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The origin and development of the ancient Greek fountain

PATRICK BOWE

As a fountain has been a key, often focal, element in Western garden tradition, it may be helpful to study its development in ancient Greece where a number of fountain types emerged. These were, at first, primarily utilitarian in character, decorated as some were with architectural and sculptural ornament. Their principal purpose was to provide water for a variety of practical needs in the public squares of the cities and towns though the elegance of a fountain's design was often a matter of considerable civic pride. Towards the end of the fourth century BC, fountains that were primarily decorative rather than utilitarian began to be depicted in vase paintings. Some of these are depicted in intimate garden settings rather than in public, civic locations.

The most valuable source of information about the ancient Greek fountain lies in contemporary vase paintings, especially those on *hydria*, the vessels used to carry water.¹ While some paintings illustrate the story of Achilles' ambush of Troilus that took place at a fountain during the Trojan War, most depict fountains as facilities in everyday use, for washing, laundering or the filling of water pots. Although there is no evidence that these paintings record actual fountains, it is reasonable to assume that they were, though maybe idealized in form or subject to artistic limitation, based on the painters' experience of the fountains of their day. Most of the relevant paintings derive from Attica in the sixth and fifth centuries BC.

The less pervasive literary evidence of fountains is more varied in character. Some, like that found in the writings of Isocrates and Pausanias, is straightforward and descriptive. Other evidence, such as that found in the plays of Aristophanes or Euripides, being poetic or evocative in character, can be less reliable in its accuracy. A significant difficulty lies in a frequent failure of ancient writings, and more so of ancient writings in translation, to distinguish clearly

between a 'spring', a predominantly natural phenomenon, and a 'fountain', a predominantly man-made construction.² The ability to distinguish between the two is complicated by the fact that some natural springs and their environs were so modified for human convenience that they took on a fountain-like appearance. In such instances, reliance may be placed on the context conveyed by the available evidence.

Though archaeological evidence can be sometimes difficult to analyse because many ancient Greek fountains were reconstructed, in whole or in part, during later periods, it confirms the substantial accuracy of the depictions of fictive fountains portrayed in vase paintings. A small number of substantially complete fountain houses survive or have been reconstructed in a scholarly fashion. In addition, individual elements of fountains such as water outlets and bowls have been conserved in a number of museums.

An assembly and attempted systemization of the available forms of evidence — visual, literary and archaeological — although varied and dispersed, enable a composite picture of the ancient Greek fountain and its development to emerge.

The Archaic period (eighth century BC to sixth century BC)

Homer's poems, written down in the eighth century BC, provide evidence of the early practice of modifying natural springs to make their waters more accessible for human use. He noted how the waters of one spring had been diverted into 'broad washing tanks, fair and wrought of stone'.³ Although he referred to a plane tree by one spring and a poplar grove by another, his reference to an olive sapling being reared by a man next to yet another spring suggests that some spring-side trees were not volunteers but, rather, specifically grown to provide

shade for the spring's users.⁴ Human interventions at a spring were not always for such practical purposes. Homer referred to the erection by one spring of an altar. It may have been designed for the performance of religious rituals associated with the nymphs, referred to by Homer as associated with springs.⁵ Such varied modifications would have given a natural spring a man-made aspect anticipating, in some of its details, the forms of the entirely man-made fountains of a later period. Homer included a singular reference to a source of water as 'well-wrought' suggesting that he intended to mean a natural spring with man-made adaptations or an entirely man-made fountain.⁶ If the latter was his intention, then this evidence, dating at least from the eighth century BC, confirms an early instance of a fountain in the Western world.

Although many settlements in ancient Greece grew up near a spring so as to take advantage of a convenient supply of water, others were located, for one reason or another, usually that of defence, at some distance from a spring. In the latter case, the practice of channelling or piping water from a distant spring to such a settlement grew. The outlet of the channel or pipe when it reached the settlement came to be known as a 'fountain', the pressure of water from it being a function of the difference in level between the spring and the fountain at a lower level. Sixth century vase paintings depict two distinct types of fountains. The simplest type is that of the freestanding fountain, the more elaborate being that in the form of a fountain house.

To judge from paintings, the simplest of the freestanding fountain types seems to have consisted of a squat, masonry-faced pillar to encase a fountain's standpipe, a water outlet, in the form of a simple, undecorated pipe, projecting on one side (figure 1). The fountain shown in the illustration boasts a primitive entablature with a masonry block forming a pot stand to one side. Simple fountains with water issuing from the mouth of a sculpted lion mask are shown in other illustrations⁷ (figure 2). A variation of the freestanding fountain, in which the standpipe is encased not in cut stone masonry but in rustic, naturalistic rockwork is shown in some sixth century BC paintings⁸ (figure 3). This kind of fountain may have been conceived to reflect a natural spring from which, in Greece, water often issues downward from a cleft in a rock face.⁹ A lion mask waterspout, however, usually belies the naturalism of the fountain type and its attempt to counterfeit nature.¹⁰ This type of simple fountain with one or, at a maximum, two water outlets would have served well in a private or rural wayside location.



FIGURE 1. *The primary function of the ancient Greek fountain was to supply water for its users' practical needs. A simple, utilitarian fountain with a masonry-encased standpipe and a basic spout of a kind illustrated in vase paintings throughout the ancient Greek period. An Athenian red-figure pyxis, 500–460 BC (British Museum, London).*

The sculpted lion mask used as a fountain spout was ubiquitous in ancient Greece. It may have been thought of as a symbolic guardian of the fountain's water or may have been, simply, an allusion to the raw and vital properties of nature. The portrayal of the lion in a fountain's spout mask varied. In some paintings, the lion mask appears to be of actual size, while in others, it is diminutive. Some paintings show a mask of a belligerent animal, its teeth menacingly bared, while in others, an excessively demure representation can



FIGURE 2. *A simple, utilitarian, freestanding fountain, its standpipe encase in masonry and a decorative lion mask spout attached is shown in the shade of the lobed foliage of a plane tree. An Athenian black-figure amphora, 575–525 BC (Museum of Fine Arts, Boston).*

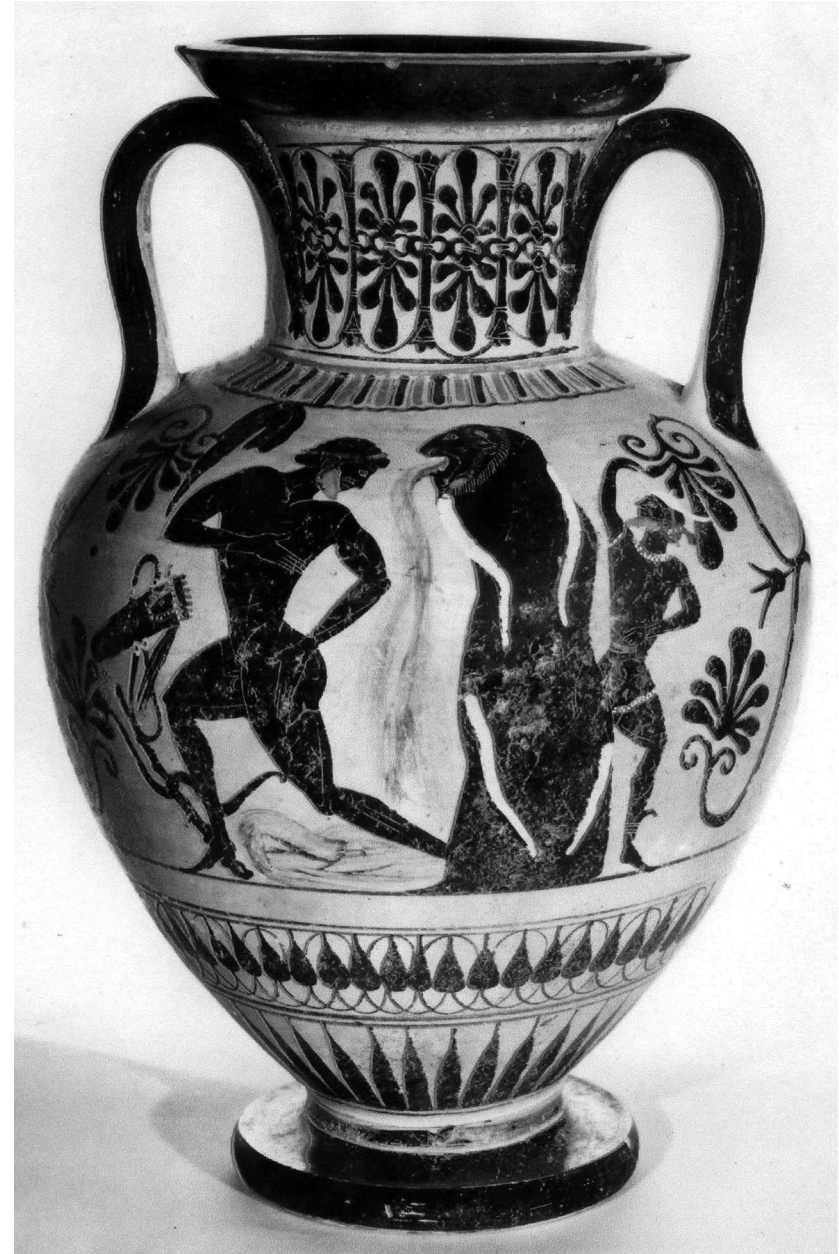


FIGURE 3. *A freestanding fountain with its standpipe encased in naturalistic rockwork, its naturalism belied, however, by the lion mask water spout. The sculpted lion mask spout was ubiquitous feature of ancient Greek fountains. An Athenian black-figure neck amphora, 550–500 BC (The British Museum).*



FIGURE 4. *The fountain house, with multiple water outlets, served better the purpose of providing water in a civic setting where a significant number of users might need to be served at the same time. An Athenian black-figure volute krater known as 'The Francois Vase', 600–550 BC (Museo Archeologico Etrusco, Florence).*

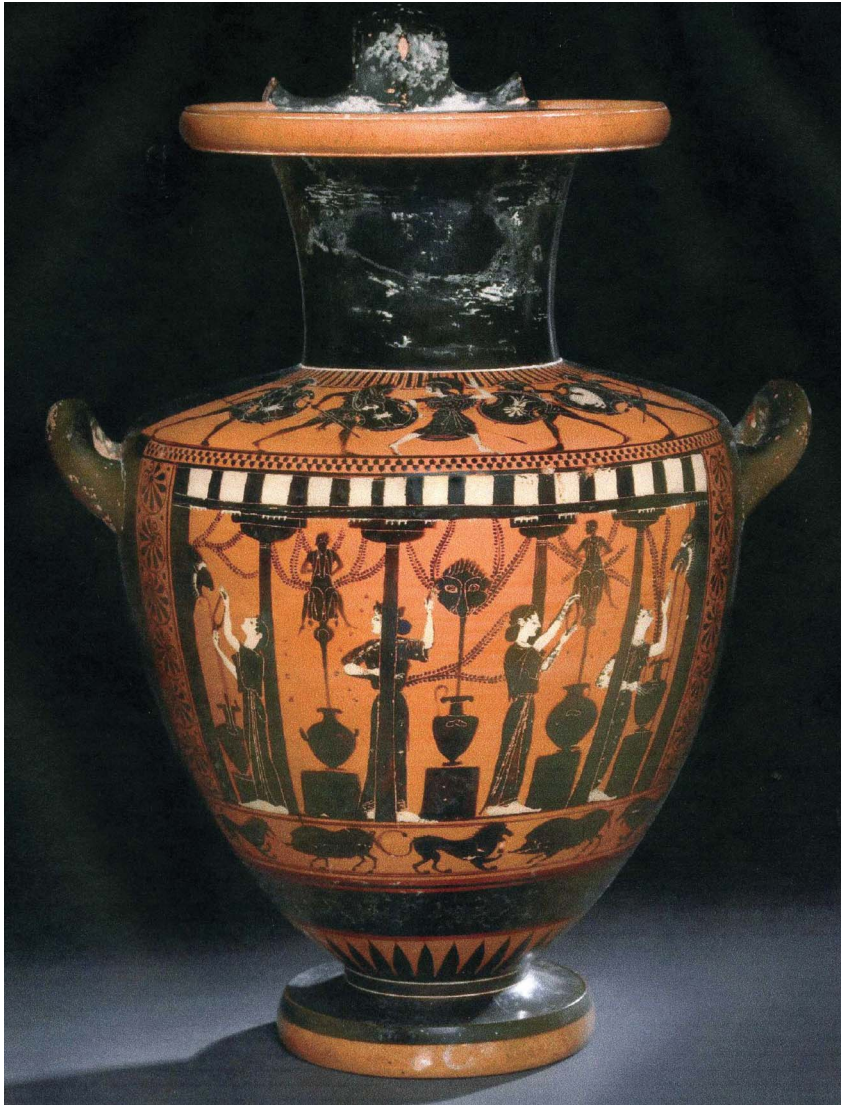
be observed. Although most fountain paintings portray the masks of male lions with voluminous manes, a lesser number depict maneless lionesses.¹¹

Larger in scale and with more water outlets, the fountain house served better the purpose of providing water in an urban setting where a significant number of users might need to be served at the same time (figure 4). Such a civic fountain usually took the form of a series of outlets mounted on a wall that was accessed through an open screen of columns in Doric or Ionic style. Such a semi-enclosed structure was, presumably, designed to protect the fountain's users from the hot sun.¹² Vase paintings show a number of variations of this standard architectural form. Some fountain screens are shown with a simple entablature.¹³ Other porticos boast a triangular pediment.¹⁴ Variations in the practical detail of design also occur. Although some paintings show water pots placed on the ground for filling, many show them placed on what appear to be individual cut stone stands.¹⁵ The provision of stands was advantageous in that pots might be more easily positioned and lifted after filling than if they had been placed on the ground.¹⁶

Late sixth century paintings depict fountain houses of increasing size and elaboration. Early paintings tend to show fountain houses with roof projections only wide enough to shade water pots being filled while later paintings show roof projections sufficiently wide to shade the users of the fountain as well.¹⁷ Fountains with multiple columns, occasionally in two rows, and with multiple water outlets, in some instances on the side walls as well as on the rear walls, are shown in other paintings¹⁸ (figure 5). A fountain erected by the dictator, Peisistratus, in the Athenian *agora* had no fewer than nine outlets. An occasional vase painting shows water descending from the roof rather than, as is usual, from the rear wall of a fountain house.¹⁹ A form of bi-lateral fountain house is also occasionally shown. In this type, water outlets are arranged back-to-back on either side of a dividing wall and are accessed from either side through matching screens of columns²⁰ (figure 6). In one depiction, a 'swan-neck' pediment with central disc spans the entire structure. Bold volutes decorate the eaves and a figure of *Nike*, the goddess of victory, presides at the apex. The pediment of another painted fountain house is ornamented with figures of prancing horses in what may be a reference to the myth of Pegasus, the winged horse whose hoof action brought forth water from a rock.²¹ Yet another painted fountain house boasts a pediment within which are figures of contorted snakes, snakes being commonly associated with water sources.²² Water outlets, though continuing to be predominantly in the form of a lion mask, show a wider variety of subject than before. Outlets in the form of a bearded satyr, a mule with erect ears and a somewhat whimsical equestrian figure are variously depicted.²³ This group of vase paintings confirm that some late sixth century fountain houses boasted a considerable range of sculptural ornament.

The Hellenic period (fifth century BC to fourth century BC)

The standard forms of fountains, including those of rustic form, and fountain houses, that had evolved during the Archaic period continued to be pictured in vase paintings of the succeeding Hellenic period, albeit in a number of variants.²⁴ While the simplest type of freestanding fountain, consisting of a squat pillar with a water outlet in the form of an undecorated pipe, is shown in one painting, other types with a little more sophistication of detailed decoration are also shown as in the example showing a standpipe encased within a squat, fluted column.²⁵ Other paintings of the period depict examples in which the squat pillar of the fountain is augmented with orthodox architectural details such as a



capital and entablature with *metopes*, *triglyphs* and *guttae*.²⁶ Yet another painting illustrates a freestanding, bilateral pillar fountain with back-to-back outlets, one in the form of a simple pipe, the other in the form of a lion mask²⁷ (figure 7).

A new variant of the freestanding fountain is observed in paintings of this period. Since the Archaic period, vase paintings showed what are referred to as 'lavers', freestanding washbasins, carved in stone or cast in clay, standing on an integral pedestal. Other paintings, from the same period, show a 'laver' used not just for washing but also as a receptacle for water falling downward from an outlet in a fountain house²⁸ (figure 8). The 'laver' is shown in two early fourth century BC vase paintings from the Greek colony of Campania in Southern Italy in use in a new and original form of fountain in which water rises in upward jets rather than falling from an outlet in the hitherto conventional way²⁹ (figures 9 and 10). The conception of an upward jet may have derived from observation of the way in which water gushes upwards sometimes in a spring as is evoked by Plato in his reference to 'a fountain which gives free course to the upward rush of water'.³⁰ It may also have been suggested by observation of the behaviour of water in a burst pipe as was described later by Ovid in his *Metamorphoses*: 'when decay has rift a leaden pipe, a hissing jet of water spurts on high'.³¹ The limited height of the upward jets of fountains such as those depicted in these paintings would have been dictated by the fact that hydraulic engineering had not advanced sufficiently to allow water to rise to an altitude higher than that from which it had originally descended. The individual jets of each fountain depicted combine to make a fan-shaped spray. As this is not an efficient means of delivering water for utility purposes, it seems reasonable to suggest that this type of fountain was contrived more for ornament or pleasure than utility. Both

FIGURE 5. The water outlets of a fountain house were usually accessed through a columnar screen. Note that two of the outlets are in the form of whimsical equestrian figures rather than the usual lion mask. Note also the rampant growth of vines on the fountain house walls, the effect of the moist atmosphere engendered by the flow of water, so that the immediate neighbourhood of a fountain must have had the character of a cool, green oasis within a city. An Attic black figure water pot, c. 510 BC (The British Museum, London).

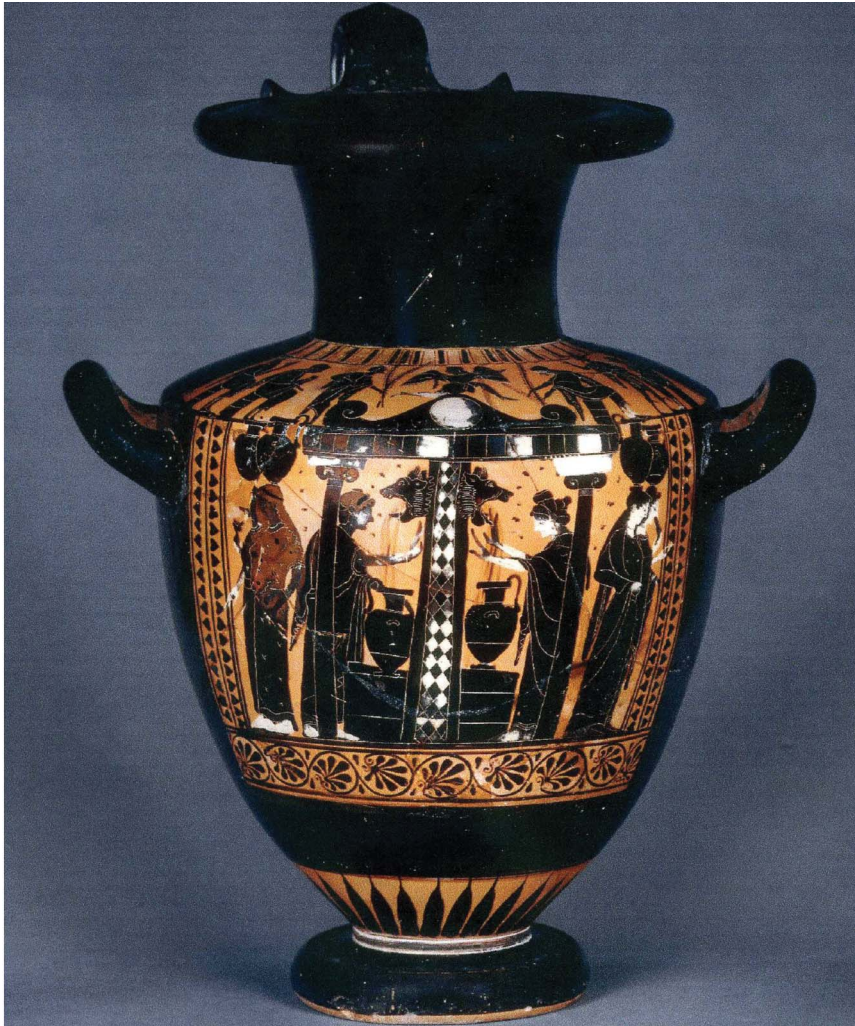


FIGURE 6. A form of bilateral fountain house with back-to-back lion mask water spouts, the dividing wall faced with diamond-pattern masonry anticipating the 'opus reticulatum' of the Roman period. A 'swan-neck' pediment with bold volutes at the eaves and a figure representing a Nike or winged victory at the apex characterizes an innovative integration of architecture, water and sculpture typical of much ancient Greek fountain house design. An Athenian black figure hydria or water pot, 520–500 BC (British Museum, London).

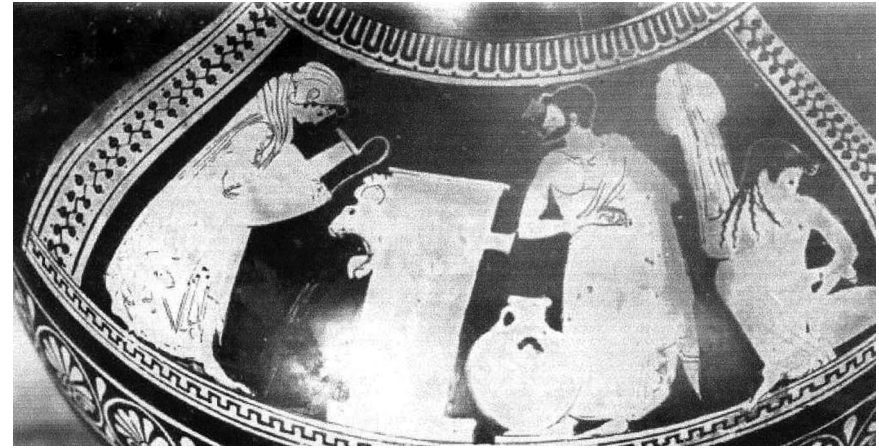


FIGURE 7. The freestanding fountain continued to be pictured during the Hellenic period albeit in a number of variants as in this bilateral fountain with back-to-back water outlets, one in the form of a simple spout, the other in the form of a lion mask. A detail from an Athenian red-figure hydria, 525–475 BC (State Hermitage Museum, St Petersburg).

paintings appear to place the fountains in an intimate domestic, rather than a public, setting. Furthermore, the incidental details of the paintings suggest the ornamental fountains as being in a garden setting. One has marginal and other scattered representations of flower heads, grape bunches and twining vines, the other a figure bringing a box of what appear to be seedlings for watering. These paintings appear to confirm that fountains were no longer seen simply as useful in the supply of water for various practical needs but also as a means of decorating a private garden or other outdoor space.³²

Vase paintings of the Hellenic period continue to show large, civic fountain houses of a kind created and maintained by the municipality of Athens.³³ The major part of a fountain of this type, a six-columned or hexastyle public fountain house in the Doric architectural style survives, with some of its lion mask spouts, at Mount Philieremo on the island of Rhodes (figure 11). Variants of this standard form, already noted in the Archaic period, such as examples of a bilateral type or with screens consisting of a double row of columns continue to be pictured.³⁴ One painting shows an arrangement by which a pair of matching fountain houses face each other. The façade of the Kastalian spring at Delphi, with seven bronze

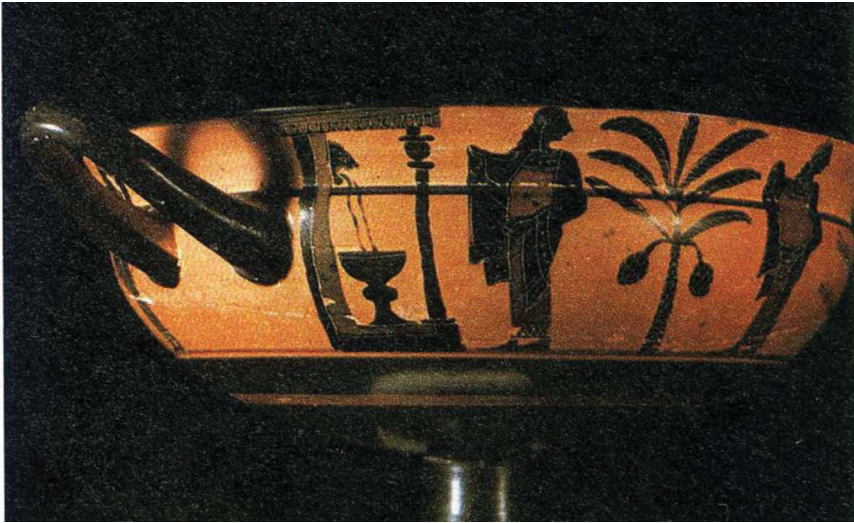


FIGURE 8. Some vase paintings show 'lavers' or freestanding washbasins, carved in stone or cast in clay and standing on an integral pedestal, used not just for washing but also as a receptacle for water falling from a fountain house outlet. An Athenian black-figure cup siana, 575–525 BC (Museo Archeologico Nazionale, Taranto).

spouts, was composed, unusually, of engaged, rock-cut columns since it was hollowed out of a rock face. Some fountain house paintings show water falling from a wall spout into a continuous trough from which, presumably, surplus water was channelled away, as Plato recommends in *The Laws*, for reuse in gymnasiums, sanctuaries and groves.³⁵ In another reference, Plato suggests that such surplus fountain water might be used to supply fishponds.³⁶

The Hellenistic period (third century BC to first century BC)

The standard forms of fountains and fountain houses that evolved in the Archaic period and that were in use throughout the Hellenic period, continued in evidence during the succeeding Hellenistic period but with a refinement of detail that was characteristic of the period.³⁷ The use of a lion mask as a fountain's water outlet continued to be ubiquitous (figure 12). A late Hellenistic relief shows a freestanding fountain with a standpipe casing of exceptional slenderness, a finely carved spout, though diminutive, in the form of a lion mask and a bowl on a finely



FIGURE 9. The typical ancient Greek 'laver' or washbasin on a pedestal is adapted to use as an innovative fountain in which the water, rather than falling from an outlet as hitherto, rises in a number of upward jets to form a fan-shaped spray. Marginal and other scattered representations of flower heads, grape bunches and twining vines indicate a garden setting. A Campanian skyphoid pyxis, early fourth century BC (National Archaeological Museum, Naples, from a photograph in A. D. Trendall, *Red figure Vases of South Italy and Sicily*).

fluted pedestal (figure 13). Freestanding fountains with casings of naturalistic rockwork, as noted during the Archaic period, are not found in the visual evidence surviving from this period, though Pausanias' description of stone shaped like river pebbles that were specially 'adapted' for fountains suggests that some fountains were of rustic character.³⁸

The fountain house continued to be an important feature of Greek cities. Its shade-giving purpose was restated by Pausanias, who noted of one example that the 'roof [was] raised on pillars to shelter it from the sun'.³⁹ No self-respecting city by this time was without its public fountain, which was usually located like those



FIGURE 11. *The fragmentary remains of ancient Greek public fountain houses, such as is seen in this fourth century BC example on Mount Philereon on the island of Rhodes, confirm the substantial accuracy of the fictive fountains portrayed in vase paintings (Alinari Archive).*

noted in Messene, Pellene and Geronthrai, in or near a city's *agora* or marketplace.⁴⁰ Some large cities had more than one. In Athens, there were two adjoining the *agora* or marketplace, one of which was known as the 'Nine Fountains' because of its nine spouts. Two others are recorded below the Acropolis and Strabo recorded a further one, located near the Lyceum, describing it, perhaps superfluously as 'constructed by man'.⁴¹ Some civic fountains were remarkable

FIGURE 10. *Fountains were no longer seen simply as useful in the supply of water for various practical needs but also as a means of decorating a private garden or other outdoor space as is shown in this illustration. Note the figure bringing what appear to be seedlings for watering. A Campanian oenochoe, early fourth century BC (Ros Collection, Baden, from a photograph in A. D. Trendall, *Red figure Vases of South Italy and Sicily*).*



FIGURE 12. *The use of a lion mask as a fountain's water outlet continued to be ubiquitous during the Hellenistic period as this realistically carved, if diminutive, example shows. A fragment of a South Italian limestone relief panel, 320–300 BC (The Getty Villa, Malibu).*

for their ornament. The dictator, Theagenes, erected a fountain house at Megara that was 'worth seeing for its size and ornament and the number of columns'.⁴² A fountain house at Epidauros was 'worth seeing for its fine ornament, particularly the roof'.⁴³ A public fountain house with an elegant pair of fluted Ionic columns survives from c. 200 BC in the city of Ephesos (figure 14).

An increased use of sculpture to adorn not only fountains but also a variety of water sources is evident. Pausanias noted 'a springhead' where there were statues of nymphs, a visible expression of the association of nymphs with springs of which, as has been noted already, there is literary evidence as early as the eighth century BC.⁴⁴ An increasing diversity of sculptural ornament was also evident in the detail of fountain water outlets. An outlet in the form of a Gorgon's head is recorded at the Kastalian spring in Delphi.⁴⁵ An outlet with a representation of a dolphin's head, considered appropriate, perhaps, because of the dolphin's association with water, was excavated on the site of a fountain house at Ai Khanoum.⁴⁶

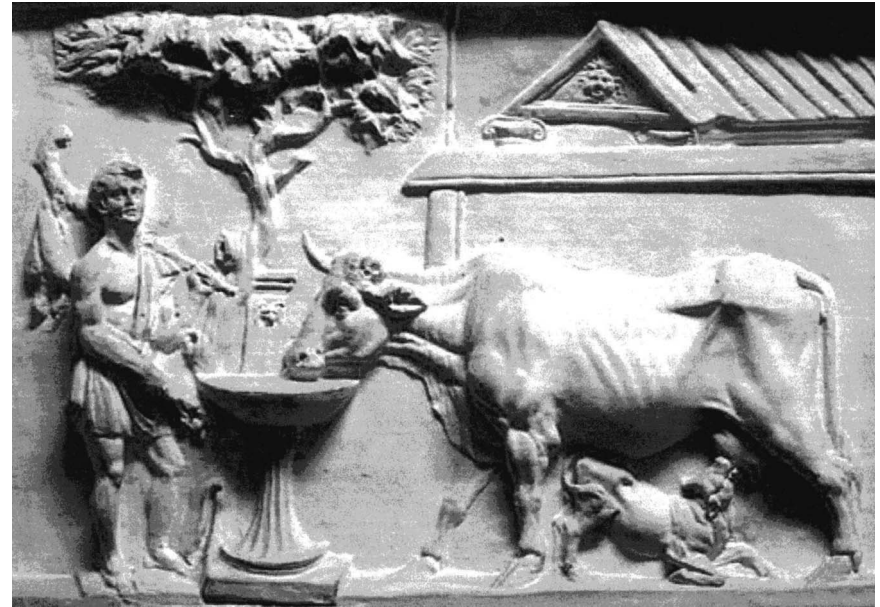


FIGURE 13. *A freestanding fountain with a 'laver-type' receptacle, already noted in a fifth century BC vase painting of a fountain house, shows a characteristic late Hellenistic refinement of detail in its standpipe casing of exceptional slenderness, its finely carved, if diminutive, lion mask water outlet and its bowl on an elegantly fluted pedestal. Late Hellenistic period. A plaster cast from an original relief in the Vatican Museum (Antikmuseet, Lund).*

That some fountains were primarily decorative rather than useful has already been noted during the preceding Hellenic period. An increasing sense of the fountain as a source of pleasure or as an object of luxury is evident in the Hellenistic period. The early third century BC writer, Apollonius Rhodius, for example, in a flight of fancy, imagines a fountain with four spouts, one gushing milk, one wine, one fragrant oil and the fourth water, that was in some seasons warm and in others cold.⁴⁷

The fountain environment

The moist atmosphere in the vicinity of a fountain was conducive to the growth of trees and other plants, even the accidental spillage from filled water pots



FIGURE 14. The civic fountain house, already evolved as a fountain type in the Archaic period, continued in evidence during the Hellenistic period as is shown by this elegant example with an Ionic screen in the city of Ephesos (the outer, cruder columns are a later addition), c. 200 BC (Livius.org).

undoubtedly irrigating the surrounding ground.⁴⁸ A rampant growth of vines such as ivy and grapevine, often in stylized form, appear on fountain house walls in many paintings.⁴⁹

Pausanias noted a large and beautiful plane tree next to the fountain of Menelaus near Orchomenos and Plato recommended that fountains should be adorned with ‘... plantations of trees’.⁵⁰ So, the immediate neighbourhood of a fountain, with its trees and vines, must have had the character of a cool, green oasis, especially in a city.⁵¹

Vase paintings of civic fountain houses show a variety of activities taking place at and around them.⁵² Women fill water-pots, men bathe and women carry wreaths, as well as sprigs, flowers and branches for re-hydration in the waters.⁵³ The busy atmosphere must have been like that which Aristophanes evoked around a spring:

I could scarcely get near to the spring though I rose before dawn,
What with tattling of tongues and rattling of pitchers in one jostling din
With slaves pushing in!⁵⁴

The cool and refreshing ambience of a fountain must have made it, especially in summer, a magnet for a wide social life.⁵⁵ Stone seats, presumably as a convenience for social intercourse as well as for rest, surrounded the laved terrace in front of the Kastalian fountain at Delphi. A character in Euripides’ play, *Medea*, refers to a group of old men sitting at gaming tables near the Peirene fountain in Corinth.⁵⁶ Isocrates describes people ‘chilling their wine at the Nine-fountains’ of Athens and Plato evokes a scene of some ‘slaves slumbering about the fountain at noon like sheep’.⁵⁷ The recreational ambience that was associated with a fountain was expressed in Athenaeus’ characterization of the frivolous songs of those who kept company around a city’s fountains: ‘But your moderns compose ivy-twisted flower-flitting fountain songs — wretched things with wretched words which they weave into nonsensical lays’.⁵⁸ Diogenes Laertius also referred to the frivolity of songs heard at a fountain.⁵⁹

Conclusion

The idea of the fountain originated in the adaptations first made by man to natural springs to make them more accessible and convenient for his practical use. Aqueducts were constructed to convey spring water to outlets in convenient locations in cities or by waysides, the outlets being called fountains. Homer’s reference in the *Odyssey*, written down in about 800 BC, to a ‘well-wrought’ source of water suggests that fountains, even in simple form, may already have been in evidence.

Two fountain types — the freestanding fountain and the fountain house — evolved during the Archaic period and continued in evidence during subsequent periods. Their primary role was not to feature water as a decorative effect but rather to supply water for a variety of practical, everyday needs, ornamented with decorative architectural elements or sculpture as many of them were. The lion

mask was the preferred form of fountain outlet in both types. A freestanding fountain generally took the form of a standpipe, encased either in precise masonry or in rustic, naturalistic rockwork. A large fountain house with multiple outlets was characteristic of a civic location where a number of users needed to be served at the same time. Some fountain houses featured an innovative integration of architecture, water and sculpture in their design. Although fountains that were primarily useful continued in evidence throughout the entire period. Fountains that feature water for its decorative effect and in a garden setting are illustrated in vase paintings of the early fourth century BC and the sense of a fountain as a source of pleasure and an object of luxury continues in the subsequent Hellenic period. An increasing refinement of detail and decorative purpose marks the development of both fountain types in this later age.

Vase paintings from the sixth century BC demonstrate that two standard forms of fountain — the fountain house and the freestanding pillar fountain — had already evolved. The fountain house form seems to have been adopted in busy urban locations where a number of water pots needed to be filled at the one time, the pillar fountain in less busy or private locations. A particular form of pillar fountain aimed at mimicking a natural spring being constructed of naturalistic random rockwork. The individual water outlets tended to be in the form of sculpted lion's heads, the lion being seen, perhaps, as the guardian of the water source. Towards the end of the Archaic period, fountain houses are shown with a variety of sculptural decoration, the innovative integration of water, sculpture and architecture being already an important characteristic of their design.

The two principal fountain types — the fountain house and the pillar fountain — continued in evidence during the succeeding Hellenic period. Individual water outlets continued to be mainly in the form of sculpted lions' heads although occasional heads of satyrs or mules were also seen. A significant development was that of the fountain jet shown in vase paintings rising from a bowl on a pedestal. The paintings show the fountains in intimate, private, garden settings indicating that the fountain was no longer simply a public utility for water supply but also a luxurious embellishment for a garden.

The two principal fountain types — the fountain house and the pillar fountain — devised first during the Archaic period, continued further in use during the Hellenistic period but boasting a refinement of detail that was characteristic of the time. An echo of the rustic fountains of the Archaic age is found in a consideration that river pebbles rather than cut stone were appropriate for the decoration of fountains. An increased use of sculpture to adorn not only fountains but also many different kinds of water sources is indicated. The growing sense that a fountain might be primarily ornamental rather than utilitarian, already evident in the preceding Hellenic period, was confirmed.

Paintings of fountains show them often to have been in a setting of trees and vines, the result, surely, of the moisture in the air and the ground around them. The cool shade thus created made them a magnet for the enjoyment of summer leisure and recreation. This was especially evident in the case of the public fountains in a city. The gradual realization that a fountain could be an object of ornament and an accompaniment of leisure as well as a necessary utility anticipated the place awarded to the fountain in the later Western garden tradition.

NOTES

1. The date ranges of vase paintings adopted in this article are those of the Beazley Archive, see www.beazley.ox.ac.uk. Images of fountains occur, occasionally, on coins, see, for example, coins from Himera, Sicily, c. 440–425 BC, and from Pherai in Thessaly, c. 400 BC.
2. Compare, for example, such differences in translation in Pausanias, *Pausanias, Description of Greece* trans. by W. H. S Jones and H. A. Ormerod (Cambridge, MA: Harvard University Press; London: William Heinemann, 1918) and in Pausanias, *Pausanias Guide to Greece* trans. by Peter Levi (Harmondsworth, Middlesex: Penguin Books, 1971), 2 vols.
3. Homer, *The Iliad*, trans. by A. T. Murray (Cambridge, MA: Harvard University Press; London: William Heinemann, 1924), book 22, line 131.
4. Homer, *The Iliad*, book 2, line 307 and book 17, line 55 successively; *The Odyssey*, trans. by A. T. Murray (Cambridge, MA: Harvard University Press; London: William Heinemann, 1919), book 6, line 288 and book 9, line 142. For a further association of an olive tree with a spring, see the 'Hymn 2 to Demeter', Hesiod, *The Homeric Hymns and Homerica*, trans. by Hugh G. Evelyn-White (Cambridge, MA: Harvard University Press; London: William Heinemann, 1914), line 100.
5. See Homer, *The Iliad*, book 2, line 305, and *The Odyssey*, book 5, line 50. For a further association of a nymph with a spring during the Archaic period, see Sappho, *Greek Lyric, Sappho and Alcaeus*, trans. and ed.

- by David A. Campbell (Cambridge, MA, and London: Harvard University Press, 2002), p. 201. The association of nymphs with springs led, later in European garden history, to the not infrequent designation of a fountain as a 'nymphaeum'.
6. Homer, *The Odyssey*, book 17, line 205.
 7. See an Athenian black-figure *dinos*, 575–525 BC, Paris, Musée du Louvre, no. E876. For the story of Achilles and Troilus, see Hesiod, *The Cypria*, fragment 1.
 8. A number of other paintings of the story of Troilus and Achilles from the Trojan War show similarly rustic fountains. See an Athenian black-figure *amphora*, 525–475 BC, Capua, Museo Campano, no. 7550, an Athenian black-figure *lekythos*, 525–475 BC, Karlsruhe, Badisches Landesmuseum, no. B27, an Athenian black-figure *lekythos*, 550–500 BC, Copenhagen, National Museum, no. 3629, an Athenian black-figure *lekythos*, 525–475 BC, Toledo, Museum of Art, no. 47.62 and an Athenian black-figure neck amphora, 550–500 BC, London, British Museum, no. B229.
 9. See, for example, the description of a spring in Euripides, 'Bacchae', *The Tragedies of Euripides*, trans. by T. A. Buckley (London, Henry G. Bohn, 1850), p. 705.
 10. Other examples of paintings of fountains in this rustic style include an Athenian black-figure *hydria*, 550–500 BC, London, British Museum, no. B324, an Athenian black-figure *lekythos*, 550–500 BC, Copenhagen, National Museum, no. 3629, an Athenian black-figure *amphora*, 525–475 BC, Capua, Museo Campano, no. 7550 and an Athenian black-figure *lekythos*, 525–475 BC, Karlsruhe, Badisches Landesmuseum, no. 186.
 11. What are described here as the heads of female lions are described in the Beazley Archive as the heads of panthers.
 12. See an Athenian black-figure *dinos*, 575–500 BC, Paris, Musée du Louvre, no. E876. In some cases, the wall of a fountain house may have acted to screen a water-holding tank behind.
 13. See an Athenian black-figure *hydria*, 550–500 BC, Würzburg, Universität, Martin von Wagner Museum, no. 316.
 14. See an Athenian black-figure *hydria*, 550–500 BC, London, British Museum, no. 1843.11–3.17.
 15. For pots placed on the ground for filling, see an Athenian black-figure *amphora*, 575–525 BC, London, the British Museum, no. 1897.7–21.2 and an Athenian black-figure *hydria*, 575–525 BC, New York, Metropolitan Museum of Art, no. 45.11.2.
 16. Some pot stands are stepped as is shown on an Athenian black-figure *hydria*, 525–475 BC, Paris, Musée du Louvre, no. 11267.
 17. See an Athenian black-figure *hydria*, 525–475 BC, Boston (MA) Museum of Fine Arts, no. 61.195.
 18. See an Athenian red-figure *hydria*, 550–500 BC, Boulogne, Musée Communale, no. 406.
 19. See an Athenian black-figure neck amphora, 525–475 BC, New York, Metropolitan Museum of Art, no. 41.162.212.
 20. A bilateral fountain house is also shown on an Athenian black-figure *hydria*, 525–475 BC, London, British Museum, no. B335, an Athenian black-figure *hydria*, 550–500 BC, Munich, Antikensammlungen, no. 1715, and an Athenian red-figure *hydria*, 525–475 BC, Rome, Museo Torlonia, no. 73.
 21. See an Athenian black-figure *hydria*, 550–500 BC, Leiden, Rijksmuseum van Oudheden, no. II 1 67.
 22. See an Athenian black-figure *hydria*, 550–500 BC, London, British Museum, no. 1836.2–24.169, an Athenian black-figure *hydria*, 550–500 BC, Vatican City, Museo Gregoriano Etrusco Vaticano no. 16449, and an Athenian black-figure *hydria*, 550–500 BC, Boulogne, Musée Communale, no. 406.
 23. See an Athenian red-figure *hydria*, 525–475 BC, Rome, Museo Torlonia, no. 73, an Athenian black-figure *hydria*, 550–500 BC, Vatican, Museo Gregoriano Etrusco, no. 417 and an Athenian black-figure *hydria*, 525–475 BC, Paris, Musée du Louvre, no. F296.
 24. See an Athenian black-figure *lekythos*, 525–475 BC, London, British Museum, no. B 542.
 25. See an Athenian black-figure *dinos*, 575–525 BC, Paris, Musée du Louvre, no. E 876 and an Athenian black-figure *amphora*, 575–525 BC, London, British Museum, no. 1899.7.2.12. Other paintings show fountains with simple, utilitarian spouts that project from the side of a table-like form. See an Athenian red-figure *lekythos*, 550–500 BC, Berlin, Antikensammlung, no. 3339 and an Athenian red-figure *lekythos*, 475–425 BC, Oxford, Ashmolean Museum, no. 1966.9.18. See also an Athenian black-figure neck *amphora*, undated, Kiel Antikensammlung, no. B595.
 26. See, for example, an Athenian red-figure cup fragment, 525–475 BC, Malibu (CA), The J. Paul Getty Museum, no. S83.AE45.
 27. See also an Athenian red-figure *hydria*, 525–475 BC, St Petersburg, State Hermitage Museum, no. ST1612.
 28. See an Athenian black-figure cup *siana*, 575–525 BC Taranto, Museo Archeologico Nazionale. The bowl shown on the pedestal resembles the washing bowls, called lavers, that are shown in many vase paintings such as an Athenian red-figure cup, 525–475 BC, Baltimore (MD), Walters Museum, no. 48.89 and an Athenian red-figure cup, 525–475 BC, New York (NY), Metropolitan Museum, no. 41.162.128.
 29. See A. D. Trendall, *Red figure Vases of South Italy and Sicily* (London and New York: Thames & Hudson, 1989), figs 321 and 328.
 30. Plato, *The Laws*, book 4, 719a.
 31. P. Ovidius Naso, *Metamorphoses*, Brookes Moore (Boston: Cornhill Publishing Co., 1922), book 4, line 55.
 32. For the design and planting of the ancient Greek garden, see Robin Osborne, 'Classical Greek Gardens: Between Farm and Paradise', *Garden History, Issues, Approaches, Methods*, edited by John Dixon Hunt (Washington, DC: Dumbarton Oaks Library and Collections, 1989), pp. 373–391; and Patrick Bowe, 'The evolution of the ancient Greek garden', *Studies in the History of Gardens and Designed Landscapes*, London & Philadelphia, 30/4, September 2010, pp. 208–223.
 33. Demosthenes, 'On Organization', *Demosthenes*, trans. by C. A. Vince and J. H. Vince (Cambridge, MA: Harvard University Press; London, William Heinemann, 1926), section 30.
 34. See an Athenian black-figure *skyphos*, 525–475 BC, Athens, National Museum, no. 12531, an Athenian black-figure *hydria*, 525–475 BC, London, British Museum, no. B335, an Athenian black-figure *lekythos*, 500–450 BC, Taranto, Museo Archeologico Nazionale,

- no. 52209 and an Athenian black-figure *hydria*, 525–475 BC, Paris, Musée du Louvre, no. F302, respectively.
35. Plato, 'The Laws', *Plato in Twelve Volumes*, vols 10 and 11, trans. by R. G. Bury (Cambridge, MA: Harvard University Press; London, William Heinemann, 1967 and 1968), book 6, 761c.
36. Plato, 'Statesman', op. cit., Vol. 12, trans. by Harold N. Fowler (Cambridge, MA: Harvard University Press; London, William Heinemann, 1921), p. 264c.
37. For confirmation that both bronze and lead were used as materials for fountain piping see Pausanias, book IV, chapter 35, p. 190, and Diodorus Siculus, *Library*, book XII, chapter 10.
38. Pausanias, Vol. 2, book III, p. 78.
39. Pausanias, Vol. 1, book X, p. 506.
40. Pausanias, Vol. 1, book X, p. 410 and Vol. 2, book III, p. 82.
41. Pausanias, Vol. 1, book I, p. 80, and Strabo, *The Geography of Strabo*, ed. H. L. Jones (Cambridge, MA: Harvard University Press; London, William Heinemann, 1924), book 9, chapter 1, section 19, respectively.
42. Pausanias, Vol. 1, book I, p. 111.
43. Pausanias, Vol. 1, book II, p. 195.
44. Pausanias, Vol. 1, book X, p. 436.
45. See a 246 BC inscription found on the site that is referred to in Tony Perrotet, *The Naked Olympics* (New York: Random House, 2004), p. 45.
46. Ai Khanoum is the site of a fourth century BC city founded by the army of Alexander the Great and located in present-day Afghanistan. See John Camp and Elizabeth Fisher, *Exploring the World of the Ancient Greeks* (London: Thames & Hudson, 2002) p. 197.
47. Apollonius Rhodius, *Argonautica*, trans. by Edward Coleridge (London: George Bell, 1889), book III, p. 215.
48. See an Athenian red-figure *hydria*, 550–500 BC, now lost, but illustrated in the Beazley archive, vase no 200120.
49. See an Athenian black-figure neck *amphora*, undated, Kiel, Antikensammlung, no. B595, an Athenian black-figure *dinos*, 575–525 BC, Paris, Musée du Louvre, no. E 876, an Athenian black-figure *hydria*, 550–500 BC, Naples, Museo Archeologico Nazionale, no. H12 and an Athenian black-figure *hydria*, 550–500 BC Wurzburg, Universitat, Martin von Wagner Museum, no. L316.
50. Pausanias, Vol. 2, book VIII, p. 425, and Plato, 'Laws', book 6, section 761b.
51. See an Athenian black figure *dinos*, 575–525 BC, Paris, Louvre Museum, no. E 876, an Athenian black-figure *lekythos*, 525–475 BC, Toledo (OH), Museum of Art, no. 47.62 and an Athenian black-figure *hydria*, 550–500 BC, Leiden, Rijksmuseum van Oudheden, no. II 1 67.
52. See an Athenian black-figure *hydria*, 550–500 BC, Madrid, Museo Arqueológico Nacional, no. L66 and the Athenian black-figure *hydria*, 550–500 BC, Leiden, Rijksmuseum van Oudheden, no. II 1 67. See also Plato, 'Laws', book 6, section 764b.
53. See an Athenian black-figure *hydria*, 550–500 BC, London, British Museum, no. B330, an Athenian black-figure *hydria*, 525–475 BC, London, British Museum, no. B 335 and an Athenian black-figure *hydria*, 550–500 BC, Antikensammlung, Berlin, no. F 1908.
54. Aristophanes, *Lysistrata*, ed. Jack Lindsay (Perseus digital library) line 328.
55. Plato, 'Phaedrus', *Plato in Twelve Volumes*, Vol. 9, trans. by Harold N. Fowler (Cambridge, MA: Harvard University Press; London, William Heinemann, 1925), 259a.
56. Euripides, 'Medea', *Euripides*, ed. David Kovacs (Cambridge, MA: Harvard University Press, 1994), line 68.
57. Isocrates, 'Antidosis', *Speeches and Letters*, trans. by George Norlin (Cambridge, MA: Harvard University Press; London: William Heinemann, 1980), section 287, and Plato, 'Phaedrus', Vol. 9, trans. by Harold N. Fowler (Cambridge, MA: Harvard University Press; London: William Heinemann, 1925), section 259a.
58. Athenaeus, *The Learned Banqueters*, trans. by S. Douglas Olson (Cambridge, MA, and London: Harvard University Press, 2009), book xiv, pp. 643–644.
59. Diogenes Laertius, 'Crates', *Lives of Eminent Philosophers* (Cambridge, MA, and London: Harvard University Press, 2005), Vol. IV, pp. 20–22.