

CHAPTER SEVEN

TRIERARCHS' RECORDS AND THE ATHENIAN NAVAL CATALOGUE (*IG i³ 1032*)

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The inscription *IG i³ 1032*, known as the Athenian Naval Catalogue, consists of eleven fragments of Pentelic marble dating from the late fifth or early fourth century BC. Found atop and near the Akropolis at different times, these fragments were painstakingly assembled by Laing to reconstruct a monument that once stood at least 2.15 m. tall and 1.0 m. wide, and was inscribed with a complete listing of the crews of eight Athenian triremes spread out over ten columns.¹ Graham's recent re-examination of the fragments has confirmed Laing's reconstruction in its essentials.² The extant portions of the inscription permit detailed analysis of the crews of four of the triremes, labelled for convenience T1, T2, T3, and T4. Lines 1-140 constitute the remains of T1's crew list; lines 141-275, those of T2's list; lines 276-406, those of T3's list; and lines 407-484, those of T4's list.³

Each ship was manned by roughly two hundred men, listed hierarchically. The two syntrierarchs come first, followed by ten ἐπιβᾶται (marines). Next come the remaining members of the ὑπηρεσία (petty officers and assistants to the trierarchs).⁴ Last but not least are the remaining 170 or so men who toiled at the three banks of oars. This group, the sailors proper, were subdivided into contingents based on civic status and again listed hierarchically. Citizen sailors, listed under the heading

¹ Laing (1965: 49-50).

² Graham (1998: 93): "the only matter where my examination of the fragments led me to differ from Laing concerned the unscribed parts of the inscription, or *vacats*."

³ Lewis (1994: 687-692, # 1032) offers the most recent text of the inscription, which is followed here. While the adjustments Graham (1998: 94-98) would make to Laing's and Lewis' *vacats* affect calculations regarding the inscription's missing portions, they have little effect on the arguments and analysis presented here.

⁴ For this meaning of ὑπηρεσία in 432 BC and thereafter see Morrison (1984: 49-56).

ναῦται ἄστοί, lead the way.⁵ Next come the ξένοι, foreign allies, and metics.⁶ The θεράποντες, slaves, bring up the rear. While these aggregate data are revealing about the overall composition of the crews, the Catalogue also offers further information about each individual crew member. Citizens are listed with their demotic, metics with their deme of residence, foreigners with their ethnikon, and slaves with the name of their master in the genitive.⁷

One of the most striking facts to emerge from the inscription's demographic information is that non-citizens comprised approximately 60-70% of the crew of each of the four ships.⁸ It is unclear whether the inscription reflects common Athenian practice in this regard.⁹ Many attempts to contextualize the monument have centred on the question of date. Its Ionic letters, deployed in a non-stoichedon pattern, place it towards the end of the fifth century or the beginning of the fourth.¹⁰ The most significant piece of internal evidence is that each of the ships is commanded by not one but two trierarchs, who are listed under a heading with a dual noun, τριηράρχω.¹¹ Although the syntrierarchy existed by 409-405 (Lys. 32.24), Graham rightly notes this is a *terminus ante quem* for the origin of the practice, rather than a *terminus post* or *ante*

⁵ Headings: lines 3, 50, 172, 305. Cohen (2000: 70-78) has argued that the term ἄστοί essentially meant "insider" and included non-citizen residents of Attica. On the shortcomings of this view see Osborne (2002: 93-98).

⁶ On the restoration of the heading ξένοι at lines 71 and 417 see Laing (1965: 33 n.33). There is some uncertainty about how metics were actually listed. On T2, the sailor Euphronios is described as ἐπὶ Σου (line 226), literally "in the region of Sounion." Despite the use of the preposition ἐπὶ instead of the more customary ἐν, Euphronios is universally regarded as a metic (e.g., Laing [1965: 64], Graham [1998: 98]). The fact that he comes right before the θεράποντες begin suggests that he was listed among the ξένοι. See also n.7 below.

⁷ The bulk of the inscription's metics are listed on fragment g, which has no physical joins with any other fragments and contains a number of anomalies. Although some men here are clearly metics, listed with the preposition ἐν + deme of residence (lines 424, 425, 427, 428, 433, 436, 437, 440, 442, 445, 448), the status of the seven men listed with the prepositions ἐκ/ἐξ or ἐς + demotic (lines 421, 422, 423, 429, 430, 432, 434) is less obvious. Moreover, mixed in among the men of fragment g we find at least one citizen (Tunnon from Phaleron, line 426) and one foreigner (Simos from Thasos, line 431). One plausible explanation for these anomalies is that this ship's trierarchs differed from the others in their record-keeping.

⁸ Laing (1965: 93).

⁹ Hunt (1998: 83-101) argues persuasively for the routine use of considerable numbers of non-citizens, especially slaves.

¹⁰ Laing (1965: 94).

¹¹ Lines 21, 141, 276, 407.

quem for our inscription.¹² Earlier scholars saw in the inscription's substantial servile contingents a link to Arginousai; yet Hunt has shown that what was unusual about this battle in 406 was not that slave rowers participated, but that they were subsequently freed for their service.¹³ Others have focused on the number of triremes apparently listed on the monument, namely eight. Laing identified these ships as those that fled from Aegospotami with Conon, sought refuge with Euagoras, and eventually returned to Athens.¹⁴ Welwei linked the monument's ships to the same battle, but claimed they were those that escaped and fled back to the city, not Cyprus.¹⁵ Significant objections have been raised to each of these views.¹⁶ Other scholars have called attention to the disproportionate Erechtheid presence among syntrierarchs and crews,¹⁷ and to the fact that eight of the eleven fragments were found in or near the Erechtheion.¹⁸ Most recently Graham has sought to connect the inscription with an expedition led by the prominent Erechtheid Strombichides in 412. Yet even he admits that "without the heading of the inscription we shall never know for certain what occasion generated it."¹⁹

The numerous uncertainties surrounding date and context argue for a different approach to the monument. Laing maintained that it was a rare example "of the type of administrative record that was kept for each ship that ever left the Piraeus, but which in the normal course of events would never be transferred into a more durable form such as this."²⁰ To

¹² Graham (1992: 265 n.34).

¹³ Hunt (1998: 92). See further Graham (1992: 266), who notes that "there [is] always a danger of circularity in arguing that the composition of the crews suits the time of Arginusae (or Aegospotami) and deducing a date from that."

¹⁴ Laing (1965: 107-119), accepted by Osborne (1983: 34).

¹⁵ Welwei (1974: 86).

¹⁶ Among the objections to Laing are: the twelve years intervening between the battle which led to their flight (Aegospotamoi) and the battle permitting their return (Knidos); and the fact that the composition of the ships' crews would have changed considerably over this interval. See further Welwei (1974: 84). Of Welwei's own conjecture Graham (1992: 265) remarks, "it seems basically improbable that those who successfully fled from a disastrous defeat would be honoured."

¹⁷ Four of the eight syntrierarchs were Erechtheids; of the 106 securely identifiable demotics, 32 are from Erechtheis. See further Graham (1998: 107).

¹⁸ Fragments *a*, *f*, *g*, *h* and *i* were found built into structures erected on the site of the Erechtheion; fragment *b* was found to the east of the Erechtheion; and fragments *j* and *k* were found in the lower area of the north slope of the Akropolis. See Laing (1965: 5-8)

¹⁹ Graham (1998: 108).

²⁰ Laing (1965: 50).

date no one has scrutinized his claim from the standpoint of naval record keeping. In particular, *IG* i³ 1032 needs renewed examination in light of three important issues: how the Athenians manned their triremes; the type of records ordinarily kept by trierarchs; and the changes these records underwent prior to inscription.²¹ A process-oriented analysis suggests that the Naval Catalogue is more honorific than administrative, and that it thoroughly reshaped trierarchs' accounts to emphasize Athens' naval dependence on non-citizens. In this regard the monument constituted not only a record of the city's past, but a vision for its future, and the fact that it is *sui generis* in the inscriptional corpus has important implications for the intersection of orality, literacy, and social memory in classical Athens.

Detailed military record keeping at Athens began in the aftermath of the Persian Wars in response to three main factors: changes in the nature of warfare, the establishment and growth of empire, and democratic developments at home. Individual commanders found it in their own self-interest to keep written lists of personnel to protect themselves from an increasingly antagonistic *demos* intent on holding them to account.²² Although the Naval Catalogue dates from at least half a century later, it too should be considered within the same basic framework. Like other officers (such as *strategoi* [generals], *phylarchs* [tribal hoplite commanders], *hipparchs* [cavalry commanders], and *taxiarchs* [unit commanders]), naval officers had every incentive to create and maintain detailed records of those serving under them.

Central to the Naval Catalogue are its lists of crew members' names. The question of where these lists came from and who maintained them is related to how Athenians manned their ships. At moments of exceptional crisis the city resorted to mobilization across the board. In 480, for instance, the Themistokles Decree directed that all available, able-bodied Athenians and metics be embarked on two hundred ships.²³ After making provisions for appointing trierarchs and petty officers, it further instructed the generals to divide up the remaining men among the ships and write their names up on whiteboards, drawing the names of

²¹ Davies (2003: 329) emphasizes the importance of such factors in the analysis of public documents.

²² Bakewell (2007: 96-97).

²³ Many scholars accept the accuracy of the decree's provisions while thinking the document itself a fourth-century literary product. See for instance Morrison et al. (2000: 108).

citizens from the deme registers (*lexiarchika grammateia*) and those of metics from the polemarch.²⁴ We see a similar process at work over a hundred years later in 362, when the members of the Boule and demarchs created catalogues of demesmen and returned lists of sailors' names to the trierarchs.²⁵ Yet recruitment rather than conscription was the general rule in the classical Athenian navy, with the trierarch ultimately responsible for finding his own oarsmen and *ύπηρεσία*.²⁶ Regardless of whether he received the initial personnel lists from others or created his own from scratch, it was up to him to maintain them, and this was no simple matter. Many of those drafted might not report for duty, and of those who did, some were unfit for service.²⁷ Of those shipping out, some eventually fell ill and were sent home. Others died, were captured or lost at sea, or deserted. Some even pressed their commanders to accept substitutes they had hired to replace themselves.²⁸ It is thus a mistake to regard trireme crews as unchanging entities. Their membership tended to be dynamic rather than static; trierarchs kept run-

²⁴ Meiggs and Lewis (1988: 23, lines 27-31): ἀναγράψα-ι δὲ κα[ι] τοὺς ἄλλους κατὰ] ναῦν τοὺς στρατηγούς εἰς λευκώ[ματα, τοὺς μὲν Ἀ]θηναίους ἐκ τῶν ληξιαρχικῶν γραμματεῖ[ων, τοὺς] δὲ ξ[έν]ους ἐκ τῶν ἀπογεγραμμένων πα- [ρ]ὰ τῶι [πολε]μ[άρχ]ω[ι] (“And for the generals to write up the others by ship on whiteboards, [taking the names of] the Athenians from the *lexiarchika grammateia* and [the names of] the metics from those registered with the polemarch.”). For this interpretation of the clause see Hammond (1986: 145-146).

²⁵ [Dem.] 50.6: ἐψηφίσασθε τάς τε ναῦς καθέλκειν τοὺς τριηράρχους καὶ παρακομίζειν ἐπὶ τὸ χῶμα, καὶ τοὺς βουλευτὰς καὶ τοὺς δημάρχους καταλόγους ποιείσθαι τῶν δημότων καὶ ἀποφέρειν ναύτας ... (“You all voted for the trierarchs to drag down the ships and bring them alongside the jetty, and for the Bouleutai and demarchs to make lists of demesmen and return [names of] sailors”). For additional instances of naval conscription see Gabrielsen (1994: 248 n.6).

²⁶ Gabrielsen (1994: 107); Jameson (1963: 398).

²⁷ E.g., [Dem.] 50.7: ἐγὼ δ' ἐπειδὴ μοι οὐκ ἦλθον οἱ ναῦται οἱ καταλεγέντες ὑπὸ τῶν δημοτῶν, ἀλλ' ἢ ὀλίγοι καὶ οὔτοι ἀδύνατοι, τούτους μὲν ἀφήκα, ὑποθεῖς δὲ τὴν οὐσίαν τὴν ἑμαυτοῦ καὶ δανεισάμενος ἀργύριον πρῶτος ἐπληρωσάμην τὴν ναῦν, μισθωσάμενος ναύτας ὡς οἶον τ' ἦν ἀρίστους, δωρεὰς καὶ προδόσεις δούς ἐκάστῳ αὐτῶν μεγάλας (“After the sailors selected from the demesmen did not come, except for a few [and these unable], I let these go, mortgaged my own property, borrowed money, and myself filled the ship, hiring the best sailors possible, giving gifts and large advances to each man.”). On draft-dodging in Athens see generally Christ (2004).

²⁸ Thuc. 7.13.2; see Hunt (2006: 28).

ning track of their men with the help of erasable media like *sanides* or *leukomata*.²⁹

In addition to personnel lists, trierarchs also kept detailed financial records. Many of these were directly related to sums spent on their crews. From early on sailors regularly received a maintenance allowance enabling them to purchase provisions in local markets where they were deployed,³⁰ and by the 430s at the latest it was standard practice for the members of a ship's crew to draw a *per diem* wage for their service.³¹ Although scholars sometimes refer to a standard naval wage of a drachma a day, in actuality rates of pay varied considerably.³² Nor were wages the only element to consider. Bonuses were sometimes required to entice men to enlist; those with specialized skills were particularly sought after.³³ Once embarked, even ordinary sailors might use opportune moments to extract additional funds for their continued service.³⁴ Being a trierarch thus entailed a formidable amount of arithmetic. In a suit against his fellow syntrierarch Polykles shortly after 362, Apollodoros asks the clerk to read aloud to the jurors:

τὰς μαρτυρίας τῶν τε τὰ στρατιώτικα τότε εἰσπραττόντων καὶ τῶν ἀποστολέων, καὶ τοὺς μισθοὺς οὓς ταῖς ὑπηρεσίαις καὶ τοῖς ἐπιβάταις κατὰ μῆνα ἐδίδουν, παρὰ τῶν στρατηγῶν σιτηρέσιον μόνον λαμβάνων, πλὴν δυοῖν μηνῶν μόνον μισθὸν ἐν πέντε μηνῶν καὶ ἐνιαυτῶ, καὶ τοὺς ναύτας τοὺς μισθωθέντας, [καὶ] ὅσον ἕκαστος ἔλαβεν ἀργύριον.

the testimony of those then collecting the military things/funds and of the dispatchers, and the wages which I was paying out each month to the petty officers and marines, receiving from the generals only the maintenance allowance, and wage-money for but two months out of a year and five months, and the sailors who had been hired, and how much money each received. ([Dem.] 50.10)

²⁹ At [Dem.] 50.65, Apollodoros has the names of his deserters read aloud to the court some time after the fact: ἀναγνώσεται ... τοὺς λιπόνεως ("he will read out [the names of] the ship-deserters"). In this regard, trierarchs were like taxiarchs (Lysias 15.5) and hipparchs (Lysias 16.3). Lysias 16.6 refers expressly to phylarchs' use of a σανίδιον to record the names of cavalrymen. On *sanides* see Fischer (2003).

³⁰ Casson (1995: 262-263).

³¹ Loomis (1998: 38-39).

³² Gabrielsen (1994: 111).

³³ On the workings of supply and demand with regard to foreign sailors at the start of the Peloponnesian War see Thuc. 1.143. At 6.31.3 the historian mentions bonuses paid to θρανῖται (oarsmen of the top bank) during the Sicilian Expedition.

³⁴ [Dem.] 50.12.

Apollodoros' ability to state precisely how much money each member of his crew received is impressive.

Complicating the administrative picture for trierarchs was their need to keep track of income as well as expenses.³⁵ Ordinarily the assembly allocated to the generals a specific sum in support of a particular expedition, and they in turn parcelled it out among their subordinates.³⁶ Yet the process was often far from straightforward. For instance, the passage above suggests that at least two additional groups had a hand in outfitting Apollodoros' ship and crew: τῶν τε τὰ στρατιώτικα τότε εισπραττόντων and τῶν ἀποστολέων. The verb from which the participle εισπραττόντων is formed regularly denotes the collection of funds; the adjectival substantive τὰ στρατιώτικα may refer to money as well as materiel.³⁷

Naval campaigns were not just complicated; they were also expensive. As Gabrielsen notes, "the aggregate resource demands accruing from the operation of fleets exceeded the amounts actually spent for that purpose by the state. Private funds were therefore needed to supplement the public ones."³⁸ In other words, trierarchs were frequently left holding the bag.³⁹ Even though he came from a wealthy family, Apollodoros claimed that he was forced to mortgage his own property and to borrow money from his dead father's guest-friends in order to fulfil the obligations of his command.⁴⁰ Nor was financial ruin the worst that might befall a trierarch. As a recipient of even limited public funds, he was officially ὑπεύθυνος, subject to a range of potentially unpleasant accountability proceedings both during and after his term of office.⁴¹ It is no wonder trierarchs were keen to demonstrate their ability to account for all of the funds entrusted them.

³⁵ A need complicated by the fact that the double-entry accounting ledger was unknown in classical Greece. See generally De Ste. Croix (1956).

³⁶ Gabrielsen (1994: 115).

³⁷ On the ἀποστολεῖς see: Aesch. 2.177; Dem. 18.107, 47.26; and Morrison et al. (2000: 121-122).

³⁸ Gabrielsen (1994: 114).

³⁹ Gabrielsen (1994: 118): "the individual trierarch ... alone acted as the formal and ultimate guarantor of the state of the finance of naval operations."

⁴⁰ [Dem.] 50.7.

⁴¹ At [Dem.] 50.50, Apollodoros says that the kybernetes Poseidippos refused to follow the sailing instructions of Kallippos, on the ground that as trierarch Apollodoros alone was ὑπεύθυνος.

In his speech against Polykles, Apollodoros describes his own accounts as meticulously as he kept them:

οὕτω γάρ μοι ἀκριβῶς ἐγέγραπτο, ὥστ' οὐ μόνον αὐτά μοι τὰναλώματα ἐγέγραπτο, ἀλλὰ καὶ ὅποι ἀνηλώθη καὶ ὅ τι ποιούντων, καὶ ἡ τιμὴ τίς ἦν καὶ νόμισμα ποδαπὸν, καὶ ὀπόσου ἡ καταλλαγὴ ἦν τῷ ἀργυρίῳ.

I kept such accurate records that not only were my expenditures written down, but also their purposes (ὅποι ἀνηλώθη) and purchasers (ὅ τι ποιούντων), and the price paid (ἡ τιμὴ τίς ἦν), and the currency of the transaction (νόμισμα ποδαπὸν), and the prevailing rate of exchange (ὀπόσου ἡ καταλλαγὴ ἦν τῷ ἀργυρίῳ). ([Dem.] 50.30)

Now the wealth of detail contained in these records may be atypical. Apollodoros came from a skilled and savvy banking family, and claimed he had spent lavishly on his ship from his personal funds, drawing the ire of his fellow trierarchs and of his own syntrierarch.⁴² He thus had both the training and the motivation to justify his expenditures and document the extent of his own contributions. In addition, he was a prominent man with a number of personal enemies, any one of whom could approach the *logistai* or *euthunoi* with complaints about his conduct as trierarch.⁴³ Yet even if the circumstances of his case were exceptional,⁴⁴ record keeping was still a daunting task for trierarchs. Apollodoros' use of the dative of agent μοι in the clause οὕτω γάρ μοι ἀκριβῶς ἐγέγραπτο suggests his extensive personal involvement in the process. Elsewhere in his speech he shows that he, like other trierarchs, relied heavily on his *pentekontarchos*, a petty officer specializing in logistics and financial matters.⁴⁵

The primary impulse for detailed record keeping came from those with the most to lose: the trierarchs themselves. Yet other parties also took an interest in their accounts. Members of trireme crews will have wanted to make sure that their wages were calculated accurately. This

⁴² Cawkwell (1984: 336) notes, "it was hardly to Apollodoros' advantage to dwell on the extravagance of his arrangements and so arouse sympathy for his opponent [Polykles]."

⁴³ On these officials and their role in εὐθυναί (accountability proceedings) at Athens see Tolbert Roberts (1982: 17-18).

⁴⁴ According to Cawkwell (1984: 334), Apollodoros' trierarchy fell during "a period when Athens' naval and military resources were exceptionally and unpredictably under stress."

⁴⁵ For the help Euktemon lent Apollodoros see [Dem.] 50.18, 24. On the role of the *pentekontarchos* in general see Gabrielsen (1994: 39).

was particularly important given the common practice of withholding half of their accumulated pay until their ship returned to the Peiraiæus.⁴⁶ Crew members' families will have demanded information about the fates of loved ones who failed to accompany the ships home, and the city itself had a vested interest in the trierarchs' records. Athens' legal system relied heavily on interested volunteers, οἱ βουλόμενοι, to prosecute lawsuits for derelictions of military duty such as γραφαὶ ἀναυμαχίου, ἀπονauτίου, ἀστρατείας, and δειλίας.⁴⁷ Commanders' records, along with eyewitness testimony confirming or contesting them, were important pieces of evidence in such trials.⁴⁸ In certain circumstances lists of military personnel attracted very broad public interest. Following 402, for instance, the assembly commanded the phylarchs to produce for inspection their lists of those who had served in the cavalry during the time of the Thirty Tyrants.⁴⁹ Naval officials could thus expect their accounts to be objects of considerable scrutiny, some of it hostile, and one of their most effective means of self-defence will have been to maintain them as honestly and openly as possible. Thus over time naval records tended to become not so much the private possessions of individual trierarchs as communal resources accessible to many if not all.⁵⁰ Once endorsed by decisions of magistrates, the assembly, or the law courts, they became a point of reference for the city, contributing to the various public stelai the names of the fallen and the disfranchised, for instance.⁵¹

⁴⁶ Gabrielsen (1994: 113, 250 n.17). Masters will have wanted an accounting of the wages due them for their slaves' service—see Hunt (2006: 27)—and in the aftermath of Arginousai slaves likely took pains to ensure their accurate listing in their trierarchs' records.

⁴⁷ On the role of οἱ βουλόμενοι see Harrison (1998: II.32). On the definition of these charges see Harrison (1998: II.32, 82); Osborne (1985: 56) and Carey (1989: 143-144) note the overlapping nature of many of the terms.

⁴⁸ E.g., Lysias 16.6. As trierarch Apollodoros kept a record not only of deserters, but of how much (wage) money they fled with, and of the places where they deserted (ἀναγνώσεται δὲ ... καὶ τοὺς λιπόνεως, ὅσον ἕκαστος ἔχων ἀργύριον ἀπέδρα καὶ ὄπου) ([Dem.] 50.65). Harrison (1998: II.32) cites Lysias 14 and 15 as evidence that trials of this sort were held before juries composed of a defendant's fellow soldiers, with the relevant *strategos* presiding.

⁴⁹ Lysias 16.6.

⁵⁰ Bakewell (2007: 99).

⁵¹ On the stelai listing those disfranchised for military cause see Andokides 1.74. On the transfer of names from impermanent media to stelai see Boegehold (1990: 154-156).

In order for trierarchs' records to be useful, they had to be properly detailed. A man's name and tribal affiliation might suffice for casualty lists, which were more concerned with honouring the dead in general terms than with identifying them precisely.⁵² The frequency of homonyms within tribes, however, meant that greater specificity was required for practical ends involving the living. When trierarchs kept their records, it therefore behoved them to add further identifying information about the men under their command. In the case of citizens, this was their demotic; if necessary, fellow demesmen could subsequently be found to vouch for these men's identities and activities.⁵³ Metics were listed with their deme of residence;⁵⁴ interested parties could seek out their homes, or consult the polemarch to determine who their *προσῳτάται* (citizen sponsors) were.⁵⁵ Foreigners were listed with their *ethnika*; Athenians could contact local officials from the sailors' home *poleis* to track them down, and if necessary pursue action against them.⁵⁶ Finally slaves were listed with the names of their masters, who had every reason to keep close tabs on their property. In its precise identification of crew members, our monument resembles several roughly contemporary inscriptions, namely the building accounts of the Erechtheion [*IG* i³ 474-478].⁵⁷ Like the Naval Catalogue, these stones docu-

⁵² The epigrams accompanying casualty lists tend to be colourless and fairly interchangeable (e.g., *IG* i³ 1162, lines 45-48; *IG* i³ 1163, lines 34-41; *IG* i³ 1181). The lists themselves contain numerous homonyms even within tribes. *IG* i³ 1147 features six homonymous pairs and one set of homonymous triplets among its Erechtheids. Doublets: Charisandros, lines 25, 50; Euthydemos, lines 31, 77; Mnesigenes, lines 58, 83; Lysias, lines 93, 99; Anaxilas, lines 112, 142; Glaukon, lines 136, 160. Triplets: Philinos, lines 79, 95, 101. Another casualty list, *IG* i³ 1162, lists twin Aristarchoi (lines 26, 29) among the Kekropid fallen. A third list, *IG* i³ 1184, records two entries for Pentakles from Antiochis (lines 36, 41).

⁵³ Whitehead (1986: 85) notes that "one is constantly brought back to the crucial point that, in the microcosm of deme society, men knew one another." The fullest pattern of civic nomenclature was name, patronymic, and demotic [Dem. 39.7, 9]. That the Athenians did not consistently employ patronymics, even in contexts where precision was desirable, is shown by, e.g., the preambles to numerous fifth-century ψηφίσματα (decrees of the assembly).

⁵⁴ Citizens' deme affiliations were by contrast inherited.

⁵⁵ Whitehead (1977: 90) argues for some form of ongoing relationship between a metic and his *προσῳτάτης*.

⁵⁶ Thuc. 1.143.2 and Gomme (1956: 461 *ad loc.*).

⁵⁷ Hunt (2006: 27-28). Laing (1965: 94 n.1) noted the similarity between the letter forms of the Naval Catalogue and a hand involved in the carving of *IG* i³ 475. The Erechtheion inscriptions date to the period 409-405; *IG* i³ 474 lines 5-6, and 476 line 1 contain archon dates of 409/8 and 408/7 respectively.

ment the efforts of a mixture of citizens, metics, and slaves working side by side to benefit the city, and they too are based on personnel and financial records originally kept on impermanent media and later edited and inscribed on stone.

While the activity of the Peloponnesian War undoubtedly led to advances in logistics and record keeping, even during the last decade of the fifth century there was nothing approaching a centralized military bureaucracy or set of archives at Athens.⁵⁸ Although trierarchs kept detailed records about the personnel and finances of their ships, they tended to do so in non-standard, idiosyncratic ways. When we look beyond the apparent uniformity of the Naval Catalogue, we find evidence of several differences among its four surviving crew lists.⁵⁹ For instance, although each ship lists its *ὑπηρεσία* separately from its sailors, the order in which the individual members of the *ὑπηρεσία* are listed varies from ship to ship.⁶⁰ For trireme T2, the inscription lists the officers in the following order (lines 156-167): *kybernetes* (helmsman), *keleustes* (rowing master), *pentekontarchos* (purser), *auletes* (flute player), *naupegos* (shipwright), *prorates* (bow officer). The (partially restored) listing for T3, however, proceeds differently (lines 290-301): *naupegos*, *kybernetes*, *prorates*, *keleustes*, *auletes*, *pentekontarchos*. Another discrepancy is related to the order in which slave sailors are listed. As Pope first noted, the slaves of each trireme's officers tended to be listed towards the end of its *θεράποντες* contingent.⁶¹ Yet within this common practice there is considerable variation. For trireme T3 the *ἐπιβᾶται* are listed at lines 279-289, and their slaves at lines 388-93. The order in which the slaves are listed clearly follows that of their masters Mnesias, Phourarchos, Apikes, Hippodamas, and Iason. There is no similar pattern for T2. Slaves belonging to the officers are not listed in the order of their masters; indeed, the three slaves of the syntrierarch Charidemos are not even listed together (lines 256, 257, 272). One plau-

⁵⁸ On the *stratageion*, whose date, function, and precise location in the agora are disputed, see Wycherley (1957: 174-177).

⁵⁹ Graham (1998: 98) offers a salutary reminder that Laing's whole reconstruction depends on certain regularizing assumptions. In addition to the two mentioned by Graham, we should remember that in the course of a year a trireme might well have had significantly more crew members than the 200 needed to staff it fully at any given time.

⁶⁰ Laing (1965: 33) does not do full justice to the variations in the listings of the *ὑπηρεσία* contingents.

⁶¹ Pope (1935: 20). See further Laing (1965: 126-128).

sible explanation for these variations in the crew listings is that they derive from differences in the records kept by individual trierarchs.

Other discrepancies in the Naval Catalogue go beyond differences in recording procedure. The most obvious anomaly lies in the ἐπιβᾶται contingents. On trireme T3, seven of the ten marines listed are from the Erechtheid deme of Agryle (lines 280-286).⁶² On T2, however, the marines are members of nine different demes from six different tribes (lines 145-155).⁶³ A reasonable hypothesis is that the bulk of the marines aboard T3 were conscripts drawn from a list originally compiled by the demarch of Agryle, whereas the marines aboard T2 were volunteers recruited by its syntrierarchs from all over.⁶⁴ This hypothesis receives additional support from the fact that the ναῦται ἄστοί on T3 seem to have been listed in demotic clusters; lines 306-312 record seven sailors from Kephisia, lines 313-314 two from Kollytos, and lines 346-347 (perhaps) a pair from Euonymon.⁶⁵ It is a different story, however, with the ναῦται ἄστοί of T2 (lines 175-204). With the possible exception of lines 178-180, no pattern of deme grouping emerges anywhere here. Of the twenty-four men with legible demotics, fully twenty-one come from different demes. These differences in how individual triremes were staffed may be related to variations in the overall composition of their crews. As noted above, non-citizens comprised approximately 60-70% of the personnel of each of the four ships. Yet the numbers of foreigners and metics on the one hand, and of slaves on the other, varied widely, and in inverse relation to one another.⁶⁶ Aboard T2, for instance, the maximum number of slaves was “forty plus a very few,” whereas the maximum aboard T3 was approximately 97.⁶⁷ Apparently the trierarch of T3 relied more heavily on conscripted sailors and slaves; the trierarch of T2, on volunteer foreigners and metics.⁶⁸

⁶² An eighth (line 287) comes from an additional Erechtheid deme, Kephisia. All three of the legible ἐπιβᾶται demotics on T1 likewise come from an Erechtheid deme, Lamptreus.

⁶³ Laing (1965: 61) notes the relative scarcity of Erechtheids in this contingent.

⁶⁴ *IG* i³ 60 lines 15-17 contains an apparent reference to marine volunteers ([ἐ]χς ἐθελοντο-[ν ἐπιβατων]).

⁶⁵ Cf. however line 343, where Charon of Kephisia is listed separately from his fellow demesmen.

⁶⁶ Laing (1965: 92-93).

⁶⁷ Graham (1998: 101).

⁶⁸ Laing (1965: 70) argues that “if a great number of maritime allies had been available to Athens at the time of the activity commemorated in this text, we would surely see fewer slave names in these lists and more aliens. I am quite ready to be-

Although the Naval Catalogue preserves traces of the differing mustering and recording practices followed by individual trierarchs, it is in all likelihood not, *pace* Laing, “a formal roster of these crews as it would have been prepared for administrative purposes.”⁶⁹ On the contrary, while it is derived from such records, the Naval Catalogue is the product of an editorial process driven by a different set of concerns. For one thing, there is no obvious administrative advantage to dividing the sailors into citizen, foreigner/metic, and slave contingents. When it came to wages, all sailors were ordinarily paid at the same rate, with any bonuses related not to citizenship but to shipboard duties, and to supply and demand.⁷⁰ Here again the Erechtheion building accounts provide a valuable point of reference. Their labourers also received equal pay for equal work; what mattered was the task a man had, not his civic status.⁷¹

If the Naval Catalogue were truly an administrative document, it would likely have grouped the crews in more practical ways. The handiest sort of personnel record might well have been a seating chart showing each man’s regular position.⁷² Each bank of oarsmen had a slightly different task, and individual sailors took pride in belonging to a particular bank.⁷³ Moreover, the narrow confines of the trireme made embarkation tricky and time-consuming; men had to line up single file according to their places aboard.⁷⁴ Another useful schema would have been to group the men by deme. Yet as noted above, the inscription only does so now and again; there is no evidence of any arrangement by tribe. Finally, there is the issue of provenience. None of the inscription’s frag-

lieve that the foreign sailors in this document were either volunteers, with an eye to the pay, or ‘impressed’ seamen who were not entirely free to choose their role.”

⁶⁹ Laing (1965: 96).

⁷⁰ Morrison (2000: 108, 119). See also n.33 above. The primary difference between free men and slaves with regard to wages was that the former earned for themselves, the latter mainly for their masters. See Hunt (2006: 27) and Laing (1965: 137).

⁷¹ Randall (1953: 209). Significantly, the Erechtheion accounts do not divide the workers into contingents based on civic status.

⁷² Morrison et al. (2000: 236): “it is quite likely, moreover, that [oarsmen] occupied regular positions within the ship, since this would have allowed them to perfect their timing by training with the same people in the same positions around them. This approach certainly worked best in [the reconstructed trireme] *Olympias*.”

⁷³ Aristophanes *Acharnians* 162 suggests that the θραυῖται held themselves in high regard.

⁷⁴ Morrison et al. (2000: 236). The boarding of passenger aircraft offers a modern analogy.

ments come from the Peiraieus, home to the fleet and find-spot of many naval inscriptions related to shipsheds, triremes, inventories, and the like.⁷⁵ Nor do any fragments hail from the Agora⁷⁶, where the monument of the eponymous heroes and the *strategeion* (generals' building) served as obvious focal points for military matters.⁷⁷

On the contrary, several factors suggest that the Naval Catalogue's primary purpose was honorific. First, there are the findspots in and around the Erechtheion. The Akropolis contained numerous temples and *temene* (sacred precincts) housing countless dedications to the gods. It also displayed other public lists of names intended to convey honour or shame. Moreover, administrative documents were generally meant to be consulted; the Naval Catalogue was not designed for easy reading or reference. Its inscribed surface measured nearly 2.35 m², and was taller than anyone alive. Its two thousand plus lines originally listed approximately sixteen hundred men, who were not organized by deme, trittys, or tribe, and neither alphabetized nor indexed. Readers would have been hard-pressed to find specific listings, especially given the fact that each letter was less than a centimetre high. Thus while the monument consisted of men's names, it did not so much honour individuals as the larger groupings to which they belonged.⁷⁸

Casualty lists are undoubtedly the most famous honorific compilations of names from ancient Athens, and many scholars once thought the Naval Catalogue belonged to this corpus. They were however mistaken. At one level this is clear from some of the inscription's technical details, including its provenance and Ionic letter forms. One of the men it lists, Morychos of Thria, was sufficiently alive to erect a dedication on the Akropolis early in the fourth century.⁷⁹ There are also weighty arguments from probability. Rarely did all two hundred men aboard a trireme perish when it was swamped or disabled,⁸⁰ and rarely did both

⁷⁵ E.g., *IG* ii² 1604.

⁷⁶ Graham (1998: 91) argues that the inscribed fragment Agora I 4682 also belongs to the Naval Catalogue. It is however tiny, contains but few letters, and was found in a "marble dump."

⁷⁷ On the monument of the eponymous heroes see Shear (1970). On the publication of call up notices there see Christ (2001: 403).

⁷⁸ The apparent absence of any subsequent corrections to the Naval Catalogue may be significant. By contrast, Bradeen (1969: 146-147) notes that casualty lists were often subsequently added to or emended.

⁷⁹ *IG* ii² 4882. See Laing (1965: 82).

⁸⁰ Graham (1992: 264).

syntrierarchs serve on board their ship at the same time. The possibility that the Athenians lost all hands (including all sixteen syntrierarchs) from the eight ships listed on the monument is extremely remote. Finally, there are crucial discrepancies with regard to genre. The Naval Catalogue does not group its men by tribe; casualty lists do not contain demotics;⁸¹ and while casualty lists tend to offer minimal information about the rank and position of the dead, these facts are central to our inscription.⁸² Above all, casualty lists do not call attention to the military contributions of allies, metics, and slaves. As Loraux puts it, “when they buried non-Athenians in the civic polyandria of the Kerameikos, the Athenians accorded them much in inscribing their names, if only by way of an afterthought, under the general heading *Athenaion hoide apethanon*,” (“of the Athenians the following men died”).⁸³

The Naval Catalogue emphasizes the contributions of non-Athenians to the fleet and to the city. Each heading of ξένοι and θεράποντες, and every ethnikon, deme of residence, and master’s name underscores the city’s reliance on its non-citizens. In this regard the monument resembles *IG ii² 10*, which honoured the non-citizens assisting Thrasyboulos’ return to the city.⁸⁴ In each instance the men listed are identified with precision and separated into groups. There are, however, important differences between the two inscriptions. To begin with, while *IG ii² 10* records a decree of the assembly, the Naval Catalogue does not.⁸⁵ The latter was inscribed on one side only, with little space remaining at top or bottom for the necessary preamble or postscript.⁸⁶ Moreover, *IG ii² 10* lists its men by occupation rather than deme of residence, ethnikon, or master’s name. The effect is to suggest that these are worthy men

⁸¹ Bradeen (1969: 147).

⁸² Loraux (1986: 32) notes that casualty lists “provide scant information about the rank of the combatants.”

⁸³ Loraux (1986: 33).

⁸⁴ For the text of the inscription see Osborne (1981: 37-41, D6). He elsewhere (1982: 42-43) distinguishes the decree from Thrasyboulos’ earlier abortive proposal, which was blocked by Archinos and cited at [Arist.] *Ath. Pol.* 40.2. See further Taylor (2002: 385).

⁸⁵ *IG ii² 10*, Face A, line 3: “Ἐδοξε τῆι βουλῆι καὶ τῶι δήμῳ (“Resolved by the Boule and the Assembly”).

⁸⁶ Graham (1998: 92) notes that the joining cluster of fragments “*h+a+b+i* reached to near the top of the original inscription, and *c+f+j* reached to near the foot.”

who just happen to be non-citizens.⁸⁷ By contrast, the Naval Catalogue's headings make the men's civic status a crucial part of their identity. Finally, the two inscriptions' lists of names suggest a difference in perspective. *IG ii² 10* is arguably more historical, focusing on a distinct sequence of discrete events. The men listed are divided into groups based on when they joined Thrasyboulos. Some came at the beginning and took part in the descent from Phyle (ἄσοι συνατῆλθον ἀπὸ Φυλῆς, Face A, line 4); others fought together with him at Mounychia (συνεμάχησαν δὲ τῆμ μάχην τῆμ Μονυχίασιν, Face A, line 7); and some stood by the *demos* in the Peiraeus (οἶδε [π]αρέμ[ενον τῶι] ἐμ Περαιεῖ δ[ήμωι], face B, column II, lines 27-28). In addition, like other decrees, *IG ii² 10* records the time of its own enactment: Xenainetos was eponymous archon, Lysiades was scribe, Hippothontis held the prytany, Demophilos presided, and Thrasyboulos spoke (Face A, lines 1-4). By contrast, the Naval Catalogue sees things somewhat differently. As noted earlier, syntrierarchs almost never commanded their ship together: when one was aboard, the other was not. The listing of each pair of syntrierarchs together thus suggests that the inscription stands at a slight temporal remove, regarding the year or campaign it records as something unitary and continuous. Moreover, the chronological relation of the inscription to the trireme crews is uncertain: does it record them before, during, or after their service? Put in photographic terms, *IG ii² 10* resembles a series of date-stamped snapshots laid side by side; *IG i³ 1032*, a time-lapse exposure made at an unknown time.

The Naval Catalogue's temporal perspective is so broad as to approach the ideological. Many scholars have noted that public monuments by their nature constitute an attempt at civic self-definition,⁸⁸ and this is certainly true of *IG i³ 1032*. Yet the Athens it depicts is not the familiar one based on Kleisthenic demes and tribes. On the contrary, its

⁸⁷ The *demos*' gratitude towards non-citizens was in any case limited, even for heroes who fought against the oligarchs. Taylor (2002: 396) interprets Archinos' decree as a statement that "we Athenians will acknowledge and honor the foreigners who helped us restore Athens to democracy, but we shall not make them part of ourselves. The 'indigenous *demos* of the Athenians' will not be sullied." Additionally Osborne (1982: 43) notes that Thrasyboulos was ultimately able to gain citizenship only for a few of his followers, "the small nucleus, probably all men of hoplite status."

⁸⁸ E.g., Davies (2003: 333), who notes that "codifications [of laws] as publicly displayed monuments primarily expressed civic self-definition and the symbolism of law, not its day-to-day application."

Athens is built on triremes and the civic orders that man them. By prominently honouring non-citizens, the Naval Catalogue broke with convention.⁸⁹ Its message was that citizens, allies, metics, and slaves had in the past accomplished something of military moment by working together. Even more important was its implication that they could do so again: its lists of names assume a representative dimension, and the monument itself becomes an idealizing vision. As such the Naval Catalogue is akin to other artistic representations of Athenian self-identity, such as the Panathenaic procession at the end of the *Eumenides*, and the Parthenon Frieze. Each representation is rooted in history, extends into the future, and touches on myth; each assigns non-citizens a significant role in the community;⁹⁰ and each is erected or enacted in a sacred space on or beneath the Akropolis, thus coming under divine protection.

While the Naval Catalogue may resemble other artistic representations of Athens, it is *sui generis* within the corpus of Attic inscriptions. To date not a single fragment from another monument listing trireme crews has come to light. Moreover, despite the Naval Catalogue's impressive size and prominent location, no surviving periegete, historian, or scholiast refers to it or anything like it.⁹¹ So far as we know, no individual or group sought to emend, duplicate, emulate, or even displace it. Given the pervasive influence of generic conventions in literature, art, and epigraphy, and the intensely agonistic ethos of classical Athens, this apparent indifference is noteworthy. For us today the inscription is an invaluable piece of historical evidence. Yet for its contemporaries it was something different: an unorthodox account of the city's past with radical and unsettling implications for the future.⁹² The Athenians responded by ignoring it. *IG* i³ 1032 stands as a reminder that even at the end of the increasingly logocentric fifth century, inscribed monuments could not create history all by themselves. On the contrary, that was up

⁸⁹ To continue the photographic analogy, the Naval Catalogue is like a positive print made from the negative image recorded, for instance, at [Xen.] *Ath. Pol.* 10-12.

⁹⁰ On *Eumenides*' favourable depiction of the Erinyes as metics see Bakewell (1999: 52-54). Neils (2001: 150, 186) notes the inclusion of metic *skaphephoroi* (tray bearers) on the Parthenon Frieze.

⁹¹ Pausanias makes no mention of it in his description of the Erechtheion complex (1.26.5-1.27.6), nor is there any apparent connection with any of wreaths listed in the Erechtheion inventories. See Harris (1995: 215-217).

⁹² Similarly, the Athenians opted to reinstate the restrictive provisions of the Periklean citizenship law following the overthrow of the Thirty. See Ostwald (1986: 507).

to living, breathing, and often illiterate individuals free to consult, mis-read, and ignore them as they saw fit.⁹³

Bibliography

- Bakewell, Geoffrey (2007). "Written Lists of Military Personnel in Classical Athens." In *The Politics of Orality: Orality and Literacy in the Ancient World VII*, Craig Cooper, ed.: 89-102. Leiden: Brill.
- Bakewell, Geoffrey (1999). "εὔνοια καὶ πόλις σωτήριος/μέτοικος: Metics, Tragedy, and Civic Ideology." *SyllClass* 10: 43-64.
- Bing, Peter (2002). "The Un-Read Muse? Inscribed Epigram and its Readers in Antiquity." In *Hellenistic Epigrams*, M. A. Harder, R. F. Regtuit, G. C. Wakker, eds.: 39-66. Leuven: Peeters.
- Boegehold, A. L. (1990). "Andokides and the Decree of Patrokleides." *Historia* 39: 149-62.
- Bradeen, Donald (1969). "The Athenian Casualty Lists." *CQ* 19.1: 145-59.
- Carey, Christopher (1989). *Lysias: Selected Speeches*. Cambridge: Cambridge Univ. Press.
- Casson, Lionel (1995). "The Feeding of the Trireme Crews and an Entry in *IG ii2 1631*." *TAPhA* 125: 261-70.
- Cawkwell, G. L. (1984). "Athenian Naval Power in the Fourth Century." *CQ* 34.2: 334-45.
- Christ, Matthew (2004). "Draft Evasion Onstage and Offstage in Classical Athens." *CQ* 54.1: 33-57.
- Christ, Matthew (2001). "Conscription of Hoplites in Classical Athens." *CQ* 51.2: 398-422.
- Cohen, Edward (2000). *The Athenian Nation*. Princeton: Princeton Univ. Press.
- Davies, J. K. (2003). "Greek Archives: From Record to Monument." In *Ancient Archives and Archival Traditions: Concepts of Record-Keeping in the Ancient World*, Maria Brosius, ed.: 323-43. Oxford: Oxford Univ. Press.
- De Ste. Croix, Geoffrey E. M. (1956). "Greek and Roman Accounting." In *Studies in the History of Accounting*, A.C. Littleton and B.S. Yamey, eds.: 14-74. Homewood IL: Irwin.
- Fischer, John (2003). "Sanides and Sanidia." In *Gestures: Essays in Ancient History, Literature, and Philosophy Presented to Alan L. Boegehold*, Geoffrey Bakewell and James Sickinger, eds.: 237-50. Oxford: Oxbow.
- Gabrielsen, Vincent (1994). *Financing the Athenian Fleet: Public Taxation and Social Relations*. Baltimore and London: Johns Hopkins Univ. Press.
- Gomme, A. W. (1956). *A Historical Commentary on Thucydides*, Vol. I. Oxford: Clarendon.
- Graham, A. J. (1992). "Thucydides 7.13.2 and the Crews of Athenian Triremes." *TAPhA* 122: 257-70.

⁹³ Bing (2002: 44) claims that in ancient Athens much inscribed material, including stelai, went unread.

- Graham, A. J. (1998). "Thucydides 7.13.2 and the Crews of Athenian Triremes: An Addendum." *TAPhA* 128: 89-114.
- Hammond, N. G. L. (1986). "The Manning of the Fleet in the Decree of Themistocles." *Phoenix* 40.2: 143-48.
- Harris, Diane (1995). *The Treasures of the Parthenon and Erechtheion*. Oxford: Clarendon.
- Harrison, A. R. W. (1998). *The Law of Athens*, 2nd ed. Indianapolis: Hackett.
- Hunt, Peter (1998). *Slaves, Warfare, and Ideology in the Greek Historians*. Cambridge: Cambridge Univ. Press.
- Hunt, Peter (2006). "Arming Slaves and Helots in Classical Greece." In *Arming Slaves: From Classical Times to the Modern Age*, Christopher Brown and Philip Morgan eds.: 14-39. New Haven and London: Yale Univ. Press.
- Jameson, M. H. (1963). "The Provisions for Mobilization in the Decree of Themistokles." *Historia* 12: 385-404.
- Laing, Donald R. (1965). *A New Interpretation of the Athenian Naval Catalogue*, IG ii², 1951. Ph.D. diss., Univ. of Cincinnati.
- Lewis, David M. (1994). *Inscriptiones Graecae*, Vol. I Fasc. II: *Inscriptiones Atticae Euclidis Anno Anteriores*, 3rd ed. Berlin: De Gruyter.
- Loomis, William T. (1998). *Wages, Welfare Costs, and Inflation in Classical Athens*. Ann Arbor: Univ. of Michigan Press.
- Loroux, Nicole (1986). *The Invention of Athens: The Funeral Oration in the Classical City*, transl. Alan Sheridan. Cambridge, MA: Harvard Univ. Press.
- Meiggs, R., and D. Lewis, eds. (1988). *A Selection of Greek Historical Inscriptions to the End of the Fifth Century B.C.*, rev. ed. Oxford: Clarendon.
- Morrison, J. S., J. F. Coates, and N. B. Rankov (2000). *The Athenian Trireme: The History and Reconstruction of an Ancient Greek Warship*, 2nd edition. Cambridge: Cambridge Univ. Press.
- Morrison, J. S. (1984). "Hyperesia in Naval Contexts in the Fifth and Fourth Centuries BC." *JHS* 104: 48-59.
- Neils, Jenifer (2001). *The Parthenon Frieze*. Cambridge: Cambridge Univ. Press.
- Osborne, M. J. (1981). *Naturalization in Athens*, Vol. 1. Brussel: AWLSK.
- Osborne, M. J. (1982). *Naturalization in Athens*, Vol. 2. Brussel: AWLSK.
- Osborne, M. J. (1983). *Naturalization in Athen*, Vols. 3 and 4. Brussel: AWLSK.
- Osborne, Robin (1985). "Law and Action in Classical Athens." *JHS* 105: 40-58.
- Osborne, Robin (2002). Review of Edward Cohen, *The Athenian Nation*. *CPh* 97: 93-98.
- Ostwald, Martin (1986). *From Popular Sovereignty to the Sovereignty of Law: Law, Society, and Politics in Fifth-Century Athens*. Berkeley: Univ. of California Press.
- Pope, Helen (1935). *Non-Athenians in Attic Inscriptions*. New York: Cosmos Greek-American.
- Randall, R. H., Jr. (1953). "The Erechtheion Workmen." *AJA* 57: 199-210.
- Shear, T. Leslie, Jr. (1970). "The Monument of the Eponymous Heroes in the Athenian Agora." *Hesperia* 39.3: 145-222.

- Taylor, Martha (2002). "One Hundred Heroes of Phyle?" *Hesperia* 71.4: 377-97.
- Tolbert Roberts, Jennifer (1982). *Accountability in Athenian Government*. Madison: Univ. of Wisconsin Press.
- Welwei, Karl-Wilhelm (1974). *Unfreie im Antiken Kriegsdienst*. Wiesbaden: Steiner.
- Whitehead, David (1977). *The Ideology of the Athenian Metic*. Cambridge: Cambridge Philological Society.
- Whitehead, David (1986). *The Demes of Attica 508/7- ca. 250 BC: A Political and Social Study*. Princeton: Princeton Univ. Press.
- Wycherley, R.E. (1957). *Literary and Epigraphical Testimonia*. The Athenian Agora, Vol. 3. Princeton: American School of Classical Studies at Athens.