

Chapter 2

The Historical Evidence

The range of historical sources for the Athenian naval installations at the Piraeus includes the Naval Inventories and other inscriptions, nearly contemporary historical accounts such as those by Herodotus, Thucydides and Xenophon, and the works of comic poets, orators, and geographical and topographical writers. Clearly the most valuable sources are the official Athenian inscriptions, but unfortunately these are often fragmentary, and derive almost entirely from the 4th century BC. Except for the inscriptions, most of the historical sources were written some time after the events they record. Orations may include exaggerations or alterations intended to make rhetorical points, in much the same way as passages in comic plays may do the same for the sake of humour.

Any attempt to trace the precise dates and historical circumstances of the initial construction of the slipways, shipsheds and other naval installations of the Piraeus, and their building phases, is confronted with three interlinked problems. First is the lack of precise archaeological dating evidence for the Phase 1 slipways and the Phase 2 shipsheds in Area 1 of Zea Harbour (see p. 7). Second is the paucity of literary sources on the subject. Despite the importance of these monumental building projects in the history of Athens as a naval and imperial power, few near contemporary writers mention them, and later writers seem to have had only vague notions concerning their origins and evolution. Third is the clarity of the textual evidence, which often uses terminology that does not explicitly describe slipways or shipsheds. None of these problems is completely insuperable. If historical circumstances and the limitations of the written and archaeological evidence are considered, it is possible to obtain results that, while provisional, can cast light on the chronology of the slipways, shipsheds and other naval installations in the Piraeus (see pp. 168–173).¹

The 6th Century BC

The Athenians appear to have had little interest in the Piraeus as a seaport throughout the Archaic period.

1. The present author wishes to express his gratitude to Prof. V. Gabrielsen, Dr. J. Hale and Dr. C. Papadopoulou for our fruitful discussions of the historical source material.

According to Herodotus (6.116), prior to the development of the Piraeus, the Bay of Phaleron was home to the city's naval base, or *epineion* (ἐπίνειον). It was from here, presumably, that Athens launched its early small-scale maritime endeavours. These would have included the sending of 20 ships to help the Ionians in their struggles against Persia in 499 BC (Hdt. 5.97), among others. Due to modern development, the original topography of the Bay of Phaleron is difficult to reconstruct, but presumably its open beach lacked suitable conditions for more ambitious harbour works.

The Late 6th to Early 5th Centuries BC

As Athens' naval objectives grew towards the end of the Archaic period, both under the tyrants and the democracy, so too did the requirements for protective harbourage.

In 511/10 BC, the tyrant Hippias fortified the Mounichia Hill ([*Ath. Pol.*] 19.2), an initiative that may have included some accommodations for warships in either Zea or Mounichia Harbours.

The historical evidence becomes somewhat more explicit concerning the early period of the democracy. Thucydides' description (1.93.3–8) of Themistocles' naval ambitions, and his dedication to converting Athens' military and commercial might towards the sea, is the best source on the origin and development of the naval installations in the Piraeus. Even so, Thucydides mentions only the initiation of the *fortification* of the Piraeus during Themistocles' archonship in 493/2 BC and their completion some 13–16 years later around 479–477 BC.² Constructing such fortifications was based on the need to protect whatever strategic and economic assets the Piraeus then contained, or might contain in the near future. If Themistocles' plan entailed the use of the Piraeus as a fortified refuge where Athenians could withstand a siege, supplied from the sea, then the Athenians would have required naval installations of some sort to accommodate the fleet. The fleet could then ensure seaward access and prevent blockades. According to Thucydides (1.93.3), Themistocles in 479 BC persuaded the Athenians “to build the remaining things (τὰ λοιπὰ) of the Piraeus”. Thucydides' use of a general term τὰ λοιπὰ rather than a specific term for ‘wall’ or ‘fortification’ suggests that whatever plan had been formulated included other el-

ements. Thucydides (1.93.6) clearly states that it was Themistocles' plan to defend the fortified Piraeus with a few men, “while all the rest might man the ships”. For this plan to be effective, the fleet must have been able to operate out of the Piraeus, and this would have required naval installations in some form.

The Bay of Phaleron, however, appears to have been considered the main naval base of Athens still in 490 BC, when the Persian fleet lay there briefly after their defeat in the Battle at Marathon (Hdt. 6.116),³ and perhaps even a decade later in 480 BC, when the Persian fleet used the same bay as a naval base during the invasion by Xerxes (Hdt. 8.66–67, 8.91–93, 9.32). It should be noted, however, that even if the three Piraeic harbours had undergone some stage of development in the first two decades of the 5th century BC, the Persians might have considered it tactically unsound to bottle up their fleet within them. Furthermore, if naval installations did exist in the Piraeus at the time of the Persian invasion of 480 BC, they would have had a capacity of, at the very most, 200 *triremes*⁴ – far too little space to accommodate a significant portion of the Persian fleet (600 to 1,207 *triremes*)⁵ and its support vessels (3,000 according to Hdt. 7.184). The better base for the large Persian fleet was certainly the Bay of Phaleron.

Later writers allude to shipsheds (or slipways) and their construction in the Piraeus in the early 5th century BC. Plato (*Grg.* 455d–e) has Gorgias tell Socrates: “I suppose that these naval bases and walls of Athens,

2. Chambers (1984: 43–50) argues that the initial building phase began in 483 BC, but the present author follows the date of 493/2 BC; see also French 1964: 77; Lenardon 1978: 36; Lazenby 1993: 84.

3. Cf. Diod. Sic. 11.41.2; Paus. 1.1.2–4.

4. Herodotus (7.144) mentions that Athens used the silver from the strike at Laurion (in 483/2 BC) to build 200 *triremes*. According to Aristotle ([*Ath. Pol.*] 22.7) and Plutarch (*Them.* 4.1) the Athenians built only 100 *triremes*.

5. The size of the Persian fleet on the eve of the Battle at Salamis is much debated and will not be discussed in detail here. On the *minimum* size of the Persian fleet: Tarn 1908: 600 *triremes*; Lazenby 1993: 800 *triremes*. On the *maximum* number of *triremes* at Salamis: Herodotus (7.89, 7.184) counts 1,207 *triremes*; Isocrates (4.93): 1,200 *triremes*. Aeschylus (*Pers.* 341–343), who fought at Salamis, mentions 1,000 *triremes*. He also refers to 207 *fast triremes*, which according to Morrison (in Morrison, Coates & Rankov 2000), is probably included in the aforementioned 1,000 *triremes*.

and the construction of your harbours, are due to the advice of Themistocles, and in part to that of Pericles, and not to your craftsmen”. Socrates answers: “So we are told, Gorgias, of Themistocles; and as to Pericles, I heard him myself when he was advising us about the Middle Wall”. Although Gorgias does not explicitly state that the work was carried out in Themistocles’ time, and in spite of Socrates’ reticence in attributing the works to Themistocles, this passage nevertheless points towards the possibility of an early 5th century BC shipshed (or slipway) phase in the Piraeus.⁶

Later, in the 4th century BC, Demosthenes (*Against Aristocrates* 23.207) associates Themistocles, Miltiades and other prominent historical figures with extensive public works in the 5th century BC: “...both the structure and the equipment of their public buildings were on such a scale and of such quality that no opportunity of surpassing them was left to coming generations”. In this context he mentions the “shipsheds” (νεώσοικοι) among the most important public works, doubtlessly referring to the naval installations in the Piraeus. While Demosthenes fails to specify who built them and when, he indicates that shipsheds were constructed in the period when these Athenian statesmen were active in the democracy.

Unfortunately, the literary sources fail to provide clear indications of shipshed or slipway construction in the early 5th century BC. When the Persian and Greek allied fleets met at Salamis in 480 BC the Athenians commanded just under 200 *triremes*. The large numbers of *triremes* acquired and built by Athens in the early 5th century BC, both before and after Salamis, would have required permanent housing for their protection and maintenance. While there is no solid indication that shipsheds or slipways were built in the Piraeus during the years in which Themistocles was an influential statesman (493/2–472/1 BC), it is likely, based on the requirements of storing and maintaining large fleets and the evidence from literary sources outlined above, that these structures were constructed in the late 480s or early 470s BC. The time frame may have been the short period following the vote to build ships using the silver from the Laurion strike in 483/2 BC and before the Battle of Salamis (480 BC), in the few years following Salamis, or soon after the Delian League’s formation in 478 BC.⁷ However, it cannot be ruled

out that slipways and shipsheds were constructed in the Piraeus between 493/2 and 483/2 BC, or even earlier.

Second Half of the 5th Century BC

The sources grow more informative in the second half of the 5th century BC. Inscription IG *F* 153, dated to between 450 and 430 BC,⁸ may be considered the earliest unambiguous evidence for the existence of naval installations. It lists a group of officials called ἐπιμελόμενοι τῷ νεορίῳ, or “naval base superintendents”.⁹ The date of the creation of these positions remains unclear, but there appears to have been a period of shipshed construction between the establishment of the Thirty Years’ Peace around 446/5 BC and the beginning of the Peloponnesian War,¹⁰ at least as related in 5th-century BC inscriptions and by writers of the following century. For example, Aeschines (*On the Embassy* 2.174), who is generally considered to be a reliable source,¹¹ mentions the construction of shipsheds directly after the accord was reached. In addition, Andocides (*On the Peace* 3.7) claims that the Athenians “built” (ᾠκοδομησάμεθα) shipsheds and constructed 100 *triremes* after Pericles concluded the Thirty Years’ Peace with Sparta in 446/5 BC.¹² Firmer

6. Jordan (1975: 19–20) considers the dialogue and Plato’s further mention of νεώρια (see e.g. *Grg.* 517c, 519e) as “good evidence that the earliest naval installations in the harbours of Athens were also built under the instigation of Themistocles”.

7. Gabrielsen (1994: 26–39) convincingly argues that the trierarchy was in all probability established during the 480s, and that an administrative infrastructure was already in place by 480 BC or shortly thereafter. However, there is no obvious link between the existence of the trierarchy and naval installations in the Piraeus.

8. Originally published as IG *F* 73, 19. Prof. Gabrielsen considers a date closer to 450 BC as more likely (pers. comm., 2010).

9. Blackman 1968: 189; Jordan 1975: 35–40.

10. Hornblower 1991: 186–187.

11. On Aeschines as a reliable source, see Gill 2006.

12. Unfortunately, Andocides’ chronology is confused and there remain questions concerning the authenticity of his speeches. The construction of 100 *triremes* and the 1,000-talent fund kept on the Acropolis, for example, date in fact to the first part of the Peloponnesian War (see Thuc. 2.24 and Gill 2006: 11). Harris (2000: 480–485; cf. Gill 2006: 11) believes that Andocides’ speech is a Hellenistic forgery based on Aeschines’ *On the Embassy*, but even a ‘forger’ may cite correct historical facts to make the text appear authentic.

information is provided by the First Callias Decree (IG *I*³ 52, 30–31), dated to 434/3 BC, which states that the amount remaining when the monies owed to the sacred treasuries of the other gods have been paid should be used on the *neorion* (τὸ νεώριον) and “the walls” (τὰ τείχε). Although the amount is unknown, this provides a clear indication that naval installations were constructed or repaired, or both, around 434/3 BC.¹³

References to shipsheds in the last quarter of the 5th century BC – a time when Athens had reached the zenith of her naval empire – are strikingly few. Aside from Aristophanes’ mention of a shipshed and *neorion* in the *Acharnians*, produced in 425 BC, and *neorion* in the *Birds* (414 BC),¹⁴ we must rely on 4th-century BC writers who describe the aftermath of the Peloponnesian War, when the shipsheds were most probably demolished by the Thirty Tyrants on the orders of the Spartans. According to Isocrates (7.66), “not less than a thousand talents” were spent on the shipsheds, and the Thirty Tyrants sold them for demolition (in 404/3 BC) for three talents. Lysias (*Against Eratosthenes* 12.40) describes the Piraeus as having been “stripped” (περιεῖλον), a term which may signal that parts of both the harbour fortifications and the shipsheds were dismantled or demolished. D.J. Blackman, however, questions whether the shipsheds were completely destroyed, since a speech of Lysias (*Against Nicomachus* 30.22), dated to 399/8 BC, mentions that they were “falling to pieces”, as Blackman translates περικαταρρέοντα.¹⁵ Thus the extent of the demolition of 404/3 BC remains unknown.

The Spartans rendered Athens powerless at the end of the Peloponnesian War in 404 BC. Athens’ unconditional surrender left the city with a mere 12 *triremes* and her naval installations in ruins, perhaps with the exception of shipsheds for these remaining *triremes*.¹⁶ The Spartans and their allies realised that if the shipsheds in the Piraeus – a potent symbol of Athenian naval power – remained standing, the city would have required far fewer resources to revive an operational fleet, either through alliances or through democratically-minded Athenians scattered around the Mediterranean. The most prominent of the latter was Conon, based in Cyprus, with

at least eight fully-manned *triremes* salvaged from the Battle of Aegospotami in 405 BC, and thus with at least 1,600 men at his disposal.¹⁷ To be made completely inoperative, the shipshed colonnades, walls and roofs, like parts of Athens’ Long Walls, were most likely pulled down.

First Half of the 4th Century BC

Conon, who spearheaded the Athenian naval recovery with his success over a Spartan fleet at the Battle of Cnidus in 394 BC, expanded and rebuilt major parts of the fortifications in the Piraeus.¹⁸ Conon’s large *trireme* fleet required protective facilities, so he probably also rebuilt parts of the shipsheds.

Several naval inscriptions from the 4th century BC provide a number of details about the size of the Athenian fleet and the naval installations in the Piraeus. Naval Inventory IG *II*² 1604, 72, dated to 378/7 BC, simply lists a *neorion* (τῶι νεωρίωι) and 103 *triremes*.¹⁹ IG *II*² 1611, 3–9 of 357/6 BC lists 283 *triremes* and their locations: “those that are hauled up in the shipsheds”, “those that are lying in the open” (meaning that they were standing on unroofed slipways, or out in the open on the natural shore), and “those that have set sail” (i.e. are out at sea). The 349 *triremes* of 353/2 BC listed in IG *II*² 1613, 302 are described in a similar manner: “those that are in the *neoria*”, “those that are in the charge of trierarchs” (i.e. in commission) and “those that are lying in the open”.²⁰

Unfortunately, these inscriptions do not specify how many of these *triremes* were kept in shipsheds and/or standing on slipways, and how many of these

13. The funds spent on τὸ νεώριον are less likely to have included work on slipways, as there is evidence of unroofed slipways being overbuilt by shipsheds in the 5th century BC in Areas 1–2 at Zea (see pp. 53–54, 168–169).

14. Aristophanes, *Ach.* 96, 915ff; *Av.* 1537–1540; see also Cratinus, fr. 197. The audience, in order to appreciate the comical aspect, must have been familiar with this building type.

15. Blackman 1968: 188.

16. Xen. *Hell.* 2.2.20, 2.3.8; Lysias, *Against Agoratus* 13.46.

17. Xen. *Hell.* 2.1.28–29.

18. Xen. *Hell.* 4.8.9–10; IG *II*² 1656–1664.

19. Gabrielsen 2008: 51, n.29 (here, Polyb. 62.2.2 should be 62.2.6).

20. Based on information provided by Prof. Gabrielsen, Feb. 2010. Prof. Gabrielsen’s unpublished translations are used here.

structures lined the shores of the Piraeus. However, given the importance of the buildings in maintaining the *trireme* fleet's operational status, the majority were probably kept in the Piraean shipsheds or on slipways and in smaller Athenian naval stations elsewhere, such as at Oiniadai (Xen. *Hell.* 4.6.14; see p. 25). These inscriptions clearly demonstrate a marked increase in the size of the fleet in the second quarter of the 4th century BC,²¹ and are strongly suggestive of major shipshed construction and repairs in the first half of the same century.

Second Half of the 4th Century BC

The picture of the size and scope of the shipsheds in their respective harbours increases in the latter half of the 4th century BC. The Naval Inventory IG *II*² 1627, 398–405, from 330/29 BC, lists a total of 372 shipsheds lining the three Piraean harbours: Kantharos with 94 shipsheds, Zea with 196, and Mounichia with 82. Exactly the same number of shipsheds and their distribution in the three harbours of the Piraeus are mentioned subsequently in the two preserved inventories of 326/5 BC (IG *II*² 1628, 552–559) and 325/4 BC (IG *II*² 1629, 1030–1036). All three inscriptions mention “construction” and “repairs”. It may be the case that shipsheds were built or remodelled to accommodate the larger warships introduced in this period, although, as V. Gabrielsen points out, the relevant formula is repeated for book-keeping purposes in the records of 326/5 BC and 325/4 BC, even though the construction and repair of the shipsheds had been completed in or by 330/29 BC.²²

Dinarchus (*Against Demosthenes* 96) and Aeschines (*In Ctes.* 3.25) both point to Eubulos (the Theoric commissioner of 354–350 BC) as the driving force behind the reconstruction of the naval installations. Blackman, however, points to the inscription IG *II*² 505, 12–13, of 302/1 BC that honours two metics for contributing toward the ten-talent levy. The levy was intended to aid in the construction of the shipsheds and the arsenal from 347/6 to 323/2 BC (that is, after Eubulos' influence had waned). Blackman proposes that most of the 372 shipsheds listed between 330/29 and 325/4 BC were probably built after 347/6 BC.²³ While these sources clearly indicate that at least some shipsheds were constructed between 347/6 and 330/29 BC

(most may have been completed already in 338/7 BC, see below), they cannot be used as clear evidence of a major shipshed building program starting in 347/6 BC.

As seen above, the number of shipsheds in the Piraeus remained constant between 330/29 and 325/4 BC. The static number most likely signifies that most of the ten talents levied per year were used for shipshed maintenance in this five-year period, and not for *ex-novo* construction.²⁴

Pseudo-Plutarch (*X orat.*, VII 851D) supports this supposition by stating that the shipsheds and the hanging store were completed under Lycurgus in 338/7 BC, after the work had temporarily stopped during the war with Macedon in 339/8 BC (*FGrH* 328 = Philochorus F 56a). Pausanias (1.29.16) states that Lycurgus raised 6,500 talents more than Pericles for the state treasury, some of which went towards the construction of shipsheds. According to him, Lycurgus also made available 400 *triremes*.

If the above information is correct, it is possible that Lycurgus in 338/7 BC completed most of the shipsheds that were inventoried in the inscription IG *II*² 1627, 398–405 (330/29 BC). Although it must be noted that an inscription (IG *II*² 244, 90–95) dated to 337/6 BC strongly indicates that some construction work took place in the naval installations at Mounichia in the following years: “For the filling [of the walls] are to be used the stones that already exist in Mounichia, except those that are going to be marked out as useful for the construction of the *neoria*”.²⁵

The tax levied for 24 years between 347/6 and 323/2 BC was in all probability not used for shipshed construction in the five-year period between 330/29

21. Gabrielsen 1994: 131.

22. Prof. Gabrielsen, pers. comm., 2010.

23. Blackman 1968: 187–189.

24. As the word “construction” (τὴν οἰκοδομίαν) and not repairs is specified in the inscription (IG *II*² 505, 13), it may be the case that the funds were also directed toward remodelling the shipsheds to accommodate the larger warships introduced in this period, but it is considered more likely to be the repetition of a book-keeping formula (see above).

25. Prof. Gabrielsen's unpublished translation is used here; the present author thanks him for bringing the inscription to his attention.

BC to 325/4 BC, and may not have been used for major construction work since 338/7 BC if Lycurgus had already completed most of the 372 shipsheds. Therefore, this tax cannot be used as evidence of a major building program initiated after 347/6 BC.

The Naval Installations in the Hellenistic and Roman Periods

After the defeat of the Athenian fleet at Amorgos in 322 BC, Athenian naval supremacy gave way to Macedonian hegemony and the fleets of the Hellenistic kingdoms. A considerable period of time passes before the Piraean naval installations re-appear in the written sources.

In 200 BC, during the Second Macedonian War (200–197 BC), the Piraeus served as winter quarters for 30 Roman warships (*Livy* 31.47.1–2), and shipsheds or slipways may have accommodated these vessels. The Roman consul Aemilius Paulus was in Athens in 168/7 BC, and among the noteworthy monuments of Athens and the Piraeus, *Livy* (45.27.11) mentions *navalia* – translated here as “naval bases”. It should be noted, however, that *Livy* may be describing Athens and the Piraeus as they appeared during his own time (late 1st century BC/early 1st century AD). In 86 BC, in the middle of Rome’s First Mithridatic War (88–84 BC), the Roman general Sulla, campaigning in Greece without a fleet, destroyed the naval installations of the Piraeus (*App. Mith.* 6.41), including the Arsenal of Philon (see also *Plut. Sull.* 14.7). No doubt his intentions were to reduce the strategic value of the Piraeus,

and thus of Athens. There can only be speculation as to what happened to the naval installations between 322 BC and Sulla’s destruction. It is highly unlikely that the shipsheds of all three harbours would have been standing unmaintained for the duration of that 236-year period. Indeed, as there was a strong Macedonian presence in the Piraeus throughout the period of 322–228 BC,²⁶ it may be presumed that the naval installations were active in some form, and that there could have been several subsequent building or repair phases between 322 and 86 BC.

In the 2nd century AD Pausanias (1.29.16) visited the Piraeus and took note of the shipsheds there, an observation that subsumes at least *some* level of maintenance of at least *some* of the shipsheds in one or more of the harbours. Pausanias is the last ancient source to mention the naval installations in the Piraeus.

Summary

In summary, the historical sources provide valuable information, but leave important questions unanswered. When were the first shipsheds and/or slipways built at the Piraeus, and by whom? What specific naval installations existed immediately before and after the Persian Wars? How did naval harbours evolve during the 5th and 4th centuries BC? What was the extent of the destruction by the Spartans after 404 BC? Finally, how can the historical sources be understood in order to form a coherent reconstruction of building projects at the Piraeus? These are questions that must be addressed by archaeological investigation.

26. Garland 2001: 45–53.