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Going against the flow

Wells, cisterns and water in ancient Greece

Edited by Patrik Klingborg

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ABSTRACT

Despite the prevalent picture of the water supply in the ancient world as being dominated by fountains and aqueducts, the large number of excavated wells and cisterns show that these were the primary water sources for most individuals. Yet, little research has been done on their construction, function and use. This prompted the organization of the workshop *Going against the flow. Wells, cisterns and water in ancient Greece*, held at the Swedish Institute at Athens on 28–29 September 2017, and subsequent publication of the contributions in this volume. The ten papers presented here offer new evidence as well as a wide range of new perspectives on the use and function of wells and cisterns in ancient Greece. Considering the ubiquity of these installations in every type of setting during antiquity, from pan-Hellenic sanctuaries and civic centres to domestic workshops and remote farmhouses, it is hoped that the breadth of interest among the authors will allow other scholars to advance their own work further, illuminating new and exciting aspects of life in ancient Greece.

Keywords: wells, cisterns, water supply, ancient Greece, archaeology, climate, sanctuaries

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Cover illustration: section of typical ancient Greek cistern, by Patrik Klingborg
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DYLAN K. ROGERS

10. Epilogue

The social side of Greek water collection

Abstract

Collecting water in the ancient Greek world was an inherently social activity in public and private contexts. Using archaeological evidence of water collection, especially wells, cisterns, and fountain-houses, we can piece together numerous elements of the daily lives of the ancient Greeks. The present chapter explores the sociological nature of Greek water collection using the depictions of wells and fountain-houses on vases and the archaeological remains of fountain-houses themselves to understand better social relations in- and outside the domestic sphere, paying close attention to issues surrounding gender in the ancient Greek world. Further, contexts with wells and cisterns, such as brothels and religious sanctuaries, are also explored to shed light on new ways that scholars today can use water infrastructures in these spaces to prompt new questions about life in Greece in the past. By examining Greek water collection points more closely, we can repopulate these spaces and understand how individuals in the past used and interacted with these structures—and others around them—in addition to the impact of collecting water in the daily life of the Greeks.*

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Introduction

The present volume is an ambitious plunge into defining and clarifying the nature of an often-overlooked aspect of the water supply in the ancient world, namely cisterns and wells. As has been demonstrated by the authors here, there is much evidence that still remains to be collected, published, and synthesized. But with the examples presented from the Kerameikos of Athens, the Sanctuary of Hera at Samos, the private homes of Late Hellenistic Delos, and throughout the Corinthia, amongst others, we can now begin to problematize the ubiquity of water collection and storage throughout the Greek world. In the introduction to this volume, Patrik Klingborg, in his discussion of future directions of Greek cistern and well studies, calls for attention to be paid to the direct impact that these structures had in the public and private contexts of the lives of ancient Greeks. As such, we can use the present chapter

* The author wishes to thank the editor of the volume, Patrik Klingborg, for his patience and enthusiasm for this contribution—and for water in the ancient Mediterranean in general. There are numerous individuals that aided the author in this essay, for which he is grateful: Katherine Harrington, Mario Iozzo, Jenifer Neils, Aimee Placas, Tyler Jo Smith, Irini Solomonidi, Diana Wardle, along with all of the participants of the workshop from which this volume stems. All errors remain those of the author.

to begin piecing together the evidence for the social impact of Greek water collection.

Water is a crucial, life-giving element that is used by all living organisms. Thus, it is necessary that water must be considered and included in the built environment of humans; without it, we cannot survive. But there is something more to water besides its utility. Veronica Strang, a social anthropologist who studies the role of water in various societies across the world, especially in the modern period, has stated that "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".[1] In this vein, going beyond just the archaeological data of Greek water infrastructure systems, when greater attention is paid to how they were actually used, a picture begins to emerge of how these structures had the power to alter how the ancient Greeks interacted with each other, their built environment, and the wider landscape.

In order to unpack the sociological nature of Greek water collection, in addition to the archaeological evidence offered in the preceding chapters, here we consider other pieces of archaeological and literary evidence that can better inform us of how water was used and manipulated in ancient Greece, in a variety of contexts. Because we have limited evidence, for example, on the activities that could have taken place around wells and cisterns (besides simple water drawing), we can employ different data, especially related to fountain-houses, as a helpful proxy to understand how water collection structures impacted the daily lives of the Greeks.[2] We will explore how cisterns, wells, and fountain-houses were used by actual people, through depictions of these structures on vases and the fountain complexes themselves. As we will see, ancient Greek water collection was intimately tied to gender, whether from the women who gathered water in the home or by female prostitutes in brothels. We will make mention of water infrastructures in religious landscapes, in order to understand the impact of water in such an environment, changing the experience of those spaces. Finally, we will briefly touch on how ancient Greek water collection behaviors continued well beyond antiquity in Greece itself. Through the ensuing discussion, we will see how, by incorporating archaeological evidence of wells, cisterns, and fountain-houses with other data and theoretical models, we can prompt new questions and methodologies, in order to repopulate these aquatic spaces and to come to a better understanding of the social nature of Greek water collection.

Greek fountain-houses: issues of depiction, usage, and gender

Athenian figured vases often give helpful glimpses into the function of water collection during the Archaic and Classical periods. There are a number of depictions of structures resembling wells on Greek red-figured pottery. Jutta Stroszeck has presented the iconography of these structures on vases, paying particular attention to the wellheads, drawing devices, and the individuals that were able to obtain water from these underground sources.[3] A number of the scenes in question are in the tondi of cups, meaning that their composition is limited due to the constraints of the allotted space. In examples such as these, the focus is on the individual drawing the water from some sort of well or cistern head, usually with the aid of a

[1] Strang 2008, 125.

[2] On the difficulties surrounding ancient literary testimonia related to wells and cisterns, see Klingborg in this volume, *Chapter 8*.

[3] Stroszeck 2017, especially 52–59.

Fig. 1. Scene of a woman at a well, tondo of an Attic red-figure cup, c. *490 BC, Florence, Museo Archeologico Nazionale 76103. Courtesy of the Museo Archeologico Nazionale di Firenze, Direzione regionale Musei della Toscana.*

rope, which is presumably tied to a vessel down below (*Fig. 1*). In this example, the featured woman clearly is outdoors, with a depiction of a tree and other structures one might find in the courtyard of an Athenian house. Based on images such as these, scholars have interpreted these scenes to depict private wells that were used by elite women, who are believed to have been primarily confined to the house.[4] And naturally there are other examples of water collection that take place in public spaces and with various types of individuals using them, ranging from women and men, to females with mythological figures, such as satyrs.[5]

A more popular form of depiction of water collection, however, were the famous fountain-houses shown on Archaic and Classical vases. There are at least 79 different scenes known on black- and red-figure vessels, especially hydriai, the water-carrying containers *par excellence* of ancient Greece (*Fig. 2*).[6] These scenes are read-

[4] Richter 1935; Smith 2016, 160–161.

[5] Stroszeck 2017, figs. 16–17, 21–27, 30–33, 36.

[6] On the fountain-house scenes shown on black- and red-figure vessels, see Hannestad 1984; Manfrini-Aragno 1992; Manakidou 1992–1993; Frel 1996; Neils 2000, 209–211; Lewis 2002, 1–4, 71–75; Pfisterer-Haas 2002; Ferrari 2003; Iozzo 2003; Shapiro 2003;

Fig. 2. Fountain-house scene, including conversing women with hydriai on their heads, Attic black-figure hydria, c. 520–500 BC, British Museum 1843, 1103.77. © The Trustees of the British Museum.

ily identifiable by their compositions showing an architectural setting that is clearly a Greek fountain-house, which can be compared to archaeological remains of these structures.[7] Requisite characteristics of these fountain-houses include Doric or Ionic columns that support an entablature (and sometimes a pediment), and water-spouts (such as the heads of lions, panthers, men on horseback, or satyrs). Generally, the fountain-houses are populated by women using hydriai to collect water flowing from the spouts.

The fountain-houses that are depicted on these vases are schematic, in that they include only the elements necessary to identify them as such. Some scholars have noted the fact that basins (into which water generally flowed in a fountain-house to aid in collection) are not present in these scenes—potentially undermining the reliability of these depictions.[8] Further, there has been much discussion of these scenes in modern scholarship centering on how to understand them. Interpretations range from an iconographic celebration of the Peisistratid construction of the famous Enneakrounos

Brunori 2006; De Simone 2008; Kosso & Lawton 2009; Sabetai 2009; Bowe 2012; Pilo 2012; Bundrick 2019, 136–155.

[7] On the architectural remains of Greek fountain-houses, see especially Glaser 1983; Tölle-Kastenbein 1990, 130–143; Longfellow 2011, 9–13; Bowe 2012.

[8] Bundrick 2019, 138.

(nine-spouted fountain) in the 6th century BC,[9] the women as brides collecting the ritualistic water necessary for their bridal baths—and thus females transitioning from maiden- to adulthood,[10] elite Athenian women celebrating the Hydrophoria (as a part of the Anthesteria festival),[11] to depictions of the autochthonous ancestresses of the Athenians, and so-called depictions of "ideal femininity".[12] Relying on a passage of Herodotos that implies that female slaves collected water from fountain-houses, scholars have also argued that the women in these scenes were in fact slaves, and were thus not elite women.[13] In the same vein, others have interpreted these women as *hetairai* (or courtesans), because of their elaborate dress often associated with courtesans, and especially when there are *kale* inscriptions to indicate that some of the figures are "beautiful".[14] *Fig. 2* includes two *kale* inscriptions, including one on the far left inside the fountain-house and another on the far right of the composition, naming Anthulli, but we are not to immediately assume that these women are *hetairai*. There are only a few examples of definitive iconographic depictions of female slaves collecting water at fountain-houses. In these examples, the women have been interpreted as Thracians, due to the appearance of tattoos on their arms and necks, and the fact that we know that the Athenians used Thracians as slaves in their society.[15] There has also been a discussion most recently on the fact that many of the vessels with fountain-house scenes have been found in Etruscan contexts—and the tentative suggestion that the Athenian export market to Etruria took advantage of the local Etruscan devotion to water cults.[16]

These interpretations stem from a shift in scholarship to move beyond using images as simple reflections of the daily lives of ancient Greeks, so-called genre scenes, to readings that can be considered structuralist, anthropological, or semiotic, amongst other approaches. These scenes are multivalent and nuanced—and the interpretation deserves such debates.[17] Yet, for the purposes of the present discussion, it is worth noting that these fountain-houses, no matter how they are read today, were rooted in some semblance of a reality.[18] Archaeological evidence from the Greek world confirms the basic elements that a Greek fountain-house contained. The schematic renderings of fountain-houses, while not photographic snapshots of an actual fountain-house, have the power to convey to the viewer a scene of an ancient fountain-house itself and the women that used the structures, no matter where these vases were used in the Mediterranean Basin. In addition to the evocative imagery of the architectural features of the fountain-houses themselves, what is also striking is the depiction of groups of women. They interact with each other, as they approach the fountain-house, fill their hydriai, and talk with each other. Such iconographic

[9] See below for more on the Enneakrounos.

[10] Thuc. 2.15 on water from the Enneakrounos in particular to be used for wedding-related rituals. On the transition of these females in these scenes, see Manfrini-Aragno 1992.

[11] For example, Diehl 1964, 130–134.

[12] Ferrari 2003, 44–51. See also Kosso & Lawton 2009 for a critique of Ferrari.

[13] Hdt. 6.137.

[14] Frel 1996; Neils 2000, 209–211; Shapiro 2003; Topper 2012, 143–144.

[15] For example, Louvre CA 2587 (Beazley Archive Pottery Database 205691). For a discussion of the iconography of this vase, see Oakley 2000, along with Tsiafakis 2000, 372–376, on the images of Thracian women in Greek art.

[16] Bundrick 2019, 136–155.

[17] See Sabetai 2009 for a call against reading fountain-house scenes simply as depictions of daily life. Further, see Smith 2016 on the problems associated with interpreting interior and exterior spaces on vases; on the depiction of *louterion*, or basin used for bathing, and the surrounding space, see Durand & Lissarrague 1980. See also, Buxton 1992.

[18] See especially Kosso & Lawton 2009 for similar approach.

evidence found on vases helps to vitalize fountain-houses that we find in the archaeological record.

Water collecting in the ancient Greek world appears to be a gendered activity for the most part. Iconographic and literary evidence suggests that women were generally the individuals collecting water for the household.[19] By considering the relationship of fountain-houses with the women actually using them in antiquity, we can then begin to repopulate spaces with actual individuals, in effect giving those places agency and vitality, which is often lost to time. In this vein, there is a sociological side to these scenes and the interaction that these women had with each other. Indeed, just like the "water cooler interactions" between work colleagues in the United States, in which they catch up on gossip or their favorite television programs, water collection in general is an inherently social rite, as communal relations are bound to take place when people share water.[20] With these images in mind, it is easy to imagine these fountain-houses acting as spaces for social interaction, especially between women. Aristophanes, in his *Lysistrata*, in fact, includes a mention of the social side of Greek fountain-houses. The chorus of women illustrates how fountains could sometimes be full of women collecting water: "I could scarcely get near to the spring though I rose before dawn, with the tattling of tongues and rattling of pitchers in one jostling din with slaves pushing in!" (lines 327–329, transl. J. Lindsay). Not only do we grasp how the space was full of women interacting with each other, but there was also the sensory experience of the act of collecting water—especially focused on the sounds of so many people together, whether gossiping or hitting their vessels during collection. Returning to *Fig. 2*, we catch a glimpse into one of the scenes, with the four female figures on the right clustered in pairs, in which they are clearly conversing with each other from their gestures, such as the woman one over from the right, who brings her hand to her mouth, as if in surprise or shock in response to her companion.

It is also worth remembering that while elite Athenian women in all likelihood did not collect water at public fountain-houses (sending their slaves in their place), there would have been a great number of lower class women (who were neither elite nor servile) that would visit a fountain-house.[21] It is also easy to imagine that cisterns or wells in private spaces also served as a place where individuals came together in the act of collecting water, just as their public counterparts and fountain-houses did. It should be noted that the water from these private wells and cisterns could be used for purposes other than drinking and bathing, such as aiding in industry or manufacturing—a point often overlooked in scholarship today.[22]

Way stations in urban spaces

In addition, fountain-houses, cisterns, and wells also act as way stations, following architectural theory of urban spaces. The notion of a way station in ancient architecture was first suggested by William MacDonald in 1986. In his exploration of the urban armature of the Roman city, MacDonald defined armatures as "main streets, squares, and essential public buildings linked

[19] Water collecting as a gendered activity still continues in a number of places in the world today. For example, studies have shown that water collection in Sub-Saharan Africa is primarily done by women, who often travel more than 30 minutes on foot to collect water in jugs that can sometimes weigh over 18 kg. See Graham *et al*. 2016.

[20] On the sociological aspects of water collection, see Wickham 1972.

[21] Blundell 1995, 136–137.

[22] New studies related to the ancient Greek economy, industry, and manufacture, however, are beginning to shed light on how spaces were used by individuals in the past. See Acton 2014; Bresson 2016; Harris *et al*. 2018.

together across cities, [and] their dominant characteristic on the ground is directional and spatial unity, an indivisibility underwritten by fluid, unimpeded connections".[23] Urban armature can then be further subdivided to include connective architecture (such as gates and arches), passage architecture (such as covered colonnades), and way stations. The latter form of architecture prompts the passer-by to stop and engage with the structure more fully, before deciding to move to the next urban node. Among the structures that can be considered a way station, the fountain is an excellent example in both Greek and Roman urban spaces. Fountains invite passers-by to stop, use the water, socialize with others that may also be there, and then begin their onward journey through the city.[24] Public wells and cisterns inevitably acted in a similar fashion in ancient landscapes.

A prime example of a Greek fountain acting as a way station is the Southeast Fountain-House of the Athenian Agora (*Fig. 3*). The structure is a simple one, with an opening, *distyle in antis* (two columns flanked by wings), that invited individuals into a covered space, with a basin at both the east and west ends. The fountain is situated at the crossroads of one of the smaller east–west running roads of the southern side of the Agora, which intersects the grand Panathenaic Way. Thus, the structure has a place of great prominence in the early history of the Athenian Agora—one in which numerous individuals would have stopped, as they either entered or left the Agora.[25] The fountain was thought by scholars to have been installed by the Peisistratid family in the late 6th century BC, conflating it with the famous Enneakrounos, or nine-spout fountain.[26] In modern scholarship, such a task fit well into building projects associated with Greek tyrants, especially those focused on bringing water to the people, which Nikolas Arvanitis has called "spaces of power".[27] But recent work by Jessica Paga indicates that the fountain could be downdated to between just before 480 and around 450 BC.[28] In the middle of the 6th century, at least 19 wells around the Classical Agora were closed and domestic structures in the area were demolished, which literally paved the way for the transfer of the Old Agora (on the southeast slope of the Acropolis) to the present location of the Classical Agora. With the advent of the democracy after 508 BC, the Agora began to be transformed with public buildings, including the Old Bouleuterion, Stoa Basileos, and the Southeast Fountain-House—in a sense demarcating the space of the new Agora under the nascent democracy.[29] Further, the water supply began to be regulated more fully under the democracy, with an elected water commissioner in charge of insuring that public water supply was protected.[30] With the transformation of the Agora in the democracy, there was a break from the tyrants, while making sure that inhabitants of the city were well supplied with water. Paga rightly states that regardless of how the fountain-house is dated or how we interpret the scenes of fountain-houses on vases, "water

[23] MacDonald 1986, 5.

[24] A discussion of fountains acting as way stations in the Roman world can be found in Lamare 2020, 38–41; Rogers 2021, 108–115.

[25] On the importance of the location of the fountain-house, see Paga 2015, 359.

[26] For an overview of the debate in scholarship on the location of the Enneakrounos and the earlier Kallirhoe Fountain-House, see Paga 2015, 359–361, with previous bibliography, along with Owens 1982 and Tölle-Kastenbein 1986.

[27] Arvanitis 2008. On the artistic program of the tyrants of Athens, see Shapiro 1989.

[28] Paga 2015. See also Paga 2021, 108–111.

[29] Paga 2015, 382.

[30] Paga 2015, 383–385. On the management of public water in Athens, see Dillon 1996.

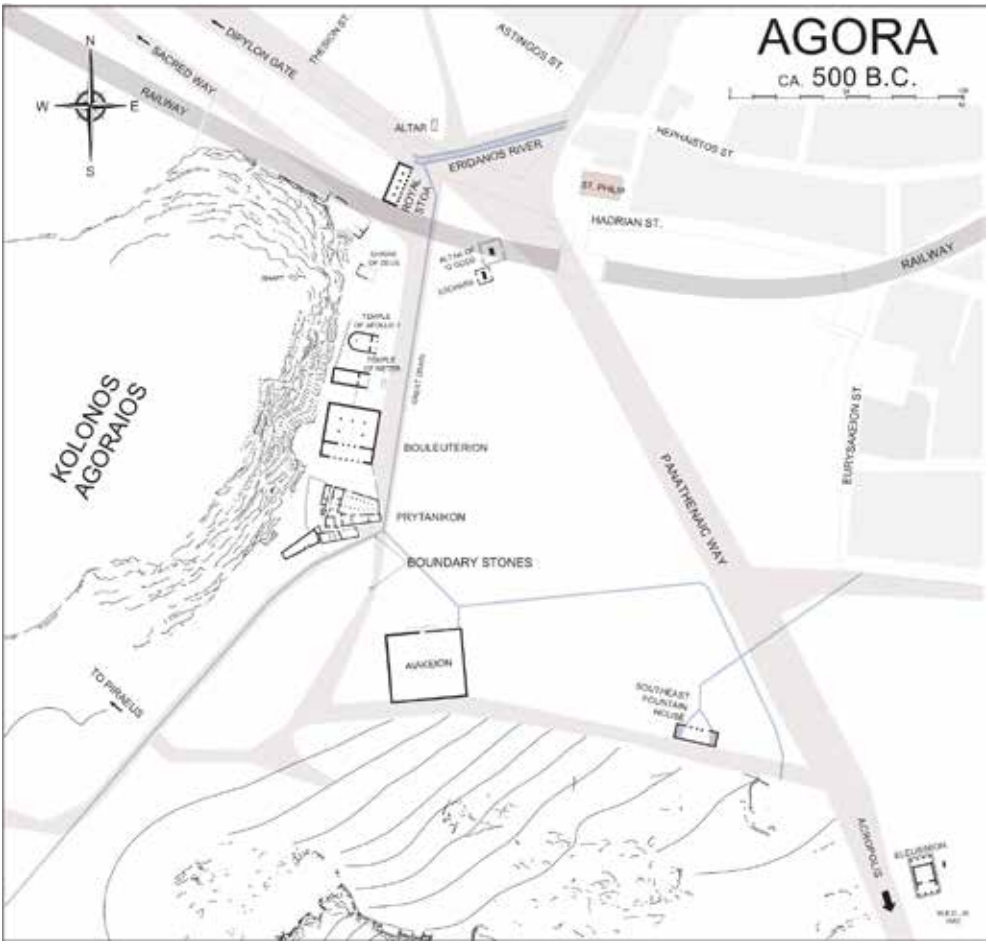

Fig. 3. Plan of the Athenian Agora, with Southeast Foutain-House indicated on the lower right, c. *500 BC. Courtesy American School of Classical Studies at Athens: Agora Excavations.*

was clearly on the minds of the Athenians during the Late Archaic period".[31]

The Southeast Fountain-House was one of the only permanent fountain-structures in Athens for some time. But its prominent placement in the urban landscape was important, especially as a way station. One can easily imagine how this structure became a crucial collection point for water in the area, particularly with the closure of the 19 private wells in the 6th century BC potentially increasing the demand for water in the area. The fountain invited pedestrians to stop briefly at this urban node, while it was also a part of a wider urban network of architectural elements that connected inhabitants and visitors to all the other areas of the city. Further, there are indications of the re-

[31] Paga 2015, 382. For a succinct overview of water-related structures of Athens during the Archaic and Classical periods, see Stroszeck 2021.

Fig. 4. Parapet with indications of repeated use, Fountain of Theagenes, Megara, c. 500–475 BC. Photograph: Dylan K. Rogers.

peated and diachronic use of fountain-houses in Greece. For example, the so-called Fountain of Theagenes in Megara, dated to around 500–475 BC, was used for such a long time that the users created grooved indentations in the stone parapet as they scraped their water collection vessels against it when gathering water (*Fig. 4*).[32] We should imagine a similar scenario happening on the parapets of the basins inside the Southeast Fountain-House in the Agora, although the parapets do not survive today. The structure's location, roughly contemporary fountain-house scenes on vases of women collecting water, and the physical evidence of use from other similar fountains begins to paint a picture of a space in the Agora full of people interacting with each other, thus vitalizing the archaeological remains.

Prostitution

In addition to depictions of fountain-houses and their physical remains in the landscape, cisterns and wells themselves have the power to unlock better understandings of ancient Greek life in general. In particular, new studies on the nature of Greek prostitution have begun to re-evaluate long-held beliefs about evidence for sex workers in the Greek world, especially considering evidence related to water collection devices. First, ancient Greek cistern terminology has seen a new degree of interest by scholars. As Klingborg has demonstrated earlier in this volume, *lakkos* (or a cistern) can be used in reference to a prostitute named Gnathaina, and the humor behind the association probably stems from a passive or submissive sexual role. Variants of the *lakkos* can also be seen regarding men engaging in sexual intercourse with other men, especially citizen men who were believed to be prositutes (and thus were committing a crime). The term *lakkoproktos* (or cistern-ass) has the implications of a passive individual, who takes on many lovers.[33] In Aeschines'

[32] On the Fountain of Theagenes, see Agusta-Boularot 2001, 216; Hellner 2004; 2006. For more on the indications of water collection activity on parapets of fountains, see Dorl-Klingenschmid 2001, 104–108; Richard 2012, 118–130; Rogers 2021, 108.

[33] Klingborg 2016, and in *Chapter 8* above. See also the brief discussion in Kapparis 2011, 249.

Against Timarchos, the figure of Timarchos is brought up on charges of prostitution. In the discussion of his illicit behaviors, the *lakkos* is used to describe his activities.[34] While there is evidently a humorous aspect in word play here (particularly the connection to the Greek word, *lakkopedon*, or scrotum), the term can be applied to prostitutes, "referring apparently to their enormous sexual capacity, or, more graphically, to their passive reception of effluvia".[35] Thus, one association between the terminology for a Greek cistern and a prostitute can come down to liquids—and how both can act as receptacles for those liquids.

Numerous scholars have identified brothels in the archaeological record by the presence of specific architectural elements (including multiple cisterns or wells) or gendered artifacts. The identification of Greek brothels, however, is a fraught topic in modern scholarship, especially as Greek brothels can share characteristics of both domestic and commercial buildings.[36] Nevertheless, one of the best-known structures identified as a brothel in the Greek world is the so-called Bau Z in the Kerameikos (*Fig. 5*). In its third phase, dated to the last quarter of the 4th century BC, loom weights and statuettes of Kybele and Astarte-Aphrodite suggest women of non-Greek origins (i.e. slaves) used this complex, which also included multiple androns (men's rooms) and drinking and dining wares.[37] The presence of women, shown through these gendered artifacts, has driven the identification and discussion of this property as a brothel. Some scholars, however, have suggested other criteria that are not based on such artifact types, but architectural elements of what a brothel would need to operate. Bau Z, in fact, also had multiple androns, often associated with the male clientele of a brothel, multiple entrances (for easy access), small rooms (for clients and prostitutes), and a louterion (or basin) for washing—all of which is suggestive of a property devoted to prostitution.[38] Further, the structure also had three large cisterns, a tile-lined well, and drainage channels, which supports the assertion by some scholars that brothels needed access to large amounts of water—perhaps for bathing that was often required after sexual activities.[39] In the same vein, Nicholas Rauh suggests that the brothels of Late Hellenistic Delos can be characterized by their location (near a port, agora, or city gate), a courtyard (allowing prostitutes to line up for clients to select), multiple entrances, private rooms, and access to water—namely through cisterns or wells.[40] Monika Trümper, however, has argued against Rauh's identification of the *Maison du Lac* in particular as a brothel, given that other structures on the island have equally large cisterns—and that those found in this particular house are not a clear indication of a brothel (among other evidence).[41] That being said, there are indications that in other structures identified with prostitution in the Greek world that access to water was important in a brothel, particularly

[34] Aeschin. *In Tim*. 84. See Ormand 2018, 97–103, for a brief discussion that contextualizes this passage in terms of Greek attitudes towards male prostitution.

[35] Davidson 1997, 79.

[36] In particular, see the contributions of Glazebrook & Henry 2011; Glazebrook & Tsakirgis 2016. See especially Glazebrook 2016, which attempts to provide a typology of brothels by illustrating the archaeological evidence other scholars have used to identify brothels in the Greek world and at Roman sites, such as Pompeii, along with relevant criticisms of the criteria of the suggested elements of ancient brothels.

[37] *Kerameikos* 17:1; Ault 2016; Glazebrook 2016, 174–175. While the structure is generally accepted to have survived as a brothel in its third phase, some scholars have begun to question the evidence used for this assertion. See for example the work of Harrington 2021.

[38] Ault 2016, 84–86; Glazebrook 2016, 182–187. On the cisterns and well of Bau Z in particular, see Klingborg 2017, nos. 165–167; Stroszeck 2017, 57–58; Stroszeck in this volume, *Chapter 5*.

[39] Rauh 1993, 200–213; Glazebrook 2016, 181–182.

[40] Rauh 1993, 200–213; McClain & Rauh 2011.

[41] Trümper 2016, 108–117. On the private cisterns of Delos, including those of the *Maison du Lac*, see Karvonis in this volume, *Chapter 4*.

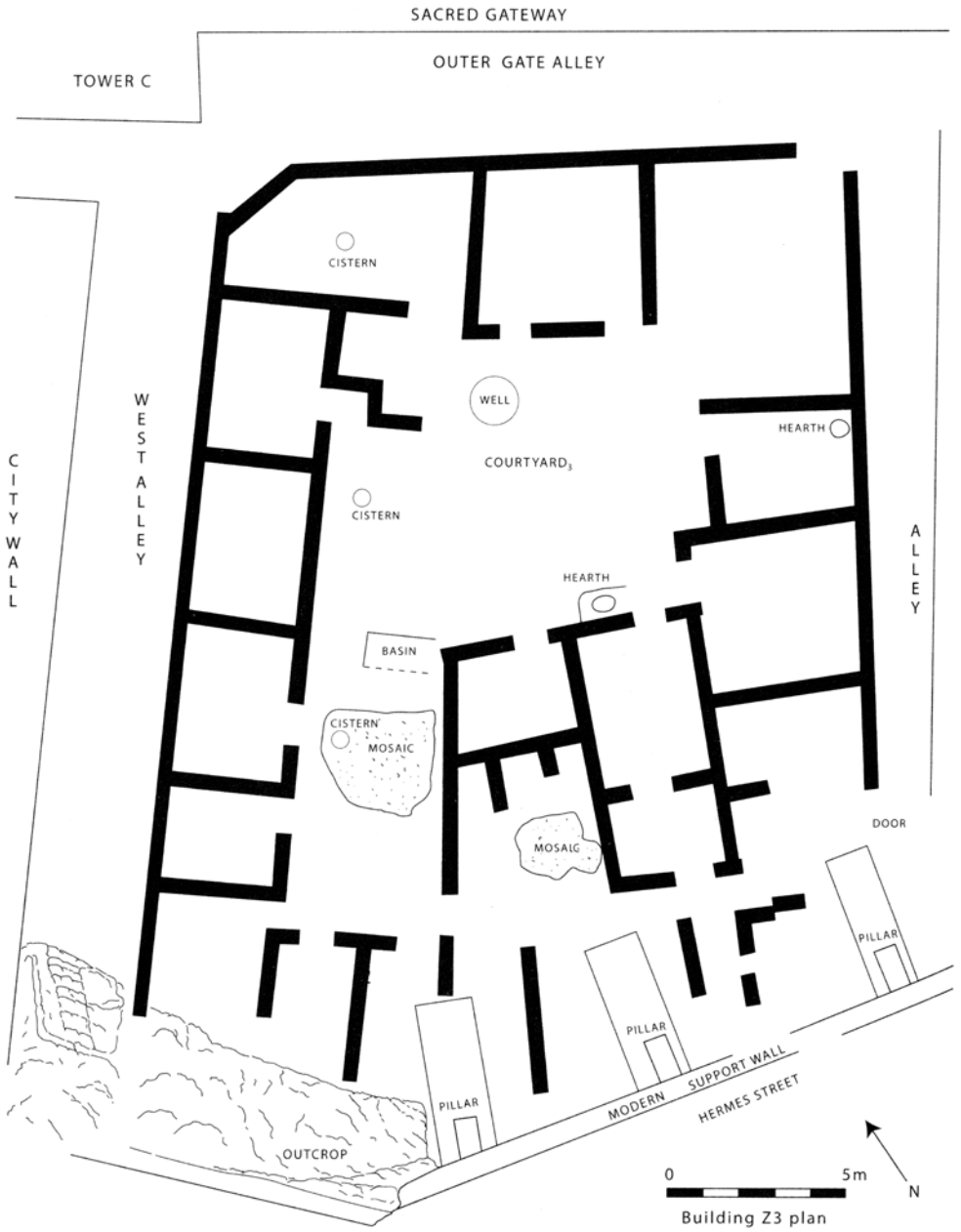

Fig. 5. Plan of Bau Z, Kerameikos, Athens, c. *425 BC. After Ault 2016, fig. 4.4.*

because these spaces could also potentially operate as industrial spaces, which also needed a great deal of water.[42]

Scholars are also turning to ceramic assemblages from closed wells, in order to discern patterns of use that might indicate whether the well served a brothel, tavern, or house. For example, Kathleen Lynch suggests that there might indications that an assemblage served a brothel if it contains both domestic (cooking wares and/or drinking vessels) and commercial (e.g. transport amphoras) types.[43] Lynch readily admits the pitfalls of such an approach, given the incomplete record of excavated pottery in some places as well as the ambiguities of the evidence related to Greek brothels. Nevertheless, wells and cisterns have the ability for scholars in the future to identify places devoted to prostitution in the Greek world, in order to better understand the daily lives of ancient sex workers.

Religion and water collection points

Research into cisterns, wells, and fountainhouses (often associated with natural springs) in religious contexts can also provide new insight into Greek religious practices related to water.[44] Acting as a vital part of Greek religious practice, scholars are now turning their attention to how water was collected and used in religious spaces in the Greek world, as we saw in the chapters by Stephanie Kimmey and Johanna Fuchs in this volume.[45] Moving past the requisite need for water as a purifying element upon entering a sanctuary, water was required for drinking, cooking, bathing, and waste management, amongst other uses—as is being demonstrated at sites such as Olympia and elsewhere.[46] Sanctuaries were vibrant landscapes in antiquity, and by understanding how water was collected and then manipulated there, we can understand better everyday religious experiences of the ancient Greeks.[47] Further, new archaeological evidence surrounding springs especially is being synthesized by scholars, demonstrating the intersection of natural water collection points and religious devotion. Whether through natural or man-made means, the well-watered landscape of the Corinthia and Argolid are providing well-preserved contexts and assemblages of votive objects at springs, such as at Nemea and Corinth.[48] For example, Signe Barfoed, through a detailed study of votive deposits associated with a spring outside the Sanctuary of Zeus at Nemea, demonstrates the importance of the relationship between a place connected to water collection and the worship of a local nymph, which she suggests is the eponymous nymph, Nemea.[49]

Collecting water in Greece beyond antiquity

Finally, the study of Greek water collection and associated activities also has resonances for those exploring the impact of water in Greece beyond antiquity. Ethnographic studies of ev-

[42] Glazebrook 2016, 182.
[43] Lynch 2016.
[44] In particular, see the recent work of von Ehrenheim *et al*. 2019.
[45] *Chapters 6* and *7*.
[46] Senff 2017; Klingborg 2018; Trümper 2018; Kobusch 2020.
[47] For example, on the sensory experience related to water structures of the Sanctuary of Demeter and Kore at Eleusis in the Roman period, see Rogers 2021, 108–115. See also Rogers forthcoming on reconstructing religious rituals in aquatic landscapes, especially through the approach of lived ancient religion. See Gasparini *et al*. 2020 for a complete overview of lived ancient religion.
[48] On Corinth, see Kopestonsky 2019.
[49] Barfoed 2019, especially 42–44, for a discussion of the nymph, Nemea. Håland 2020 demonstrates the continuity between springs and caves dedicated to nymphs to water rituals in those spaces related to the Panagia (Virgin Mary), especially as the *Zoodochos Pege*, or Life-giving Spring. See also Kimmelfield 2016.

eryday life in Greece into the modern period have the ability to show continuity with ancient Greek practices regarding water collection-related practices.[50] For example, Juliet Du Boulay has demonstrated the importance of water collection points, such as wells, in rural mountain villages as part of the social network of women, especially as places that provided them "with a means of chatting with people whom they would not otherwise encounter".[51] And images of rural Greek women collecting water seems to have captured the popular imagination outside Greece, evident in a postcard taken in the early 20th century of a girl wearing what could be considered a "traditional" Greek costume and Victorian boots, carrying a water-jug next to a "well" in a photographic studio—perhaps taken in central Europe, given the style of the church on the backdrop (*Fig. 6*). While she appears to mimic a contemporary Greek water-carrier (or at least what was thought one should look like), the young girl also brings to mind the women shown in our fountain-house scenes. In a similar manner to what we saw in ancient Athens, Greek society continued to operate in a similar way to their ancestors—namely that women collected water for the household, and used such activity as a way to interact with others outside their familial network. Water collection outside the house evidently continued into the early 20th century, even in Athens. Most houses in the city typically had wells of a depth of 6–12 m; however, the growing population strained the resources of the water table, resulting in the rise of *neroulades* (water-carriers), who sold water from springs and wells to the public.[52] Athenians would line up to buy water with their own containers, and sometimes a police presence was needed in case quarrels broke out among those buying water from the *neroulades*. In the 20th century, important water infrastructure projects in the city and the surrounding region of Attica led to the decline of such practices in Athens.[53]

Fig. 6. Photograph of a Greek girl at well, early 20th century AD. © Cabinet Card Gallery / Wikimedia Commons / CC-BY-SA-3.0.

[50] For example, see Forbes 2009 for more on considering the past in the present in rural Greek communities, along with his contribution to this volume (*Chapter 9*) on the use of wells and cisterns on Methana. On the limits of comparing ancient and modern Greek culture through ethnography, see Skinner 2014.

[51] Du Boulay 1974, 209. For more on the role of women in rural Greece, see Dubisch 1986.

[52] Christaki *et al*. 2017, 417. For more on *neroulades*, see also Balafoutis 2004, 169–170.

[53] Robinson 2013; Christaki *et al.* 2017; Idol 2018; Sargentis *et al*. 2019. Robinson documents the activities of American firms completing such projects in Athens and Corinth, such as the Marathon Dam project. The director of the project, Roy Gausmann, also wrote an unpublished manuscript, entitled "Water for Athens" (1940), now housed in the Gennadius Library of the American School of Classical Studies at Athens, that documented,

Conclusion

This brief excursus into the sociological nature of Greek water collection has illustrated a few main points. Collecting water, whether out in public or within the domestic sphere, was an inherently social activity, bringing individuals together in a common endeavor—thus strengthening bonds in- and outside the family. In this vein, water collection points acted as way stations, providing an architectural node for people to gather, from the courtyard of the home to the crossroads in the city center of Athens. Gender issues also become apparent, with women predominantly acting as water collectors in the ancient Greek world and beyond. In addition to the new data provided in this volume, when we consider new evidence in different contexts (from brothels to religious sanctuaries), we can begin to promote new questions, frameworks, and methodologies, not only to better understand the nature of water collection points themselves, but also how individuals in the past (and into the present) actually used and interacted with these structures—and their impact on everyday life.

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Bibliography

Acton, P. 2014. *Poiesis. Manufacturing in Classical Athens*, Oxford. https://doi.org/10.1093/acprof%3Aoso%2F9780199335930.001.0001

Agusta-Boularot, S. 2001. 'Fontaines et fontaines monumentales en Grèce de la conquête romaine à l'époque Flavienne. Permanence ou renouveau architectural?', in *Constructions publiques et programmes édilitaires en Grèce entre le IIe siècle av. J.-C. et le Ier siècle ap. J.-C.* (BCH Suppl., 39), eds. J.-Y. Marc & J.-C. Moretti, 167–236.

Arvanitis, N. 2008. *I tiranni e le acque. Infrastrutture idrauliche e potere nella Grecia del tardo arcaismo*, Bologna.

Ault, B.A. 2016. 'Building Z in the Athenian Kerameikos. House, tavern, inn, brothel?', in *Houses of ill repute. The archaeology of brothels, houses, and taverns in the Greek world*, eds. A. Glazebrook & B. Tsakirgis, Philadelphia, 75–102. https://doi.org/10.9783/9780812292695-006

Balafoutis, K.G. 2004. *Παραδοσιακά επαγγέλματα και συνήθειες*, Athens.

Barfoed, S. 2019. 'Water, myth, and cult in Nemea', in *Ancient waterlands*, eds. B.A. Robinson, S. Bouffier & I.F. Ortega, Aix-en-Provence, 35–50. https://doi.org/10.4000/books.pup.40525.

Blundell, S. 1995. *Women in ancient Greece*, Cambridge, Massachusetts.

Bowe, P. 2012. 'The origin and development of the ancient Greek fountain', *Studies in the History of Gardens & Designed Landscapes* 32:3, 201–213. https://doi.org/10.1080/14601176.2012.681928

Bresson, A. 2016. *The making of the ancient Greek economy. Institutions, markets, and growth in the city-states*, Princeton, New Jersey.

Brunori, S. 2006. 'Vulci e le idrie attiche a figure nere', *Ostraka* 5, 249–278.

Bundrick, S. 2019. *Athens, Etruria, and the many lives of Greek figured pottery*, Madison. https://doi.org/10.2307/j.ctvfjcz1c

amongst many topics, water collection practices, such as those of the *neroulades*. For more on Gausmann's building activities in Greece, including at Amphipolis, see Robinson 2014.

Buxton, R. 1992. 'Imaginary Greek mountains', *JHS* 112, 1–15. https://doi.org/10.2307/632149

Christaki, M., G. Stournaras, P.T. Nastos & N. Mamassis 2017. 'Water supply associated with the development of the city of Athens from the end of the nineteenth century until the present', *Water History* 9, 411–431. https://doi.org/10.1007/s12685-017-0198-x

Davidson, J. 1997. *Courtesans and fishcakes. The consumption of passions of Classical Athens*, New York.

De Simone, G.F. 2008. 'Le donne alla fontana sui vasi attici a figure nere', in *Doni agli dei. Il sistema dei doni votive nei santuari. Atti del Seminario di Studi, Napoli, 21 aprile 2006*, eds. G. Greco & B. Ferrara, Pozzuoli, 317–342.

Diehl, E. 1964. *Die Hydria. Formgeschichte und Verwendung im Kult des Altertums*, Mainz.

Dillon, M.P.J. 1996. 'The importance of the water supply at Athens. The role of the ἐπιμελητὴς τῶν κρηνῶν', *Hermes* 124, 192–204.

Dorl-Klingenschmid, C. 2001. *Prunkbrunnen in kleinasiatischen Städten. Funktion im Kontext* (Studien zur antiken Stadt, 7), Munich.

Dubisch, J., ed. 1986. *Gender & power in rural Greece*, Princeton, New Jersey. https://doi.org/10.2307/j.ctvcmxs7q

Du Boulay, J. 1974. *Portrait of a Greek mountain village*, Oxford.

Durand, J.-L. & F. Lissarrague 1980. 'Un lieu d'image? L'espace du loutérion', *Hephaistos* 2, 89–106.

Ferrari, G. 2003. 'Myth and genre on Athenian vases', *ClAnt* 22, 37–54. https://doi.org/10.1525/CA.2003.22.1.37

Forbes, H. 2009. 'Researching ekina ta khronia [times past] in a rural Greek community', *Public Archaeology* 8:2–3, 88–107. https://doi.org/10.1179/175355309X457169

Frel, J. 1996. 'La céramique et la splendeur des courtisanes', *RdA* 20, 38–53.

Gasparini, V., M. Patzelt, R. Raja, A.-K. Rieger, J. Rüpke & E. Urciuoli, eds. 2020. *Lived religion in the ancient Mediterranean world. Approaching religious transformations from archaeology, history, and classics*, Berlin. https://doi.org/10.1515/9783110557596

Glaser, F. 1983. *Antike Brunnenbauten (Krēnai) in Griechenland* (Österreichische Akademie der Wissenschaften. Philosophisch-historische Klasse. Denkschriften, 161), Vienna.

Glazebrook, A. 2016. 'Is there an archaeology of prostitution?', in *Houses of ill repute. The archaeology of brothels, houses, and taverns in the Greek world*, eds. A. Glazebrook & B. Tsakirgis, Philadelphia, 169–196. https://doi.org/10.9783/9780812292695-010

Glazebrook, A. & M.M. Henry, eds. 2011. *Greek prostitutes in the ancient Mediterranean, 800 BCE–200 CE*, Madison.

Glazebrook, A. & B. Tsakirgis, eds. 2016. *Houses of ill repute. The archaeology of brothels, houses, and taverns in the Greek world*, Philadelphia. https://doi.org/10.9783/9780812292695

Graham, J.P., M. Hirai & S.-S. Kim 2016. 'An analysis of water collection labor among women and children in 24 Sub-Saharan African countries', *PLoS ONE* 11, 14 pp. https://doi.org/10.1371/journal.pone.0155981

Håland, E.J. 2020. 'Water sources and the sacred in modern and ancient Greece', in *Sa-*

cred waters. A cross-cultural compendium of hallowed springs and holy wells, ed. C. Ray, London, 41–49. https://doi.org/10.4324/9781003010142-4

Hannestad, L. 1984. 'Slaves in the fountain-house theme', in *Ancient Greek and related pottery. Proceedings of the international vase symposium in Amsterdam, 12–15 April 1984*, ed. H.A.G. Brijder, Amsterdam, 252–255.

Harrington, K.B. 2021. 'Housing and the household, in *The Cambridge companion to ancient Athens*, eds. J. Neils & D.K. Rogers, Cambridge, 124–139. https://doi.org/10.1017/9781108614054.010

Harris, E.M., D.M. Lewis & M. Woolmer, eds. 2018. *The ancient Greek economy. Markets, households and city-states*, Cambridge. https://doi.org/10.1017/CBO9781139565530

Hellner, N. 2004. 'Die Krene (κρήνη) von Megara', *AM* 119, 163–220.

Hellner, N. 2006. 'The Krene in Megara. The analysis of a thin black layer on the floor plaster', *2ο Διεθνές Συνέδριο Αρχαίας Ελληνικής Τεχνολογίας. Πρακτικά*, Athens, 172–178.

Idol, D. 2018. 'The 'peaceful conquest' of Lake Kopaïs. Modern water management and environment in Greece', *Journal of Modern Greek Studies* 36:1, 71–95. https://doi.org/10.1353/mgs.2018.0002

Iozzo, M. 2003. 'L'acqua e le donne ad Atene', in *L'acqua degli dei. Immagini di fontane, vasellame, culti salutary e in grotto*, ed. D. Sinelli, Montepulciano, 17–23.

Kapparis, K.K. 2011. 'The terminology of prostitution in the ancient Greek world', in *Greek prostitutes in the ancient Mediterranean, 800 BCE–200 CE*, eds. A. Glazebrook & M.M. Henry, Madison, 222–255.

Kerameikos 17:1. U. Knigge, *Kerameikos* XVII:1. *Der Bau Z. Text, mit einem Beitrag von K. Tancke*, Munich 2005.

Kimmelfield, I. 2016. 'The shrine of the Theotokos at the Pege', in *Fountains and water culture in Byzantium*, eds. B. Shilling & P. Stephenson, Cambridge, 299–313. https://doi.org/10.1017/cbo9781316226742.017

Klingborg, P. 2016. 'Cistern-arse! Dry humour with wet cisterns', in *De aquaeductu atque aqua urbium Lyciae Pamphyliae Pisidiae. The legacy of Sextus Julius Frontinus. Tagungsband des internationalen Frontinus-Symposiums Antalya, 31. Oktober–9. November 2014* (BABesch Suppl., 27), ed. G. Wiplinger, Leuven, 187–188.

Klingborg, P. 2017. Greek cisterns. Water and risk in ancient Greece, 600–50 BC, Ph.D. thesis, Uppsala University.

Klingborg, P. 2018. 'Water beyond the ritual in Greek sanctuaries', paper read at the conference 'Logistics in Greek sanctuaries. Exploring the human experience of visiting the Gods', 13–16 September 2018, Athens.

Kobusch, P. 2020. 'Fountains and basins in Greek sanctuaries. On the relationship between ritual performance and architecture', in *The power of urban water. Studies in premodern urbanism*, eds. N. Chiarenza, A. Haug & U. Müller, Berlin, 51–68. https://doi.org/10.1515/9783110677065-005

Kopestonsky, T.B. 2019. 'Offerings, rituals, and water. The case of the Sacred Spring at Corinth', in *Ancient waterlands*, eds. B.A. Robinson, S. Bouffier & I.F. Ortega, Aix-en-Provence, 51–66. https://doi.org/10.4000/books.pup.40535

Kosso, C.K. & K. Lawton 2009. 'Women at the fountain and the well. Imagining experience', in *The nature and function of water, baths, bathing and hygiene from antiquity through the Renaissance* (Technology and Change in History, 11), eds. C.K. Kosso & A. Scott, Leiden, 87–108. https://doi.org/10.1163/ej.9789004173576.i-538.14

Lamare, N. 2020. 'Fountains and the ancient city. Social interations, practical uses, and pleasant sights', in *The power of urban water. Studies in premodern urbanism*, eds. N. Chiarenza, A. Haug & U. Müller, Berlin, 31–50. https://doi.org/10.1515/97831106770 65-003

Lewis, S. 2002. *The Athenian woman. An iconographic handbook*, London. https://doi.org/10.4324/9780203351192

Lindsay, J. 1926. *Lysistrata by Aristophanes*, London.

Longfellow, B. 2011. *Roman imperialism and civic patronage. Form, meaning, and ideology in monumental fountain complexes*, Cambridge.

Lynch, K.M. 2016. 'Can pottery help distinguish a brothel from a tavern or house?', in *Houses of ill repute. The archaeology of brothels, houses, and taverns in the Greek world*, eds. A. Glazebrook & B. Tsakirgis, Philadelphia, 36–58. https://doi.org/10.9783/9780812292695-004

MacDonald, W.L. 1986. *The architecture of the Roman Empire* vol. II. *An urban appraisal*, New Haven & London.

Manakidou, E. 1992–1993. 'Athenerinnen in Schwarzfigurigen Brunnenhausszenen', *Hephaistos* 11–12, 51–91.

Manfrini-Aragno, I. 1992. 'Femmes à la fontaine. Réalité et imaginaire,' in *L'image en jeu. De l'antiquité à Paul Keen*, eds. C. Bron & E. Kassapoglou, Tens-sur-Morges, 127–148.

McClain, T.D. & N.K. Rauh 2011. 'The brothels at Delos. The evidence for prostitution in the maritime world', in *Greek prostitutes in the Ancient Mediterranean, 800 BCE–200 CE*, eds. A. Glazebrook & M.M. Henry, Madison, 147–171.

Neils, J. 2000. 'Others within the other. An intimate look at hetairai and maenads', in *Not the Classical ideal. Athens and the construction of the other in Greek art*, ed. B. Cohen, Leiden, 203–226. https://doi.org/10.1163/9789004493742_012

Oakley, J.H. 2000. 'Some "other" members of the Athenian household. Maids and their mistresses in fifth-century Athenian art', in *Not the Classical ideal. Athens and the construction of the other in Greek art*, ed. B. Cohen, Leiden, 227–247. https://doi.org/10.1163/9789004493742_013

Ormand, K. 2018 (rev. ed.). *Controlling desires. Sexuality in ancient Greece and Rome*, Austin.

Owens, E.J. 1982. 'The Enneakrounos fountain-house', *JHS* 102, 222–225. https://doi.org/10.2307/631145

Paga, J. 2015. 'The Southeast Fountain House in the Athenian Agora. A reappraisal of its date and historical context', *Hesperia* 84:2, 355–387. https://doi.org/10.2972/hesperia.84.2.0355

Paga, J. 2021. *Building democracy in Late Archaic Athens*, Oxford. https://doi.org/10.1093/oso%2F9780190083571.001.0001

Pfisterer-Haas, S. 2002. 'Mädchen und Frauen am Wasser', *JdI* 117, 1–79.

Pilo, C. 2012. 'Donne alla fontana e hydriai. Alcune riconsiderazioni iconografiche sul rapport tra forme e immagine', *ArcheoArte. Rivista Elettronica di Archeologia e Arte* 1, 353–369. https://doi.org/10.4429/j.arart.2011.suppl.27

Rauh, N.K. 1993. *The sacred bonds of commerce. Religion, economy, and trade society at Hellenistic Roman Delos, 166–87 B.C.*, Amsterdam.

Richard, J. 2012. *Water for the city, fountains for the people. Monumental fountains in the Roman East. An archaeological study of water management* (Studies in Eastern Mediterranean Archaeology, 9), Turnhout.

Richter, G. 1935. 'The woman at the well in Milan', *RA* 5, 200–204.

Robinson, B.A. 2013. 'Hydraulic euergetism. American archaeology and waterworks in early-20th-century Greece', *Hesperia* 82:1, 101–130. https://doi.org/10.2972/hesperia.82.1.0101

Robinson, B.A. 2014. 'The pride of Amphipolis', From the Archivist's Notebook. https://nataliavogeikoff.com/2014/09/15/the-pride-of-amphipolis/

Rogers, D.K. 2021. 'Sensing water in Roman Greece. The villa of Herodes Atticus at Eva-Loukou and the Sanctuary of Demeter and Kore at Eleusis', *AJA* 125:1, 91–122. https://doi.org/10.3764/aja.125.1.0091

Rogers, D.K. forthcoming. 'Sensory experience and ritual. The lived ancient religion of water in the Roman world', in *Archaeology of ritual in the ancient Mediterranean. Recent finds and innovative approaches*, eds. E. Angliker & M.A. Fowler, Paris.

Sabetai, V. 2009. 'The Poetics of maidenhood. Visual constructs of womanhood in vase-painting', in *Hermeneutik der Bilder. Beiträge zur Ikonographie und Interpretation griechischer Vasenmalerei*, eds. S. Schmidt & J.H. Oakley, Munich, 103–114.

Sargentis, G.-F., R. Ioannidis, G. Karakatsanis, S. Sigourou, N.D. Lagaros & D. Koutsoyiannis 2019. 'The development of the Athens water supply system and inferences for optimizing the scale of water infrastructures', *Sustainability* 11:9, 2657. https://doi.org/10.3390/su11092657

Senff, R. 2017. 'Olympia, Heiligtum und Wettkampfstätte mit wasserwirtshaftlichen Problemen', in *Cura aquarum in Greece. Proceedings of the 16th International Conference on the History of Water Management and Hydraulic Engineering in the Mediterranean Region, Athens, Greece 28–30 March 2015* (Schriften der Deutschen Wasserhistorischen Gesellschaft [DWhG] e.V., 27), ed. K. Wellbrock, Siegburg, 193–214.

Shapiro, H.A. 1989. *Art and cult under the tyrants in Athens*, Mainz am Rhein.

Shapiro, H.A. 2003. 'Brief encounters. Women and men at the fountain house', in *Griechischen Keramik im kulturellen Kontext. Akten des Internationalen Vasen-Symposions in Kiel vom 24.–28.9.2001*, eds. B. Schmaltz & M. Söldner, Münster, 96–98.

Skinner, J. 2014. 'Greek ethnography and archaeology. Limits and boundaries. An example from southern Calabria', *Dialogues d'histoire ancienne* 10, 171–203.

Smith, A.C. 2016. 'Looking inside on the outside of a pot', in *Houses of ill repute. The archaeology of brothels, houses, and taverns in the Greek world*, eds. A. Glazebrook & B. Tsakirgis, Philadelphia, 143–168. https://doi.org/10.9783/9780812292695-009

Strang, V. 2008. 'The social construction of water', in *Handbook of landscape archaeology*, eds. B. David & J. Thomas, Walnut Creek, California, 123–130. https://doi.org/10.4324/9781315427737.ch10

Stroszeck, J. 2017. 'Wells in Athens. The contribution of the Kerameikos wells' in *Cura Aquarum in Greece. Proceedings of the 16th International Conference on the History of Water Management and Hydraulic Engineering in the Mediterranean Region, Athens, Greece 28–30 March 2015* (Schriften der Deutschen Wasserhistorischen Gesellschaft [DWhG] e.V., 27), ed. K. Wellbrock, Siegburg, 43–88.

Stroszeck, J. 2021. 'Water and water management', in *The Cambridge companion to ancient Athens*, eds. J. Neils & D.K. Rogers, Cambridge, 110–123. https://doi.org/10.1017/9781108614054.009

Tölle-Kastenbein, R. 1986. 'Kallirhoe und Enneakrounos', *JdI* 101, 55–73.

Tölle-Kastenbein, R. 1990. *Antike Wasserkultur*, Munich.

Topper, K. 2012. *The imagery of the Athenian symposium*, Cambridge.

Tsiafakis, D. 2000. 'The allure and repulsion of Thracians in the art of Classical Athens', in *Not the Classical ideal. Athens and the construction of the other in Greek art*, ed. B. Cohen, Leiden, 364–389. https://doi.org/10.1163/9789004493742_018

Trümper, M. 2016. 'Locations of ill repute in late Hellenistic Delos', in *Houses of ill repute. The archaeology of brothels, houses, and taverns in the Greek world*, eds. A. Glazebrook & B. Tsakirgis, Philadelphia, 103–128. https://doi.org/10.9783/9780812292695-007

Trümper, M. 2018. 'The dirt on clean. Sanitary installations in Greek sanctuaries', paper read at the conference 'Logistics in Greek sanctuaries. Exploring the human experience of visiting the Gods', 13–16 September 2018, Athens.

von Ehrenheim, H., P. Klingborg & A. Frejman 2019. 'Water at ancient Greek sanctuaries. Medium of divine presence or commodity for mortal visitors?', *JAAH* 26, 31 pp.

Wickham, G.Y. 1972. 'Some sociological aspects of irrigation', *Philippine Sociological Review* 20:1–2, 101–112.