (After Cascella 2012, Fig. 82)



Figure 140c Entrance Fountain of Theater, Suessa, Sessa Aurunca, Italy (Cascella 2012, Fig. 83)



**Figure 141a** Plan: Area of Water-Displays (A), Theater, Perge, Turkey (After Sear 2006, Plan 392)



Figure 141b Theater Entrance Fountain (Nymphaeum F1), Perge, Turkey (Photo Author)



Figure 142 City Plan: West Nymphaeum (A), Tetrapylon (B), Transverse Street (C), Theater (D), East Nymphaeum (E), Palmyra, Syria (After Schmidt Colinet 1995, Fig. 16)



Figure 143a Exedra Fountains, Theater, Ostia Antica, Italy (Riccardi and Scrinari 1996, Fig. 355)



Figure 143b West Exedra Fountain Ship Prow Sculpture, Theater, Ostia Antica, Italy (Photos Ismini Miliaresis)



Figure 144a Plan: Parados Fountain (A), Theater, Sparta, Greece (Di Napoli 2013, 38)



Figure 144b Fountain Basin, Western Parados, Theater, Sparta, Greece (Photo Author)



Figure 145 Area around Theater and Fountain, Petra, Jordan (Segal 1997, Fig. 46)



**Figure 146** *Kolymbethra* Reconstruction, Theater of Dionysus, Athens, Greece (Traversari 1960, Plate 1)