

***Zeugitai* in Fifth-Century Athens: Social and Economic Qualification from Cleisthenes to the End of the Peloponnesian War**

Miriam Valdés Guía

Department of Ancient History, Complutense University of Madrid

mavaldes@ucm.es

| | |
|----------------------------|------------|
| Submitted | 23/12/2021 |
| Accepted (Internal Review) | 17/01/2022 |
| Revised (External Review) | 25/01/2022 |
| Published | 24/03/2022 |

Abstract

The status of the *zeugitai* as middle-class hoplites has received considerable attention in recent decades regarding property requirements for inclusion into the hoplite rank and their expected role in the Athenian army. Accordingly, this paper re-examines the idea that after the reforms of Cleisthenes and the fiscal and demographic changes throughout the fifth century, the *zeugitai* formed a census class of middling owners with an estate equivalent to at least 3.6 hectares. It argues that late-sixth century reforms converted the property holdings of *zeugitai* into a monetary equivalent (in *drachmas*) and used the census classes as an economic criterion for recruitment from the hoplite catalogue. Already in the sixth century but especially during the *Pentecontaetia*, the number of hoplites/*zeugitai* grew substantially due to economic prosperity and the foundation of colonies and cleruchies. Many citizens without landholdings but in possession of sufficient wealth were included in the *zeugitai* census class and, like the famous Anthemion ([Arist.] *Ath. Pol.* 7.4), could ascend even higher.

Keywords

Athenian classes; *zeugitai*; hoplites; Cleisthenes' reforms; Athenian military; Athenian demographics; monetary criteria of the census classes

Acknowledgements

This research has been aided by the Spanish Ministry of Science and Innovation, Project PID2020-112790GB-I00, and by the Complutense University (UCM), Project PR108/20-29. I would like to thank Hans van Wees, whose suggestions and detailed critique instigated reflection and revisions. I am also grateful to Julian Gallego, Thomas Figueira and Gil Davis for their kind comments. I would also like to thank the anonymous reviewers for their corrections and suggestions. Any inaccuracies herein are my sole responsibility. Finally, I would like to thank Stefanos Apostolou and Manolis Pagkalos for their great editing, corrections, and suggestions, as well as to congratulate them for this magnificent project of *Isegoria* and *PNYX*.

Introduction

More than a decade ago, scholars began to question the established views on the *zeugitai* and the landholding requirement as high as 8.7 hectares, subsequently increased to a minimum of 13.8 hectares, by applying the measures provided by the *Athenaion Politeia*.¹ Together with Julián Gallego, we have argued against the proposed elite status for the *zeugitai* and suggested that their class corresponded to those with an estate considered to be of ‘hoplite rank’, that is, in possession of land of at least between 3.6 and 5.4 hectares. Other scholars have rejected the application of measures attested in the Aristotelian *Constitution of the Athenians* (7.3-4) and Pollux’s *Onomasticon* (8.130), which seem to rely on the same tradition,² to the Solonian census classes (except for *pentakosiomedimnoi*),³ but failed to fully explain why these specific measures appear in the *Constitution of the Athenians* in the first place. This paper intends to build on our theory and revisit the criteria and property requirements for inclusion in the *zeugitai*. Hence, before I begin, the presentation of the two texts and a summary of the theory are essential.

τιμήματι διεῖλεν εἰς τέτταρα τέλη, καθάπερ διήρητο καὶ πρότερον, εἰς πεντακοσιομέδιμνον καὶ ἰπ[πέα] καὶ ζευγίτην καὶ θῆτα. καὶ τὰς με[ν ἄλλ]ας ἀρχὰς ἀπένειμεν ἄρχειν ἐκ πεντακοσιομέδιμνων καὶ ἰππέων καὶ ζευγῖτων, τοὺς ἑννέα ἄρχοντας καὶ τοὺς ταμίαις καὶ τοὺς πωλητὰς καὶ τοὺς ἑνδεκα καὶ τοὺς κωλακρέτας, ἐκάστοις ἀνάλογον τῷ μεγέθει τοῦ τιμήματος ἀποδιδούς τὴν ἀρχήν· τοῖς δὲ τὸ θητικὸν τελοῦσιν ἐκκλησίας καὶ δικαστηρίων μετέδωκε μόνον. ἔδει δὲ τελεῖν πεντακοσιομέδιμνον μὲν, ὃς ἂν ἐκ τῆς οἰκείας ποιῆ πεντακόσια μέτρα τὰ συνάμφω ξηρὰ καὶ ὑγρά, ἰππάδα δὲ τοὺς τριακόσια ποιοῦντας – ὡς δ’ ἔνοιό φασι τοὺς ἵπποτροφεῖν δυναμένους· σημείον δὲ φέρουσι τό τε ὄνομα τοῦ τέλους, ὡς ἂν ἀπὸ τοῦ πράγματος κείμενον, καὶ τὰ ἀναθήματα τῶν ἀρχαίων· ἀνάκειται γὰρ ἐν ἀκροπόλει εἰκὼν Διφίλου, ἐφ’ ἣ ἐπιγράφεται τάδε· Διφίλου Ἀνθεμίων τήνδ’ ἀνέθηκε θεοῖς, θητικῷ ἀντὶ τέλους ἰππάδ’ ἀμειψάμενος

He divided the people by assessment into four classes, as they had been divided before, Five-hundred-measure man, Horseman, Teamster and Laborer, and he distributed the other offices to be held from among the Five-hundred-measure men, Horsemen and Teamsters – the Nine Archons, the Treasurers, the Vendors of Contracts, the Eleven and the Paymasters, assigning each office to the several classes in proportion to the amount of their assessment; while those who were rated in the Laborer class he admitted to the membership of the assembly and law-courts alone. Any man had to be rated as a Five-hundred-measure man the produce from whose estate was five hundred dry and liquid measures jointly, and at the cavalry-rate those who made three hundred, – or as some say, those who were able to keep a horse, and they adduce as a proof the name of the rating as being derived from the fact, and also the votive offerings of the ancients; for there stands dedicated in the Acropolis a statue of Diphilos on which are inscribed these lines: ‘Anthemion Diphilos’s son dedicated this statue to the gods... having exchanged the Laborer rating for the Cavalry’.

[Arist.] *Ath. Pol.* 7.3-4 (Trans. by H. Rackham)

¹ Foxhall, 1997; van Wees, 2001; 2006; 2013a (12 hectares *at a minimum* for a *zeugites*); 2018: 27 (13.8 hectares or 7,590 drachmas, including fallow).

² Also in Plut. *Sol.* 18.1-2. As Thomsen (1964: 150, 153) argues, in all likelihood, Pollux used the same source as Aristotle, an early fourth-century Attidographer.

³ Rhodes, 1981: 137-143 (*pentakosiomedimnoi* as the only new designation); Rhodes, 1997: 4; 2006: 253; Hansen, 1991: 30; Rosivach, 2002: 41; de Ste. Croix, 2004: 48-49; Mavrogordatos, 2011: 12-15.

Τιμήματα δ' ἦν τέτταρα, πεντακοσιομεδίμων ἰππέων ζευγῆτων θητῶν. οἱ μὲν ἐκ τοῦ πεντακόσια μέτρα ξηρὰ καὶ ὕγρα ποιεῖν κληθέντες· ἀνήλισκον δ' εἰς τὸ δημόσιον τάλαντον· οἱ δὲ τὴν ἰπάδα τελοῦντες ἐκ μὲν τοῦ δύνασθαι τρέφειν ἵππους κεκλήσθαι δοκοῦσιν, ἐποιοῦν δὲ μέτρα τριακόσια, ἀνήλισκον δὲ ἡμίταλαντον. οἱ δὲ τὸ ζευγῆσιον τελοῦντες ἀπὸ διακοσίων μέτρων κατελέγοντο, ἀνήλισκον δὲ μᾶς δέκα· οἱ δὲ τὸ θητικὸν οὐδεμίαν ἀρχὴν ἤρχον, οὐδὲ ἀνήλισκον οὐδέν.

There were four census classes: pentakosiomedimnoi, hippeis, *zeugitai* and thetes. Those so named for their production of five hundred dry and liquid measures contributed one talent to the public fund. Those who belonged to the hippeis appear to have been named for their ability to raise horses; they produced three hundred measures and contributed half a talent. Those who belonged to the *zeugitai* were registered starting from two hundred measures, and contributed ten minas. Those of the thetikon did not hold any office and did not contribute anything.

Poll. 8.130 (Trans. by Valdés Guía and Gallego, 2010)

In our 2010 paper, we link the production measures (500, 300 and 200) of the different census classes, assuming that Aristotle or his school did not invent them, to the late fifth-century revision of the Athenian law code, which led to a redefinition of property sizes for census classes. The objective would have been to determine who should pay the *eisphora*. At that time, these comprised a somewhat broader group than the first two census classes but did not fully correspond to the first three census classes either. Therefore, the Athenians redefined the census classes to adapt them to the *eisphora* system. This system seems to have been in force – possibly in relation to the census classes, as may be inferred from the passage in Pollux – at least until the reforms of Callistratos in 378, when the *proeisphora* and other changes were introduced (also probably including a broader taxpayer base).⁴ According to this interpretation, when Aristotle and the members of his school produced their writings, that new system was no longer in force, so they assumed that those measures⁵ dated back to the time of Solon. Hence, the argument goes, the economic definition of the census classes in Solon's time would have been more in line with what our two main sources record in this respect.⁶ Namely, *hippeis* would have been those citizens in possession of material wealth sufficient to support horse-owning/horse-breeding, and the *zeugitai* those who owned at least a couple of oxen, which was the equivalent to landed property between at least 4 and 6 hectares, according to recent studies.⁷ *Pentakosiomedimnoi*

⁴ Valdés Guía and Gallego, 2010. For the measures of Callistratos and further bibliography, Valdés Guía, 2014; 2018. For the *eisphora*, Thomsen, 1964; Christ, 2007.

⁵ [Arist.] *Ath. Pol.* 7.4 and Poll. 8.130 mention liquid and dry 'measures' (*metra*), not *medimnoi* (Hansen, 1991: 43), which could be 'a confusion or a later development (and so in need of correction)'; Gabrielsen, 2002: 97. Recently, Duplouy (2014) has also argued against the existence of concrete measures for the Solonian census classes, following Raflaub (2006), who attributes the definition of the property qualification and the political rights associated with each class to Ephialtes or Pericles. Duplouy defines the census classes as occupational groups. Although the review of the legal or institutionalist perspective for Archaic Athens is welcome, this 'informal behavioural' approach is, in my opinion, not fully convincing on its own.

⁶ Regarding *hippeis* as horse breeders, see the texts quoted above. For the *zeugitai* as those who 'raise oxen': Poll. 8.132: καὶ ζευγῆσιόν τι τέλος οἱ ζευγοτροφοῦντες ἐτέλουν; as 'owner of a yoke of oxen', Hansen, 1991: 30, 43-46, 106-109, 329. For Rosivach (2002: 39-41, 46-47), 'the legislation defining the requirements for membership in the Solonic classes had been lost'.

⁷ Owning a yoke of oxen was a primary distinction for farmers, Valdés Guía, 2019b. The minimum amount of land for a farm with oxen has been calculated at 4 or 5 hectares (Halstead, 1987: 84; 2014: 61; Hodkinson, 1988: 39; Burford, 1993: 67; Forbes, 2000: 63-64; Nagle, 2006: 71). For the large numbers of middling farmers (owners of land between 40 and 60 *plethra*) in classical times, Andreyev, 1974: 14-16; Burford, 1977/78: 168-72; 1993: 67-72; Boyd and Jameson, 1981; Isager and Skydsgaard, 1992: 78-79; Jameson 1977/78; 1994: 59; Hanson, 1995: 181-201; van Wees, 2001: 51, with n. 41; Halstead, 2014: 61; Gallego, 2016.

were apparently defined in terms of their production in *medimnoi*, with the legislator taking special care to ensure that the class included the richest of Athenians, since they were the only ones who could serve as *tamiai* (treasurers), perhaps to avoid the temptation of misappropriating public funds.⁸ The last census class, *thētes*,⁹ would have comprised citizens in possession of property less than 4 to 5 hectares and a pair of oxen. In Solon's time, it seems possible that an equivalence between land-based and non-land-based wealth had already been established so that people with assets equivalent to a certain amount of land (for *zeugitai*, c. 4 hectares at a minimum) would have been included in the respective census class.¹⁰ Hence, we argue, citizens would have been assigned to a census class probably based on their own declaration in the phratries (*phratērikon grammateion*) or before the *naukraroi*, at a time when the small population meant that people's possessions were common knowledge.¹¹ Although those entering the *zeugitai* census class could purchase hoplite weaponry, it is not clear whether it was a mandatory obligation under Solon's law.¹² However, it seems that Solon did indeed regulate the citizenry's involvement in civil conflicts (*staseis*): without exception, all had an obligation to take up arms. *Thētes*, who, by and large, would not have possessed a hoplite panoply, were undoubtedly also expected to become involved, each with the weapons available to him.¹³ According to this hypothesis, the *zeugitai* population at the time might have been much larger than the figure proposed by van Wees.¹⁴

This paper aims to build on this theory to gain further insight into the identification of the *zeugitai* in financial terms during the fifth century, after the time of Cleisthenes. I will argue that the census classes were defined in monetary terms at the beginning of the isonomy, when a drastic reconstruction of the army took place with the introduction of the recruitment of hoplites *ek katalogou* in Athens. At the same time, the obligation to fight and to possess hoplite weaponry would have been regulated for those belonging to the *zeugitai* census class, who thenceforth would have been registered on the newly established rolls for recruiting hoplites by tribes (as reflected in the Salamis decree: IG I3 1). This form of recruitment would have been employed for at least a century, until the end of the fifth century, a time of significant changes with the economic redefinition of the census classes, especially that of the *zeugitai* to adapt them to the *eisphora* system in force until the 370s. The redefinition of the census classes at the end of the fifth century might have been one of the factors behind the transformation of the recruitment

⁸ *Tamiai*: [Arist.] *Ath. Pol.* 8.1; Harris, 1995: 13-14; Bubelis, 2016: 118-120.

⁹ The term acquired a new meaning in Solon's time: in addition to 'day labourer' or 'wage worker' (Hom. *Od.* 11.489-491; *Od.* 18.357-361; *Il.* 21.441-455; Hes. *Op.* 600-603), it designated those who belonged to the fourth census class (Arist. *Ath.* 7.4) (i.e., owners, in my view, of less than approx. four-hectare plots or without land). For *thētes*, Bravo, 1991-1993; recently Valdés Guía, 2019a.

¹⁰ Thus, for example, during the Damasias crisis ([Arist.] *Ath. Pol.* 13.2; Figueira, 1984) ten exceptional archons were chosen, of whom three were *agroikoi* and two *demiourgoi* (artisans), possibly with a *timēma* equivalent, hypothetically, to at least that of the *zeugitai* census class. For wealthy and middle-class artisans in the sixth century, Section Four below; for the economy in Solon's time, Descat, 1990; Bresson, 2016: 402-404; for a broader perspective of the economy, Harris, Lewis and Woolmer, 2016.

¹¹ As to the possibility that the *naukraroi* also registered citizens at that time, see *infra* notes 42 and 116. For the *phratērikon grammateion*: Lambert, 1993: 174-175. Herodotus (2.177) thought that Solon introduced a law from Egypt, according to which everyone should 'declare his means of livelihood [...] annually'.

¹² As recently postulated by van Wees (2018: 10, n. 23), in light of the attribution to Solon of a law on *astrateia* in Dem. 24.103 (*Against Timocrates*) and Aeschin. 3.175 (*Against Ctesiphon*), but which, as the author himself acknowledges, is doubtful.

¹³ On the neutrality law: [Arist.] *Ath. Pol.* 8.5 and Plut. *Sol.* 20.11; also Valdés Guía, 2021. For the *demos* taking arms in 508, Flaig, 2011; for the involvement of *thētes*, Ober, 1998.

¹⁴ Valdés Guía (2019b), as to the possibility that the population of *hoplitai* was larger than originally thought, to the point of being reflected in the name of one of the tribes, *Hoplethes*, with Solon. For the names of the four Athenian pre-Cleisthenic tribes: Hdt. 5.66; Eur. *Ion* 1579-1581; Poll. 8.109.

system and the fact that they were ignored systematically when appointing magistrates or council members during that century.¹⁵ Accordingly, in Section Two, I review the evidence on the *zeugitai* in the fifth century (archonship, cleruchies and census class promotion) and the scholarly discussion on the military use of the census classes at the time. In Section Three, I consider the demographics of the hoplites and *zeugitai*, as well as the sources of wealth (land and non-land properties) of the hoplitic class. Finally, in Section Four, I defend the hypothesis of establishing monetary equivalences for the *zeugitai* census class in the context of Cleisthenes' military reforms.

Evidence on *Zeugitai* in the Fifth Century and the Scholarly Debate on the Use of the Census Classes in the Military Organization

The validity and importance of the census classes in the fifth century notwithstanding, only a limited number of testimonies on their use has been preserved to us, perhaps because this was common knowledge for our mainly Athenocentric sources. Being a member of the first two census classes seems to have been a requirement for holding a magistracy (except for minor offices).¹⁶ This is no trivial matter because the archons held sway over the polis, albeit with less power than in archaic times. After completing their terms in office, they were responsible for all facets of life and were automatically enrolled as life-long members of the Areopagus, which seems to have played an important role in Athenian politics, especially after the Persian Wars up until the reforms of Ephialtes.¹⁷ The census requirement was verified in the *dokimasia*. On that occasion, the citizen in question had to declare and prove, among other aspects, that he belonged to the appropriate census class.¹⁸

The opening of the archonship to the third census class did not occur until after the reforms of Ephialtes ([Arist.] *Ath. Pol.* 26.2) in 457. This rather drastic turn to what can be described as radical democracy contrasts, in my view, with van Wees' theory that the *zeugitai* were a leisured class of owners of at least c. 12-14 hectares, and therefore a very small and exclusive part of the population. This change makes much more sense if they actually owned the amount of land wherewithal to purchase their own weapons so that archonship would be open to a much larger number of citizens, given the new trends of radical democracy.¹⁹

An inscription from the colony of Brea records the use of census classes as a selection criterion for participating in the expedition: ἐς δὲ [B]ρέαν ἐχθετον καὶ ζε[υ]γιτον ἰέναι τὸς ἀπο[ί]κος (*IG* I3 46, lin. 43-46, dated to 445).²⁰ Several authors have suggested, without clear evidence, that this class criterion

¹⁵ Regarding the possibility that the census classes were ignored when appointing council members was something that perhaps had happened before due to the lack eligible citizens (a person could only serve as a counsellor twice in his life), Hansen, 1991: 249. For the *Boule*, Rhodes (1972: 4-6), who argues that *thētes* did not participate in it.

¹⁶ [Arist.] *Ath. Pol.* 7.3; 26.2. It is likely that there would have soon been exceptions to this rule for membership of the council for demographic reasons.

¹⁷ For the importance and functions of archons in Athens, Rhodes, 1981: 612-668; for the pre-eminence of the Areopagus after the Persian Wars: Arist. *Pol.* 1304a1724; [Arist.] *Ath. Pol.* 25, with recent skepticism over the credibility of ancient accounts of Ephialtes' reforms in Zaccarini, 2018; and Harris, 2019.

¹⁸ [Arist.] *Ath. Pol.* 7.4, 55.3; Poll. 8.86.

¹⁹ Section Three discusses demographic evidence and calculations for the *zeugitai*.

²⁰ 'The colonists to go to Brea shall be from the *thētes* and *zeugitai*', translation by S. Lambert and P. J. Rhodes (*AIO* 298). *IG* II² 30 (387/6) may also indicate that *hippeis* and *pentakosiomedimnoi* were excluded from participating in the cleruchy of Lemnos in 387, but other interpretations are plausible. I follow the suggested reconstruction [-πλήν ἰπέων καὶ πεντακοσιομεδίωνων]; discussion in Stroud, 1971: 164 (l. 12) and 171-162. Also de Ste. Croix, 2004: 11-12; Rosivach, 2002; *contra* Moreno, 2007: 106, n. 138 (see bibliography with criticism of Moreno's theory in note 98).

for selecting cleruchs might have favoured *thētes* in particular.²¹ The criterion would have probably been broader for the colonies ('whoever wishes': *ho boulomenos*). Still, in this case too, it might have sometimes been restricted to *zeugitai* and *thētes* (as in the amendment in the Brea inscription quoted above). The 'whoever wishes' clause in the case of the colonies would have also ensured the (minority) presence of wealthy individuals necessary to perform liturgies and other services.²² In any case, those *thētes* who were allotted with land in colonies and *cleruchies* would have joined, in my view, the *zeugitai* census class since it seems that they remained Athenian citizens – certainly in the case of cleruchs.²³ This might explain, in part, the increase in the size of the Athenian military during the *Pentecontaetia* (a point that will be discussed in further detail below).

A change in census class for individuals was not unusual, and such changes are recorded in our sources as a result of amassing a great fortune, as was the case with Anthemion, who from a *thēs* became a *hippeus* ([Arist.] *Ath. Pol.* 7.4). In this case, what is extraordinary was not the promotion itself, which in all likelihood was not that infrequent (at least for cleruchs), but that Anthemion had climbed two rungs rather than one.²⁴

According to several authors, the census classes could be used as a criterion for military recruitment. Thucydides records that in the emergency of 428 metics and citizens of all census classes were drafted into the navy, except for the first two.²⁵ In other words, it was the *zeugitai* and *thētes* who manned the triremes. Even though the voluntary or compulsory enrolment of *thētes* (alongside foreigners and, perhaps already at that time, slaves)²⁶ in the navy was a matter of course, it is striking, to say the least, on this occasion that *zeugitai* embarked as regular crew members. This was possibly a choice to secure the fleet's operational capacity as a response to population decline after the plague, and it may have occurred in response to other emergencies during the war,²⁷ above all after the disaster at Sicily, where *thētes* served as

²¹ According to Figueira (2008: 440-441), *thētes* were given precedence in *cleruchies* and *zeugitai* and *thētes* in colonies – as in Brea – possibly as volunteers; also Morris, 2005: 45. Plut. *Per.* 11.5-6 and Lib. 7.8.2 (*Hypotheses of Demosthenes' Speeches*) imply a distribution of land to citizens of the lowest social status to alleviate impoverishment (in his summary of Demosthenes' *On the Hersonese*, Libanios notes that the landless poor were sent as settlers and were handed in weapons and some money by the state treasury). Also Pébarthe, 2009; Gallego, 2022: 8-9.

²² Figueira, 2008: 441; Pébarthe, 2009: 381; Gallego, 2022: 8-9. Most of those who chose to go did so voluntarily and had to draw lots, as in the case, for instance, of *Ennea Hodoi*, Thuc. 4.102.2, with Figueira, 1991: 20-24. The epigraphic record attests to the important presence of wealthy Athenians in colonies and/or *cleruchies* like Lemnos or Samos in the fourth century (less well documented for the fifth century), as highlighted in Culasso Gastaldi, 2015 (with bibliography). However, this does not imply that these individuals constituted a majority of the population (not even of the Athenian population which could include larger segments of less privileged groups of lower status). As Culasso Gastaldi herself points out, these well-off families were 'una frazione ristretta, anche se non sappiamo quanto ristretta, della popolazione attiva' (Culasso Gastaldi, 2015: 618). On the other hand, as Culasso Gastaldi also emphasises, the intense mobility and social complexity of a *cleruchy* (involving changes and transformations of the economic level) must also be taken into account.

²³ Colonists theoretically acquired colonial citizenship (Hansen, 1988a: 19), but their situation was somewhat ambiguous at least in the literary sources, Graham, 1991 [1964]: 168-170), as it appears that they did not lose their Athenian citizenship (Jones, 1957: 167-173; Brunt, 1966: 75-77; Figueira, 2008: 448; Pébarthe, 2009) and some are known to have returned to Athens (Figueira, 2008; Brunt, 1966: 76). Cleruchs were eligible for military service in Athens and, although stationed at military garrisons in hotspots, they could be recalled to Athens (Graham, 1991 [1964]: 190; Brunt, 1966: 73; Figueira, 1991: 66-73). Morris (2005: 45) estimates that at least 15,000, and probably closer to 20,000, Athenians left Athens for the colonies and *cleruchies* throughout the fifth century. For estimates on the number of colonists and cleruchs in the Athenian army in 431, see note 123.

²⁴ IG I³ 831 records a similar case of promotion from *thēs* to *zeugitēs* (c. 480 or a little later); Raubitschek, 1949: 400-401, no. 372; Hansen, 1991: 45.

²⁵ Thuc. 3.16.1. For state of emergency, Rosivach, 1985: 46; Gabrielsen, 1994: 107. In 428, the Athenian fleet numbered 250 ships, the highest figure given by Thucydides for the fleet (3.17.2).

²⁶ For the use of slaves in the fleet, Hunt, 1998: 88-99.

²⁷ In 428, the 1,000 hoplite citizens dispatched to Lesbos with Paches served as rowers (Thuc. 3.18.3).

epibatai (Thuc. 6.43.1).²⁸ Scholars who are sceptical of the employment of the census classes for recruiting purposes interpret the *thētes* to mean salaried workers. However, the attestation of the census classes concerning military enlistment in Thucydides (3.16.1) makes it more plausible that in this passage, too, the term *thētes* refers to the census class.²⁹ A fragment of Aristophanes' *The Banqueters* (*Daitaleis*; 428/7),³⁰ transmits additional information on the relationship between the census classes and military service: the lexicographer notes that *thētes* do not 'fight' (*strateuonto*): ὅτι δὲ οὐκ ἐστρατεύοντο εἶρηκε καὶ Ἀριστοφάνης ἐν Δαιταλεῦσιν.³¹ As van Wees has pointed out, *thētes* were indeed conscripted to fight wars,³² especially in the fleet as rowers, as archers on a voluntary basis, and possibly as *epibatai*.³³ Hence, the implicit meaning in οὐκ ἐστρατεύοντο must refer to the fact that they were not obliged to serve in the infantry or listed in the hoplite muster rolls. A fragment of Antiphon cited in the same entry of Harpocration contains the phrase τούς τε θῆτας ἅπαντας ὀπλίτας ποιῆσαι, possibly in the context of the expedition to Sicily.³⁴ This excerpt indicates that *thētes* (or their vast majority) did not regularly fight (at least not en masse) as hoplites.³⁵

The fragments preserved in Harpocration and the passages of Thucydides evince that *thētes*, as a census class, were related in some way to military life in the fifth century. They testify that they were enrolled in the navy, served occasionally as *epibatai*, were not called up as hoplites *ek katalogou* (at least in Sicily),³⁶ and did not usually fight as such. They also indicate that the *zeugitai* did not usually embark on ships (except to be transported as land troops),³⁷ nor did the *pentakosiomedimnoi* or *hippeis*, except in emergencies and close to the end of the Peloponnesian war (after the Sicilian expedition)³⁸ in times of pressing demographic and economic problems.³⁹

Several scholars have postulated a relationship between the census classes and military service based on this meagre information relating to the fifth century, particularly regarding the Athenian army.⁴⁰

²⁸ For the *epibatai*, Zaccarini, 2015; for *thētes* as *epibatai*, infra note 33; contra Herzogenrath-Amelung, 2017 (with bibliography).

²⁹ Rosivach, 2012; Pritchard, 2019: 41. It is interesting to consider the possibility that with this term Thucydides was also, perhaps intentionally, evoking the census class, 'the lowest classes in need of wages', because at that time there were not that many *thētes epibatai* who could serve without remuneration (Valdés Guía, 2022).

³⁰ Ar. fr. 248 Kassel-Austin. For the content of this early work of Aristophanes, Buis, 2009.

³¹ Harp. s.v. *thētes kai thētikon*. This is understood in the sense of not fighting as hoplites *ek katalogou* by van Wees (2018: 27): 'Since no one was exempt from general levies, in context this presumably meant either that *thētes* did not serve as hoplites, or that they were not liable to selective conscription.' For *thētes* not usually fighting, in a broader sense of the word, as hoplites, Valdés Guía and Gallego, 2010: 258.

³² van Wees, 2001: 59; 2018: 27. For the use of *strateuomai* in a more general sense (not only for hoplites) in Aristophanes, Ar. Ach. 1052, 1080; Nu. 692; Vesp. 1117, 1124; Av. 1367; Lys. 1133.

³³ *Epibatai* are generally thought to have been recruited from among the *thētes* census class, Thuc. 6.43.1, 8.24.3; de Ste. Croix, 2004: 21; van Wees, 2006: 371; Hornblower, 2008: 815-816. This theory has been questioned by other scholars, Jordan, 1975: 195-203; Herzogenrath-Amelung, 2017; Okada, 2017; 2018; Pritchard, 2019: 40-42. On the theory of *thētes* as *epibatai* in the fifth century, at least until after the expedition to Sicily, a time fraught with serious demographic and financial problems, Valdés Guía, in preparation.

³⁴ Munn (2000: 100-101) stresses that the most likely context for this short sentence from Antiphon's *Against Philinos* are the circumstances of 415, in combination with passing references in a biography of Antiphon, 'arming men of military age and ... manning sixty triremes' ([Plut.] *X orat.* 832f).

³⁵ Valdés Guía and Gallego, 2010; Valdés Guía, 2022.

³⁶ Hansen, 1991:45.

³⁷ For *hoplitagogoí stratiotides*, Gabrielsen, 1994: 106-107; Morrison *et al.*, 2000: 226-227.

³⁸ *Hippeis* in Arginusae, for example Xen. *Hell.* 1.6.24; Gabrielsen, 1994: 107.

³⁹ Other evidence pertaining to *thētes* before or after the fifth century: Lys. fr. 207 Sauppe (fr. 261 Carey) = Harp. s.v. *pentakosiomedimnon*; Posidippus, fr. 38 Kassel-Austin = Harp. s.v. *thētes kai thētikon*; [Dem.] 43.54 (*Against Macartatus*). Solon's law on *epikleroi*, Diod. Sic. 12.18.3. Rosivach, 2002: 43-45. For discussion, Valdés Guía and Gallego, 2010: 271-277; Valdés Guía, 2014; 2018.

⁴⁰ Following Böckh, 1817: 34-35; Hansen, 1991: 45-46, 116; de Ste. Croix, 2004; contra Gabrielsen, 2002b: 211; Pritchard 2019: 40-42.

Using the census classes for recruitment purposes does not necessarily render them ‘military classes’, as Whitehead contended.⁴¹ Instead, they were financially defined classes whose aim was to allocate political roles and privileges depending on wealth. Before the Cleisthenic isonomy, this was probably Solon’s objective, at a time when a timocracy replaced the aristocracy.⁴²

Hansen⁴³ postulated a tripartition of the Athenian army in the fifth century: first, the cavalry, composed of members of the first two census classes (*hippeis* and *pentakosiomedimnoi*); second, hoplites, roughly coinciding with the *zeugitai*; and, thirdly, light infantry composed of *thētes*, the lowest census class economically speaking (and presumably the largest), whose members served, according to Hansen, in the fleet as *epibatai* and rowers. As evidence, Hansen adduces Thucydides (3.87.3) on the fatalities of the plague between 430 and 426, which uses the phrase ‘the multitude’ (*ochlos*):

[...] τετρακοσίων γὰρ ὀπλιτῶν καὶ τετρακισχιλίων οὐκ ἐλάσσους ἀπέθανον ἐκ τῶν τάξεων καὶ τριακοσίων ἰππέων, τοῦ δὲ ἄλλου ὄχλου ἀνεξεύρετος ἀριθμός.

No less than four thousand four hundred heavy infantry in the ranks died of it and three hundred cavalry, besides a number of the multitude that was never ascertained.⁴⁴

Thuc. 3.87.3 (Trans. by J.M. Dent)

Hansen stresses that by this ‘multitude’ Thucydides referred to *thētes*, and I would add that, in addition to *thētes*, the term included foreigners and slaves employed in the fleet. Hansen further reads a similar term in Thucydides (2.31.2): ἄλλος ὄμιλος ψιλῶν (‘a multitude of light troops’), as referring to the rowers of the 100 ships who, from their base in Aegina, joined the hoplites led by Pericles in Megaris (more than 10,000 hoplites and 3,000 metics). The interpretation of these terms as references to light troops should be treated with caution for, as Thucydides observes, the Athenians did not deploy citizens as light infantry at the Battle of Delion (Thuc. 4.94.1), and *psilloi* do not feature in the list of troops at the beginning of the war (Thuc. 2.13.6-8). The absence of trained light troops conscripted among the citizenry (Thuc. 4.94.1: ψιλοὶ ὠπλισμένοι) can be explained by assuming that non-hoplite citizens were mostly employed in the fleet. This does not imply that Athenian rowers could not disembark and serve as light troops when needed be (e.g. Thuc. 2.31.2).⁴⁵ Hansen also interprets the *hyperesia* (ὑπηρεσίας ταῖς ναυσίν) as *thētes* who, together with knights and hoplites, appear in Thuc. 8.1.2.⁴⁶ Thucydides does not use census-class terminology but prefers military terms because there would be men of the first

⁴¹ Whitehead, 1981.

⁴² Without ruling out the possibility that one of the objectives was to facilitate the introduction of taxes at that time (probably in kind), Descat, 1990; Harris, 1995: 9-10. For the *naukraroi* (introduced by Solon) in charge of tax collection, Faraguna, 2015: 652 (with sources).

⁴³ Hansen, 1991: 43-46, 116.

⁴⁴ Thuc. 8.37.3. Hansen reads a reference to these classes also in Thuc. 2.31.2 and 8.1.1. For cavalry, Bugh, 1988; van Wees, 2018: 29-30. Obviously not every member of the first two census classes could serve in the cavalry, neither those whose age or physical condition prevented them from doing so (Pritchard, 2021: 407-408), nor those who performed a liturgy. But, even though the cavalry group *hippeis* did not exactly coincide with the *hippeis* census class, this does not mean that the members of the cavalry were not primarily drafted from the first two census classes, as Hansen (1991: 43-46, 116) argues.

⁴⁵ I thank José Pascual for this point on the absence of Athenian light infantry. Van Wees (2002: 66) thinks that rowers could disembark to fight as light troops.

⁴⁶ Hansen, 1991: 116.

two census classes among the cavalrymen. Similarly, members of the three higher census classes would be among the hoplites. Finally, there would be *thētes* in large numbers among the rowers, but also metics and slaves.

De Ste. Croix suggested a relationship between the census classes and military categories, although he believed that the classes were never precisely defined in economic terms.⁴⁷ Pritchard notes that the group of knights (*hippeis*) in general did not strictly coincide with the *hippeis* census class because cavalry members would generally be young and in good physical condition.⁴⁸ However, this does not imply that the cavalry members were not drawn primarily from the first two census classes, as Hansen suggests. The cavalry was obviously smaller in number than the two upper classes combined. This would have also been the case with the *zeugitai*, who, together with hoplites from the first two census classes, may have coincided with those listed in the catalogues as regular hoplites *ek katalogou*.⁴⁹ It is even possible that compulsory enrolment as a hoplite in the regular infantry required belonging, at a minimum, to the *zeugitai*. At the same time, enrolment was voluntary for *thētes*, some of whom would have possessed hoplite weaponry (specifically, those who served as *epibatai*). Therefore, a significant majority of *thētes* would not have fought as regular hoplites, but as rowers in the fleet, as light troops, as *epibatai*, or as archers, usually on a voluntarily, but in case of emergencies, on a mandatory basis.⁵⁰ Moreover, van Wees posits that only the first three census classes enlisted on the hoplite muster rolls.⁵¹ Nevertheless, as he also believes that the *zeugitai* were a leisured class and owned a considerable amount of land, he subsequently suggests that a significant proportion of *thētes* (30%) regularly fought as hoplites (as *epibatai*, as volunteers and in general levies), and distinguishes between ‘leisured-class hoplites’ and ‘working-class hoplites’.⁵²

Other scholars have disassociated census classes from recruitment.⁵³ Pritchard, for example, holds that when citizens enlisted in their deme register at the age of 18, they decided whether they wanted to serve as horsemen, hoplites, or in the navy. However, he ultimately recognises that their choice depended on their financial means. This was the case with cavalrymen, who belonged to one of the first two census classes as wealthy young men. The hoplites were equipped with expensive weapons whose cost they defrayed themselves and who, in many cases, albeit not always, were accompanied by a servant. Only a cushion was required to serve as a rower (which was appropriate for the *thētes*).⁵⁴

The recruitment of hoplites *ek katalogou* relied on the ten Cleisthenic tribes from the lists of demesmen drawn up by the demarchs (*lēxiarchika grammateia*), which were then given to the *strategoí* and the *taxiarchoi*.⁵⁵ These lists included citizens who were compulsorily recruited as hoplites, were drawn up especially for each campaign and were placed under the statue of the eponymous hero of each

⁴⁷ de Ste. Croix, 2004: 48-49.

⁴⁸ ‘The most able in wealth and physical capacity’ (Xen. *Eq. mag.* 1.9-10); Pritchard, 2021: 407-408.

⁴⁹ For the hoplite *katalogoi* as *ad hoc* muster rolls for every occasion, Christ, 2001; Bakewell, 2007: 90-93.

⁵⁰ Although not much is known about the methods for recruiting rowers or archers for the fleet, it seems that, on many occasions, it might have been on a voluntary basis: Ar. *Ach.* 545-547; Jordan, 1975: 101-103; Pritchard, 2019: 98 – the enrolment of rowers only seems to have been compulsory on three occasions between 480 and 387/6. For the compulsory enrolment of *thētes* on several occasions and the possible existence of muster rolls, Gabrielsen, 2002a; 2002b: 205, 207 (in the fourth century); also Hansen, 1985: 22; Bakewell, 2008: 144-145. For archers, Pritchard, 2019: 90-92 (both citizens and foreigners).

⁵¹ van Wees, 2018.

⁵² van Wees, 2018: 17.

⁵³ Rosivach, 2002; Gabrielsen, 2002; Pritchard, 2019: 43-45.

⁵⁴ Cushion for rowers: Isoc. 8.48 (*De Pace*); Thuc. 2.93.2; Eup. fr. 54, Kassel and Austin; Pritchard, 2019: 45.

⁵⁵ Christ, 2001; Bakewell, 2007: esp. 90-93. For the *lēxiarchika grammateia*, Hansen, 1985: 14-15; Whitehead, 1986: 35-36 with n. 130, and 135. Concerning registration in classical Greece, Faraguna, 2014.

of the tribes in the agora. There would have been similar lists of demesmen for recruiting cavalrymen.⁵⁶ If required, the demarchs might have drawn up lists of citizens to be recruited as rowers, but this does not seem to have occurred very frequently in the fifth century.⁵⁷

The earliest indication that these lists were drawn up by the demarchs, on the basis of the *lēxiarchika grammateia*, is an inscription from 440 regulating the payment of a fee for training hoplites, cavalrymen, and archers in the gymnasium of the Lyceum.⁵⁸ According to Jameson, the inscription only refers to the army, so presumably, the fleet's rowers, *epibatai*, and archers would not have been trained there.⁵⁹ However, if the so-called Decree of Themistocles (*SEG* 22.274; fourth/third century) was a copy of the original from the beginning of the fifth century (a controversial issue), then the first mention of such lists goes back to the dawn of the classical period.⁶⁰

The demarchs' task of drawing up the lists and handing them over to the *strategoï* and the *taxiarchoi* would have been much simpler if the *zeugitai* census class had coincided with that of the hoplite class, namely, if the vast majority of hoplites had been *zeugitai*, except a minority who belonged to the first two census classes. Registration in a census class was mandatory when citizens enrolled in their deme register at the age of 18. This system thus avoided duplicate enrolments (in Pritchard's theory) in the deme register, such as 'hoplite and *zeugitēs*', 'hoplite and *thēs*', or 'hoplite and *hippeus*'. All *zeugitai* were, by default, hoplites, but not all hoplites were *zeugitai*,⁶¹ albeit the vast majority were. The deme register was mandatory to include the citizen's name and age or the date of enrolment of citizens aged 18, which made it easy to know their age. So, if the *zeugitai* were those whose wealth was considered to be equivalent to that of a hoplite, it would have been a simple matter for the demarchs to provide the *strategoï* and the *taxiarchoi* with lists to compile the *katalogos*. As possible candidates, they would have only had to include those belonging in a certain age group (decided on and stipulated for each campaign separately) and in one of the first three census classes, while removing those enrolled as cavalrymen (no more than perhaps seven to ten young men per deme, given the approximate number of demes and number of cavalrymen)⁶² and those who were known to be performing a liturgy, also a minority in each deme. The demarchs might have also indicated who was unable to perform a liturgy.

⁵⁶ Pritchard, 2021: 407-408.

⁵⁷ For the recruitment of naval forces from the lists of the demesmen drawn up by the demarchs, Dem. 50.6 (*Against Polycles*). For a probable recruitment of naval forces *ek katalogou* in exceptional circumstances, Thuc. 7.16.1, with Gabrielsen, 2002a: 89, 93-94; Christ, 2001: 401.

⁵⁸ *IG I³* 138 (c. 440).

⁵⁹ Jameson, 2014: 49-51.

⁶⁰ Also *ML* 23. Jameson, 1960; 1963. Rejected as fabrication by many authors (Johansson, 2001; Blösel, 2004), but accepted by others (Hammond, 1982; 1986 and 1988: 558-563). Even if the source's authenticity is compromised the decree nevertheless offers an overview of the events in 480. As Chaniotis (2013: 746) contends it is 'a text based on a true incident and composed [...] possibly in the mid-fourth century by the local historian Kleidemos'.

⁶¹ Probably the *thētes* who could serve as *epibatai* (young citizens from the most prosperous families of that class) accounted, for economic reasons, for no more than 10-15% of the citizen population, perhaps owners of properties between 2.7 and 3.6 hectares or equivalent in movable assets. The proportion probably dropped as a result of the demographic and economic crisis during the Peloponnesian War (Valdés Guía, 2022). For a calculation of the percentage of *thētes*' households with more than 2.7 hectares in the fourth century (maximum c. 4,500 out of a population of 30,000 adult male citizens), Gallego, 2016: 61, fig. 3.

⁶² 1,000 cavalrymen by 139 demes approximately gives an average of 7.1 men per deme.

Hoplites and Zeugitai: Numbers, Wealth, and Land Ownership in Fifth-Century Athens

Scholars who dismiss the hypothesis of a close relationship between the *zeugitai* and hoplites argue that if the *zeugitai* included all citizens who owned a team of oxen to work their land,⁶³ there would not have been enough arable land in Attica to accommodate such the vast number of *zeugitai*⁶⁴ attested on the eve of the Peloponnesian War: 13,000 hoplites and over 1,000 cavalrymen, plus a reserve of 16,000 men, including ‘hoplite rank’ metics.⁶⁵ Nevertheless, this view does not consider that membership of the census classes in the fifth century was probably calculated based on both movable and immovable assets (this had perhaps already been the case since Solon) and in monetary terms.⁶⁶ Then, it is not a question of sufficient land in Attica to accommodate the 13,000 active hoplites – whether or not they were *zeugitai* – on the eve of the Peloponnesian War. Both hoplites and *zeugitai* (in my opinion, largely one and the same) might have had sources of income other than land, with total assets equivalent to the land requirements for hoplite status – namely, a minimum of between 3.6 and 5.4 hectares. Moreover, wealth requirements were stipulated in monetary terms (drachmas) when Antipater disenfranchised those who did not possess a *timēma* equivalent to at least 2,000 drachmas at the end of the fourth century.⁶⁷ In the fourth century, when a *plethron* of land was worth around 50 drachmas, 2,000 drachmas were equivalent to only 40 *plethra* (3.6 hectares).⁶⁸ This was not necessarily inclusive of the total estate value in drachmas of hoplites/*zeugitai* in fifth-century Athens, as the value of a *plethron* of land at the time is unknown. The possibility that the standard of living rose between the fifth and fourth centuries should also be borne in mind,⁶⁹ and, consequently, that the equivalent of 3.6 hectares (the minimum requirement, in my opinion, for the *zeugitai*) in drachmas was lower in the fifth century than in the fourth century.

The inclusion of citizens with non-monetary assets in the first three classes can be deduced from the aforementioned case of Anthemion, who became rich enough to move up two census classes.⁷⁰ He may have been the father of Anytus (Socrates’ accuser), a tanner by trade who amassed considerable wealth

⁶³ Without ruling out that there was already an equivalence of immovable and movable assets at the time, but not as yet in drachmas; this merits further research and I will address this point in future publications.

⁶⁴ Okada, 2017: 27; Pritchard, 2021: 406.

⁶⁵ For these figures, Thuc. 2.13.6-7; Diod. Sic. 2.40.3. Christ, 2001: 401; Thomsen, 1964: 162-163. Rhodes (1988: 274) calculates a total of between 21,000 and 29,000 hoplites in 431; Garnsey (1988: 92) offers a number between 18,000 and 25,000. Van Wees (2001: 51) speaks of 18,000, but subsequently (2006: 374 n. 90) claims that there were 24,000. Some of them were cleruchs and/or colonists, according to Figueira (1991: Table 3; 2008: 459); also Pébarthe, 2009: 383.

⁶⁶ As will be contended below, this monetary requirement might have been in place since Cleisthenes.

⁶⁷ Antipater disenfranchised 22,000 citizens, Diod. Sic. 18.18.4-5. Poddighe (2002: 59-61) explains the different figures provided by Diodorus and Plutarch (*Phoc.* 28. 7: 12,000 excluded) by contending that those 12,000 were readmitted to the *politeia* when the requirement was reduced from 2,000 to 1,000 drachmas by Cassander in 317. For the census of Demetrios of Phaleron (between 317 and 307), Ctesicles (*FGrHist* 245 F 1 = Ath. 272b-c) reports that there were 21,000 citizens at the time, which suggests that, despite the fact that some had regained their citizen status, around 9,000-10,000 people would still have been left out (cf. Gallego, 2016: 47-48). The population was c. 30,000 at that time, according to Hansen’s (1985; 1988a and 1988b; 1991: 92-93; 2006) calculations; cf. Kron, 2011: 130. Van Wees relates the measures of Demetrios with the Draconian Constitution in [Arist.] *Ath. Pol.* 4, but see *infra* note 127.

⁶⁸ Calculated from the *Rationes centesimarum*, it would be a guide price, rather than a real market one. Andreyev, 1974: 14-18. Burford, 1977/78: 169-171; 1993: 67-72; Isager and Skydsgaard, 1992: 78-79; Jameson, 1994: 59; Hanson, 1995: 181-201; Halstead, 2014: 61; Poddighe, 2002: 137; van Wees, 2006: 357-358 and n. 34; Gallego, 2016: 52-53.

⁶⁹ See *infra* note 126.

⁷⁰ [Arist.] *Ath. Pol.* 7.4.

from activities unrelated to land use or ownership in the fifth century.⁷¹ It does not seem probable that well-known and prominent political figures in the latter part of the fifth century, such as Cleon, even elected as generals, who also obtained their wealth mainly from similar activities, were enrolled in the *thētes* census class rather than the upper two ones, as was the case with Demosthenes in the fourth century, who belonged to the liturgical class.⁷² In this sense, Iasos of Kollytos, a wealthy businessman in the tombstone trade, who would come to perform liturgies at the beginning of the fourth century, was surely not enrolled in the *thētes* census class, but in one of the two top ones.⁷³ As Harris observes in his study of artisan workshops, there were workshop owners with assets equivalent to 500, 700, 1,000, 2,000, 2,400, 4,000 drachmas and up to three talents.⁷⁴ In the fifth century, those with (movable or immovable) assets equivalent in drachmas to 3.6 hectares (or 2,000 drachmas according to the fourth-century criterion or its equivalent in the fifth century) would have probably been *zeugitai*, whether they owned land or not.

Just as there were landless *zeugitai* (and landless members of other census classes), evidence suggests that landless citizens owned hoplite weapons. This might have been the case with Socrates and his father, Sophroniscos.⁷⁵ Socrates was born around 470/69 and therefore should have enrolled in his deme register on his 18th birthday in 452/1. The sources indicate that he was a sculptor.⁷⁶ Before abandoning this profession for philosophy, he might have owned, like his father, a workshop (inherited from his father) employing several workers (hired labourers or slaves), so his estate might have amounted to more than 2,000 drachmas (or the equivalent of 3.6 hectares in drachmas in the fifth century), since sculpting was one of the best-paid crafts.⁷⁷ However, his decision to abandon the trade for philosophy – probably after gradually selling or renting out his properties – impoverished him.

⁷¹ Regarding this character, see: Pl. *Meno* 90a. Anytos inherited a successful tannery from his father, Xen. *Ap.* 29; Nails, 2002: 37-38, with further sources.

⁷² For the wealth of Demosthenes, Thomsen, 1964: 85-87; Valdés Guía, 2014.

⁷³ Iasos of Kollytos served as *choregos* in 387/386, Feyel, 2006: 415, with bibliography; *IG II²* 2318, l. 206; Davies, 1971: 24; Hochscheid, 2020: 218. He might have been a sculptor in the Erechtheus in 408-406. According to Davies (1971: xx-xxiv), the members of the liturgical class were expected to have a fortune comprising at least three talents, which would be the maximum price for a workshop in Attica (Harris, 2002: 81). For other scholars, however, the minimum requirement would have been from one to two talents, cf. Gabrielsen, 1994: 45-47., 52-53; Rhodes, 1982; Kron, 2011: 129-131. Perhaps the wealth required in the fifth century to be a member of the liturgical class (and the *hippeis* census class) might have been in the region of 1.6 talents, as stated in the spurious Draconian constitution, which might have been related to the oligarchic coup in 411 (100 *mnai* – equivalent to 1.6 talents – as a requirement ([Arist.] *Ath. Pol.* 4.2). Those with more than three talents would be the richest of the rich – a minimum of three talents for *pentakosiomedimnoi* (van Wees, 2018: 27) – who served as *proeispherontes* (the 300 richest families) in the fourth century, see Valdés Guía, 2018.

⁷⁴ On the variety of values of *ergasteria* in fourth-century mortgage *horoi*, Finley, 1951: 69-70; Harris, 2002: 81. For workshops, Acton, 2014; Lewis, 2020.

⁷⁵ Sophroniskos, a sculptor (*lithourgos*), Aristoxenos fr. 51 Wehrli; Huffman, 2012: 261. Val. Max. 3.4 ext.1; Diog. Laert. 2.19 citing Douris of Samos (*FGrHist* 76 F 78); Cyril. *Adv. Iul.* 208a.

⁷⁶ Luc. *Somn.* 12. Sch. Ar. *Nu.* 773: as Sophroniskos' son 'he learned to carve marble and made marble sculptures, among which are the three Graces'; Douris of Samos *FGrHist* 76 F 78; Timon of Phleious, fr. 25 d. Diog. Laert. 2.19. As a descendant of Daedalus, the patron of sculptors: Pl. *Eutyphr.* 11b, 15b; *Alc.* 1.121a; *Hp. mai.* 282a.

⁷⁷ Feyel, 2006: 415. Socrates probably provided for his mother's dowry at a time when the family would have been comfortably off, since she married, after Sophroniskos death, Chairedemos of Alopekia, who had a good socioeconomic position, Nails, 2002: 218. Several sources suggest that Socrates sculpted the three Graces and the Hermes at the entrance of the Acropolis, Paus. 1.22.8. Diog. Laert. 2.19; Paus. 9.35.7; sch. Ar. *Nu.* 773: 'Behind Athena was a relief of the Graces on the wall, said to have been carved by Socrates'; Valdés Guía, 2020, with further bibliography. For the position of the sculptors, see recently Harris, 2020: 51-54; Hochscheid, 2020.

Although he was already depicted as poor in *The Clouds* (422 BCE), this was not always the case.⁷⁸ Socrates probably did not fight as a volunteer at Potidaea, Delion, or Amphipolis, for he himself admitted that he was not enticed by public life or politics.⁷⁹ He was called up three times, perhaps four (including Samos in 440), the last time in 422.⁸⁰ On those occasions, he was recruited presumably because he had enrolled in his deme register as a *zeugitēs*, notwithstanding the gradual diminishing of his income to the point of him owing, at the end of his days (probably c. 399), an estate worth no more than 500 drachmas, appropriate for a rather poor *thētes*.⁸¹ There is no evidence to suggest demotion to the *thētes* census class in the last years of his life due to his impoverishment; as Mavrogordatos notes, this was not the case due to the Athenian system's inherent inertia.⁸²

Moreover, less well-off *zeugitai* could normally enlist as volunteers to earn a salary before being recruited from the lists. In particular, this would have been the case for single young men.⁸³ In this way, they offered their families financial support alleviating financial burdens at dire moments or when it was necessary to consider dividing the family property because there was more than one child in the *oikos*.

That there were both landless infantrymen and cavalrymen – but possessing the equivalent in movable assets – is evidenced by Lysias. When criticising Phormisios' proposal to expel the landless, the speaker offers, doubtless exaggerating the situation, as a rhetorical device, that many citizens would have to leave the city.⁸⁴ At any rate, the vast majority of the landless at the end of the fifth century would have been *thētes* without means. Nonetheless, land ownership was probably still essential and the main way of gauging wealth in Athens. However, during the *Pentecontaetia*, in the golden years of the Empire, the possibilities for diversification would have opened up new sources of income and enrichment (for all census classes). In Xenophon, Aristotle and Socrates observed that the craft trade was highly profitable,⁸⁵ while the slave trade and the renting out of slaves were also very lucrative.⁸⁶ Certain influential fifth-century individuals, such as Cleon, Cleophon, Hyperbolus and the father of Isocrates, who surely did not belong to the *thētes* census class, obtained their wealth and economic position from their craft and trade.⁸⁷

Therefore, the *timēma* of both hoplites and *zeugitai* in the fifth century was measured in movable and immovable assets, in the same way as for the *eisphora*.⁸⁸ In addition, there would probably have been equivalences between the size of landholdings and/or production in *medimnoi* and drachmas.

⁷⁸ Ar. Nu. 103, 175, 362; Mavrogordatos, 2011. Socrates was probably already a *zeugites* of modest status since Potidaea. In the 430s, he trained as a philosopher and possibly gradually abandoned his work as a sculptor, a profession that he had been pursuing since 452, to dedicate himself to philosophy, probably his only occupation in the 420s. Further argumentation in Valdés Guía, 2020.

⁷⁹ Pl. Ap. 31d.

⁸⁰ He visited Samos in his youth, Diog. Laert. 2.23; Graham, 2008 with bibliography and discussion. Amphipolis, Potidaea and Delion, Pl. Ap. 28e; Pl. Symp. 219e-221b; Pl. Lach. 181b. Cf. Mavrogordatos, 2011.

⁸¹ Xen. Oec. 2.3; Valdés Guía, 2020 with further sources and bibliography.

⁸² Mavrogordatos, 2011; Valdés Guía, 2020.

⁸³ Ar. Av. 1364-1369; Christ, 2001: 399; van Wees, 2018: 25.

⁸⁴ Lys. 34.4 (*Against The Subversion of the Ancestral Constitution*); Phormisios' proposal, Dion. Hal. Lys. 32-33.

⁸⁵ Arist. Pol. 1278a20; Xen. Mem. 2.7.6; Feyel, 2006: 434.

⁸⁶ As regards the fortunes amassed by Nikias and Hipponikos (undoubtedly acquired in slave markets) from hiring slaves in mines, Xen. Vect. 4.14-15; Plácido, 2002: 24. For the role of slavery in Athenian economy: Porter, 2019, esp. 37.

⁸⁷ Andoc. 1.146 (*On the Mysteries*); Ar. Eq. 1302-1315; Plut. Isoc. 1; Harris, 2002: 273. For the diversity of skilled workers in Athens: Lewis, 2020.

⁸⁸ The *eisphora* in the fourth century, before and after 378, was based on *timēma* or capital, not on income, and all kinds of properties were taken into account, Thomsen, 1964: 181-183. The Solonian census classes were based, according to Aristotle, on income or production ([Arist.] Ath. Pol. 7.1), but Plato (*Leg.* 955d-e) explores the possibility of a tax system based on both, viz. *timēma* (capital) and income.

All *zeugitai* would have been hoplites, but not *vice versa* because the hoplite ranks would have also included a minority formed by members of the first two census classes and a very small proportion of *thētes*. Although they had no obligation to serve as such, the latter possessed the necessary weaponry and could serve voluntarily as *epibatai* in the fleet.⁸⁹

Regarding the number of hoplites, most scholars estimate that at the beginning of the fifth century and during the Persian Wars, there would have been c. 30,000 adult male citizens (over 18), of which around 9,000 or 10,000 would have possessed hoplite weaponry, which means that approximately 30% of the population would have been hoplites.⁹⁰ Before Antipater's disenfranchisements in the fourth century, the population would have been roughly the same.⁹¹ It seems that Antipater disenfranchised around 21,000 people with assets amounting to less than 2,000 drachmas. This should have left 9,000 citizens who still met the requirements – 3.6 hectares or 2,000 drachmas during that period – for the 'hoplite class',⁹² which is similar to the number of hoplites at the beginning of the fifth century. The rest of the population (around 70%) would have belonged to the *thētes* census class both at the beginning of the fifth century and at the end of the following one.

However, the population of Athens likely doubled during the *Pentecontaetia*; on the eve of the Peloponnesian War, the number of Athenian citizens exceeded 60,000.⁹³ If the proportion of citizens of hoplite rank was the same as that at the beginning of the fifth or the end of the fourth century (around 30%), it stands to reason that there must have been 18,000 citizens of hoplite rank in 431. However, it appears that the proportion of hoplites increased possibly to 40% due to cleruchies and colonies. Scholars who base their calculations on the figures for hoplites and knights provided by Thucydides and Diodorus before the Peloponnesian War prefer a number between 18,000 and 24,000 (40% of 60,000), including the young, the elderly, the disabled, but not counting the metics, for citizens of hoplite rank in Athens at the time. As I have argued earlier, these (a number equivalent to 40% of a total citizen population of 60,000) would have all belonged to the first three census classes. If we assume that the richest citizens – the first two classes – did not account for more than 5% of the total citizen population, that is around 3,000 during that period (when the economic position of many of them would have derived from movable assets), then the number of *zeugitai* would have been c. 21,000. This means that the number of wealthy citizens or those belonging to the first two census classes had doubled since the Persian Wars and that the number of *zeugitai* had possibly

⁸⁹ It cannot be ruled out that those *thētes* who possessed hoplitic weaponry might have volunteered as hoplites on land. Be that as it may, their number would have been very small, since the proportion of *thētes* with weapons was not very high. In addition, in the *oikoi* of well-off *thētes*, weapons would have passed, perhaps, from parents to sons (between 20 and 30 years old, the usual age of the *epibatai*, SEG 22.274, ll. 23-25) who would have served as marines, while their parents or older brothers would have served as volunteers in the fleet – as rowers, especially as *thranitai*, and as officers – than on land.

⁹⁰ At Marathon, there were between 9,000 and 10,000 men, but this figure refers to the field army as a whole and not to the total number of hoplites. It is possible that men of all ages up to 59, or at least 49, would have been mustered (91.3 or 79.4% of adult male citizen population, see table in Hansen, 1985: 12), and/or that those 9,000 or 10,000 men included light infantry as well, as postulated by van Wees, or even slaves, as Pausanias (10.20.2) suggests: 'those who were too old for active service and slaves'. Nine thousand in Nep. *Milt.* 5. 1; Paus. 10.20.2; 10,000 in Just. *Epit.* 2.9.9 and 8,000 in Plataea: Hdt. 9.28.6; Plut. *Arist.* 11.1; Jones, 1957: 8, 161.

⁹¹ This is the same proportion as in the Persian Wars. Gallego, 2016: 47-49.

⁹² Estimates for the fourth century in Gallego, 2016. For middle-class men with hoplite status.

⁹³ Hansen, 1985; 1988: 14-28. Hansen based his estimation on the casualties during the war; Hansen, 1991: 53 and 86-88; Jones, 1957: 167-173. Garnsey (1988: 89-91) postulates 250,000 citizen families (that is, around 62,500 citizens); also Rhodes, 1988: 271-277. However, Gomme (1933: 25-26) calculated a total of 47,000 citizens in 431; Morris (1987: 100) suggests 35,000 to 40,000 at that time.

almost tripled.⁹⁴ As has been argued elsewhere, this was because landholdings in colonies or cleruchies⁹⁵ and the economic prosperity resulting from the Empire allowed many citizens to ascend the social ladder. Of this large number of *zeugitai*/hoplites (c. 21,000, excluding the first two census classes) on the eve of the Peloponnesian War, possibly just over a third had landholdings in Attica. In contrast, the remainder would have owned property in colonies or cleruchies or an artisan's workshop or other movable assets in Attica.⁹⁶

Some studies on fifth-century cleruchs, especially those on Lesbos, highlight that the minimum monetary requirement for inclusion into the *zeugitai* census class was an income of 200 drachmas or two *minae* a year.⁹⁷ This could be equivalent to around a minimum of 40 *plethra* or 3.6 hectares and perhaps a production of around 50 *medimnoi* per year.⁹⁸ This does not mean that the lots distributed to the Athenian cleruchs in Lesbos were 40 *plethra*, but that the cleruchs received income equivalent to the production of c. 40 *plethra*. Possibly the lots were larger, and the Lesbian families who worked them would have had to provide a fixed income, which hypothetically might have been half of the

⁹⁴ If those of hoplite rank at the beginning of the fifth century, with a population (c. 30,000 adult male citizens at the beginning of fifth century; Hdt. 5.97.2; 8.65.1; Ar. *Eccl.* 1132; Pl. *Symp.* 175e; Jones, 1957: 8, 161) very similar to that in the late fourth century, accounted for 30% of the population (Gallego, 2016: 64-65), then there were 9,000 hoplites of whom the first two classes might have totalled between (490) c. 1,200 and 1,500 (c. 4 or 5% of 30,000). Accordingly, the rest of the citizenry of hoplite rank (to my mind, belonging to the *zeugitai*) would have accounted for c. 7,500, perhaps slightly more if the population was larger. At Marathon, there were between 9,000 and 10,000 men, but this figure refers to the field army as a whole, and not to the total number of hoplites. Given the critical situation, it seems fair to assume that those mustered included people of all ages (perhaps up to 49 or 59) and that they were supported by light infantry and slaves.

⁹⁵ Cleruchs retained Athenian citizenship, as presumably colonists did (see note 22).

⁹⁶ Although there were apparently only 5,000 landless at the time of Phormisios' proposal in 403, c. 20% of the citizen population, it is possible that in 431, when the population was c. 60,000 citizens, the proportion was higher. In any case, this piece of information (5,000 landless citizens) provided by Dionysius should be treated with caution, since it is essential to consider the rhetorical component of Lysias' speech and understand that Phormisios' intention was not to get rid of rich Athenian citizens without land (similar to Demosthenes or Iasos of Kollytos), but the landless *thētes* (the poorest members of the population), according to their 'moderate' oligarchic ideal. Still, it is important not to lose sight of the fact that although movable assets made up the bulk of the income of many, they might have also owned a small plot of land in Attica (perhaps leased out), so that technically they would not have been landless, although their income would have derived, for the most part, from workshops or other businesses.

⁹⁷ Thuc. 3.50.2. For the distribution of land on Lesbos after the rebellion, Diod. Sic. 12.55.10; Antiph. 5. 76-80 (*On the Murder of Herodes*). For Pébarthe (2009: 382-383), an annual income of two *minae* was enough for *klerouchoi*, due to the fact it was located on the boundary between the *thētes* and *zeugitai* census classes. For a contrary view of cleruchies, with a distribution of land among the Athenian elite, based on the interpretation of the Grain-Tax Law of 374, Moreno, 2007; 2009; criticism of this theory in Lytle, 2009; Migeotte, 2011; Gallego, 2022: 8 with n. 14; forthcoming (with further bibliography and discussion). For an extensive reflection on land distribution and the status of the cleruchs, Gallego, 2022.

⁹⁸ A *medimnos* of wheat cost 5-6 drachmas and that of barley 3-4 drachmas. Van Wees (2013a: 230-231; 2018: 27, n. 100) estimates that a production equivalent to 200 *medimnoi* corresponded to 13.8 hectares (including fallow) or a property worth 7,590 drachmas; along these lines, 50 *medimnoi* would have corresponded to c. 3.45 hectares (including fallow), which was fairly close to the minimum of 3.6 hectares (producing 52.32 *medimnoi*, taking into consideration fallow) that I assume was required of the poorest *zeugitai*. These measures are, however, speculative, because although the weight of wheat and barley is known from the Grain-Tax Law of 374 (33 and 27.5 per *medimnos*, respectively, Osborne and Rhodes, 2017: no. 26, ll. 21-5), the yield (800 kg/ha) is overoptimistic to say the least, taken from statistics for average yields in Attica and Boiotia from 1911 to 1950 in Gallant, 1991: 77, table 4.7). Osborne (1987: 44-46) also calculates a very optimistic yield of 900 kg/ha. However, Sallares (1991: 79; 372-89) doubts that yields would have exceeded 650 kg/ha. Moreno (2007: 27) posits a maximum yield of 600 kg/ha for Attica (cf. Sallares, 1991: 79), with comparanda and discussion among different authors, Moreno, 2007: 2-10, table 1. Based on a yield of 600 kg/ha, a production of 50 *medimnoi* of wheat would have required 2.7 + 2.7 (for fallow) = c. 5.4 hectares (60 *plethra*); and a production of 50 *medimnoi* of barley c. 4.5 hectares (50 *plethra*). It must also be borne in mind that one quarter of the crop had to be kept back as seed grain for the following year. Anyway, on small properties it is possible that less land was left fallow and other alternatives were sought, Halstead, 2014: 200-202.

harvest/production – but converted into drachmas – in a regime of dependency similar to that of the helots (Tyrtaeus fr. 6 West).⁹⁹ In the fifth century, the minimum income (and therefore the minimum requirement for inclusion into the hoplite/*zeugitai* census class) for cleruchs might have been calculated not only in drachmas (Lesbos), but also perhaps in *medimnoi*. This is evidenced by a passage from Aristophanes alluding to two different realities that he comically intermingles, namely, the grain production (of wheat) of a plot in a cleruchy and grain distribution in Athens:

ἀλλ' ὅποταν μὲν δείσωσ' αὐτοί, τὴν Εὐβοίαν διδῶσιν ὑμῖν καὶ σίτον ὑφίστανται κατὰ πεντήκοντα μεδίμνους ποριεῖν: ἔδοσαν δ' οὐπώποτέ σοι πλὴν πρῶην πέντε μεδίμνους, καὶ ταῦτα μόλις ξενίας φεύγων ἔλαβες κατὰ χοίνικα κριθῶν.

When they are afraid, *they promise to divide Euboea among you and to give each fifty bushels of wheat* [emphasis added], but what have they given you? Nothing excepting, quite recently, five bushels of barley, and even these you have only obtained with great difficulty, on proving you were not aliens, and then choenix by choenix.

Ar. *Vesp.* 715-718 (trans. E. O'Neill Jr.)¹⁰⁰

The price of a *medimnos* of wheat during that period (fifth century) is unknown, but it might have been slightly lower (c. 4 drachmas) than in the fourth century when a *medimnos* of wheat cost 5-6 drachmas and that of barley 3-4 drachmas.¹⁰¹ Thus, if membership to the hoplite/*zeugitai* census class was based on disposable income in cash, land, and production, this raises the question of when this change was

⁹⁹ The land allocation in Lesbos accounted for approximately 1,200 km², excluding Methymna (as in Thuc. 3.50.2), but arable land was much less plentiful in Attica (between 20% and 40% of the total; calculations in Gallego, 2022: 17-24). Moreover, we cannot know whether all arable land was allocated or only that of the members of the elite or *dynatoi* as postulated by Gauthier, 1966: 80, n. 38. Antiphon (5.77) recalls the *adeia* granted to the rest of the population; Gallego 2022: 11-17, for discussion and bibliography. It is possible that the Lesbians who already worked for the *dynatoi* continued to do so for the Athenians (Zelnick-Abramovitz, 2004; Gallego, 2022: 24-27).

¹⁰⁰ With sch. Ar. *Vesp.* 715-718 (Philoch. *FGrH* 328 F 118-119) on the appropriation of land in Euboea and distribution of grain by Psammetichus in 445; Nenci, 1964: 179. See the commentary of Biles and Olson (2015: 311-312), who point out that these two possibilities (promises of further cleruchies and the importance of the place as a source of grain) are not mutually exclusive.

¹⁰¹ The price of a *medimnos* fluctuated in the fifth and fourth centuries and the known prices cannot be regarded as reliable guides (Stroud, 1998: 74 with n. 175). A *medimnos* of wheat cost 5-6 drachmas and that of barley, 3-4 drachmas (Pritchett, 1956: 198; Stroud, 1998: 32-33, 63; Engen, 2010: 81-83, 87-88; Rathbone and von Reden, 2015, tables A8.2 and A8.3), but there is evidence of lower prices (3 drachmas for a *medimnos* of wheat in 393 (Ar. *Eccl.* 547-548; Suda, s.v. *hekteus*) and 2 for that barley in 430 (Plut. *Mor.* 470F). Prices go higher: 9 drachmas for a *medimnos* of wheat and 5 for that barley in 340-330 (*IG* II² 408) and up to 32 drachmas in 330 (Arist. [*Oec.*] 1352b14-20) due to inflation; Bresson, 2000: 183-210. The oldest attestation for the price of a *medimnos* is 430 (2 drachmas for a *medimnos* of barley attested in Plutarch; see *supra*), as well as the sale of the properties of the *hermokopidai* in 415, when the price of wheat was 6 drachmas per *phormos* (*IG* I³ 421, lines 137-139; Pritchett, 1956: 186, 197; Markle, 1985: 293-294). As this case was an auction, the price may be unreliable, without mentioning that the fact that although for some scholars a *phormos* was equivalent to a *medimnos* (Pritchett, 1956: 195; Markle, 1985: 293-294; Figueira, 1986: 156-157; Rathbone and von Reden, 2015). Others think that it was a higher (Bissa, 2009) or lower (Crawford, 2010: 68) measure. It is likely that prices rose from the fifth to the fourth century (Gallo, 1987; in a more moderate way, Loomis, 1998), although this cannot be confirmed. Be that as it may, if a *medimnos* of wheat cost 5-6 drachmas (the 'standard' price in the fourth century), then 50 *medimnoi* cost 250-300 drachmas, and, analogously, if a *medimnos* of barley cost 3-4 drachmas, 50 *medimnoi* cost 150-200 drachmas. In both cases, the figures are close to the yearly income of 200 drachmas for a Lesbian cleruch in the fifth century. Hypothetically, if a *medimnos* of barley cost 2 drachmas in 430 (see Plutarch *supra*), it could be stressed that a *medimnos* of wheat cost double that price, as in the fourth century, that is, 4 drachmas, so that 50 *medimnoi* of wheat (such as the production of the alleged cleruchy of Euboea: see previous note) would have been equivalent to 200 drachmas, precisely the income earned by a Lesbian cleruch at a very close date (427).

introduced. In my view, this would have most likely occurred in the time of Cleisthenes, insofar as it was then that the army was reformed and recruitment by the ten Cleisthenic tribes was implemented. It also roughly coincides with the minting of the first owls (which were possibly slightly earlier), the Athenian currency that would remain in circulation throughout the democratic period.

Cleisthenes' Measures: Monetary Requirements for Inclusion into the *Zeugitai* Census Class and Military Reforms

There are several reasons to argue that the division of the census classes based on disposable income in cash occurred as part of the Cleisthenic reforms.¹⁰² First and foremost, the introduction of a stable currency, the owls. Second, the growing importance of citizens whose wealth was produced by activities unrelated to land use or ownership in the time of the Peisistratids (or perhaps since Solon or earlier), especially potters but also other trades.¹⁰³ And, third, the fact that the Cleisthenic period was a time of major military reforms to accommodate the new 10-tribe system. I argue that Cleisthenes leveraged the census classes to gain a better knowledge of the citizenry's assets (through the new local units in which the citizen body of Athens was reorganised, i.e., the demes and the *lēxiarchikon grammateion*) and, therefore, to ascertain who was eligible to be recruited, henceforth on a mandatory basis, as a hoplite in Athens. The consequences were swift: two victories in Boiotia and Chalcis and, shortly afterwards, in Marathon and Plataea.¹⁰⁴ Yet, an early interest in increasing the number of eligible hoplites through dispatches in colonies or cleruchies (Chalcis and Salamis) and, therefore, in enlarging the *zeugitai* census class, is plausible.¹⁰⁵

It seems that, albeit already structured, the Athenian army was not genuinely effective until after the Cleisthenic reforms.¹⁰⁶ A restored line from an inscription dated to the 430s seems to mention a customary *nomos* on the recruitment of hoplites from the lists, which might date back to the Cleisthenic period, as the task was conducted 'by tribes' (κατὰ φυλὰς), a system introduced by Cleisthenes himself:¹⁰⁷ ἡ[εκατ]ὸν κα[τὰ τὸν νόμον καταλεχσάσθ]ον κατὰ φυλὰς ἐχς Ἀθ[εν]αίων. Although there is no clear evidence to credit Solon with the obligation for *zeugitai* to fight, there is evidence of the responsibility for all citizens to take up arms in a *stasis*. Cleisthenes introduced the recruitment system via the ten tribes, and it is likely that the conscription lists (*katalogoi*), one for each tribe, were also introduced at the same time. The use of the census classes, fully in force by that time, might have been an essential aspect for determining, after the income requirements in drachmas had been introduced, who were eligible for inclusion into the hoplite muster rolls. These requirements would have corresponded to an

¹⁰² For Moreno (2007: 95 n. 88), the Solonian census class requirements were converted into drachmas at the beginning of the fifth century. Beloch (1885: 245-246) was the first to suggest the time of the Persian Wars, whereas Thomsen (1964: 154) suggests a date around 500. For a date in the Cleisthenic period, De Sanctis, 1912: 237-238; Thomsen, 1964: 22, with further bibliography.

¹⁰³ Regarding the enrichment of the landless Athenian middle classes from activities other than agriculture, Charalambidou, Forthcoming.

¹⁰⁴ Chalcidians and Boiotians, Hdt. 5.77.1-2; Marathon, Nep. *Milt.* 5.1; Paus. 10.20.2; 10,000 in Just. 2.9.9. Eight thousand hoplites in Plataea, Hdt. 9.28.6; Plu. *Arist.* 11.1.

¹⁰⁵ Decree on Salamis (*IG I³ 1 = ML 14; 510-500*): 4,000 cleruchs in Chalcis, Hdt. 5.77.1-2; 6.100.1. Figueira (2008: 433) thinks that this number must have also included part of the Chalcidian *demos*, not just Athenians.

¹⁰⁶ For Cleisthenes' military reforms, van Effenterre, 1976; Siewert, 1982; Stanton, 1984. For military organisation in sixth-century Athens, from different perspectives: van Wees, 2018; Valdés Guía, 2019b.

¹⁰⁷ *IG I³ 60*, line 10-11. For the *nomoi* of Cleisthenes, [Arist.] *Ath. Pol.* 22, 29.3; Camassa, 2011. For Cleisthenes' relationship with the people, Ober, 1989; Flaig, 2011, who does not think that the changes at that moment qualify as a revolution. For the reception of Cleisthenes, the forgotten founding father: Anderson, 2003, esp. 197-199; 2007; Flaig, 2011.

estate equivalent to that of the hoplitic class, that is a minimum of 3.6 hectares (which in the fourth century was equivalent to a *timēma* of 2,000 drachmas and, according to fifth-century criteria, perhaps a yearly income of around 200 drachmas or 50 *medimnoi* of wheat in cleruchies). These equivalences are hypothetical, but what is not speculative is the cleruchs' obligation to fight, which appears in the Salamis decree at the end of the sixth century (*IG I3 1*, line 3: στρατ[εύεσθ]αι) and, therefore, to be enrolled on the hoplite *katalogos*. The economic status of these cleruchs is unknown, but it would not have been very high if the weapons they required could be purchased at a minimum of 30 drachmas according to *IG I3 1* (lines 9-11; although they could cost between 75 and 100).¹⁰⁸ I assume that these cleruchs were *thētes* – as was usually the case in the fifth century – who had risen to the status of *zeugitai* and who, therefore, would have had the obligation, presumably established by a *nomos* on recruitment by tribes, to purchase weapons and to fight. The amount set in the Salamis decree was an affordable minimum for them and certainly an investment that, albeit expensive (15% of an annual income of 200 drachmas), was worthwhile and durable.¹⁰⁹

At the end of the sixth century, Cleisthenes reorganised the citizen body of Athens in demes and deme registers (*lēxiarchica grammateia*); the army was organised on the basis of the ten tribes; the new Athenian currency (the owl tetradrachm) was introduced or consolidated; and political life was rationalised with isonomy. It is logical to assume that the military conscription by *katalogos*, organised by the new Cleisthenic tribes and based on information provided by the new political units, the demes, began then and that, at a time when the census classes were fully in force, these were used to determine who was wealthy enough – after converting their assets into drachmas – to serve as a hoplite from the lists. This economic capacity would have been equivalent to the 'hoplite level', which various scholars have estimated between 3.6 and 5.4 hectares and which was subsequently set, under Antipater, at a minimum *timēma* of 2,000 drachmas. This would have been equivalent to the *timēma* of the cleruchs on Salamis, who could only afford to spend 30 drachmas on weapons. This means that those landowning *zeugitai* – for there would have been other landless members of this census class, perhaps not many at the time but growing steadily in number and whose assets (and/or income) would have been measured in drachmas – did not produce 200 *medimnoi* of grain in the time of Cleisthenes (nor, for that matter, in Solon's), but perhaps around 50 *medimnoi* at a minimum. This corresponds to a minimum landholding of 3.6 hectares or 40 *plethra* (or, in late-fourth-century monetary values, 2,000 drachmas).

The *polis* was undoubtedly interested in establishing the equivalence between wealth in land and drachmas for the census classes because an increasing number of citizens derived substantial income from activities other than agriculture. For instance, we know that in the second half of the sixth century, especially after 525, artisans began to make dedications on the Acropolis, some of which were very expensive. At that moment, this group – especially potters – started to be represented on Athenian vases.¹¹⁰ Studies of these dedications indicate that metalwork, among other trades, was more

¹⁰⁸ Between 75 and 100 drachmas, Connor, 1988: 10 with n. 30; van Wees, 2004: 48, 52-53, 55. Van Wees (2002: 63-64) argues that hoplites did not need to fight in full panoply (including the pricey metal thorax) and that the minimum requirement (a shield and a spear) was relatively cheap to come by (c. 25-30 drachmas); also Hanson, 1995: 57-59. Full armor was handed down in part from fathers to sons, Raaflaub, 1997: 54.

¹⁰⁹ Thirty drachmas comprised 15% of the annual income of the Lesbian cleruchs (200 drachmas).

¹¹⁰ Guarducci, 1980: 88-89; Himmelman, 1980: 133; Lauter, 1980: 105-129; Williams, 1995: 159; Valdés Guía, 2005. Craftsmen's dedications, Beazley, 1946: 21; Raubitschek, 1949: 465, who asserts that they were craftsmen of a good socioeconomic position, esp. nos. 30, 42, 44, 48, 70, 92, 150, 178, 197, 209, 220, 224, 225, 244, 357-358; Webster, 1972: 4-8. with references to the more modest ceramic dedications – vases and *pinakes* – in addition to larger dedications with inscribed stone bases and with scenes of craftsmen at work; Thompson, 1984: 9; Williams, 1995: 147-150. Scenes of artisans at work began to appear as of 540, Beazley, 1946: 6-8; Ziomecki, 1975: 16-17; Angiolillo, 1997: 105 fig. 50-51.

important than has been previously thought in sixth-century Athens.¹¹¹ Along these lines, the study by Makres and Scafuro on inscribed bronze *aparchai* and *dekatai* dedications for the period c. 525-480 has been essential to show the economic capacity of a ‘middle class’ in Athens. This middle class Athenian population comprised workers and artisans (without ruling out farmers) who possessed the wherewithal to make expensive dedications on the Acropolis, but without forming part of the more exclusive elite.¹¹² No doubt many of these dedicators would have been *zeugitai*.

The Cleisthenic reforms also coincided with the introduction or consolidation of the characteristic currency of Athens, the owl tetradrachm, which remained in circulation for centuries. Its rise might have been related to democratic and centralising measures implemented by the Athenian state without ruling out economic and tax reasons.¹¹³ Undoubtedly, this ‘conversion’ was not across the board, and the measurement of income in *medimnoi* and wealth in land assets was still in force, together with the measurement in cash (drachmas).¹¹⁴

The new registers of the demes, the *lēxiarchika grammateia*, were introduced by Cleisthenes at the same time as the demes became an essential unit in political life for the recognition of citizenship. Undoubtedly, the figure of the *lēxiarchos* may predate the reforms of Cleisthenes, since there were six of them, equal to the number of *thesmothetai*, thus suggesting its antiquity. On the face of it, this figure does not coincide with reality in Solon’s time,¹¹⁵ but possibly with conditions in the seventh century (such as the six *thesmothetai*), at a time when Athens might have had a council of state of 300 members chosen *aristindēn* (selected from the *aristoi* or ‘best-born’).¹¹⁶ Counting the *aristoi* made no sense in the new democracy (nor with Solon now with an established timocracy). The link between the *lēxiarchikon grammateion* and the new political and administrative unit, the demes, began with Cleisthenes. The demarchs kept a registry of citizens belonging to their demes, including their census class, age, and, probably, their property holdings. The demarchs replaced, in this role, the *naukraroi*.

¹¹¹ Keesling, 2003; Avramidou, 2015; Tarditi, 2016; Makres and Scafuro, 2019; Charalambidou, Forthcoming. I would like to thank this latter author for allowing me to read a draft version of her work, which has offered me new insight into these realities. For *pinakes* dedications, Karoglou, 2010. For skilled workers in classical times: Lewis, 2020.

¹¹² Makres and Scafuro, 2019; Charalambidou, Forthcoming.

¹¹³ For the transit from Wappenmünzen coins to the owls, Kroll, 1981; van Wees, 2013b: 107-109; Kallet and Kroll, 2020: 52-54. The owls have been associated with the government just after the expulsion of the tyrants (Wallace, 1962: 28, 35) or with the Cleisthenic reforms (Price and Wagoner, 1975: 64-65; Trevett, 2001), but Kroll (1981: 24), following Kraay (1956), is of the mind that the reasons behind their introduction were more economic than political. This is part of a much broader debate on the economic or political reasons behind currency; on this debate, Trevett, 2001; Engen, 2005. van Alfen (2012: 20) comments: ‘despite the polarization that sometimes occurs between the political and economic systems of interpretation, the two are by no means exclusive’. For the development of the currency in archaic times in relation to the ideological changes in the elite’s mindset (contrary to the introduction of the currency) and of a ‘middling class’ linked to the birth of democracy, Kurke, 1999, with criticism in Samons, 2003; Kroll, 2000; van Alfen, 2012: 29. On the subject of the introduction of the coinage at the time of Pisistratus, Davis (2012), who considers the references to drachmas in Solon’s time to be anachronistic.

¹¹⁴ This reality is verifiable at different times in the subsequent history of Athens – for example, with Phormisios – or even in the distribution of cleruchies (200 drachmas or 50 *medimnoi* of income/production).

¹¹⁵ van Wees, 2018: 27.

¹¹⁶ Six *lēxiarchoi* (Poll. 8.104) of archaic origin, van Effenterre, 1976: 13-14; Lambert, 1993: 262, n. 80; Faraguna, 1997. Referring to a council of 300 members of the *aristoi* (after Cylon; Plut. *Sol.* 12.2-4) in the seventh century, perhaps the Areopagus at that date, Valdés Guía, 2002: 122; 2012: 226, 232. For *lēxiarchika* of a different association in the archaic period, Ismard, 2010: 95-96. Registers of citizens kept by the *naukraroi* in the sixth century, Faraguna, 2015: 653-654. For evidence of *naukraroi* and *naukrariai*, van Wees, 2013b: 44-53. Muster roll from the *phratèrikon grammateion* in archaic times, Frost, 1984: 284-285. For the number of phratries (c. 30-40) in classical times, Lambert, 1993: 20; Hedrick, 1991: 259; Davies, 1996: 5.

The recruitment system was greatly simplified if we assume that the *zeugitai* – equated with the hoplite class and accounting for around 30% of the population at the beginning of the fifth century – were enrolled in the hoplite *katalogos*. The author of the Aristotelian *Constitution of the Athenians* rightly pointed out that ‘the multitude’ drawn from the lists perished miserably in fifth-century Athens:

πρὸς δὲ τούτοις ἐφθάρθαι τοὺς πολλοὺς κατὰ πόλεμον. τῆς γὰρ στρατείας γιγνομένης ἐν τοῖς τότε χρόνοις ἐκ καταλόγου, καὶ στρατηγῶν ἐφισταμένων ἀπείρων μὲν τοῦ πολεμεῖν, τιμωμένων δὲ διὰ τὰς πατρικὰς δόξας, αἰεὶ συνέβαινε τῶν ἐξιόντων ἀνὰ δισχιλίους ἢ τρισχιλίους ἀπόλλυσθαι, ὥστε ἀναλίσκεσθαι τοὺς ἐπεικεῖς καὶ τοῦ δήμου καὶ τῶν εὐπόρων.

And in addition, that the multitude (τοὺς πολλοὺς) had suffered seriously in war, for in those days the expeditionary force was raised from a muster-roll (ἐκ καταλόγου), and was commanded by generals with no experience of war but promoted on account of their family reputations, so that it was always happening that the troops on an expedition suffered as many as two or three thousand casualties, making a drain on the numbers of the respectable members both of the people and of the wealthy (καὶ τοῦ δήμου καὶ τῶν εὐπόρων).¹¹⁷

[Arist.] *Ath. Pol.* 26.1. Trans. H. Rackham

In the fifth century, the *zeugitai* were predominantly members of the *demos* (τοὺς πολλοὺς) usually taken to mean the lower classes,¹¹⁸ although a small part of them could be more affluent, precisely those whose assets were just below the threshold of inclusion into the *hippeis*. Hence, the *zeugitai* would have been a multitude, many of whom died after being recruited *ek katalogou*. According to the theory articulated in Valdés Guía and Gallego (2010), however, the *zeugitai* were an elite in the fourth century, as of c. 403. It was then when the census classes ceased to be operational, and, therefore, these reforms did not have serious political or military consequences (coinciding, in addition, with the reform of the army). As I discussed previously, recruitment *ek katalogou* was perhaps employed before the battle of Salamis. On this particular occasion, and exceptionally for that period, it is possible that the fleet’s *epibatai* were not *thētes*, but, for the most part, *zeugitai*. The controversial Decree of Themistocles (*SEG* 22.274) records recruitment *ek katalogou* (line 23-24: καταλέξει δὲ καὶ ἐπ[ι]βάτας [δ]έκα [ἐφ’ ἐκάστη] ν ναῦν), 10 per ship, whereas Plutarch suggests 14.¹¹⁹ It seems plausible to assume that at the battle of Salamis, for which all the Athenians (except the elders) embarked on the ships,¹²⁰ *thētes* were not allowed to serve as marines (*epibatai*), although they could usually assume this role or would do so in the future. The young men (c. 33.3%)¹²¹ aged between 20 and 30 (line 24-25) of a population of c. 9,000 with hoplite rank work out at precisely 14 per ship (the number given by Plutarch). Therefore, these young men must surely have been recruited *ek katalogou*.

¹¹⁷ The fact that Aristotle (*Pol.* 1303a8-10) points out that at that time the notables (οἱ γνῶριμοί) fell in land battles as a result of being hoplites drawn from the lists, does not mean that the poor did not also fall, since, in this case, he is referring specifically to the notables or members of the elite of various cities.

¹¹⁸ For the different meanings of ‘*demos*’, especially as ‘lower classes’, Finley, 1973: 12; Hansen, 2010: 502-515. See also reflections by Cammack, 2019.

¹¹⁹ Plut. *Them.* 14.2; Jordan (1975: 194-195) is of the mind that this number should be accepted. Cimon was probably among their number, Plut. *Cim.* 5.2.

¹²⁰ Hdt. 7.144.3; Thuc. 1.18.2; Plut. *Them.* 4.3.

¹²¹ Hansen, 1985: 12 (table).

One of the consequences of the Cleisthenic military reforms was the mustering of a large number of hoplites to fight and defeat the enemy at Boiotia and Chalcis, Marathon and Plataea.¹²² At that time, many of them would have been *agroikoi*, among others plying other trades, as noted above. In the *Pentecontaetia*, the number of available hoplites/*zeugitai* grew, as did the variety of their backgrounds. A significant number of them would have been cleruchs/colonists and owners of workshops in Attica with minimum assets in drachmas equivalent to 3.6 hectares or 40 *plethra*.¹²³ To these should be added those who had landholdings in Attica, a relatively stable population between the fifth and fourth centuries.¹²⁴

It remains to be clarified what the equivalent of 3.6 hectares (40 *plethra*) in drachmas, supposedly the threshold for those *thētes* who aspired to join the *zeugitai* census class in the time of Cleisthenes, was. According to fourth-century evidence, best documented by the *Rationes centesimarum* from the second half of the fourth century¹²⁵ and the available information on Antipater's and Demetrios of Phaleron's disenfranchisements, the dividing line between the former *thētes* and *zeugitai* census classes in monetary terms was set at 2,000 drachmas (20 *mnae*). However, depreciation of money, an increase in the cost of living, or a rise of prices between the fifth and the fourth centuries should be considered probable, as Gallo and Loomis have observed, although there is no solid evidence in this regard either.¹²⁶ This could lead to the assumption that the value of land wealth in drachmas might have been lower in the fifth century than in the following one. Although it is impossible to venture a figure, the spurious Draconian constitution in *The Constitution of the Athenians* ([Arist.] *Ath. Pol.* 4.2) may be useful in this respect, for everything points to the possibility that it was drafted (or at least its core content) in the context of an oligarchic coup in 411, in which the *nomoi* of Cleisthenes were closely reviewed. This theoretical constitution specifies that the minimum requirement for forming part of the *politeia* in the time of Draco was to own hoplite weaponry (*ta hopla parechomenos*), similar to what was postulated in the Constitution of the Five Hundred *politeia*.¹²⁷

¹²² On increased military potential, Hdt. 5.77-78.

¹²³ With respect to the size and revenues of workshops, see note 74. Cleruchs and colonists as citizens and as part of the hoplite contingent, Figueira, 1991: Table 3; Figueira (2008: 459) suggests that there would have been between 929 and 1,250 cleruchs among the 13,000 hoplites, 1,000 cavalry and 200 mounted archers (14,200 in total) in 431 (in Thucydides and Diodorus of Sicily, see *supra* note 65), and between 6,500 and 7,800 colonists among the 16,000 available reserves. Pébarthe (2009: 374) calculates the number at around 8,000-9,000 colonists and cleruchs.

¹²⁴ Gallego, 2016.

¹²⁵ For the theory that *rationes centesimarum* are inscriptions indicating the collection of a 1 per cent tax on the sale of land to Athenians by corporate groups (*phratries*, *demes*, etc.), Lambert, 1997; also Faraguna, 1998.

¹²⁶ According to Gallo, 1987, the cost of living rose by 200% in the fourth century. For a more moderate estimate that nonetheless highlights the impact of gradual rise of prices, Loomis, 1998: 240-250, esp. 247-249. The problem is that fifth-century prices remain obscure to us (Zimmermann, 1974: 101-103). It would be useful to focus on the price of plots of land and dwellings, although it should be borne in mind that their value varied depending on size, quality, and location. It seems that house prices rose between 415 (cf. on the stelai of the *hermokopidai*, IG I³ 421) and the fourth century, but these figures are unreliable (taken from an auction in 415, let alone the enormous difference between prices attested in Attic oratory and those in the epigraphic record of the *poletai* (Pritchett, 1956: 261-275). Gallo bases his inflation case on the rise from 1 to 2 obols for the *trophe*, with which the *polis* provided orphans and invalids from the end of the fifth century to the second half of the fourth century (*SEG* 28.46, line 10; also Lys. 24.13 and 26, *On the Refusal of a Pension to an Invalid*; [Arist.] *Ath. Pol.* 49.4; more sources in Gallo, 1987: 26-30) and on the increase in builders' wages (Loomis, 1998: 247-249; Scheidel, 2010), as well as those of other workers (criticism in Crawford, 2010: 69). The price of a *medimnos* of wheat might have, perhaps, risen from 3-4 drachmas (on average) in the fifth century, to 5-6 drachmas in the fourth, but these figures are not entirely reliable given the fluctuations, the fact that many of these prices are related to the 'public sector', and the lack of information on wheat prices during most of the fifth century.

¹²⁷ Thuc. 8.97.1; Arist. *Ath. Pol.* 33.1. Rhodes, 1981: 113-115; Shear, 2011, esp. p. 45 with n. 93, with further bibliography. Van Wees (2011) revives the theory of the insertion of the Draconian constitution in the time of Demetrios of Phaleron as an image of his new constitution. Valid objections in Fritz, 1954: 76-86, with n. 16; and recently Verlinsky, 2017: esp. 144-146; Canevaro and Esu, 2018: 121.

All scholars agree that the Draconian Constitution outlined in the Aristotelian treatise is not historical but derivative of a political pamphlet. Still, it remains an integral part of the *Constitution of the Athenians*, probably elaborated with information borrowed, at convenience, from different sources. Two interesting aspects of this constitution refer to property requirement to hold office: 10 *mnai* (1,000 drachmas) for the Nine Archons and the Treasurers, 100 *mnai* or 1.6 talents (10 times more) to hold offices like the *stratēgia* or the *hipparchia*.¹²⁸ As Rhodes points out, ‘this invites suspicion first on account of the means of assessing a man’s wealth [...] and secondly because it sets a higher qualification for generals and hipparchs than for archons and treasurers, and this, at any rate in the relative standing of archons and generals, reflects the political realities of the late fifth century [...]’.¹²⁹ The last amount could correspond roughly to the assets of those who belonged to the *hippeis* (and the liturgical) census class. The first could refer to the requirements for *zeugitai* (3.6 ha or 40 *plethra*) defined in monetary terms, more or less equivalent to the 20 *mnai* in the time of Antipater. Both measures attributed to Draco’s legislation might have been consulted and borrowed by the oligarchs of 411 from the Cleisthenic *politeia*. Regardless, the text clearly shows that the hoplite census requirements were in the lower band, namely, around 3.6 hectares.¹³⁰

With such scant evidence, it would be unwise to venture a guess as to the requirement in drachmas for belonging to the *zeugitai* census class, introduced by Cleisthenes according to the theory set out above, which coincided with the introduction of new coinage (the owl tetradrachm) and the reorganisation of the army *ek katalogou*. Nor is it possible to know whether this census remained the same throughout the fifth century or varied at some point. In my view, the monetary requirements would have been between 1,000 drachmas (10 *mnai*) in the fifth century and 2,000 (20 *mnai*) in the time of Antipater.

¹²⁸ [Arist.] *Ath. Pol.* 4.2. More discussion in Rhodes, 1981: 84-88, 109-111.

¹²⁹ Rhodes, 1981: 113.

¹³⁰ In any case, it is also possible that around 430 the minimum requirement for inclusion into the *zeugitai* was already higher (for example, hypothetically, around 1,500 drachmas) than that set by Cleisthenes (let us hypothesise, 1,000 drachmas). Should this be the case, we do not know when the change was introduced. However, this threshold might have dropped again to 1,000 by 411 (the return to the Cleisthenic *nomos* serving as a justification), given the precarious financial situation in the wake of Sicilian expedition (which also coincided with a period of deflation in about 412-403 according to Loomis, 1998: 240-241, 244-245). The lower threshold increased the number of those who could fight at moments of serious demographic and economic crisis but excluded the poorest *thētes*, despite the reduction in the citizen body due to the disenfranchisements of the oligarchic revolution. It should be noted that *thētes* in a better financial position, between 1,000 and 2,000 drachmas, according to fourth-century criteria, and especially those with land over 2.7 hectares or its equivalent in non-land assets, might, in many cases, have possessed hoplite weaponry or at least part of the panoply since they could serve as *epibatai* (see note 33). Anyway, they were probably few in number (see note 61) due to Athens’ demographic crisis during the last years of the war (see note 93). No more than 25,000 by the end of the war, Hansen, 1988: 22-23, 26, 28. For the Five Hundred figure, in my opinion taken from the number of those paying the *eisphora* since 428 (Thuc. 8.65.3; [Arist.] *Ath. Pol.* 29.5: καὶ τοῖς σώμασιν καὶ τοῖς χρήμασιν λειτουργεῖν; Valdés Guía and Gallego, 2010), as a nominal figure (Thuc. 8.92; [Arist.] *Ath. Pol.* 32.3), but with ‘capacity’ to integrate more hoplites – up to 9,000 in [Lys.] 20.13 (For *Polystratus*) and perhaps all those who could certify that they possessed hoplite weapons: τοῖς πεντακισχίλοις ἐψηφίσαντο τὰ πράγματα παραδοῦναι (εἶναι δὲ αὐτῶν ὅποσοι καὶ ὄπλα παρέχονταί). Thuc. 8.97.1; [Arist.] *Ath. Pol.* 33.1-2; Fritz, 1954: 92. For the Five Hundred in the coup of the oligarchs of 411, Kagan, 2013: 187-189; Tuci, 2013: esp. pp. 76-77, 174-176, 200; Bearzot, 2013. This matter merits further study.

Conclusion

In the period between Cleisthenes and the end of the fifth century, the *zeugitai* can be equated with those defined as belonging to the hoplite class, with an estate equivalent, either in land, movable assets, or drachmas, to 3.6 hectares at a minimum. During that period, this would probably have meant an income of 200 drachmas or between 50 and 100 *medimnoi* of grain production (at a minimum), which might have coincided with an estate amounting to a monetary equivalent of 1,000 to 2,000 drachmas (also at a minimum). In fifth-century Athens, this census class would have accounted for between 30% and 40% of the population (or somewhat less, when excluding the non-*zeugitai* hoplites, those hoplites belonging to the upper classes). I argue that the monetary requirements for belonging to this census class were probably set by Cleisthenes or shortly afterwards, given the existence of a part of the population whose income did not rely on agriculture and who could serve as hoplites in times of war. The objective was to regulate the citizenry's military life (with the introduction of the *lēxiarchika grammateia* and the *katalogoi*) with the obligation to fight as hoplites with their own weapons (as seen in the Salamis decree) for those citizens belonging to the *zeugitai* census class, that is, those meeting the minimum monetary requirements. The reforms bore immediate fruit in both Chalcis and Boiotia, and shortly afterwards, in Marathon and Plataea.

The spectacular growth in the number of hoplites – and therefore, in my view, of the *zeugitai* census class – during the *Pentecontaetia* (around 24,000 out of an approximate total of 60,000 citizens in 431), was undoubtedly due, on the one hand, to landholdings in cleruchies and colonies, and, on the other, to the economic prosperity of Athens, deriving in part from the Hegemony, thus expanding the base of those capable of fighting with hoplite weapons onto non-landowners. To this census class, both collectives (colonists/cleruchs plus artisans/merchants) joined those who owned enough land in Attica (3.6 hectares at a minimum). This system was efficient and straightforward. Nevertheless, those belonging to the hoplite/*zeugitai* census class obviously did not possess identical estates since there were certainly significant differences between those who met the minimum requirements (3.6 hectares) and those who almost met those for inclusion into the *hippeis* census class.¹³¹ These economic differences and the obligations of the richest among them to pay the *eisphora* as of 428 would lead to the restructuring of the census classes at the end of the fifth century. This occurred at a time of the revision of Solon's laws, probably resulting in the adaptation of those classes to the well-known Aristotelian measures of production, at a time when the criterion of land ownership was important (as was the case with Phormisios).

¹³¹ Perhaps a *timēma* equivalent to approximately 1.6 talents (10,000 drachmas; see note 74).

Bibliography

- Acton, P. 2014. *Poiesis: Manufacturing in Classical Athens*. Oxford: Oxford University Press.
- Anderson, G. 2003. *The Athenian Experiment: Building an Imagined Political Community in Ancient Attica, 508-490 B.C.* Ann Arbor, MI: The University of Michigan Press.
- Anderson, G. 2007. Why the Athenians Forgot Cleisthenes: Literacy and the Politics of Remembrance in Ancient Athens. In: Cooper, C. (ed.), *The Politics of Orality*, Mnemosyne Supplements 280. Leiden: Brill, 103-127.
- Andreyev, V.N. 1974. Some Aspects of Agrarian Conditions in Attica in the Fifth to Third Centuries B.C. *Eirene*, 12, 5-46.
- Angiolillo, S. 1997. *Arte e Cultura nell'Atene di Pisistrato e dei Pisistratidi*. Bari: Edipuglia.
- Avramidou, A. 2015. Women Dedicators on the Athenian Acropolis and their Role in Family Festivals: The Evidence for Maternal Votives between 530-450 BCE. *Cahiers "Mondes anciens"*, 6, 1-27.
- Bakewell, G. 2007. Written Lists of Military personnel in Classical Athens. In: Cooper, C. (ed.) *Politics of Orality*, Mnemosyne Supplements 280. Leiden: Brill, 87-102.
- Bearzot, C. 2013. *Come si abbatte una democrazia. Tecniche di colpo di Stato nell'Atene antica*. Roma-Bari: Laterza.
- Beazley, J. 1946. *Potter and Painter in Ancient Athens*. Oxford: Oxford University Press.
- Beloch, J. 1885. Das Volksvermögen von Attika. *Hermes*, 20, 237-261.
- Biles, Z. P. and Olson, S. D. (eds.) 2015. *Aristophanes: Wasps*. Oxford: Oxford University Press.
- Bissa, E. 2009. *Governmental Intervention in Foreign Trade in Archaic and Classical Greece*, Mnemosyne Supplements 312. Leiden: Brill.
- Blok, J. and Lardinois, A. P. M. H. (eds.), *Solon of Athens: New Historical and Philological Approaches*, Mnemosyne Supplements 272. Leiden: Brill.
- Blösel, W. 2004. *Themistokles bei Herodot: Spiegel Athens im fünften Jahrhundert: Studien zur Geschichte und historiographischen Konstruktion des griechischen Freiheitskampfes 480 v. Chr.* Stuttgart: Franz Steiner Verlag.
- Böckh, A. 1817. *Die Staatshaushaltung der Athener*, vol 2. Berlin: in der Realschulbuchhandlung.
- Boyd, T. and Jameson M. H. 1981. Urban and Rural Land Division in Ancient Greece. *Hesperia*, 50, 327-342.
- Bravo, B. 1991-1993. I thetes ateniesi e la storia della parola thes. *Annali della Facoltà di Lettere e Filosofia dell'Università degli Studi di Perugia*, 29-30(15/16), 69-97.
- Bresson, A. 2000. *La cité marchande*. Bordeaux: Ausonius Éditions.
- Bresson, A. 2016. *The Making of the Ancient Greek Economy: Institutions, Markets, and Growth in the City-States*. Princeton, NJ: Princeton University Press.
- Brunt, P. A. 1966. Athenian Settlements Abroad in the Fifth Century B.C. In: Badian, E. (ed.) *Ancient Society and Institutions: Studies Presented to Victor Ehrenberg*, Oxford: Blackwell, 71-92.
- Bubelis, W. S. 2016. *Hallowed Stewards: Solon and the Sacred Treasurers of Ancient Athens*. Ann Arbor, MI: University of Michigan Press.
- Bugh, G. R. 1988. *The Horsemen of Athens*. Princeton, NJ: Princeton University Press.
- Buis, E. 2009. Fragmentos de un discurso jurídico: la descontextualización del léxico judicial y su eficacia cómica en Comensales de Aristófanes. *Emerita*, 77(1), 79-108.
- Burford, A. 1977/78. The Family Farm in Ancient Greece. *The Classical Journal*, 73, 162-175.
- Burford, A. 1993. *Land and Labor in the Greek World*. Baltimore, MD: Johns Hopkins University Press.
- Cammack, D. 2019. The Dēmos in Dēmokratia. *Classical Quarterly*, 69, 42-61.
- Camassa, G. 2011. Les (nouvelles) lois de Clisthène et leur histoire. In: Ismard, P. and Azoulay, V., *Clisthène et Lycurgue d'Athènes. Autour du politique dans la cité classique*, Paris: Publications de la Sorbonne, 43-55.

- Canevaro, M. and Esu, A. 2018. Extreme Democracy and Athenian Nomothesia: The Athenaion Politeia and the Reasons of a Silence. In: Bearzot, C., Canevaro, M., Gargiulo T. and Poddighe, E. (eds.), *Athenaion Politeiai tra storia, politica e sociologia: Aristotele e Pseudo-Senofonte, Atti del Convegno Internazionale di Studi (Cagliari 10-12 Maggio 2017)*, Milano: Edizioni universitarie di lettere economia diritto, 105-145.
- Chaniotis, A. 2013. Affective Epigraphy: Emotions in Public Inscriptions of the Hellenistic Age. *Mediterraneo Antico*, 16(2), 745-760.
- Charalambidou, X. Forthcoming. Material Status Markers and Social Networks in Attica: The Evidence from the Cemeteries, Residential Contexts, Cultic Sites (draft).
- Christ, M. R. 2001. Conscription of Hoplites in Classical Athens. *Classical Quarterly*, 51, 398-422.
- Christ, M. R. 2007. The Evolution of the Eisphora in Classical Athens. *Classical Quarterly*, 57, 53-69.
- Connor, W. R. 1988. Early Greek Land Warfare as Symbolic Expression. *Past & Present*, 119, 3-29.
- Crawford, M. H. 2010. From Alcibiades to Diocletian: Slavery and the Economy in the “Longue Durée”. In: Roth, U. (ed.) *By the Sweat of Your Brow: Roman Slavery in its Socio-Economic Setting*, Bulletin of the Institute of Classical Studies 53, Supplement 109, London: Institute of Classical Studies, 61-73.
- Culasso Gastaldi, E. 2015. Composizione e mobilità sociale di una cleruchia: l'esempio di Lemnos e non solo. In: Matthaiou, A. P. and Papazarkadas, P. (eds.) *AXON: Studies in Honor of Ronald S. Stroud*, Volume 2, Athens: Greek Epigraphical Society, 599-638.
- Davies, J. K. 1971. *Athenian Propertied Families*. Oxford: Oxford University Press.
- Davies, J. K. 1996. Strutture e subdivisioni delle “poleis” arcaiche. Le ripartizioni minori”, In: Settis, S. (ed.) *I Greci. Storia Cultura Arte Società, 2 Una storia greca, I. Formazione (fino al VI secolo a.C.)*, Torino: Giulio Einaudi Editore, 599-652.
- Davis, G. 2012. Dating the Drachmas in Solon's Laws. *Historia*, 61(2), 127-158.
- De Sanctis, G. 1912. *Atthís. Storia della Repubblica ateniese dalle origini all'età di Pericle*. Roma: La Nuova Italia.
- de Ste. Croix, G. E. M. 2004. *Athenian Democratic Origins and Other Essays*, edited by D. Harvey and R. Parker. Oxford: Oxford University Press.
- Descat, R. 1990. De l'économie tributaire à l'économie civique. Le rôle de Solon. In: Mactoux, M.-M. and Geny, E. (eds.) *Mélanges P. Lévêque*, 5, Paris: Les Belles Lettres, 85-100.
- Duplouy, A. 2014. Les prétendues classes censitaires soloniennes. À propos de la citoyenneté athénienne archaïque. *Annales. Histoire, Sciences Sociales*, 69(3), 629-658.
- Engen, D. T. 2005. Athenian Owls, the Law of Nikophon, and the Greek Economy. *Historia*, 54(4), 359-381.
- Engen, D. T. 2010. *Honor and Profit: Athenian Trade Policy and the Economy and Society of Greece, 415-307 B.C.* Ann Arbor, MI: Michigan University Press.
- Faraguna, M. 1997. Registrazioni catastali nel mondo Greco: il caso di Atene. *Athenaeum*, 85, 7-37.
- Faraguna, M. 1998. Un nuovo studio sulle «Rationes. Centesimarum». *Dike*, 1, 171-80.
- Faraguna, M. 2014. Citizens, Non-Citizens, and Slaves: Identification Methods in Classical Greece. In: Depaw, M. and Coussement, S. (eds.), *Identifiers and Identification Methods in the Ancient World. Legal Documents in Ancient Societies III*, Leuven: Peeters, 165-184.
- Faraguna, M. 2015. Citizen Registers in Archaic Greece: The Evidence Reconsidered. In: Matthaiou, A. P. and Papazarkadas, N. (eds.) *AXON: Studies in Honor of Ronald S. Stroud*, Athens: Greek Epigraphical Society, 649-667.
- Feyel, C. 2006. *Les artisans dans les sanctuaires grecs aux époques classique et hellénistique à travers la documentation financière en Grèce*, Bibliothèque des Écoles françaises d'Athènes et de Rome 318. Paris: École française d'Athènes.
- Figureira, T. J. 1984. The Ten Archontes of 579/8 at Athens. *Hesperia*, 53, 447-473.

- Figueira, T. J. 1986. "Sitopolai" and "Sitophylakes" in Lysias' "Against the Graindealers": Governmental Intervention in the Athenian Economy. *Phoenix*, 40(2), 149-171.
- Figueira, T. J. 1991. *Athens and Aigina in the Age of Imperial Colonization*. Baltimore, MD: Johns Hopkins University Press.
- Figueira, T. J. 2008. Colonisation in the Classical Period. In: Tsetschkladze, G. R. (ed.) *Greek Colonisation: An Account of Greek Colonies and Other Settlements Overseas*, Mnemosyne Supplements 193, Leiden: Brill, 427-523.
- Finley, M. I. 1951. *Studies in Land and Credit in Ancient Athens, 500-200 B.C.: The Horos-Inscriptions*. New Brunswick, NJ: Rutgers University Press.
- Finley M. I. 1973. *Democracy Ancient and Modern*. New Brunswick, NJ: Rutgers University Press.
- Flaig, E. 2011. La révolution athénienne de 507. Un mythe fondateur «oublié». In: Ismard, P. and Azoulay, V. (eds.) *Clisthène et Lycurgue d'Athènes. Autour du politique dans la cité classique*, Histoire ancienne et médiévale 109, Paris: Éditions de la Sorbonne, 59-66.
- Forbes, H. A. 2000. The Agrarian Economy of the Ermionidha around 1700: An Ethnohistorical Reconstruction. In: Buck Sutton, S. (ed.) *Contingent Countryside, Settlement, Economy and Land Use in the Southern Argolid since 1700*, Stanford, CA: Stanford University Press, 41-70.
- Foxhall, L. 1997. A View from the Top: Evaluating the Solonian Property Class. In: Mitchell, L. G. and Rhodes, P.J. (eds.) *The Development of the Polis in Archaic Greece*, London: Routledge, 113-136.
- Frost, F.J. 1984. The Athenian Military before Cleisthenes. *Historia*, 33, 283-294.
- Gabrielsen, V. 1994. *Financing the Athenian Fleet: Public Taxation and Social Relations*. Baltimore, MD: John Hopkins University Press.
- Gabrielsen, V. 2002a. The Impact of Armed Forces on Government and Politics in Archaic and Classical Greek Poleis: A Response to Hans van Wees. In: Chaniotis, A. and Ducrey, P. (eds.) *Army and Power in the Ancient World*, Heidelberger Althistorische Beiträge und Epigraphische Studien 37, Stuttgart: Franz Steiner Verlag, 83-98.
- Gabrielsen, V. 2002b. Socio-economic Classes and Ancient Greek Warfare. In: Ascani, K., Gabrielsen, V., Kvist, K. and Rasmussen, A. H. (eds.) *Ancient History Matters: Studies Presented to Jens Erik Skydsgaard on his Seventieth Birthday*, Roma: L'Erma di Bretschneider, 203-220.
- Gallant, T. W. 1991 *Risk and Survival in Ancient Greece: Reconstructing the Rural Domestic Economy*. Stanford, CA: Stanford University Press.
- Gallego, J. 2016. El campesinado y la distribución de la tierra en la Atenas del s.IV a.C. *Gerión*, 34, 43-75.
- Gallego, J. 2022. La cleruquía ateniense en Lesbos: Distribución de la tierra y explotación de los nativos. *Nova Tellus*, 40(1), 1-36.
- Gallego, J. Forthcoming. La Atenas democrática y la sumisión de Lesbos y Melos: mecanismos de dominación y explotación imperialista. In: Currás, Brais X. and Conceição Lopes, M. (eds.) *As faces do império: mecanismos de controlo e estratégias de resistência* (XLI Colóquio Internacional do GIREA), Coimbra.
- Gallo, L. 1987. Salari e inflazione: Atene tra V e IV sec. A. C., *Annali della Scuola Normale Superiore di Pisa*, 17(1), 19-63.
- Garnsey, P. 1988. *Famine and Food Supply in the Graeco-Roman World: Responses to Risk and Crisis*. Cambridge: Cambridge University Press.
- Gauthier, P. 1966. Les clérouques de Lesbos et la colonisation athénienne au V^e siècle. *Revue des Études Grecques*, 79, 64-88.
- Gomme, A. W. 1933. *The Population of Athens in the Fifth and Fourth Centuries B.C.* Oxford: Oxford University Press.
- Graham, A. J. 1991 [1964]. *Colony and Mother City in Ancient Greece*. Manchester: Manchester University Press.

- Graham, D. W. 2008. Socrates on Samos. *Classical Quarterly*, 58(1), 308-313.
- Guarducci, M. 1980. Sull'artista nell'Antichità classica. In: Coarelli, F. (ed.) *Artisti e artigiani in Grecia. Guida storica e critica*, Roma-Bari: Laterza, 7-101.
- Halstead, P. 1987. Traditional and Ancient Rural Economy in Mediterranean Europe: Plus ça change. *Journal of Hellenic Studies*, 107, 77-87.
- Halstead, P. 2014. *Two Oxen Ahead: Pre-Mechanised Farming in the Mediterranean*. Chichester: Wiley Blackwell.
- Hammond, N. G. L. 1982. The Narrative of Herodotus VII and the Decree of Themistocles at Troezen. *Journal of Hellenic Studies*, 102, 75-93.
- Hammond, N. G. L. 1986. The Manning of the Fleet in the Decree of Themistokles. *Phoenix*, 40, 143-148.
- Hammond, N. G. L. 1988. The Expedition of Xerxes. In: Boardman, J., Hammond, N. G. L., Lewis, D. M. and Ostwald, M. (eds.), *The Cambridge Ancient History, Volume IV: Persia, Greece and the Western Mediterranean c. 525 to 479 B.C.*, Cambridge: Cambridge University Press, 518-591.
- Hansen, M. H. 1985. *Demography and Democracy: The Number of Athenian Citizens in the Fourth Century B.C.* Herning: Systime.
- Hansen, M. H. 1988a. *Three Studies in Athenian Demography*, Det Kongelige Danske Videnskabernes Selskab, Historisk-filosofiske Meddelelser 56. Copenhagen: Munksgaard.
- Hansen, M. H. 1988b. Demography and Democracy Once Again. *Zeitschrift für Papyrologie und Epigraphik*, 75, 189-193.
- Hansen, M. H. 1991. *The Athenian Democracy in the Age of Demosthenes: Structure, Principles, and Ideology*. Oxford: Oxford University Press.
- Hansen, M. H. 2006. *Studies in the Population of Aigina, Athens and Eretria*. Copenhagen: Munksgaard.
- Hansen, M. H. 2010. The Concepts of Demos, Ekklesia, and Dikasterion in Classical Athens. *Greek, Roman, and Byzantine Studies*, 50, 499-536.
- Hanson, V. D. 1995. *The Other Greeks: The Family Farm and the Agrarian Roots of Western Civilization*. New York: Free Press.
- Harris, D. 1995. *The Treasures of the Parthenon and Erechtheion*, Oxford: Oxford University Press.
- Harris, E. M. 2002. Workshop, Marketplace and Household: The Nature of Technical Specialisation in Classical Athens and its Influence on Economy and Society. In: Cartledge, P., Cohen, E. E. and Foxhall, L. (eds.) *Money, Labour and Land: Approaches to the Economies of Ancient Greece*, London: Routledge, 67-99.
- Harris, E. M. 2019. Aeschylus' *Eumenides*: The Role of the Areopagus and Political Discourse in Attic Tragedy. In: Markantonatos, A. and Volonaki, E. (eds.) *Poet and Orator: A Symbiotic Relationship in Democratic Athens*, Berlin: De Gruyter, 389-419.
- Harris, E. M. 2020. Many Ancient Greek Occupations, but Few Professions. In Stewart, E., Harris, E.M. and Lewis, D. (eds.), *Skilled Labour and Professionalism in Ancient Greece and Rome*, Cambridge: Cambridge University Press, 29-67.
- Harris, E. M., Lewis, D. and Woolmer, M. (eds.). 2016. *The Ancient Greek Economy: Markets, Households and City-States*. Cambridge: Cambridge University Press.
- Hedrick, G. W. Jr. 1991. Phratry Shrines of Attica and Athens. *Hesperia*, 60, 241-268.
- Herzogenrath-Amelung, T. 2017. Social Status and Combat Reality of Classical Greek *epibatai*. *Historia*, 66(1), 45-64.
- Himmelman, N. 1980. La remunerazione dell'attività artistica nelle iscrizioni edilizie d'età classica. In: Coarelli, F. (ed.), *Artisti e artigiani in Grecia. Guida storica e critica*, Roma-Bari: Laterza, 133-152.
- Hochscheid, H. 2020. Professionalism in Archaic and Classical Sculpture in Athens: The Price of *Technē*. In Stewart, E., Harris, E. M. and Lewis, D. (eds.), *Skilled Labour and Professionalism in Ancient Greece and Rome*, Cambridge: Cambridge University Press, 205-229.

- Hodkinson, S. 1988. Animal Husbandry in the Greek Polis. In: Whittaker, C. R. (ed.), *Pastoral Economies in Classical Antiquity*, Cambridge: Cambridge University Press, 35-74.
- Hornblower, S. 2008. *A Commentary on Thucydides, III: Books 5.25-8.109*. Oxford: Oxford University Press.
- Huffman, C. A. 2012. *Aristoxenus of Tarentum: Texts and Discussion*. New Brunswick, NJ: Transaction Publishers.
- Hunt, P. 1998. *Slaves, Warfare, and Ideology in the Greek Historians*. Cambridge: Cambridge University Press.
- Isager, S. and Skydsgaard, J. E. 1992. *Ancient Greek Agriculture: An Introduction*. London: Routledge.
- Ismard, P. 2010. *La cité des réseaux. Athènes et ses associations VIe-Ier siècle av. J.-C.* Paris: Publication de la Sorbonne.
- Jameson, M. H. 1960. A Decree of Themistokles from Troizen. *Hesperia*, 29(2), 198-223.
- Jameson, M. H. 1963. The Provisions for Mobilisation in the Decree of Themistokles. *Historia*, 12(4), 385-404.
- Jameson, M. H. 1977/78. Agriculture and Slavery in Classical Athens. *The Classical Journal*, 73(2), 122-145.
- Jameson, M. H. 1994. Class in the Ancient Greek Countryside. In: Doukellis, P. and Mendoni, L. (eds.) *Structures rurales et sociétés antiques*, Paris: Les Belles Lettres, 55-63.
- Jameson, M. H. 2014. *Cults and Rites in Ancient Greece: Essays on Religion and Society*. Cambridge: Cambridge University Press.
- Johansson, M. 2001. The Inscription from Troizen: A Decree of Themistocles? *Zeitschrift für Papyrologie und Epigraphik*, 137, 69-92.
- Jones, A. H. M. 1957. *Athenian Democracy*. Oxford: Basil Blackwell.
- Jordan, B. 1975. *The Athenian Navy in the Classical Period*. Berkeley, CA: University of California Press.
- Kagan, D. 2013. *New History of the Peloponnesian War*. Ithaca, NY: Cornell University Press.
- Kallet, L and Kroll, J. H. 2020. *The Athenian Empire: Using Coins as Sources*. Cambridge: Cambridge University Press.
- Karoglou, K. 2010. *Attic Pinakes: Votive Images in Clay*. Oxford: Oxford University Press.
- Keesling, C. M. 2003. *The Votive Statues of the Athenian Acropolis*. Cambridge: Cambridge University Press.
- Kraay, C. M. 1956. The Archaic Owls of Athens: Classification and Chronology. *Numismatic Chronicles*, 16, 43-68.
- Kroll, J. H. 1981. From Wappenmünzen to Gorgoneia to Owls. *American Numismatic Society Museum Notes*, 26, 1-32
- Kroll, J. H. 2000. Review of Leslie Kurke, *Coins, Bodies, Games, and Gold: The Politics of Meaning in Archaic Greece*. *The Classical Journal*, 96, 85-90.
- Kron, G. 2011. The Distribution of Wealth at Athens in Comparative Perspective. *Zeitschrift für Papyrologie und Epigraphik*, 179, 129-138.
- Kurke, L. 1999. *Coins, Bodies, Games and Gold: The Politics of Meaning in Archaic Greece*. Princeton, NJ: Princeton University Press.
- Lambert, S. 1993. *The Phratries of Attica*. Ann Arbor, MI: Michigan University Press.
- Lambert, S. 1997. *Rationes Centesimarum: Sales of public land in Lykourgan Athens*. Amsterdam: J.C. Gieben.
- Lauter, H. 1980. La posizione sociale dell'artista figurativo nella Grecia classica. In: Coarelli, F. (ed.) *Artisti e artigiani in Grecia. Guida storica e critica*, Roma-Bari: Laterza, 105-29.
- Lewis, D. 2020. Labour Specialization in the Athenian Economy: Occupational Hazards. In Stewart, E., Harris, E.M. and Lewis, D. (eds.), *Skilled Labour and Professionalism in Ancient Greece and Rome*, Cambridge: Cambridge University Press, 129-174.
- Loomis, W. T. 1998. *Wages, Welfare Costs and Inflation in Classical Athens*. Ann Arbor, MI: Michigan University Press.
- Lytle, E. 2009. Review of Feeding the Democracy: The Athenian Grain Supply in the Fifth and Fourth Centuries BC, by Alfonso Moreno. Oxford: Oxford University Press, 2007. *Phoenix*, 63(3-4), 398-400.

- Makres, A. and Scafuro, A. 2019. The Archaic Inscribed Bronzes on the Acropolis of Athens. In: Palagia, O. and Sioumpara, E. (eds.) *From Hippias to Kallias. Greek Art in Athens and Beyond; 527-449 B.C.*, Athens: Acropolis Museum Editions, 63-77.
- Markle, M. M. 1985. Jury Pay and Assembly Pay at Athens. *History of Political Thought*, 6, 265-97.
- Mavrogordatos, G. T. 2011. Two Puzzles Involving Socrates. *Classical World*, 105(1), 3-23.
- Migeotte, L. 2011. Compte rendu: Alfonso Moreno, Feeding the Democracy: The Athenian Grain Supply in the Fifth and Fourth Centuries BC, Oxford, University Press, 2007. *L'Antiquité Classique*, 80, 462-464.
- Moreno, A. 2007. *Feeding the Democracy: The Athenian Grain Supply in the Fifth and Fourth Centuries BC*. Oxford: Oxford University Press.
- Moreno, A. 2009. 'The Attic Neighbour': The Cleruchy in the Athenian Empire. In: Ma, J., Papazarkadas, N. and Parker, R. (eds.) *Interpreting the Athenian Empire*, London: Duckworth, 211-221.
- Morris, I. 1987. *Burial and Ancient Society: The Rise of the Greek City-State*. Cambridge: Cambridge University Press.
- Morris, I. 2005. *The Athenian Empire (478-404)*. Princeton, NJ: Stanford Working Papers in Classics.
- Morrison, J. S., Coates, J. F. and Rankov, N. B. 2000. *The Athenian Trireme: The History and Reconstruction of an Ancient Greek Warship*. Cambridge: Cambridge University Press.
- Munn, M. 2000. *The School of History: Athens in the Age of Socrates*. Berkeley, CA: University of California Press.
- Nagle, D. B. 2006. *The Household as the Foundation of Aristotle's Polis*. Cambridge: Cambridge University Press.
- Nails, D. 2002. *The People of Athens: A Prosopography of Plato and Other Socratic*. Indianapolis, IN: Hackett Pub.
- Nenci, G. 1964. Una ignorata revisione delle liste dei cittadini ateniesi nel 424/3 a.C. *Rivista di filologia e di istruzione classica*, 92, 173-180.
- Ober, J. 1989. *Mass and Elite in Democratic Athens: Rhetoric, Ideology, and the Power of the People*. Princeton, NJ: Princeton University Press.
- Ober, J. 1998. Revolution Matters: Democracy as Demotic Action (a response to Kurt. A. Raaflaub). In: Morris, I. and Raaflaub, K. A. (eds.) *Democracy 2500? Questions and Challenges*, Dubuque, IA: Kendall/Hunt Publishing Company, 67-85.
- Okada, T. 2017. Zeugitai and Hoplites: A Military Dimension of the Solon's Property Classes Revisited. *Japan Studies in Classical Antiquity*, 3, 17-37.
- Okada, T. 2018. Some Notes on IG I³ 1032 and the Crews of Athenian Triremes in the Fifth Century BCE. In: Amann, P., Corsten, T., Mitthof, F. and Taeuber, H. (eds.), *Sprachen – Schriftkulturen – Identitäten der Antike. Beiträge des XV. Internationalen Kongresses für Griechische und Lateinische Epigraphik*, Wien: Holzhausen, 1-11.
- Osborne, R. 1987. *Classical Landscape with Figures: The Ancient Greek City and its Countryside*. London: George Philip.
- Osborne, R. and Rhodes, P. J. 2017. *Greek Historical Inscriptions 478-404 BC*. Oxford: Oxford University Press.
- Pébarthe, C. 2009. Émigrer d'Athènes. Clérouques et colons aux temps de la domination athénienne sur l'Égée au Ve siècle a.C. In: Moatti, C., Kaiser, W. and Pébarthe, C. (eds.) *Le monde de l'itinérance en Méditerranée de l'antiquité à l'époque moderne. Procédures de contrôle et d'identification*, Bordeaux: Ausonius Éditions, 367-390.
- Plácido, D. 2002. Guerre et marché d'esclaves dans la Grèce Classique. In: Garrido-Hory, M. (ed.), *Routes et marches d'esclaves. 26ème colloque du GIREA, Besançon, 27-29 septembre 2001 (Esclavage et dépendance)*, Paris: Presses universitaires de Franche-Comté, 21-28.
- Poddighe, E. 2002. *Nel segno di Antipatro. Leclissi Della democrazia ateniese dal 323/2 al 319/8 a.C.* Roma: Carocci.
- Porter, J. 2019. Slavery and Athens' Economic Efflorescence: Mill Slavery as a Case Study. *Mare Nostrum*, 10, 25-50.
- Pritchard, D. M. 2019. *Athenian Democracy at War*. Cambridge: Cambridge University Press.
- Pritchard, D. M. 2021. The Armed Forces. In: Neils, J. and Rogers, D. (eds.) *The Cambridge Companion to Ancient Athens*. Cambridge: Cambridge University Press, 405-418.

- Pritchett, W. K. 1956. Attic Stelai, II. *Hesperia*, 25(3), 178-328.
- Raaflaub, K. A. 1997. Soldiers, Citizens, and the Evolution of the Early Greek Polis. In: Mitchell, L. G. and Rhodes, P. J. (eds.) *The Development of the Polis in Archaic Greece*, London: Routledge, 49-59.
- Rathbone, D. and von Reden, S. 2015. Mediterranean Grain Prices in Classical Antiquity. In: van der Spek, R. J., van Zanden, J. L. and van Leeuwen, B. (eds.) *A History of Market Performance: From Ancient Babylonia to the Modern World*, London: Routledge, 149-235.
- Raubitschek, A. E. 1949. *Dedications from the Athenian Akropolis: A Catalogue of the Inscriptions of the Sixth and Fifth Centuries B.C.* Cambridge, MA: Archaeological Institute of America.
- Rhodes, P. J. 1972. *The Athenian Boule*. Oxford: Clarendon Press.
- Rhodes, P. J. 1981. *A Commentary on the Aristotelian Athenaion Politeia*. Oxford: Oxford University Press.
- Rhodes, P. J. 1982. Problems in Athenian Eisphora and Liturgies. *American Journal of Ancient History*, 7, 1-19.
- Rhodes, P. J. 1988. *Thucydides: History II*. Warminster: Aris & Phillips.
- Rhodes, P. J. 1997. Introduction. In: Mitchell, L. G. and Rhodes, P. J. (eds.) *The Development of the Polis in Archaic Greece*, London: Routledge, 1-8.
- Rhodes, P. J. 2006. The Reforms and Laws of Solon: An Optimistic View. In: Blok, J. and Lardinois, A. P. M. H. (eds.) *Solon of Athens: New Historical and Philological Approaches*, Mnemosyne Supplements 272, Leiden: Brill, 248-260.
- Rosivach, V. J. 2002. The Requirements for the Solonic Classes in Aristotle, AP 7.4. *Hermes*, 130, 36-47.
- Rosivach, V. J. 2012. Thetes in Thucydides 6.43.1. *Hermes*, 140(2), 131-139.
- Sallares, R. 1991. *The Ecology of the Ancient Greek World*. Ithaca, NY: Cornell University Press.
- Samons II, L. J. 2003. Review to Coins, Bodies, Games, and Gold: The Politics of Meaning in Archaic Greece by Leslie Kurke. *International Journal of the Classical Tradition*, 10(2), 281-286.
- Scheidel, W. 2010. Real Wages in Early Economies: Evidence for Living Standards from 1800 BCE to 1300 CE. *Journal of the Economic and Social History of the Orient*, 53(3), 425-462.
- Shear J. L. 2011. *Polis and Revolution: Responding to Oligarchy in Classical Athens*. Cambridge: Cambridge University Press.
- Siewert, P. 1982. *Die Trittyen Attikas und die Heeresform des Kleisthenes*. Munich: C. H. Beck.
- Stanton, G. R. 1984. The Tribal Reform of Kleisthenes the Alkmeonid. *Chiron*, 14: 1-41.
- Stroud, R. S. 1971. Inscriptions from the North Slope of the Acropolis I. *Hesperia* 40, 146-204.
- Stroud, R. S. 1998. *The Athenian Grain-Tax Law of 374/3 B. C.*, *Hesperia* Supplement 29. Princeton, NJ: American School of Classical Studies at Athens.
- Tarditi, C. 2016. *Bronze Vessels from the Acropolis. Style and Decoration in Athenian Production between the Sixth and Fifth Centuries BC*, Thiasos Monografie 7. Rome: Edizioni Quasar.
- Thompson, H. A. 1984. The Athenian Vase-Painters and Their Neighbors. In: Rice, P. M. (ed.) *Pots and Potters: Current Approaches to Ceramic Archaeology*, Monography 24, Los Angeles, CA: Cotsen Institute of Archaeology, 7-19.
- Thomsen, R. 1964. *Eisphora: A Study of Direct Taxation in Ancient Athens*, Humanitas 3. Copenhagen: Gyldendal.
- Trevett, J. 2001. Coinage and Democracy at Athens. In: Meadows, A. and Shipton, K. (eds.), *Money and Its Uses in the Ancient Greek World*, Oxford: Oxford University Press, 23-34.
- Tuci, P. A. 2013. *La fragilità della democrazia. Manipolazione istituzionale ed eversione nel colpo di Stato oligarchico del 411 a.C. ad Atene*. Milano: LED Edizioni Universitarie.
- Valdés Guía, M. 2005. La position sociale des *dèmiourgoi* et leur intégration dans la *politeia* au VI^e siècle. *Dialogues d'histoire ancienne*, 31, 9-24.
- Valdés Guía, M. 2014. Patrimonio de Demóstenes como *hegemón* de su "sinmoría": *eisphorá* y *proeisphorá* tras el 378. *Emerita*, 82(2), 249-271.

- Valdés Guía, M. 2018. Reformas en las cargas fiscales y sociedad ateniense en la primera mitad del s.IV: entre los problemas financieros y la renovación imperialista. In: Pascual, J., Antela-Bernárdez, B. and Gómez Castro, D. (eds.) *El mundo griego en el siglo IV a.C. Pervivencias, cambios y transformaciones*, Monografía ICCA, Madrid: Universidad Autónoma de Madrid, 89-107.
- Valdés Guía, M. 2019a. Historiografía de los *thetes*. In: Alvar Nuño, A. (ed.) *Historiografía de la esclavitud. Groupe International de Recherche sur l'Esclavage dans l'Antiquité. Volume XXXIX*, Anejos de la Revista de Historiografía 10, Madrid: Universidad Carlos III, 235-260.
- Valdés Guía, M. 2019b. The Social and Cultural Background of Hoplite Development in Archaic Athens: Peasants, Debts, Zeugitai and Hoplethes. *Historia*, 68(4), 388-412.
- Valdés Guía, M. 2020. Sócrates, pobre como un *thes*. In: Reduzzi Merola, F. Bramante, M.V. and Caravaglios, A. (eds.), *Le realtà della schiavitù: identità e biografie da Eumeo a Frederick Douglass. Les réalités de l'esclavage: identités et biographies d'Eumée à Frederick Douglass. Atti del XL Convegno internazionale del GIREA (Napoli, 18-20 dicembre 2017)*, Napoli: Satura Editrice, 107-127.
- Valdés Guía, M. 2021. A New Reading on Solon's Law on Stasis: The Sovereignty of the Demos. *Dialogues d'histoire ancienne*, 47(2), 187-219.
- Valdés Guía, M. 2022 (Forthcoming). Thetes epibatai in Fifth-Century Athens. *Revue des Études Anciennes*.
- Valdés Guía, M. and Gallego, J. 2010. Athenian Zeugitai and the Solonian Census Classes: New reflections and Perspectives. *Historia*, 59(3), 257-281.
- van Alfen, P. G. 2012. Problems in the Political Economy of Archaic Greek Coinage. *Notae Numismaticae*, 7, 13-32.
- van Effenterre, H., 1976. Clisthène et les mesures de mobilisation. *Revue des Études Grecques*, 89, 1-17.
- van Wees, H. 1999. The Mafia of Early Greece: Violent Exploitation in the Seventh and Sixth Centuries BC. In: Hopwood, K. (ed.), *Organized Crime in Antiquity*, London: Duckworth, 1-51.
- van Wees, H. 2001. The Myth of the Middle-Class Army: Military and Social Status in Ancient Athens. In: Bekker-Nielsen T. and Hannestad, L. (eds.) *War as a Cultural and Social Force: Essays on Warfare in Antiquity*, Copenhagen: Det kongelige danske videnskabernes selskab, 45-71.
- van Wees, H. 2002. Tyrants, Oligarchs and Citizen Militia. In: Chaniotis, A. and Ducrey, P. (eds.) *Army and Power in the Ancient World*, Heidelberger Althistorische Beiträge und Epigraphische Studien 37, Stuttgart: Franz Steiner Verlag, 61-82.
- van Wees, H. 2004. *Greek Warfare: Myths and Realities*. London: Duckworth.
- van Wees, H. 2006. Mass and Elite in Solon's Athens: The Property Classes Revisited. In: Blok, J. and Lardinois, A. P. M. H. (eds.) *Solon of Athens: New Historical and Philological Approaches*, Mnemosyne Supplements 272, Leiden: Brill, 351-389.
- van Wees, H. 2011. Demetrius and Draco: Athens' Property Classes and Population in and Before 317 BC. *Journal of Hellenic Studies*, 131, 95-114.
- van Wees, H. 2013a. Farmers and Hoplites: Models of Historical Development. In: Kagan, D. and Viggiano, G. F. (eds.), *Men of Bronze: Hoplite Warfare in Ancient Greece*, Princeton, NJ: Princeton University Press, 122-255.
- van Wees, H. 2013b. *Ships and Silver: A Fiscal History of Archaic Athens*. London: I. B. Tauris.
- van Wees, H. 2018. Citizens and Soldiers in Archaic Athens. In: Duploux, A. and Brock, R. W. (eds.) *Defining Citizenship in Archaic Greece*, Oxford: Oxford University Press, 103-114.
- von Fritz, K. 1954. The Composition of Aristotle's Constitution of Athens and the So-Called Draconian Constitution. *Classical Philology*, 49, 73-93.
- Wallace, W. P. 1962. The Early Coinages of Athens and Euboia. *Numismatic Chronicle*, 2, 23-42.
- Webster, T. B. L. 1972. *Potter and Patron in Ancient Athens*. London: Methuen.
- Whitehead, D. 1981. The Archaic Athenian Zeugitai, *Classical Quarterly*, 31: 282-286.

- Whitehead, D. 1986. *The Demes of Attica, 508/7-ca. 250 B.C.: A Political and Social Study*. Princeton, NJ: Princeton University Press.
- Williams, D. 1995. Potter, Painter, and Purchaser. In: Verbanck-Piérard, A. and Viviers, D. (eds.) *Culture et Cité. L'avènement d'Athènes à l'époque archaïque*, Bruxelles: Fondation Archéologique de l'Université Libre de Bruxelles, 139-160.
- Zaccarini, M. 2015. Thucydides' Narrative on Naval Warfare: Epibatai, Military Theory, Ideology. In: Lee, G., Whittaker, H. and Wrightson, G. (eds.) *Ancient Warfare: Introducing Current Research*, vol. 1, Newcastle: Cambridge Scholars, 210-228.
- Zaccarini, M. 2018. The Fate of the Lawgiver: The Invention of the Reforms of Ephialtes and the Patrios Politeia. *Historia*, 67(4), 495-512.
- Zelnick-Abramovitz, R. 2004. Settlers and Dispossessed in the Athenian Empire. *Mnemosyne*, 57(3), 325-345.
- Zimmermann, H. D. 1974. Freie Arbeit, Preise und Löhne. In: Welskopf, E. C. (ed.), *Hellenische Poleis I*, Berlin: Akademie-Verlag, 92-107.
- Ziomecki, J. 1975. *Les représentations d'artisans sur les vases attiques*. Wrocław: Zakład narodowy imienia Ossolińskich.

Abstract (Spanish) | Resumen

El estatus de los *zeugitai* como hoplitas de clase media ha sido objeto de una considerable atención en las últimas décadas. Se ha discutido tanto lo que respecta a los requisitos de propiedad para la inclusión en esta clase censitaria como el papel de los *zeugitai* en el ejército. Hace más de una década se empezaron a cuestionar los puntos de vista establecidos sobre los *zeugitai*, señalándose a partir de las medidas proporcionadas por la *Constitución de los atenienses*, que el requisito de propiedad para pertenecer a esta clase era una cantidad de tierra muy elevada (8,7 hectáreas, luego incrementado a un mínimo de 13,8 hectáreas: van Wees, 2001; 2006; 2013a). En un trabajo sobre este tema, Valdés y Gallego (2010) argumentaron en contra de esta elevación del estatus de los *zeugitai* y sugirieron que esta clase correspondía a aquellos con un patrimonio considerado de “rango hoplita”, es decir, en posesión de tierras, como mínimo, de entre 3,6 a 5,4 hectáreas. Estos autores relacionaban las medidas de producción aristotélicas de las diferentes clases (500, 300 y 200: [Arist.] *Ath. Pol.* 7.4), con la revisión del código de leyes de Atenas a finales del siglo V, que llevó a una redefinición de las clases censitarias con el objetivo de adecuarlas al pago de la *eisphora*, instaurada para Atenas durante la guerra (428 a.C.).

El objetivo de este trabajo es partir de esta teoría para conocer mejor quiénes fueron los *zeugitai* en términos económicos durante el siglo V, después de las reformas clístenicas. Se argumenta que las clases censitarias se definieron en términos monetarios a principios de la isonomía, cuando se produjo una drástica reconstrucción del ejército con la introducción del reclutamiento de hoplitas *ek katalogou* en Atenas. Al mismo tiempo, se habría regulado la obligación de combatir y de poseer armamento hoplita para los pertenecientes de la clase de los *zeugitai*, que a partir de entonces se inscribieron en las nuevas listas establecidas para el reclutamiento de hoplitas por tribus. Esta forma de reclutamiento se empleó durante al menos un siglo, hasta finales del siglo V, época de importantes cambios con la redefinición económica de las clases censitarias, especialmente la de los *zeugitai*, para adaptarlas al sistema de *eisphora* vigente hasta los años 370s.

Desde esta perspectiva se revisan los escasos testimonios sobre los *zeugitai* en el siglo V (arcontes, clerucos y promoción de clase censitaria) así como la discusión académica sobre el uso militar de las clases censitarias en esa época. A continuación, se atiende a la demografía de los hoplitas y de los *zeugitai*, así como a las fuentes de riqueza (no basadas únicamente en la tierra) de la clase hoplítica, y se señala que una proporción de hoplitas/*zeugitai*, creciente en el s.V, obtendría sus recursos de propiedades no fundiarias. Por último, en la última sección, se defiende la hipótesis del establecimiento de equivalencias monetarias para las clases censitarias en el contexto de las reformas militares de Clístenes, momento en el que el mínimo requerido para ser *zeugites* se definiría tanto por la propiedad de la tierra (con un mínimo de 3,6 hectáreas), como por el equivalente en dracmas de esos valores fundiarios.

En consecuencia, este trabajo reexamina y contribuye a consolidar la idea de que, desde la época de Clístenes y a lo largo del siglo V, los *zeugitai* formaban una clase censitaria de propietarios medianos con una propiedad equivalente a un mínimo de 3,6 hectáreas. Sostiene, asimismo, que a finales del siglo VI, se estableció una equivalencia entre la propiedad de la tierra y la moneda (en dracmas), y que, finalmente, se utilizaron las clases censitarias como criterio económico para el reclutamiento del catálogo hoplita. Ya en el siglo VI, pero especialmente durante la Pentecontecia, el número de hoplitas/*zeugitai* creció sustancialmente debido tanto a la prosperidad económica

(diversidad de fuentes de riqueza para acceder a la clase de los *zeugitai*) como a la fundación de colonias y cleruquías. Muchos ciudadanos sin tierras, pero en posesión de suficiente riqueza se incluyeron en esta clase censitaria e, incluso algunos, como el famoso Anthemion ([Arist.] *Ath. Pol.* 7.4), pudieron ascender aún más en el escalafón socio-económico, llegando a la de los *hippeis*.