

POPULATION SIZE 2: NON-CITIZENS

The number of non-citizens – metics and slaves – in Athens has always been controversial and recognised as problematic. We have even less evidence to go on than we do for the citizens, and definitive answers will remain elusive. The situation is further complicated by the fact that estimates of metic and slave numbers cannot be separated from those of citizen numbers, nor entirely from other debates about the nature of Athenian economy and society. In the absence of much direct attestation for their numbers, we are forced instead to consider what roles they might have played, or their numbers in relative terms to those of the citizens. In the latter case, the danger of circularity arises, as an important reason for wanting to know their numbers is precisely to shed light on the ratios of free to unfree and citizen to non-citizen. As it turns out, moreover, the metics and slaves themselves can be hard to disentangle not just from the citizens (as the Old Oligarch complained) but from each other.¹ Few deny that manumitted slaves became metics; no one would deny that at least some of them did so.

Rachel Zelnick-Abramovitz falls into the former camp, suggesting that only those freedmen who were fully manumitted – whom she argues were those termed ‘exeleutheroi’, as opposed to the ‘apeleutheroi’, who remained in a state of dependence on and subjugation to their masters – became metics.² Her argument fails to convince for two reasons. In the first place, the distinction between exeleutheroi and apeleutheroi does not seem to be as consistent or clear as she maintains. In the second, and more

¹ [Xen.] *Ath. Pol.* 1.10.

² Zelnick-Abramovitz 2005. See also Meyer 2010.

seriously, the argument requires that metic status really be in at least some minimal sense a privileged one. Whitehead's demonstration that there was nothing positive or honorific about being identified as a metic remains more convincing; rather, it was a clear definition of the obligations of a resident non-citizen in Athens in his or her dealings with citizens.³ For practical purposes, however, this may not be important. Even Zelnick-Abramovitz would not deny that the *exeleutheroi* were metics, and her *apeleutheroi* would have been very hard to distinguish from slaves. Once it is accepted that the boundary between slave and metic was porous and, *pace* Whitehead, that metic status did carry at least a tinge of servility in citizen eyes (132–138 below) then there is relatively little to be gained from yet more definitional squabbling.⁴

The conclusion of Sargent, whose treatment remains the best full-length attempt to get to grips with classical Athenian slave numbers, is hard to fault: 'the number of slaves employed . . . varied considerably at different periods during the fifth and fourth centuries before Christ, and stood in direct relation to the size of the free population and the general economic conditions'.⁵ However, not only do we have only a precarious grip on the size of the free population, but the 'general economic conditions' are what we are trying to elucidate by starting from the size of the total population.

Slaves

The number of slaves in Athens has attracted more attention and controversy than that of the metics. While this has not obviously brought definitive answers any closer, at least the terms of the debate have become clearer. It will be easier, therefore, to start with this part of the non-citizen population. The direct literary evidence is scanty and can be summarised very briefly.

There are only two total figures surviving from antiquity, both of which we have already met in the discussion of citizen numbers in Chapter 3. First, there is the passage from Ctesicles in

³ Whitehead 1977, 69–97.

⁴ Whitehead 1977, 114–16.

⁵ Sargent 1924, 126.

Athenaeus 272c, where it is claimed that in the late fourth century there were 21,000 Athenians, 10,000 metics, and 400,000 *oiketai*. Whatever one makes of the figures for citizens and metics, it is now generally accepted that the figure of 400,000 for slaves is simply too high to be credible as an accurate figure.⁶ The arguments go back to Hume. The *oiketai* figure could be salvaged by translating it as ‘household members’. That in itself is not an obviously implausible suggestion. In the first place, however, that does not make it any more informative about the number of slaves. In the second place, the fact that it is plausible need not make us believe that Demetrius’ census-takers could actually (even if they had wanted to) have reached an accurate figure for the total population of Attica at the time. Even Van Wees, who has recently argued that the number deserves to be taken seriously, concedes that it is ‘uncertain’ whether the number can be taken as accurate, and that it seems ‘unfeasibly high’.⁷

The figure provided by Hyperides fr. 29, is barely, if at all, more believable. After the crushing defeat of Chaeronea, the orator proposed conscripting ‘the 150,000 or more slaves from the silver mines and from the rest of the countryside’. At least it is tolerably clear here that only adult males are being counted, but the total figure is still very high – indeed it implies a total figure (including female slaves and males who were not suitable for military service) of the same magnitude as Ctesicles’.

What these passages tell us, if they accurately reflect fourth-century Athenian views at all (not necessarily a foregone conclusion), is that there was a belief, at least in the later part of the century, that the free residents of Attica were hugely outnumbered by the unfree. This is an important observation in itself, but it is of limited help to us here.

The only figure from the fifth century is provided by Thucydides at 7.27.5, where he claims that more than 20,000 slaves fled from Attica during the Deceleian War. Perhaps just because it is in Thucydides, this passage has sometimes been taken very seriously.⁸ Although I have argued that Thucydides’

⁶ Hume 1752, 220–6; Sallares 1991, 54.

⁷ Van Wees 2011, 111, 112. See 41 above.

⁸ Sargent 1924, 87–8; De Ste Croix 1981, 506.

numbers at 2.13 and 3.87 should be treated with respect, it is much more difficult to be as confident about this figure. In the first place, by this stage in the war, Thucydides had been in exile for some years, and can no longer be considered a first-hand observer of what was going on in Attica. In the second, even if he had been on the spot, it is hard to see how he, or anyone else, could possibly have known how many slaves ran away or were captured by Athens' enemies during the course of the war. The vagueness that comes over him when he talks about the numbers of poorer citizens is hardly likely to have been lifted when it came to non-citizens. It seems unlikely too that the garrison at Decelea kept detailed records of the numbers of slaves that passed through their hands one way or another – or even that all the slaves lost to the Athenians actually ended up in the fort at all. The 20,000 figure should be treated in a similar manner to the figures of 20,000 or 30,000 given in literary sources for the size of the citizen population – as a conventional 'big number' that means nothing more precise than 'lots'. Having said which, it may be of some relevance that this is the number that Thucydides – who did after all have some idea of the size of the citizen population, and was in a position to judge the relative proportion of the slave and free populations – actually chose to represent 'lots'. There is also some interest in asking who these slaves were, or rather how they were employed, and this is a question to which I return below.

Given how few data there are, it is hardly surprising, then, that there is wide variation in the estimates for slave numbers provided by modern historians. The most minimal view was famously articulated by Jones, who argued for a total number of slaves in Attica of around 20,000 to 30,000.⁹ At the other end of the scale, Gomme suggested a total number of slaves in 431 of 115,000.¹⁰ Most other estimates have fallen between Jones' and Gomme's positions. Sargent concluded that there were perhaps 70,000 to 100,000 slaves in the period when 'the slave population reached its greatest expansion', that is 'in the fifth century, after

⁹ Jones 1957, 10–20.

¹⁰ Gomme 1933, 20–3, with table 1 at 26. There appears to be a discrepancy of 5,000 between the text and the figures in the table.

the Persian Wars, and before the disasters of the Peloponnesian War'.¹¹ Rhodes has suggested a round figure of 100,000.¹² At the lower end of the scale, Hanson followed Jones and suggested 20,000 to 30,000.¹³ Scheidel, in an article concentrating on the importance of women's labour in Greek households, and so rhetorically disposed to play down the importance of slaves, suggested that 30,000 to 50,000 should be considered a maximum. Jameson again responded that a figure of 50,000 is more likely to have been a minimum.¹⁴ Hansen suggested a moderate-to-high range of 66,000 to 93,000.¹⁵ Wood, while concerned to play down as far as possible the importance of slaves in agriculture, is less concerned about global figures. In fact, she argues that even if Gomme's high estimate were allowed to stand, the number of agricultural slaves would still be very small.¹⁶ In his general account of Greek slavery, Fisher avoids committing himself to any numbers in his own voice (reasonably enough in what is essentially a textbook), but implies support for a moderate maximalism. More recently, Bissa was happy to follow Hansen, and Moreno to follow Sargent.¹⁷

It is worth noting that in his 'conservative' estimate of the population in 431, Moreno adopts Sargent's higher maximum number of slaves of 97,000 (higher of two: the other one is derived from Beloch's estimate of the free population, which entailed smaller figures for slaves engaged in household service). This in turn was based on Meyer's estimate of the size of the free population.¹⁸ This figure included 700 to 1,000 'slaves owned by the state', 29,000 to 30,000 'employed in household service', 10,000 to 12,000 'employed in agriculture'; 15,000 to 20,000 'employed in mining'; 28,000 to 30,000 'employed in other industry', and 9,000 to 10,000 'children under nine years of age'.

¹¹ Sargent 1924, 126–7; for the fourth century, she reckoned 60,000 to 70,000 was more likely.

¹² Rhodes 1992, 83.

¹³ Hanson 1992a.

¹⁴ Scheidel 1995; Jameson 2002, a modification of the views expressed in Jameson 1977–8.

¹⁵ Hansen 1988, 10–12.

¹⁶ Wood 1983, 43–4.

¹⁷ Bissa 2009, 172; Moreno 2007, 29–30.

¹⁸ Moreno 2007, 29–30; Sargent 1924, 126.

Although Moreno's comment that Sargent's 'methodology of proportionality and of differentiation between individual sectors of ownership (public, household, agriculture, mining and other industry) is . . . sound' is fair enough, it is less obvious that it 'yields conservative results, useful in achieving minimum estimates of population and consumption'.

Moreno has committed himself earlier in his account to the traditional picture of Greek (and by extension Attic) agriculture defended by Isager and Skydsgaard; presumably this makes him sympathetic to the relatively small fraction of Sargent's total represented by 'slaves employed in agriculture'. Sargent's account remains valuable; it is thorough, sober, and sensible. Moreno's evident admiration for Meyer is not at all unjustified. Nonetheless, the Sargent–Meyer model is reflective of the times in which it was produced, and of the modernising orthodoxy that prevailed (and which Meyer himself had, of course, done so much to establish). That there were 30,000 slaves in domestic service, and another 30,000 in 'other industry' would not now necessarily appear to be 'conservative' estimates. In the case of 'other industry', one might wonder what these industries were, and whether they were as fully dominated by slaves to the extent implied by such a figure. The most impressive remaining products of imperial Athens, its painted pottery and its monumental buildings, were each probably the work of a few hundreds of men at a time, and the majority were not slaves. As for the 'domestics', this figure would be most easily explained by fairly deep penetration through the citizen group of slave-ownership – and one would expect many of them to have been engaged at least some of the time in some kind of agricultural labour, in what would have been quite ordinary farmers' households. It is also possible that views about the indispensability of domestic servants were rather different in the early twentieth century from those after the Second World War. The figure for mining slaves here is not especially low, although it is not at the top of the range of modern estimates. Peter Acton has argued for quite large numbers of slaves involved in manufacturing, but is reluctant (understandably) to suggest definitive total numbers.¹⁹

¹⁹ Acton 2014, 288.

The ‘representative’ figures he deploys in his appendix are derived from existing scholarship, including Sargent.²⁰

In the absence of good direct evidence, all of these arguments depend on the same two basic approaches. In the first place, there are inferences about the extent of slave-ownership in the citizen population, based on what the literary sources seem to think is normal. In the second there are attempts to look at the tasks in which slaves were certainly employed in classical Athens, and to try to work out how many slaves it would have taken to carry out those tasks.²¹ While some progress has been made with variations on the second approach since Sargent, it is important to note that while she ended up with quite high (maximum) estimates, Jones developed his extreme minimalist position by arguing that there were really very few places where we can be sure that significant numbers of slaves were employed.

The overriding impression given by the literary evidence, however, is that slave-ownership was normal and widespread, if not universal, among the whole citizen body, and so the natural inference is that the slave population was indeed large. Beyond the very large totals given by the Hyperides and Ctesicles passages, the usual assumption in oratory and comedy seems to be that most citizens could routinely be expected to own at least one slave. Most clearly, there is Lysias 5.5, delivered in the aftermath of the restoration of democracy:

This trial should not, I think, be a private matter for these men alone, but a common concern for everyone in the city. For it is not just these men who own slaves, but everyone else too: slaves who, when they consider the fate of these men, will no longer think about what service they could do for their masters to gain their freedom, but rather about what false allegations they could make about them.

Todd’s comment in his commentary is worth noting: ‘it is extremely dangerous to draw demographic conclusions from a remark like this, not least because Lysias is seeking to magnify the argument from social consequences by generalising the threat’.²²

²⁰ Acton 2014, 299–317.

²¹ Acton 2014, 299–317, presents both approaches. He is only interested in manufacturing workers, but slaves are prominent in his account.

²² Todd 2007, 396.

We might compare Lysias 24.6: ‘My trade, at which I can now only work with difficulty, can only help a little, and I cannot yet acquire someone to take it over from me.’ The implication here is that even the most destitute of citizens expected and aimed to be able to buy slaves to assist them in their work. The problem with this particular (and rather inept) speech is that it may well not have been delivered in an actual case, and also may not accurately reflect the views of ordinary Athenian citizens.²³ On the other hand, it strengthens the impression that at least some people in fourth-century Athens thought that slave-ownership was very widespread.

Likewise, Aristophanes gives us a consistent picture of men who are apparently to be taken as ‘ordinary’ citizens – men like Dikaiopolis in *Acharnians* and Chremylus in *Wealth* – who possess not one but several slaves.

In detail, this kind of evidence is open to attack, and Jones exploited the openings with some vehemence:

A man for whom Lysias wrote a little speech does indeed roundly assert that everyone has slaves; but he is trying to convince the jury that it is contrary to public policy to encourage slaves to inform against their masters. In comedy domestic slaves appear when dramatically convenient, even in the poorest households, but this evidence is suspect: comedy was written after all by well-to-do authors, and slaves provided a variety of stock comic turns.²⁴

While admitting that ‘slaves were employed in many capacities – as domestic servants, as clerks and agents in commerce and banking, in agriculture, and in industry and mining’ and that ‘all well-to-do Athenian families had several servants, and no doubt wealthy men kept large households of a dozen or more’ – Jones also contended that ‘the domestic servant probably did not go very far down the social scale’. The point about the well-to-do authors of comedy is potentially a telling one, but Jones seems to have overstated the strength of his case: such a consistent picture cannot just be explained away in the terms he uses. Still, reference to the direct literary evidence alone is clearly going to remain indecisive. Most estimates, and certainly the more generous ones, rely on the

²³ Reeve 1968.

²⁴ Jones 1957, especially 11–13.

identification of the *roles* that slaves played in classical Athens. The principal areas of slave employment that need discussion are public slaves, agriculture, warfare, mining and other industry, and ‘domestic’ slaves.²⁵

Two of these categories are relatively unproblematic. The *polis* of Athens clearly owned a certain number of slaves who performed a variety of functions. While we surely only hear about some of them in the sources, there are unlikely to be huge numbers of which we neither know anything nor can reasonably infer the existence. Estimates here are all in the hundreds (the largest single body may have been the Scythian archers of the fifth century), with about 1,000 being a plausible round estimate for the total. In the mines, estimates for the numbers of men employed at periods of peak production vary from 11,000 to 30,000. The lower estimate is that of Conophagos, whose detailed and knowledgeable account has strong claims to be taken seriously. His argument centres on the physical remains of the Laurion district, but it is also entirely compatible with such written evidence as we have. His total compares interestingly with what Xenophon recommends in the *Poroi* at 4.23–4; although what Xenophon goes on to say implies that he believed that far larger holdings existed in the fifth century. Still, the figures that Xenophon provides at 4.14–15 for the (presumably unusually large) holdings of Nicias, Hipponicus, and Philemonides, if we can have any confidence in them at all, seem to be at least consistent with a total labour force that only just gets into five figures at times of particularly intensive exploitation.²⁶

The other categories are much harder to get to grips with, not least because they are less clearly defined. Public slaves and mining slaves only had one job. A slave owned by a private household might perform a range of tasks according to the needs of that household and the time of year. In a household with a small farm, a single slave might help in the fields at times of peak demand for labour, but at others might perform general domestic duties and/or be employed in petty manufacture or retail to

²⁵ Compare Rihll 2011.

²⁶ Conophagos 1980. Rihll 2001 on the logistical implications of this number.

supplement the household's cash income; a male slave might attend his master when the latter went to war, whether as hoplite or as rower. In wealthier households, there would undoubtedly have been at least some greater specification of slave tasks (such as the overseers referred to by Xenophon in the *Oikonomikos*, and perhaps also nurses for childcare tasks) and, defining 'household' more widely, the workshops owned by the wealthy contained slaves who were engaged permanently in the relevant artisanal activities.²⁷ We can, however, at least make a start at quantification. As with the citizens, even if there is no possibility of reaching absolutely firm numbers, it is worth establishing the limits of the possible (or at least the plausible), and the exercise itself can generate some interest by making us confront our assumptions.

With 'other industry' (possibly something of a misnomer, since the silver mines and the dockyards were perhaps the only sectors of the Athenian economy that can meaningfully be said to have been industrialised), there is a limit to what we can say at present. The most familiar and enduring physical remains of classical Athens – its monumental architecture and its painted pottery – were certainly in part the products of slave labour. But both probably only required the work of at most a few hundreds of men at a time, the majority of whom were free men in any case.²⁸ Clearly, there were some quite large manufacturing businesses, each employing dozens of slaves, but it is very difficult to know how many there were beyond the ones we hear about.²⁹ The workshops belonging to Demosthenes' father and to Polemarchus are not referred to as if they were utterly exceptional, but they also clearly belonged to some of the very wealthiest men in Athens, and ones who may in fact have been unusual in their focus on manufacture rather than agriculture. How many more workshops were there on this kind of scale? And how many more that were smaller, like the perfumery we hear about in Hyperides 3? To supply the needs of a city the size of Athens, not to mention the other sizeable towns of Attica, there must have

²⁷ Acton 2014, especially 281–8: at 282, Acton appears to endorse a maximalist position.

²⁸ Hannestad 1988; *IG* I³ 475.

²⁹ *Lysias* 12.19; *Aeschines* 1.97; *Demosthenes* 27.9, 36.11.

been very many people making all kinds of goods.³⁰ But how many of them, and how many were slaves, is virtually impossible to establish with more precision than ‘thousands’.

With the central concerns of *polis* existence – warfare and agriculture – there is, however, some more scope for assessing the scale of the contribution of slaves.

Slaves at War

The military employment of slaves gave even Jones slightly more pause than their ubiquity in comedy and oratory. A central piece of evidence is Thucydides 3.17.4, which implies that every Athenian hoplite would normally expect to take a slave attendant on campaign with him. Gomme observed that this could be used to argue for a male slave for every citizen and metic over the age of 20 in the ‘hoplite and cavalry classes’ – although he also considered a figure of around 35,000 adult male slaves derived on this basis as very much a maximum for male ‘domestics’.³¹ He suggested a slightly higher maximum for the female slaves in domestic service – a number essentially plucked out of the air, with the justification that there ‘may’ have been more women than men slaves in this role (his note 3). On the basis of Thucydides 7.27.3–5, Gomme inferred (implicitly assuming that the 20,000 figure was genuine and accurate, and taking a very literal reading of Thucydides’ text) that ‘something like 40,000 to 50,000 slaves were engaged in ‘industry’ (excluding mining), for a total maximum slave population in 431 of c. 115,000.³² The impression of every hoplite and cavalryman having his own slave is reinforced by Thucydides 7.75, where their absence from the defeated Athenian army at Syracuse is a measure of the wretched state of that force. These followers are variously referred to as *akolouthoi*, *skeuophoroi*, and *huperetai*. As Hunt notes, there was not always any clear distinction between these terms.³³

³⁰ This is the ‘demand’ side of Acton’s appendix (2014: 311–17).

³¹ Gomme 1933, 21.

³² Gomme 1933, 26, table 1. Note that there is a slight discrepancy between the text on 21 and this table for the number of male domestic slaves.

³³ Hunt 1998, 167 note 7; Welwei 1974, 58–62.

The sceptical Jones, however, noted that while ‘those hoplites who owned suitable slaves certainly used them for this purpose . . . there is no evidence that every hoplite’s attendant was his own slave’.³⁴ This is perhaps fair enough, although as long as we are only concerned with global figures, it is not a major problem. As Jones went on, ‘the high rate of the state allowance [according to Thucydides, one drachma per hoplite, plus another drachma for his attendant], on the contrary, is only explicable on the assumption that many hoplites would have to hire a man for the purpose’.³⁵

This is a more problematic claim. A lot depends in fact on *why* the hoplites (and cavalrymen) themselves were given state support at this relatively high rate. If it was simply to enable them to procure provisions (at presumably inflated campaign prices in the siege camp), then their own slaves will have needed to have been fed as well. If, as could be suggested for the pay provided for dikasts, it was meant to compensate ordinary citizens for the loss of produce or earnings while they were away from their farms and workshops, then they would surely also need to have been compensated for the diversion of the labour of their slave assistants. It is not therefore obviously true that the ‘only’ explanation for the drachma a day paid for each attendant was to enable the hiring of that man.

Jones goes on, as if to strengthen his point, that ‘Thucydides’ inclusion of the baggage carriers with the light-armed among the Athenian casualties at Delium implies that they were citizens’.³⁶ It does not, unless one presupposes that the *psiloi* were all citizens, which there seems no good reason to do. In fact, one might instead argue that the Greek actually serves to separate both the light-armed and the baggage carriers from the ‘Athenians’, who are presumably the citizens: they are not specifically hoplites and cavalry only.³⁷

It is undoubtedly true, however, that not all of the attendants, baggage carriers, and so on of an Athenian army on campaign

³⁴ Jones 1957, 12.

³⁵ Jones 1957, 12–13. See 124–125 below for the suggestion that perhaps a rental market for slaves may not have existed away from the mining industry.

³⁶ Jones 1957, 13; Thuc. 4.101.2

³⁷ ἀπέθανον δὲ Βοιωτῶν μὲν ἐν τῇ μάχῃ ὀλίγῳ ἐλάσσους πεντακοσίων, Ἀθηναίων δὲ ὀλίγῳ ἐλάσσους χιλίων καὶ Ἱπποκράτης ὁ στρατηγός, ψιλῶν δὲ καὶ σκεοφόρων πολλὸς ἀριθμὸς.

were slaves, or even non-citizens. There is one clear exception: the story in Isaeus 5.11 (*On the estate of Dicaeogenes*). Here it is alleged by the speaker that one Cephisidotus was sent off on campaign to act as a servant to his uncle Harmodius by his other uncle Dicaeogenes. There are a number of points that can be made about this passage, apart from the fact that it provides one instance of a man of citizen birth being employed as an *akolouthos*. It is not entirely clear how old Cephisidotus was at the time, and so he may not have been formally enrolled as a citizen. In the first place, as Van Wees has observed, it is interesting that the attendants of Athenian hoplites seem to have been expected to maintain certain standards of dress: Cephisidotus is chastised for his shabby appearance when he reports for duty.³⁸ But it is also worth noting that Cephisidotus is sent out *ant' akolouthou*, that is, 'in place' of an attendant, not 'to be' an attendant. The whole point of the story is to paint Dicaeogenes as an absolute blackguard who has utterly failed in his duties to his kinsman. Sending Cephisidotus as an attendant is proof of his *hubris* and *miarai* – extremely strong words – especially because he was receiving a healthy income at the time from an inherited estate. The mention of his income implies that he was acting meanly. Whether this was because he was refusing to risk one of his own slaves, or that some of these funds should have been used to hire an appropriate attendant, is unclear, but not important here. Since Cephisidotus was apparently dishonoured by being despatched to fulfil this duty for one of his relations, it seems unlikely that another *citizen* would have done the job for a stranger in exchange for pay.³⁹ It is perhaps worth mentioning, as Van Wees is clearly aware but does not make quite explicit, the case of Cephisidotus is a powerful reason for really believing that the 'Homeric' attendants of a warrior, themselves freeborn young men, sometimes of high status, were not a feature of the classical period. This incident also took place during the rather straitened circumstances of the Corinthian war; it might not be wise to try to use it as evidence for what happened

³⁸ Van Wees 2004, 68–9.

³⁹ Jameson 1992, 141 note 41. A similar kind of rule-proving exception in Xenophon's *Anabasis* is discussed by Hunt 1998, 168–9.

in the more prosperous Athens of the 430s and 420s, or later in the fourth century.

Jones, however, held that:

more significant than these uncertain inferences is a remark by Demosthenes, who, castigating the harshness with which Androtion and Timocrates collected the arrears of war tax, pictures them 'removing doors and seizing blankets and distraining on a servant girl if anyone employed one' [Dem. 24.197]. Now the payers of war tax can be estimated to have numbered only about 6,000 out of a population of 21,000. If not all of them had a domestic servant, one may hazard that under a quarter of the population enjoyed that luxury.⁴⁰

The argument for the 6,000 figure is essentially that there were 100 war tax symmories (on the basis of Cleidemus *FGH* 3.323, fr. 8; according to Demosthenes 14.14, there were only 20 trierarchic symmories, so the symmories to which Cleidemus refers must be the *eisphora* symmories) and that there were the same number of men (60) in the *eisphora* symmories as there were in the trierarchic ones (Demosthenes 14.16–17: the trierarchic symmories are supposed to have been modelled on those for the *eisphora*.)

The domestic servants to which Jones is referring here are all female; strictly speaking, this evidence is not relevant to the question of how many households had male slaves available to accompany their citizen members to war. Again, it is not immediately apparent that the situation that Demosthenes describes, in the 350s, need be reflective of the situation in Athens at other times, (say, 70 or 80 years previously), even if it were safe to take it at face value.

Jones' scepticism alone gives us little reason to doubt that the size of Athens' field army (13,000 hoplites, 1,000-odd cavalry) at least should make us think in terms of a similar number of slave attendants – or somewhere between 10,000 and 15,000 reasonably able-bodied male slaves – as a minimum starting figure. When not required on campaign, these men could have been employed in a variety of occupations, according to those of their masters. Since hoplite-based military operations took place principally in the slack periods of the agricultural year, those who could most easily be spared may have been those who normally worked in the fields,

⁴⁰ Jones 1957, 28–9.

as well as those who were domestic attendants. Skilled craftsmen were probably more likely to be left behind to continue a more profitable activity.

Van Wees, however, has provided a possible reason for doubting the validity of this picture. He has argued that the hoplites to whom Thucydides refers in 2.13 were not, as is usually assumed, all (or mostly) members of the *zeugitai* property class.⁴¹ In Van Wees' model of the citizen population, the *zeugitai* were (relatively) wealthy and part of a relatively small elite within Athenian society, rather than the more moderately well-off part of the broad mass of the citizens. (That is, he sees them as more aligned with the *hippeis* and *pentacosiomedimnoi* than with the *thetes*.) Only the *zeugitai*, he suggests, were liable to be conscripted to fight as hoplites; while some (even many) of the *thetes* might have had the necessary minimum equipment to fight in a phalanx at need, they would not necessarily be expected to. The relevance of this in the current context is that only the *zeugitai* hoplites would routinely have had slave attendants. The support of these attendants would have allowed them to operate for longer periods at greater distances from home. Van Wees notes that the hoplite forces deployed for relatively distant operations from Athens were much smaller than Thucydides' totals in 2.13; the incursion into the Megarid, in this light, would have been exceptional in mobilising the whole active hoplite force – and we should not assume that every hoplite in this expedition, of short duration and close to Attica, *would* actually have been attended by a slave. If Van Wees is right, then our minimum figure for able-bodied male slaves would have to be roughly halved. The strength of the argument depends on Van Wees' picture of the distribution of wealth within the Athenian citizen body; as such, I shall defer full discussion until later. For the moment, we can accept that Van Wees presents an argument for minimising the number of able-bodied male slaves. That argument, however, could not bring the figure below about 5,000 or 6,000 at any time, given the scale of deployable hoplite forces apparently available to Athens.

Although slaves provided a vital part of the logistical support of the hoplite army, this was, of course, not the full extent of their

⁴¹ Van Wees 2001.

military role. Particularly important for Athens was their use in the manpower-hungry trireme fleet. Again, we run up against the problems of establishing the exact composition of trireme crews and of estimating the total numbers of such crews. However, it is clear that slaves were employed in significant number in Athenian fleets, as they were in all the navies involved in the Peloponnesian War.⁴²

Morrison, Coates, and Rankov suggest that 'slave oarsmen were unusual in Athenian ships at this time, but they are sometimes to be found and they were not always lacking in skill. When the Athenians were hard pressed to relieve Conon at Mytilene in 406, they promised freedom to the slaves who served in the ships they sent. Such an incident clearly indicates that their service in the fleet was unusual.'⁴³ This argument was well dealt with by Peter Hunt.⁴⁴ The situation at Arginusae was certainly unusual, but there is nothing to indicate that it was the recruitment of slaves into the fleet that was unusual. The desperation of the situation explains why the slaves were promised their freedom, which seems best explained as a mechanism for retaining the loyalty of these slaves and keeping them in the Athenian fleet in rather trying circumstances.

The evidence is far from abundant, but what there is suggests that in round figures about a third of Athenian trireme crews were made up of slaves, whether they were the attendants of the marines and officers, or rowing alongside their masters, or provided in some other way. *IG* i³ 1032 (ex ii² 1951) implies a proportion of between 20 per cent and 40 per cent.⁴⁵ If the 'missing' crew from the Themistocles decree really were slaves, then they would have made up about a third of the crews too.

Since the Athenians at the start of the Peloponnesian War (and during most of it) seem routinely to have been able to deploy fleets of around 200 vessels, this would imply around another 13,000 or

⁴² Van Wees 2004, 211–30; Jordan 2003, most recently arguing for between 50 and 60 (state-owned) slaves for a typical crew, and 2000, especially 92–3; Cohen 2000, 18; Hunt 1998, 122–43; Graham 1998, 1992.

⁴³ Morrison, Coates, and Rankov 2000, 118.

⁴⁴ Hunt 1998, 87–95.

⁴⁵ Hunt 1998, 88, with Laing 1965, 93.

so able-bodied adult male slaves added to the total for that period. Since they were presumably mostly skilled crewmen, they would have been less clearly available for other tasks, even when there were not active hostilities in progress. Likewise, because of the lack of obvious conflict between the manpower demands for the fleet and for the land forces, these men should be assumed to have been separate from the attendants of the hoplite army. Just as with the citizens, consideration of Athens' military potential does allow us to say *something* about the minimum number of slaves in Athens. At the least, even bearing in mind the implications of Van Wees' arguments about hoplites and wealth distribution, for 431 we must think in terms of 20,000 able-bodied adult males to add to the 12,000 or so employed by the *polis* and in the mines. This gives us the *total* figure suggested by Jones, even before we take into account any female slaves (who clearly did exist), or those male slaves who either were not needed by or were too valuable to their masters (by virtue of specialised skills) to take on campaign. Extreme minimalist views of the number of slaves in Athens cannot be accepted, on this basis.

Slavery in Athenian Agriculture

The role of slaves in Athenian agriculture has been a more intensely controversial issue. Even by his standards, Jones was particularly dismissive at this point, claiming that 'in agriculture, we hear little of slaves'.⁴⁶ His argument turned almost entirely on Androtion and Timocrates' seizure of slave-girls and what he took to be their consequent absence from the households even of many of those who were liable for the *eisphora*. Although his extreme picture has won few adherents, the idea that slave labour was only of importance to the Athenian elite as far as agriculture was concerned has been much more vigorously defended. On the kind of 'minimalist' model advocated by, in particular, Wood and Sallares, for the majority of Athenian farmers, any extra labour demanded by the household would have come almost entirely from neighbours or from hired workers. In opposition to

⁴⁶ Jones 1957, 13.

this view, it has been argued by ‘maximalists’ that slaves were more commonly used – that not only did all members of the *eisphora*-paying ‘class’ own slaves, but also very many poorer citizens, most or even all of the ‘hoplite’ class, or even some of the ‘*thetes*’.⁴⁷

It is worth observing in passing, following Fisher, that even a ‘maximalist’ view does not hold that slave-owning enabled ‘ordinary Athenians to become men of leisure, able to devote all their lives to politics or leisure, nor that the limited amounts of payment offered for jury service, political office-holding, or military service would release them from the need for hard manual work’.⁴⁸ Finding anyone who would seriously hold such a view now is difficult. This was a position that was already the subject of attack from Sargent. Wood was also concerned to dispel this image, but the positions she was attacking were not always quite those occupied by the people she cast as her opponents.⁴⁹

The literary evidence is simply insufficient to resolve the issue. On the one side, we have Jones claiming that there is little direct indication of slave employment in agriculture, and similar views more recently developed by Wood. On the other, there are those who, like Garland and De Ste Croix,⁵⁰ suggest that much literary evidence presupposes the widespread existence of agricultural slavery and assumes that the original audiences in classical Athens would have been intimately familiar with it. And this is indeed a major problem for an extreme minimalist position like that held by Jones – the overall picture consistently given by the literary evidence really is that there were quite a lot of slaves in Attica. The key question then becomes what they were doing, as one strategy that could be adopted by the advocates of a minimalist position on slaves in *agriculture* is that there were, or could have been, lots of slaves but, except on the estates of the rich, they were all doing something else.⁵¹ This is essentially the line taken by

⁴⁷ Fisher 2001, 40–2, for a fuller summary and the categorisation of ‘minimalists’ and ‘maximalists’.

⁴⁸ Fisher 2001, 42.

⁴⁹ Wood 1988.

⁵⁰ Garland 1988, 64; De Ste Croix 1981, 505–6.

⁵¹ A point on which the ‘minimalist’ Sallares and the ‘maximalist’ De Ste Croix were agreed; Sallares 1991, 54.

Wood, although how far she adopted this position simply for the sake of argument is not clear.⁵²

The key attempt to argue for the widespread use of slaves in Athenian agriculture was advanced by Michael Jameson.⁵³ Influenced in part by Ester Boserup, he argued that as the population of Attica increased while the available land remained the same, farmers would have been obliged to pursue strategies of intensified production.⁵⁴ With the available technological base, all such strategies would have depended on increased inputs of labour. While yields per unit area could be increased, however, this would have come at the expense of (either or both of) the ideal of *autarkeia* (a restraint on the extent to which specialisation of production for a market could be adopted), or ‘the periodic leisure for social functions the Greek valued’.⁵⁵ These undesirable consequences for the ordinary Athenian citizen could be avoided (or at least mitigated) by the employment of slave labour. This is an important point.

The picture presented by Jameson of increased population leading to agricultural intensification (broadly defined) is in many ways a compelling one. The picture that is emerging about the size of the total population undercuts to an extent one of the key objections to Jameson’s argument presented in Wood’s critique, that ‘Jameson’s propositions about demographic growth and intensification turn out to be rather vague and indeterminate’.⁵⁶

It is also, I think, an unfair exaggeration to argue, as Wood does, that Jameson’s ‘whole case turns on the proposition that “slave-holding enabled the Athenian to be a participant in a democracy”’. That would be a potentially serious objection, but in fact it does not so turn, or at the very least need not. It is worth considering here the observations of Scheidel; that citizens had other calls on their time is not irrelevant to the scale of use of slave labour.⁵⁷ To a large degree, the argument for intensification turns instead on

⁵² Wood 1988.

⁵³ Initially, Jameson 1977–8; but restated and partially modified in Jameson 1992, 1994, 2002.

⁵⁴ Boserup 1965.

⁵⁵ Jameson 1977–8, 129.

⁵⁶ Wood 1988, 52–3.

⁵⁷ Scheidel 2008.

the proposition that without intensifying production ‘the Athenian’ would have had great difficulty just in surviving.⁵⁸ At the very least, there would have been severe pressures (positive and negative) on him to intensify production. The logic of Jameson’s argument is not nearly as weak as Wood contended.

It is true that the use of chattel slavery was not the only option available for those who wanted to intensify production on their land (or just wanted to employ extra labour). It is clearly the case that waged, free labour was employed on Athenian farms, and this is a point that Wood makes very well.⁵⁹ It is also true that wage labour and slavery are not the only two (and mutually exclusive) forms of labour available, whether to the elite or to ordinary citizens. However, Wood does not deal with the sheer ubiquity of slaves, even those engaged (at least some of the time) in agriculture, as it is presented in the literary texts. Trying to explain them away in terms of ‘linguistic and conceptual ambiguity’ is insufficient, not least because the existence of such ambiguity is in fact itself questionable.⁶⁰

Here we should return briefly to Thucydides 7.27.5. The *number* he gives of 20,000 has, as we have seen, no claim to be taken at all seriously. What may be more interesting is what the slaves he is referring to did before they were lost to the Athenians. The natural reading of the passage as a whole is that Thucydides is stressing the Athenians’ loss of control over their *chora* – which seems, first and foremost, to be the countryside as a place of agricultural production. The slaves who ‘deserted’ are mentioned along with the flocks and the yoke animals. The silver mines are not explicitly mentioned here, in spite of attempts to argue that many, if not most of the slaves must have come from there.⁶¹

This is not altogether surprising. Laurion is after all quite a long way away from Decelea, and the Athenian cavalry, at least, were maintaining a posture of active defence. In spite of Wood’s derision, De Ste Croix was surely right when he observed that slaves

⁵⁸ Moreno 2007, 37–76.

⁵⁹ Wood 1988, 70–2.

⁶⁰ Wood 1988, 46–51; Jameson 2002, 168, provides a response to the claim of ambiguity in references to agricultural labour.

⁶¹ Recently Patterson 2007, 160; *Poroi* 4.114–5 is cited in a footnote, but its immediate relevance to this context is unclear.

who worked in agriculture would have had more opportunities for escape.⁶²

That mining slaves had more to gain by escaping, since those slaves who ended up in Decelea were sold on to new Boeotian masters, is not a strong argument. The *Hellenica Oxyrhynchia* (London 17.3) implies that many in fact were captured, not deserters. Thucydides also does not quite say that the slaves who deserted did so to Decelea. The implication of his claim is that the fort caused the Athenians to lose control over their countryside, and that as a result they were unable to prevent escapes – and not necessarily that it provided a refuge for escaped slaves in the way that, for example, the Athenian *epiteichismos* at Pylos had for Spartan helots. Peloponnesian League troops would presumably have been as happy to round up deserters as to capture slaves who were not trying to escape. In any case, it is not necessary to assume that even slaves who did choose to run away to Decelea knew what fate awaited them. Not all escapes need have been carefully thought out or well prepared. Furthermore, for many slaves, just removing themselves from an active war zone may have been sufficient incentive for an escape.

The reference to *cheirotechnai* is not decisive proof that large numbers of miners were among the escapers. Miners could indeed be *cheirotechnai*, but so could all kinds of other craftsmen and artisans. It may well be too much to assume that they were specialist agricultural workers such as vine dressers. Rather than ‘specialist’ agricultural workers, the Greek would surely allow them just to be ‘skilled’ at various aspects of farming. Success in farming is not, after all, just a matter of common sense and hard work, even if Xenophon’s Ischomachus might want us to think so.⁶³ But in spite of what Wood asserts, if they were not specialist agricultural workers, this is not as damaging to Jameson’s position as she allows the reader to infer. Precisely part of his point about intensification in the wide sense (which for Jameson includes diversification of household activity) was that slaves could be

⁶² De Ste Croix 1981, 506; Wood 1988, 67–8. It may be worth noting in passing that the mines are not mentioned at all in Thuc. 7.27 or, incidentally in the summary of Athenian resources at 2.13. The only time that the mines are mentioned as being (potentially) vulnerable to a fort at Decelea is in the voice of Alcibiades at 6.91.7.

⁶³ Xen. *Oec.* 15–21.

turned to other productive work in a diversified and commercialised economy.⁶⁴ As Wood observes:

the slave population of the *chora* would certainly have included mineworkers and domestic servants, as well as the skilled craftsmen who laboured in the villages and small townships scattered throughout Attica. (It is, after all, important to remember that ‘urban’ craftsmen cannot have been confined to the city of Athens.)⁶⁵

This is entirely true, but the crucial issue is who owned these slaves. If they were part of small citizen households, the fact that they were not primarily (or even at all) agricultural workers is rather beside the point.

Another approach that tried to get away from the exiguous direct evidence for the number and location of slaves in Attic agriculture was taken by Osborne. Osborne worked indirectly to assess the degree to which slaves would have *had* to have been exploited by the elite.⁶⁶ He started by assuming that something like 50,000 ha of land in Attica each year would have been under cereal cultivation (about 20 per cent of the total land area). On the basis of his earlier suggestions about patterns of landholding, he reckoned that about a quarter to a third of this land was owned by the 2,000 richest families, which would have meant something like 15,000 ha being cultivated by the richest 3,000 citizens.⁶⁷ The remaining 35,000 ha would have been divided among the remaining citizens – around 25,000 of them in the fourth century.

One of the periods of the agricultural year when labour is most in demand is harvest. By using the comparative data collected by Halstead and Jones,⁶⁸ Osborne suggested that getting in the harvest from the small estates belonging to the bulk of the Athenian citizens (the 25,000) would have required the labour of something like 35,000 people. The harvest from the comparatively large estates of the rich would have required the labour of 15,000.

⁶⁴ This is a point made more explicitly in Jameson 2002.

⁶⁵ Wood 1988, 68.

⁶⁶ Osborne 1995.

⁶⁷ Osborne 1991. All the figures are debatable in detail – see 207–210 below – but there is nothing obviously implausible about them which would prevent them being accepted for the sake of the argument.

⁶⁸ Halstead and Jones 1989.

What this suggests is that there really was a need for a considerable amount of extra labour beyond the family on the estates of the rich – at least at times of peak activity. But there does not *obviously*, on Osborne’s model, seem to have been such a need on the farms of the more ‘typical’ Athenian farm. In fact, Osborne notes that ‘on a family farm the labour available varies considerably at different stages of the family’s own history, depending on the amount of female and juvenile labour available, a variation emphasized by the normally late age of male marriage’.⁶⁹

⁶⁹ Osborne 1995, 33, with a reference to Gallant 1991, 11–33, 60–112. It is certainly true that, as Gallant argues, there will be times in the life cycle of a household when the amount of labour available will be small relative to the number of dependents present, and that in these circumstances the purchase of a slave might well be attractive if there is the cash available to pay for one. That ‘if’ is quite a big one, but here again the provision of *misthos* in cash and the generally diversified, commercialised, and monetised nature of the economy of classical Athens might make it smaller than elsewhere in Greece, especially combined with the pressures towards intensification of production within households. On the other hand, there will be times when households have lots of labour available to them – if the children are teenagers or adults, and the parents are still alive, or when a couple has just married and have no dependants, for example. In Attica there were tens of thousands of households at all stages of the household life cycle. Those which were short of labour were probably matched in number by those which were overflowing with it. These households did not exist in isolation – indeed, another potentially unusual aspect of Attica was the wealth and strength of local and wider social networks that existed there, many of which were based on various forms of reciprocity. There seems no reason in principle why labour-rich households could not have provided labour to those which were labour-poor, without any recourse to slaves. In fact, this must surely have happened, but there were dangers for both parties to such a strategy if the labourers provided were of citizen birth. The household providing the labour could be seen to be creating a reciprocal obligation on the household that received the labour; on the other hand, the actual labourers might be in danger of appearing to be subservient to the household for which they were working. However, the delicacy of the situation may help to make sense of a passage in Xenophon which has appeared rather baffling to modern readers. This is the story of Eutheros’ conversation with Socrates in *Memorabilia* 2.8. In the aftermath of the Peloponnesian War, Eutheros was reduced to manual labour to make his living. This can only be a temporary expedient, as he is no longer a young man. Socrates suggests that he instead seek employment as a farm bailiff, but Eutheros retorts that he does not want to be a slave. Socrates then goes on to try to persuade him that such a job would not in fact be any worse than any other kind of work. The point that concerns Socrates – whether being a bailiff is actually servile – is not at issue here. What modern readers have had more difficulty with is why Eutheros does not perceive his *existing* employment as slavish – and clearly he does not. Part of the reason may be that by providing labour for another household he can (at least in his own mind) be considered to be in the superior position in social terms, whatever the economic reality. That is, he is not dependent on that household but doing them a favour. Taking up a position as a bailiff, a permanent employee, would remove that possibility. Wood 1988, 69, is right to observe that the logic of the story is that many citizens actually did act as bailiffs – but she goes too far in saying that it says nothing about the existence of slave bailiffs. A job that was characteristically performed by citizens surely could not be

Osborne's argument is ingenious and stimulating, but it is supposed to apply directly to the situation in the fourth century. The picture must have been different in the fifth – although to what extent and in what ways, we have yet to establish. However, one possibility must be that the 'structural necessity' for extra labour in the households of the rich was even greater in the years leading up to the Peloponnesian War, as more land will have been concentrated in the hands of those households.

The effect on poorer households is harder to judge, but a couple of points have to be made. One is that we have a kind of parallel here with the exploitation of livestock. Slaves in the household would indeed have been extra mouths to feed, but there were social benefits aside from the economic implications. Further, employing extra agricultural labour was not the *only* way of pursuing an intensification strategy for small householders. In addition to craft production, slaves could be taken along to row in the fleet (with the master pocketing the pay). As plots of land became smaller, the *need* for extra labour at times when the household's native resources were, for whatever reason, depleted would have become all the more intense. Slavery was not the only option for plugging the gaps, but it did provide some unique advantages.⁷⁰

This is consistent with the picture painted by Scheidel, who has developed another interesting line of argument about the place of slaves in classical Athens by placing them in a comparative economic context with their counterparts in the Roman empire.⁷¹ Scheidel observes that the suggestions made in the past by Jones and Duncan-Jones about the low cost of slaves in Attica seem to be borne out by more exhaustive surveys of evidence than they had been able to carry out. Slave labour in classical Athens really does seem to have been cheap when reckoned in terms of 'wheat equivalent' in relation to daily wages for free hired labourers and grain prices, compared to

considered slavish. Quite possibly many bailiffs were metics, but that would not necessarily suffice to remove the taint of servility from the role (see 136–142 below).

⁷⁰ On the last point, see especially Jameson 2002. Forsdyke 2006 emphasises that 'intensification' is not a single activity.

⁷¹ Scheidel 2005, 2008.

those in Roman Egypt and elsewhere in the empire under the principate.⁷² He goes on to note:

It must have paid to buy slaves instead of relying on hired labor . . . High real wages indicate labor scarcity. Imported slaves were both cheaper and more dependable than free wage-laborers. In this environment it may even have been profitable to keep slaves simply to hire them out.⁷³ This creates an apparent paradox. If slave labor was so competitive and readily available, why didn't demand increase until slave prices rose to less inviting levels and the value of free labor fell? I suspect that slave markets may have been limited in scope. Greek states that relied on more archaic forms of bondage had lower incentives to bid for slaves, and even within the 'slave society' *poleis* of central Greece, only a limited proportion of the population would control sufficient resources to invest in chattel slaves. In conjunction with abundant supplies from many different regions, these factors may have stabilized slave prices at relatively low levels.⁷⁴

This passage illustrates well just how complex some of the problems of interpretation are here. Scheidel's basic point is that slaves were cheap in Athens. At a superficial level, this should mean that slave-ownership could have extended quite a long way down the economic hierarchy in Athens, as those citizens who had a need or desire for slave labour should have been able to acquire it without too much difficulty. This is, again, consistent with the general impression given by the literary texts.

However, things are unlikely to have been that simple. Scheidel's identification of his 'paradox' is only the beginning of the difficulties. Granted his premises, his attempts to resolve the paradox make sense and are surely part of whatever story we end

⁷² Scheidel's argument, which he deliberately and explicitly weakens for rhetorical purposes by making assumptions that are as unfavourable as possible to his case, is potentially made even stronger if the volume-based units of measurement used for grain in classical Athens really were as light as the Grain Tax Law seems to imply – i.e., if an Attic *medimnos* of wheat really only weighed about 33 kg rather than the 40 kg that Scheidel assumes. In the former case, the 180 drachma cost of a typical slave would only have bought about 1–1.2 tonnes of wheat, as opposed to the 1.2–1.4 tonnes that Scheidel uses. On the other hand, such a reconstruction also makes the real price of wheat in Athens higher than Scheidel thinks.

⁷³ Of course, this is precisely what Xenophon tells us that Nicias and other wealthy Athenians of the late fifth century did in providing labour for the silver mines. This was a special case, however. Work below the surface in the mining industry was, as far as we can tell and unsurprisingly, exclusively carried out by slaves; and probably a lot of the work done on the surface was also done by slaves. Where the possibility of hiring free workers was effectively zero, a very particular form of 'labour scarcity' would result.

⁷⁴ Scheidel 2005, 14–15.

up telling. Abundance of supply would have helped to keep slave prices suppressed, and there is rarely any indication of any shortage of slaves for the Athenian market. The endemic warfare of the classical period would have generated huge numbers of slaves just within the Greek world; significant Athenian military victories would have dumped hundreds and occasionally thousands onto the market overnight, quite apart from the sources that existed outside Greece, even if those sources are not always as easy to identify as we might wish.⁷⁵

Even in Athens, however, the outright purchase of a slave was not a trivial transaction: 180 drachmas was a substantial sum of cash, more than a labourer's annual wages if we assume a rate of about three obols per day and a substantial number of wage-free days in a year. Once bought, a slave could amortise himself or herself relatively quickly if they could bring in as much as two or three obols in profit every day, although the investment would not be without risk, as slaves could and clearly sometimes did abscond. Whether a typical citizen would routinely expect to have access to a couple of hundred drachmas in cash is still open to question. Sources of credit existed, but it may be significant that where we have a clear instance in the sources of a loan being made for the purpose of purchasing slaves, the rate of interest seems punitive.⁷⁶ Abundant supply and restricted demand would have kept prices low, but penetration of slave-ownership in the citizen body would still have been shallow if the cash was usually not available.

There is another paradox lurking behind the one pointed out by Scheidel. Slaves were cheap in relation to free labour, which was expensive. The latter observation should be surprising; although population levels fluctuated in Athens, the *polis* was densely populated throughout the classical period. As Scheidel points out, Athens should have had a 'thick' labour market, where free

⁷⁵ Occasions which saw large-scale enslavements (and which are recorded in literary sources) are collected and conveniently tabulated in Pritchett 1991, 226ff. For obvious reasons, the capture of whole cities and enslavement of populations was more a feature of the fifth than the fourth century, although in the latter, some unfortunate ship crews did find themselves enslaved. See also Lewis 2016.

⁷⁶ Lycurgus, *Against Leocrates* 23. Acton 2014 very much minimises the obstacles to acquiring a slave.

labour was cheap. In such circumstances, there would be little chance of slaves playing a significant role in the agricultural sector – and this was indeed the case in Roman Egypt. In Athens, however, as Scheidel points out, real wages seem to have been high. Scheidel's explanation for this centres on the 'commitments' to which free labourers were subject and which constrained their availability. By this he means not just the requirements of participation in Athenian civic and social life, but the ideological constraints that made it difficult for a citizen to be seen to be subordinated to another citizen.

What further complicates this picture is that it is not clear that real wages really were all that high throughout the classical period. Such evidence as we have is suggestive, but it is far from conclusive. Scheidel cites Loomis' 'exhaustive' survey to suggest that '1 drachma appears to have been a common [daily] wage for civilians and soldiers in the fifth century BC. Unskilled workers at the Erechtheion received 1–1.5 drachmas per day, skilled employees 1.25–2.5 drachmas.'⁷⁷ In a note (37), Scheidel goes on:

If a deliberately matter-of-fact list in comedy is to be trusted, 3 drachmas was a credible outlay to rent a cook for a day, while 1 drachma paid for a waiter (*Men. Asp.* 216–35); at the very least, these wages are consistent with the documentary evidence. This also suggests that state wages need not have been wildly out of sync with wages in the private sector. The strong presence of slaves among the Erechtheion builders also speaks against the assumption that wages associated with the project were abnormally high. The fact that Athenian citizens could apparently get by on 3 obols a day if they had to (M. M. Markle, 'Jury pay and Assembly pay at Athens', in Cartledge and Harvey, eds, 1985, 265–97, at 276–81) is consistent with this scenario of high (i.e., significantly higher than mere subsistence) real wages.

The Erechtheum builders' wages are undoubtedly important. However, it is worth noting that the relevant inscriptions do not tell us what Scheidel says that they do. Scheidel's figures (1–1.5 drachmas per day for unskilled workers, 1.25–2.5 drachmas per day for skilled workers) are not from the Erechtheum accounts but from the Eleusis accounts of the 320s. The Erechtheum workers seem almost all to have been paid one drachma per day,

⁷⁷ Scheidel 2005, 11–12.

although in some cases exactly for what period of time or for what task they were being paid is unclear.⁷⁸ Given that Scheidel is at this point claiming to be talking about the fifth century, the relevance of Menander is not all that apparent, unless we already have some reason to think that real wages did not change over the course of a century. On the other hand, if Scheidel was meaning to talk about Eleusis and the fourth century all along, then a consistent picture does emerge of wage levels and labour prices – for the late fourth century. This is in itself a valid point, but the evidence for slave prices is mainly from earlier periods. It comes from Xenophon and Demosthenes (including the cases about the latter’s inheritance, which must have taken place around 363 BC), and from the public auctions of the property of the Hermokopidai, which were much closer in time to the Erechtheum accounts. Whichever way we look at the evidence, Scheidel’s case has a problem with a lack of contemporary data to compare – unless, again, we assume that nothing of importance changed over the course of the classical period. This is possible, of course, but it probably needs to be demonstrated rather than being taken as a premise.

The problem with the fifth century is that there is almost no evidence for wages outside the public sector, so it is virtually impossible to tell how far the private sector was ‘in sync’ with it (although to be fair there is no particular reason why it should *not* have been). There does not seem to be any particular reason to accept Scheidel’s comment that ‘the strong presence of slaves among the Erechtheion builders . . . speaks against the assumption that wages associated with the project were abnormally high’. As Loomis points out, there are reasons for thinking that the Erechtheum accounts actually do record a quite abnormal

⁷⁸ Loomis actually concludes that the one drachma per day rate apparently attested for the construction of the Erechtheum is exceptional, or at least exceptionally egalitarian – and, for a time when soldiers and sailors were receiving only three obols per day, unusually high. He is at something of a loss to explain, concluding (reasonably enough), ‘at our distance, and with our relatively meagre evidence, we cannot always understand why the Athenians made the judgements that they did on questions of social value and comparability’ (238). He goes on, ‘but the mere asking of these questions does clarify the initial question about a standard wage: there is *no* evidence of a standard wage that applied to all workers in all fields’ (238–9). Loomis has an axe to grind here, but while it does not contradict Scheidel’s first point, it is worth bearing in mind that we have very little useful wage data for the fifth century in general.

situation. Even if this were not the case, Scheidel's claim seems to be a non sequitur, unless he believes that the slaves were able to keep the entirety of their wages. An equally plausible assumption would be that the sums would be pocketed by the slaves' masters, who would then have had every incentive to bring their slaves along if the wages had been abnormally high.

The most important part of his argument however is the claim that a wage of three obols a day was sufficient to support a citizen. Here he is on safer ground, although it is worth noting that if the implication of the Grain Tax Law for the weight of a *medimnos* of wheat is right, then not only would slaves have been cheaper in terms of wheat equivalent but the value of wages would have been reduced. Markle's calculations, on which Scheidel relies here, do assume a daily ration of 1.2 *choinikes* of barley. This was very much a maximum, as this would have provided nearly 100 per cent of a 'very active' male's daily calorie requirements as calculated by the FAO.⁷⁹ As Moreno points out, a lighter *medimnos* would bring the 'daily ration' down into the realms of a likelier number of calories.⁸⁰ Still, it would cost the best part of two obols for a family of four to buy the barley they needed. We need not accept Markle's claim that 'the other kinds of food in Athens were so cheap that they are hardly worth reckoning' – on his terms, it would cost two-and-a-half obols to provide very basic rations in barley, a very little olive oil, and some wine for that family of four.⁸¹ If the normal daily wage was actually three obols rather than one drachma (as Markle assumed), then wages would not have been significantly above subsistence after all – and perhaps Scheidel's paradox can be made to disappear.

Markle assumed that one drachma per day was a normal wage in the fifth century. It is worth reflecting that even if the Erechtheum accounts are after all reflective of wages in general, by 409 the labour market in Athens had been significantly 'thinned'; the situation earlier in the fifth century could well have been rather different.

We shall return to some of these issues later on. For now, it is enough to observe that whatever we make of Scheidel's

⁷⁹ Markle 1985.

⁸⁰ Moreno 2007, 32.

⁸¹ Markle 1985, 280.

observations, they could be used to suggest that slaves perhaps did not, after all, play a huge role in agriculture. If slaves were cheap and remained so, then that suggests that the market was constricted (as Scheidel points out) and demand was not sufficient to drive their price up. If they were not in fact as cheap as Scheidel suggested, then real wages were not as high, and it would have been easier to hire free labour (probably including, although by no means limited to, citizens).

Isager and Skydsgaard's argument against the widespread employment of slaves in agriculture was that at times of peak demand hired labourers could be employed. As we saw, Wood made the point well that hired wage labour clearly did exist in classical Attica. Against this, there is Scheidel's argument that, at least for those elite families about whom Osborne was talking, it may well have been more cost effective to buy slaves. True, the additional labour would only have been needed in the fields during some parts of the year, but for the rest of the year the slaves could be put to productive use in other ways. From an elite perspective, they could have helped with the generation of the cash they needed both to meet their obligations to the *polis* and to maintain their status and lifestyle. For poorer (but not destitute) Athenians, such a slave would help provide the economic flexibility that was stressed by Jameson and Halstead. For moderately well-off Athenians – that is, those who had their own farms and/or workshops, however small – the low cost of slaves would have been a good thing, especially if it was being held down mainly by an abundance of supply. For the very poorest citizens, whose only real asset was their labour, it may have been a rather different story.

The number of slaves in Athens is then connected to the size of the citizen population, but the correlation is not a straightforward one. The key issue that emerges, beyond the implausibility of extreme minimalist views like that of Jones, is not so much one of the absolute size of the citizen population, but of how wealth was distributed within that population; and here overall size, while important, is not the only determining factor.

Before moving on, however, it is worth making one final observation. All the scholars mentioned so far have assumed

that there was a straightforward choice between employing slave labour and free hired labour when work needed to be done. At least for Jones and Scheidel, it was a short and unproblematic step from there to assuming that slaves could themselves be hired out for profit by their owners. This might be right, but slave labour and free labour cannot always be directly substituted for each other. One set of differences between free and slave labour was discussed by Scheidel, as he sought to investigate the impact of the differences in incentives required by a slave and free labour force on the kinds of work for which they have been employed.⁸² The situation one would intuitively expect, and which does apply to a certain extent, is one where free labourers are provided with positive incentives to work hard, whereas slaves are constrained with negative, pain-based incentives. In turn, one would expect this to lead to a situation where slaves are used for unskilled labour, but not for tasks that require attention to detail and care about the outcome, and that are harder to supervise. In practice, the situation is much more complicated, as slaves were clearly used for high-skilled labour in antiquity. One crucial factor is the desire of slave-owners to gain the benefit of investments made in the human capital represented by their workers. The turnover of workers in a skilled workforce is much easier to control if those workers are slaves rather than free men who can choose to go to another employer. However, while Scheidel is right to stress owners' investments in the intangible human capital of a skilled slave workforce, it is important to recall that slaves represented a more basic form of capital investment too, and that this could have affected their roles in the labour markets of the classical world.

It is well known that rental markets for animal power (provided by bullocks, for example) often fail in the developing world today.⁸³ While it may appear to be adding insult to injury to compare slaves to draught or plough animals, there is, potentially, an important similarity. One important reason that the rental markets in animals fail seems to be that owners are concerned that the

⁸² Scheidel 2008.

⁸³ Hayami 2001, 413.

renters will overwork and abuse the animals to extract the maximum output from them in the short term, as they have no interest in the long-term health of the animal. Similar concerns could have existed on the part of slave-owners, constraining the existence of a rental market in slave labour and further complicating the interaction of slaves with the labour market. It may be significant that one place where we are sure that there was a rental market in slaves was the silver mines. This industry provided a special case, as there seems to be no doubt that the slaves must have been brutally constrained and no one (among the owners or renters) had much concern for the long-term prospects of the slaves, as there were none. Again, there was little or no competition with free workers for this kind of work. The peculiar circumstances of the mining industry cannot be used as a guide for the rest of the economy, where there may have been no, or only weak, rental markets for slave labour. If this were the case, then it would be a further step to resolving Scheidel's paradox.

Metics

The metics – free, but non-citizen residents of Attica – constitute the third and last significant portion of the population that we need to discuss. They present some of the same sorts of problems for us as do the slaves. There is very little in the way of direct evidence for their numbers. Such evidence as we do have suggests that they were, throughout the classical period, present in substantial numbers, but going beyond this observation is much more difficult. Although their numbers were of some interest in antiquity, just because of their ubiquity – and what seems to have been their general reliability – the Athenians seem for much of the time just to have taken them for granted. From our perspective, it is difficult, if not impossible, to get to grips with the question of their numbers separately from that of the number of citizens. To make matters worse, the relationship between the number of metics and the number of citizens is potentially more complex than the relationship between the number of slaves and the number of citizens. It is also important to raise the question of what the metics actually did

in classical Athens, just as Jones did with the slaves – even if that question is not a straightforward one to answer at all definitively.⁸⁴

In other ways, however, the metics seem to be a rather less troublesome category of people for us to understand. The definition of a metic in Athens was, in at least some senses, pretty clear-cut – a metic was someone who was subject to a particular tax, the *metoikion*. The people who had to pay this tax were non-Athenians who were resident in Attica for some period that was extended beyond a certain minimum – usually, and plausibly, taken to be 30 days. The situation in classical Athens should in fact be especially clear, and not just for the familiar reason that we are much better informed about metics in Athens than we are about their counterparts in other Greek *poleis*. Athens also presents a clear case because under the democracy (or at the very latest from 451/0 BC onwards), where there was no property qualification for what amounted to full citizenship, we can be sure that almost everyone who was not either a citizen (or a citizen's direct kin) on the one hand, or a slave on the other, was going to be a metic. The only exceptions would be visitors who were merely passing through.⁸⁵ This is obviously not the case in those other cities where there were other non-citizen but free groups in the population. The clearest example is provided by Sparta with its *perioikoi*, but the overwhelming majority of other *poleis* would have fallen into this category too.

Furthermore, we know, as surely as we know anything about classical Athens, that metics were, and were sometimes explicitly recognised as being, essential to the continued well-being and even existence of the city. This importance is clearest in the operation and maintenance of the fleet (as Pseudo-Xenophon makes explicit, but which we could reasonably infer in any case

⁸⁴ I have discussed several of the issues in this section from a slightly different perspective in Akrigg 2015.

⁸⁵ Whitehead 1977, 6–20. It is Watson who argues that in fact this relatively strict definition of metic status, and the clear tripartite division of the permanent population of classical Athens, was an artefact of the Periclean citizenship law of 451/0. In Watson's account, in the first half of the fifth century, this clear distinction between who was a metic and who was a citizen did not exist, with the former term meaning only something like 'immigrant' in a non-technical sense. The background to Watson's claim and the argument he develops to support it are both, to a large degree, demographic. See below and in Chapter 5.

on consideration of the logistical realities), but we also find metics playing important roles in land warfare and involved in almost every sector of Athenian economic and intellectual life.

Finally, and not least importantly, there is the fact that we are very well informed about some individual metics. These are figures as familiar to us as any Athenian citizen, and have done as much as any of them to shape our picture of classical Athens: Aristotle can be and is cited for almost every subject in Greek history, and the speeches of Lysias – quite apart from providing many students' first extended encounters with genuine Attic prose – are central to our understanding of early fourth-century Athenian society.

This clarity and familiarity, however, comes with a cost, which is that we are often blinded to or complacent about the metics and their roles. Full-length treatments of the Athenian metics have tended to concentrate either on the legal status of metics and their relationships with the formal institutions of the Athenian *polis* or with what Whitehead famously discussed as the 'ideology' of the metics – which is, of course, the ideology constructed by the Athenians about the metics, not one constructed by the metics themselves. While these are, undeniably, important issues, further points of interest emerge from consideration of what may seem to be the more basic question of how many metics there actually were in Athens to make them so important. This question in turn should inspire us to wonder from where these non-Athenians were coming to live in Athens. Exactly as with the slaves, we should also ask what they were doing: unlike the slaves, however, they had at least some choice about where they did it, and so there is also a question about what it was that made them stay.

We can start with the 'how many' question. Again, the best evidence we have, just as with the slave population, gives us only an impression of the size of the metic population. Having said that, the indications are that it was quite large, and a significant fraction of the size of the citizen population. The only explicit numbers we have are those given by Thucydides (in the passages in book two previously discussed, which deal with the metic hoplites alone), and Ctesicles (the figures reported, including one for the metics, for Demetrius of Phaleron's census).

An attempt to get to grips with the numbers question is complicated by the reluctance of some scholars to accept that there really might have been very large numbers of them, both in absolute terms and relative to the size of the citizen population. This reluctance is well illustrated by Whitehead, who in his fundamental and influential treatment of the Athenian metics, relegates discussion of their numbers to little more than a page.⁸⁶

Whitehead was willing to accept the figure Ctesicles gave for Demetrius of Phaleron's census – that is, 10,000 metics compared to 21,000 citizens (and of course the 400,000 slaves) – but seemed less prepared to accept the implications of Thucydides 2.13, although his reasons are not clear. Whitehead cites Clerc's arguments simply to show (what he considers to be) their obvious weakness:

Using general demographic statistics (while admitting their fallibility) Clerc (1893) calculated that c. 11,750 of the 16,000 reserve hoplites were metics; he then estimated metic '*thetes*' (i.e., *psiloi* and those in the fleet) at least this figure, thus arriving at a total of c. 24,000 metics under arms; and the margin of error in this arbitrary figure was then compounded fourfold in an estimate of a total metic population of 96,000, as against 120,000 citizens (i.e., a 4:5 ratio, though this was immediately undercut by his final contention – unsupported – that there were half as many metics as citizens). I pick out Clerc's reasoning only *exempli gratia*, but certainly his high figures have won no adherents. Something has gone seriously wrong here.⁸⁷

It is not unreasonable, I think, to focus on Whitehead's own reasoning *exempli gratia* here, given the influence of his account. It is implicit, of course, that what has gone wrong is in Clerc's argument, rather than in the opinions of those who are not his adherents. Clerc's numbers, while speculative, are however perhaps not quite as obviously silly as Whitehead suggests. The 11,750 figure, as we shall see, seems to be an entirely reasonable inference from Thucydides – although not the only possible one. The suggestion that metics should be half the number of citizens does, of course, contradict the results of Clerc's calculations, but to be fair to him it is what is implied by Demetrius'

⁸⁶ Whitehead 1977, 97–8.

⁸⁷ Whitehead 1977, 98.

census, which suggests at least that this is what was believed in Athens at the end of the fourth century.⁸⁸

Gomme suggested a figure of just under 30,000 in 431, and this is the ‘consensus’ figure alluded to by Whitehead.⁸⁹ Rhodes, in the *CAH* suggested about 50,000;⁹⁰ Implicit in Duncan-Jones’ approach is a figure nearer 100,000, which actually reaches a similar conclusion about Thucydides to Clerc’s.⁹¹

Clearly we do need to look at Thucydides 2.13 again, but in the light of the discussion in Chapter 3. If, in our interpretation of the figure given there for the main hoplite army of 13,000, we make assumptions that minimise the number of citizens, then that does seem to imply a figure of 10,000 to 12,000 metic hoplites. Such minimising assumptions – that the 13,000 figure is actually a population figure for all the men with hoplite equipment between the ages of 20 and 50 – would mean that relatively few of the 16,000 figure for hoplites on guard duty could have been citizens, and so the number of metic hoplites that is implied is really very large.

If, however, we make a different (and perhaps more plausible) set of assumptions about the 13,000 figure – that it is meant to be a realistic army figure, and it represents a narrower range of age groups – then there might only have been 3,000 to 6,000 metic hoplites. We could further assume that, as seems likely, Hansen was right to argue that there must have been a total of at least 60,000 citizens in 431. In that case, if we minimise the number of citizen hoplites, then we seem to be required to accept that Athens was overflowing with citizen manpower in groups other than the hoplites. But if we were to make these other, different assumptions, then the hoplites would have made up a much larger proportion of the citizen population. But the assumptions which are less minimising about citizen hoplites should in turn imply that there was a smaller supply of citizens to row in the fleet.

⁸⁸ See also Van Wees 2011, who suggests that the ‘metics’ here include those former citizens who fell short of the property qualification for citizenship under Demetrius’ regime, and that the number of non-Athenian residents was closer to a sixth than a third of the free population.

⁸⁹ Whitehead 1977, 108 note 183.

⁹⁰ Rhodes 1992, 83.

⁹¹ Clerc 1893, 367–80; Duncan-Jones 1980. See also Thür 1989.

Now, there is a consistent assumption in the contemporary sources that the metics were crucial in some way for the fleet. Their importance is made explicit by the Old Oligarch, who claims (at 1.12) that Athens ‘needs the metics because of the multitude of their skills and because of the fleet’. Unfortunately the reason for this importance is left frustratingly vague. If we assume that more citizens were fighting on land, there was (at least potentially) greater scope for that metic contribution to be a quantitative one, with the metics filling many places on the rowing benches of manpower-intensive triremes. But if we return for a moment to the minimising assumptions about citizen hoplite numbers, the metic contribution to rowing manpower might not have been so great; in this case, the crucial contribution could have been qualitative, with the metics providing not rowing muscle but more specialised technical skills. Which of these situations is more plausible – whether the contribution of the metics was important quantitatively or qualitatively – will therefore depend partly on what we end up concluding about the citizen population (including the distribution of wealth within it, and how much of a socio-economic elite the hoplites constituted), but also on what kind of people we think the metics were. Putting this issue this way does perhaps overemphasise the distinction, since it is entirely possible that the metics were important in both respects. It is, however, important to emphasise that there *is* a distinction. Were all the metics like Polemarchus, at ease among the wealthiest Athenians, or were they mainly poorer men? We shall turn to this question in a moment, but it is also worth returning briefly to the question of what the ratio of citizens to metics was.

As we have seen, the results of Demetrius of Phaleron’s census imply that there were roughly two citizens to every metic (at a time when there was a property qualification for citizenship, as there had not been earlier in the classical period). But even if we want to trust these figures, the situation may not have been quite so straightforward as that suggests. For example, Hansen takes the 21,000 citizens to be essentially an army figure. That is not unlikely in itself, and it is possible that the figure for metics was an army figure too. However, it is easier to imagine that the number of metics was simply derived from the amount of the

metoikion tax that was collected in a year. In fact, the metics, because of this tax, were probably the one part of the population whose numbers could at least roughly be quantified in antiquity – even if the figure was probably too low, as presumably there was a significant degree of evasion of the tax; however, in terms of assessing the ratio of citizen to metic, this probably does not matter all that much, as military service was clearly evaded too.⁹² In that case, the number of metics would actually represent a population figure, albeit a rather odd one, as it would include not just all the adult males but single adult females too. On that basis, Hansen ended up suggesting about 40,000 non-citizen long-term residents in total, at a time when the number of people in citizen families would have been in the range of roughly 100,000 to 120,000, giving a ratio between two-and-a-half and three to one.⁹³

It is worth considering briefly if there was a similar pattern in the 430s. If there was, a figure of 60,000 citizens might be taken to imply a population of 20,000 to 30,000 (adult) metics. On their own, the army figures provided by Thucydides, while they do not rule out such a figure, would also be consistent with a population of 10,000 to 15,000 metics. That is a similar absolute number to that of Demetrius' census, but one smaller relative to the size of the citizen population, with a ratio of citizens to metics of between four and six to one.⁹⁴ Again, deciding whether either the absolute numbers or the relative numbers of metics changed between 431 and 312 requires us to think about what kind of people the metics were, and what they were doing in Athens.

There is still a widespread, and not inherently unreasonable, assumption that the bulk of the metics were people like Lysias and Polemarchus, even if most of them were not nearly as successful or as wealthy. Because metics could not own land, then surely, this line of reasoning goes, they must have been making their living by other means than agriculture. Therefore, they should mainly have been working in trade and manufacture. This is fair enough as far as it goes, but this is not as far as it might appear. Being unable to own land does not prevent one from farming. Farmland could be

⁹² Christ 2006, 45–87.

⁹³ Hansen 1988, 10–11.

⁹⁴ Van Wees 2004, 241–3.

(and at least sometimes was) rented by metics, and it was also possible to work for people who needed additional labour, at least at times of peak labour demand like harvest.⁹⁵ It is also worth remembering that some of the views that remain common about metic employment were formed first in a period when it was more widely believed that citizens would have despised *any* employment in trade and manufacture, and that therefore these fields would have been left more or less completely to non-citizens. While this picture may not be wholly misleading, it is nonetheless clear that citizens were engaged in the full range of non-agricultural economic activities, and at all levels.

This last point is accepted now almost as a truism, but it bears repeating explicitly – because the usual explanation for the presence of large numbers of metics in classical Athens is that they were drawn there by the opportunities provided by a large urban centre and major port. There must be some truth in this, and it is part of the way to explain the presence of men like Lysias and Aristotle. On the other hand, it might reasonably be asked how many opportunities there really were for non-Athenians of lesser means and/or talents, given that they would have had to compete, on generally unfavourable terms, with the citizens, who were themselves present in numbers far too large to be supported by agriculture alone. The large number of metics was not inevitable; urban centres do not attract economic migrants, or grow in size generally, just because they are urban. Something has positively to attract voluntary migrants: rural poverty and landlessness can act as ‘push’ factors (where they are present), but for a given urban centre the ‘pull’ factors have also to be explained. If the migration is economically motivated, then there has to be something for those migrants to do; otherwise, they tend to migrate elsewhere (or just go back where they came from, when the city proves not to be what they had hoped for).⁹⁶ James Watson has suggested that Athens’ political stability was a factor in encouraging immigration.⁹⁷ There were extensive periods in the fifth and fourth centuries when Athens genuinely appeared politically stable, and

⁹⁵ Metics in agriculture: Lysias 7.10; Osborne 1988, 289–90; Papazarkadas 2011, 323–5.

⁹⁶ On rural–urban migration, see Ray 1998, especially 372–9.

⁹⁷ Watson 2010, 262 note 24.

this may well be relevant: it is easy to imagine that this played into Cephalus' calculations, for example. On the other hand, Athens was not always predictably stable, and may have looked a bit different to those without the benefit of hindsight. If this was a factor, then the way in which the Athenians were able to take the loyalty of the metics for granted becomes even more surprising (more on this below). If stability was what they were after, then one would expect them to have left when that stability was threatened, as it was on many occasions.

One source of those opportunities was provided by the fleet. Even if Athens' warships were not necessarily all built in the Piraeus itself (since it may have been more practical to build them in the areas where both timber and the skills to work it were abundant), there would have been a market for specialist labour in the shipyards and military harbours for maintenance, as well as a need for trireme crews. Bissa suggests that the difficulties of transporting ship-building timber would have led to most of Athens' warships being built outside Attica. These difficulties were real, but they may not have been insurmountable: although the convenience of building near sources of supply was recognised, local resources could often be overwhelmed by demand, and so later wooden navies were often obliged to look far afield for their raw materials.⁹⁸ We might expect non-citizens to play an important role here anyway, but the Old Oligarch's comment compels us to consider it. Neither demand is easy to quantify (as we have seen in the case of ship crews); comparative data (from later and better documented times and places where large wooden fleets were operated) might be some help with assessing at least the likely scale of the demand.

One obvious source of a comparison is another city-state with a maritime empire dependent on a substantial galley fleet, and about which we are reasonably well informed: the republic of Venice, especially in the fifteenth to seventeenth centuries. In that period, the republic's naval strength was concentrated in a fleet of galleys not so very different from those of classical Athens.

⁹⁸ Bissa 2009, 117–40.

The basis of the fleet, as the name implies, was the *galia sotil* or ordinary galley, the very distant descendant of the classical warship via the *dromones* of the Byzantine fleet: early fifteenth-century examples tended to be about 38 metres long, with a beam of just over 5 metres (very similar in fact to the reconstructed *Olympias*, which is slightly shorter and beamier). Later galleys were built rather longer (41 m) but with the same beam: the addition of heavy cannon armament at the prow with a counterweight at the stern contributed to a significant increase in displacement but also to the increase in length. Before the battle of Lepanto in 1571, the ships were overwhelmingly rowed at three levels, like Athenian triremes. A shift to the alternative system, where three men pulled a single oar, took place in the Venetian navy only in the decade after the battle, when crews were increasingly dominated by convicts chained to the oars. There were 25 to 30 rowing benches each side, with three men to a bench (allowing for 150 to 180 oarsmen). The important difference was in armament: Venetian galleys (and their contemporaries in other navies) did not carry the heavy bronze rams at the water line of their ancient counterparts. Their projecting prow spurs were metal-tipped, but were meant to function as boarding bridges rather than weapons in their own right.⁹⁹

The home base of the fleet of these vessels, Venice's Arsenale, was a centre for both production and maintenance. In the 1560s, when in the face of imminent threat the Arsenale was at its busiest, the number of men employed there seems to have fluctuated between a minimum of around 1,000 and an 'emergency' peak of around 3,000, with 2,000 being fairly typical. At this time the republic aimed to maintain a reserve of 100 seaworthy galleys, while it actually deployed fleets in the order of 40 to 60 ships.¹⁰⁰

These are smaller resources than those maintained by Athens at the height of its power, of course, when hundreds of galleys were not only available but might actually be sent out in very large numbers. In the fourth century, however, the number of Athenian galleys manned and at sea was also likely to be around 40 to 60,

⁹⁹ Alertz 1995.

¹⁰⁰ Lane 1973, 362.

even though there were still hundreds of hulls on hand.¹⁰¹ Presumably Athens would not have needed significantly fewer shipyard workers than Venice to maintain a fleet of similar size: probably a figure of about 2,000 men in the fourth century would not be too far off. The figure in the fifth century would certainly have been higher, although it is difficult to tell how much; as with later dockyards, the number of men employed would have varied according to need.

There are two possibly relevant factors to bear in mind here. First, Venetian galleys seem not to have had such long service lives as their Athenian predecessors, only lasting about 10 years as opposed to the 20 of the latter. They were however considered at the time to be of good quality (although this may not have been a straightforward reflection of reality). Second, the hull-first method of constructing ancient galleys would have made them harder to maintain than later vessels that were built frame first. Very many of the men employed in the *Arsenale* were caulkers, whose work was necessary to keep vessels seaworthy throughout their service lives. Older vessels (and those captured from the enemy) would have required a great deal of work to keep (or make) them seaworthy. Because of the labour demand generated by maintenance (which could have taken place within the Piraeus' ship sheds), the question of where new ships were built may not be so important for our current purposes, where it is the overall size of the establishment we are interested in, not the specification of the tasks undertaken there.

At times when Athens regularly sent a hundred or even more ships to sea, perhaps a figure of 4,000 or 5,000 men would not be excessively high. This kind of figure would have made the naval shipyards of the Piraeus a very large centre of industry indeed – about which our relative ignorance is therefore all the more frustrating. To provide a little more context, in the seventeenth century, the English Royal Dockyard at Chatham never employed more than 1,000 men, even at moments of extreme crisis, and usually fewer.¹⁰² In their eighteenth-century heydays,

¹⁰¹ Cawkwell 1984, 335.

¹⁰² MacDougall 1987, 30–1; 41.

the Chatham, Portsmouth, and Plymouth dockyards each employed about 2,000 men, of whom about a third were engaged in clerical activities.¹⁰³ In this context, it is also well worth noting that in the earlier period a great deal of the work in English dockyards was seasonal. Much the same may have been true at the Piraeus, with the migration it induced being ‘circular’ in many cases.

Chatham was, of course, in many ways a quite different kind of establishment from the Piraeus; uniquely for an English royal dockyard, however, it acquired some specialised facilities for galley operations, including a dry dock built in 1571.¹⁰⁴ The later history of the dockyard also illustrates what should be obvious (but in fact is not always to ancient historians): that a naval dockyard may not always also be a naval base.¹⁰⁵ Chatham’s increasing unsuitability as one of the latter led to its replacement in that role over the course of the eighteenth century by Portsmouth and Plymouth. Although these ports on the south coast also had ship-building facilities, this was not their main focus, which instead was on the maintenance of operational fleets. However, this in turn meant that they had spare building capacity, which was taken up in emergencies when new ships were needed in a hurry. It may not be too far-fetched to imagine that the Piraeus worked in similar fashion, so that although some ships were built there, most new Athenian triremes need not have been – except in exceptional circumstances, such as the construction of the fleet that fought at Arginusae.

Not everyone in the dockyard could have been a metic. We should expect that both citizens and slaves worked there too: even in the fifth century, we can hardly believe that more than 2,000 metics could have found regular employment in the naval yards. Beyond this, though, how much scope really was there for men of limited means to make a living in classical Athens? Clearly there were not 10,000 Lysiases, each living off the proceeds of substantial armaments workshops. The city provided a large potential market of consumers, but presumably it was possible to

¹⁰³ MacDougall 1987, 55; 2012, 54.

¹⁰⁴ MacDougall 2012, 13.

¹⁰⁵ MacDougall 2012, 71–2.

make money selling things to the Athenians without having to live with them, let alone having to fight for them. And what would have forced the metics to stay in times of war and hardship, as during the Peloponnesian War? Armaments manufacturers and food merchants would have had fairly strong financial incentives (at least while there was money to pay for their goods), but again, how many metics can these activities explain, given that citizens were clearly involved here too? Have we been too influenced by later examples of the pull exerted by cities over migrant workers? Athens was not in every way like imperial Rome; nor was it necessarily like cities in the modern industrial and industrialising worlds.¹⁰⁶

At this point, it is worth coming back to the fact that at least some metics were not voluntary immigrants, but instead were freed slaves. This is generally accepted, but its potential significance has not always been fully appreciated. It is, for example, a surprising feature of Whitehead's study that although he was determined to debunk what he saw as a prevailing orthodoxy that being a metic at Athens was in some sense a privileged status (an idea which, in spite of the strength and cogency of Whitehead's arguments, has proved remarkably resilient),¹⁰⁷ he was almost as determined to deny that metics as a body were tinged with the negative connotations of servility. Whitehead rightly pointed out that having the status of 'metic' was not inconsistent with retaining one's status as a citizen of another *polis* (although he also rightly observes that after too prolonged a stay in Attica, and after the first generation, it may have become harder actually to get one's entitlement recognised at home). There is no reason to doubt

¹⁰⁶ Hin 2013, 210–57, on migration and republican Rome, arguing persuasively that there are problems with using the (relatively well documented) case of early modern London as a comparative model for Rome (250–4); the broader point is that sweeping and generalising assumptions will not always be helpful: every city has its own story. See especially 212–18, which include important general observations. Hin rightly emphasises the complexity of migration and its demographic effects. In particular, it can be difficult to separate, and to evaluate the relative importance of, the 'push' and 'pull' factors that motivate migration (elite literary sources, then as now, often tend to emphasise the 'pulls'). Hin (217) quotes Seneca to this effect, but the same is true implicitly in the Old Oligarch and explicitly in Xenophon's *Poroi*.

¹⁰⁷ For metic status as privileged, see for example Cohen 2000; Zelnick-Abramovitz 2005; Acton 2014, 279.

that there must have been many metics who fell into this category. But that still does not affect the extent to which the term ‘metic’ was in fact associated with servility, and so in my view Whitehead underplayed the number of metics who were freedmen and women.

Whitehead must be right when he says:

although freedmen were subsumed juristically under the *metoikia* they seem in fact to have been perceived as a distinct sub-group by the ordinary observer: in saying ‘the metic or the freedman’ the Old Oligarch is confounding the legal pedantry of official status-classifications with the illogical pedantry of common sense.¹⁰⁸

I would, however, question whether the Old Oligarch can really be cited as an ‘ordinary observer’. The evidence of his problematic text can cut both ways on this issue. Slaves, metics, and freedmen are lumped together (and apparently equally reviled) by this author as much as they are distinguished. The text does not seem necessarily to support Whitehead’s claim that ‘the inclusion does not appear to have been felt to characterise or contaminate the whole class’.¹⁰⁹

The crucial point, I think, is one that is not quite explicitly addressed by Whitehead. He notes that the *metoikion* ‘was . . . unique in Athens in being not merely a direct tax but a poll-tax, levied on the person rather than his (or her) property of activities’,¹¹⁰ but he does not address the obvious implication that this in itself made metics look closer to slaves than to citizens. The tax was unique precisely because it was unthinkable to impose such a levy on citizens. It is also highly suggestive that (as Whitehead does note) the punishment for failing to pay the *metoikion* was enslavement. Whitehead goes on to consider the extent to which the tax was a financial burden. How much of a burden it was must have depended on individual circumstances: for the poorest metics, it could not have been trivial.¹¹¹ But to consider the tax only in this way is, surely, to miss precisely the ideological point.

¹⁰⁸ Whitehead 1977, 116.

¹⁰⁹ Whitehead 1977, 116.

¹¹⁰ Whitehead 1977, 75–6.

¹¹¹ Acton 2014, 279–81, for possible consequences.

That metics were subject to (and to a large extent defined by) the payment of a tax not on their property but on their bodies would on its own have made them vulnerable to identification with slaves. Even more strikingly, however, they were (theoretically) liable to torture in judicial settings. The need for a *prostates*, whatever their precise role, also smacks of servility. It is further worth noting that the passage (Lysias 31.9) where this is explicitly sneered at concerns an Athenian citizen who was a metic in another city.¹¹² The role of the metic women in the Panathenaic procession can hardly have been seen as anything other than servile.¹¹³ These surely served to align them, at least in the official view of the Athenian *polis*, much more closely with slaves than with citizens.

Whitehead was, of course, absolutely right to point out that metics rarely if ever described themselves as metics (and the city in certain contexts avoided the word too), preferring to use patronymics and city ethnics, except when they were able to describe themselves as *isoteleis*. Whitehead's response to his own observation is curiously half-hearted, however. On the use of city ethnics, he wonders briefly whether describing oneself as, for example, 'Samios' (not a neutral claim in fourth-century Athens, of course) entails a realistic claim to citizen status in one's home city. His conclusion is essentially 'why not?' On the preference for the use of *isoteles* as an identifier, he notes that it shows how keen metics were to show that their adoptive city was honouring them. It strikes me that there are alternative ways to read this pattern. If 'metic' did carry a tinge of servility, then an assertion of citizen status somewhere (irrespective of whether or not it was justified) would be one way to counter it. Being *isoteles*, however, was a matter of public record in Athens itself, and was a status that could only be achieved by someone who was wealthy enough to have done significant service to the city; it could have lifted a metic unmistakably out of the ranks of those who were subject to suspiciously servile obligations and treatment.

If we take many of the metics to have been freedmen and -women, then many of them, still largely dependent on their former

¹¹² Whitehead 1977, 46.

¹¹³ Parker 2005, 258, with note 25.

masters, will have had few realistic alternatives to remaining in Athens, even in the midst of plague and military defeat. This might have reduced the numbers who left (although it is also obviously true that many metics who could have left did not – again, Lysias is a familiar but not necessarily typical example). From the perspective of military history, it might also influence how we interpret the significance of Thucydides' mentions of metic troops when he seems so interested in the Spartans' use of freed slaves (like Brasidas' *neodamodeis*).

Whitehead also observes that there was a well-developed vocabulary of abuse in servile terms for those who wanted to employ it, whereas no one is ever explicitly denigrated by being called a metic. This is true, but it need not be as decisive as Whitehead thinks – if metic status was linked to servility, then it would be at least as effective, and probably more so, to label an opponent straightforwardly as a slave rather than labelling them as a bit like a slave. After all, we know so much about this servile vocabulary of abuse precisely because it is frequently directed at citizens.

Whitehead thinks that where metics are referred to as such, there is in fact a certain amount of sympathy and even affection for them. This, I think, is entirely in the eye of the beholder. The two key passages for him are Thucydides 1.143.1–2:

Suppose, again, that they lay hands on the treasures at Olympia and Delphi, and tempt our mercenary sailors with the offer of higher pay, there might be serious danger, if we and our metics embarking alone were not still a match for them. But we are a match for them: and, best of all, our pilots are taken from our own citizens, while no sailors are to be found so good or so numerous as ours in all the rest of Hellas. None of our mercenaries will choose to fight on their side for the sake of a few days' high pay, when he will not only be an exile, but will incur greater danger, and will have less hope of victory. (Jowett's translation, as quoted by Whitehead)

and Aristophanes *Acharnians* 507–8:

This time we are alone, ready hulled; for I reckon that the metics are the bran of the *astoi*. (Whitehead's translation)

Thucydides has Pericles acknowledge the necessity of the metics, along with a breezy assumption that they are absolutely reliable.

In the Aristophanes passage, which, as Whitehead puts it, characterises the metics as the citizens' 'inescapable (if nutritionally inferior) companions', Whitehead sees sympathy; the patronising element to which he also refers seems rather more apparent. Nothing in these passages, even if we were to accept that there is something favourable, necessarily makes implausible the idea that the metics were considered, as a body, to be somewhat servile. Whitehead takes them as 'perhaps elevat[ing], if only momentarily, the social status of the freedman *qua* metic, as perceived by the citizen'. However, some moral qualities and standards of behaviour could perfectly well be expected of, or at least recognised in, slaves.

The clearest message from these texts seems actually to be the *inseparability* from the citizens. This would make more sense if the metics were substantially composed of freedmen and -women than if they were economic migrants. Freedpersons had no other homes to go to in hard times, and clearly owed continuing obligations to their former masters.

Xenophon's well-known discussion of the metics in *Poroi* 2 is consistent with this picture. It is often taken to confirm the view that the majority of metics were economic migrants. This is because Xenophon suggests a variety of possible methods for enticing this kind of immigrant, to the economic benefit of Athens. Austin and Vidal-Naquet suggested in this context that there may really have been a distinction between a fifth-century metic population that was made up mainly of immigrants from other Greek cities (and who might settle permanently, and be more easily assimilated) and a fourth-century one that was more 'barbarian' and, partly for that reason, more transitory, and unassimilated even when they chose to remain.¹¹⁴ Miller, however, presented reasons for doubting this – for example, the existence of a 'Little Phrygia' in Athens in Thucydides 2.22.2, and the introduction of new cults in the fifth century.¹¹⁵ However, it is important to note that nowhere does Xenophon actually claim that there were few metics in contemporary (mid-fourth-century)

¹¹⁴ Austin and Vidal-Naquet 1977, 104.

¹¹⁵ Miller 1997, 84.

Athens. Rather, he seems to think that the problem is that there are not enough of the *right kind* of metics. Those that are in Athens (and fighting alongside the Athenians) are ‘Lydians, Phrygians, Syrians, and all kinds of other barbarians’,¹¹⁶ of whom there seems to be no shortage. The named peoples are, of course, some of those that provided Athens with many of its slaves. Clearly the wealthier economic migrant-type metics (including, albeit not exclusively, those of Greek origin) could and did leave Athens when they saw no particular advantage in staying, or indeed they could choose to stay at home, or go elsewhere in the first place. It would, surely, be extremely odd if these were the sort of men of whose loyalty the Athenians could be so complacently sure.

Instead, we must see at least two quite distinct types of metics. In the first place, there was a relatively small elite of wealthy men, many of whom were probably citizens of other Greek cities who could take advantage of the opportunities offered by Athens, but whose first loyalty might not always be to Athens. In the second place, there would have been a much larger, but to us less visible, number of freed slaves. A few of the latter (such as former banking slaves) might be wealthy, but the majority would have been a good deal poorer; alienated from their natal communities and still with ties of dependency to their former masters, they would have been short of alternative places to go.

If there is any truth to this suggestion, it has implications for how we think about the structure of the metic population. The usual assumption that metics were economic migrants tends to encourage a further assumption that they would mostly therefore have been young (and mainly single) men – so that, for example, the thousands of metic hoplites in Thucydides have not usually been taken to imply necessarily similar numbers of women or of dependent children.¹¹⁷ But if many metics were freedmen, they would have had every incentive to marry, even if their choice of partners was restricted, and to have children.

¹¹⁶ Xen. *Poroi* 2.3.

¹¹⁷ Starting with Gomme 1933, and rarely challenged, but see note 106 above on the danger of making this assumption in the case of Rome.

Moreover, the proportion of women in the *metoikia* may have been rather higher than is usually assumed. In all slave societies where it is possible to tell, women tend to be manumitted at a higher rate than men. The reasons are as obvious as they are depressing. Women are generally more likely to be employed in domestic household situations which lead to manumission more often than employment in distant farms (or silver mines); in paternalistic societies, the continued dependence of a freedwoman on her master is easier to assure; and prostitution is often the most common way to earn the money to buy one's freedom.¹¹⁸

Freedmen and -women appear to be a good source of some of the thousands of individuals on whose continued presence the Athenians seemed absolutely able to rely in the fifth century. However, we know very little about rates of manumission in the fifth century. It *need* not in fact have been practised very much at all. Labour was cheap and the economy was expanding rapidly; for most of the period, Attica was militarily secure, and most of the time there was relatively little disunity in the citizen slave-owning group (part of the 460s and the oligarchic episodes towards the end of the century notwithstanding). These are not the circumstances where one would necessarily expect high rates of manumission. On the other hand, a low rate of manumission in a large population of slaves could still produce a sizeable number of freedmen in absolute terms. This might, therefore, incline us towards stability in the absolute size of the metic population, with change over time being seen in the number of metics relative to the number of citizens. At which point, it is time to turn to the issue of population change more generally if we are to make any progress.

¹¹⁸ Wrenhaven 2009.