

# ATHENIAN *ZEUGITAI* AND THE SOLONIAN CENSUS CLASSES: NEW REFLECTIONS AND PERSPECTIVES\*

## Introduction

It has recently been claimed that the Solonian *zeugitai* were, according to Lin Foxhall (1997), moderately well-off farmers, or, in the opinion of Hans van Wees (2001; 2006), landowners who were members of the Athenian leisured class (with at least 8 or 9 hectares excluding fallow land, or some 16 ha if land periodically left uncultivated is included). This would mean that the *zeugitai* belonged to the wealthy elite that made up approximately 15 or 20 % of the citizen population of the archaic and classical periods. As a result, van Wees has directly called into question the very existence of a “middle class” of farmers and suggested that the *thetes* regularly served in the Athenian army as hoplites, but on a voluntary basis.

The principal arguments put forward by both Foxhall and van Wees rely on the evidence of Aristotle’s *Athenian Constitution* (*Ath. Pol.* 7.4), reproduced by Plutarch (*Sol.* 18.1–2) and possibly by Pollux (8.130) in a rather different version.

In this article we propose to reflect on the *zeugitai* of the archaic and classical periods offering new arguments in favour of the hypothesis that supports their importance as a broad group of middling peasants, who reached the level of hoplites, owned a yoke of oxen and, according to modern calculations, possessed a certain level of income derived from an average landholding of about 4–6 ha<sup>1</sup>.

We shall develop our argument on the basis of three fundamental questions. First, we shall analyse the arguments that suggest that the great majority of the *zeugitai* in the fifth century were a class of middling peasants that made up the bulk of the Athenian hoplites. So they did not belong to a “leisured” class, and on occasions aligned themselves with the *thetes*. Secondly, we shall look at the formation and consolidation of this “class” of hoplite peasants in Athens during the archaic era. Finally, we shall reflect on the conditions in the late fifth or fourth century that paved the way for the situation described (and the measures) we find in Aristotle and Pollux associated with Solon’s reforms.

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1 We use the term “peasant” regarding the *zeugitai* because we do not think that the peasant has to be considered an exploited rural producer. On occasion we use “farmer” in a descriptive sense. See Gallego 2001; 2007.

1. The *Zeugitai* of the Fifth Century as the Bulk of the Attic Peasantry

In this section we shall analyse a collection of sources that enable us to consider the fifth-century *zeugitai* as the greater part of the Athenian hoplites and, therefore, as a broad group of middling peasants, most of whom worked their plots with their family – and possibly slave(s) –, although they did not constitute a completely homogeneous class. Hence they did not generally belong to the Athenian leisured class (except perhaps for a minority).

1.1. As Geoffrey de Ste. Croix (2004: 13, 21) has pointed out in a recently published study, it seems that in the fifth century the *thetes* as a census class<sup>2</sup> did not normally fight as hoplites. A fragment of Aristophanes' *Daitaleis* cited by Harpocration (*s. v. thetes kai thetikon*) says that the *thetes* do not fight<sup>3</sup>. It is true that in the Aristophanic corpus the verb *strateuomai* is not used to allude exclusively to the hoplite service, but to the army in a general way<sup>4</sup>; and there is even a case in which Aristophanes (*Th.* 232) uses *strateuomai* in connection with serving as a *psilos*. But Harpocration records another quotation, this time from Antiphon's *Against Philinus*, which states: "to make all the *thetes* hoplites"<sup>5</sup>. Of course, this does not mean there were no *thetes* serving occasionally as hoplites; but in general they would not accomplish that military role. In Thucydides (6.43) the *thetes* are referred to as *epibatai*, that is, as hoplites on board ship that did not appear on the list (*ek katalogou*)<sup>6</sup> but formed part of the fleet's crews<sup>7</sup>. Another passage by the same author (8.24.2) allows us to speculate that the normal hoplites on the list did not serve in the fleet (as *epibatai*), although they may have been obliged to do so in exceptional circumstances, as Thucydides demonstrates in this case. From this it can be deduced that the *thetes* normally crewed the ships as *epibatai*, and were habitually employed as oarsmen (together with foreigners, allies or slaves)<sup>8</sup>. According to Ste. Croix (2004: 21), these *epibatai* or hoplites that served on board ship were usually armed by the state, and during the Peloponnesian War there were usually 10 on each ship<sup>9</sup>. Moreover, during the emergency of 428 (*Th.* 3.16.1) the ships were crewed by all the Athenians (including metics) except those of the upper classes (*pentakosiomedimnoi* and

2 The term *thetes* has only two meanings: a census class or men who worked for wages. For instance, Thucydides uses it in the first sense; cf. Ste. Croix 2004: 21.

3 Fr. 248 Kassel-Austin: ὅτι δὲ οὐκ ἐστρατεύοντο εἶρηκε καὶ Ἀριστοφάνης ἐν Δαιταλεῦσιν.

4 See Ar. *Ach.* 1052, 1080; *Nu.* 692; *V.* 1117, 1124; *Av.* 1367; *Lys.* 1133.

5 Fr. 61 Thalheim = fr. 63 Sauppe: τε θῆτας ἅπαντας ὀπλίτας ποιῆσαι.

6 On the *katalogos* of hoplites as *ad hoc* lists drawn up for each expedition, Christ 2001 (with bibliography).

7 *Th.* 6.43: καὶ τούτων Ἀθηναίων μὲν αὐτῶν ἦσαν πεντακόσιοι μὲν καὶ χίλιοι ἐκ καταλόγου, ἐπτακόσιοι δὲ θῆτες ἐπιβάται τῶν νεῶν.

8 On the composition of a ship's crew, Morrison 1984; Gabrielsen 1994: 106–108.

9 See also Gomme, Andrewes & Dover 1970: 310; Hansen 1991: 45; Loomis 1998: 59. *Contra*, van Wees 2006: 373. It is possible that some *thetes* would have been able to acquire hoplite weapons; the *epibatai* for the ships could have been recruited from amongst them. If there were *thetes* with hoplite weapons, they could have been enrolled as volunteers in the hoplite contingents. On this, van Wees 2002: 67, who exaggerates their number.

*hippeis*)<sup>10</sup>. Since the *thetes* were those who usually served on board, this suggests that the Athenian *zeugitai* (who did so in this emergency) could be roughly identified with the hoplites *ek katalogou* who did not normally serve in the fleet (cf. Th. 6.43; 8.24.2), except in a crisis or through necessity.

Vincent Gabrielsen (2002a: 87, 92–93) considers the information given by Thucydides (6.43) to be an exception, since it would be the only source which associates the Solonian classes with military service (but he pays no attention to Th. 3.16.1). For Vincent Rosivach (2002a: 41 n. 21; 2002b: 34), in Aristophanes', Antiphon's and Thucydides' texts the word *thetes* would allude to the poor rural underclass, not to the Solonian class. But considering the information gathered by Harpocration (*s. v. thetes kai thetikon*), the lexicographer appears to refer to the census class. It is true that the evidence is weak, but there seems to be no testimony explicitly attesting the opposite, namely that *thetes* usually fought as hoplites. From all we have seen, it could be inferred that it was uncommon for the *thetes* to serve regularly as hoplites during the fifth century, and they would therefore be excluded from the hoplite lists.

According to van Wees (2002: 67–69), the hoplites on the list came only from the first three classes (consistent with his economically and socially restricted characterisation of the *zeugitai*). The members of these three classes were obliged to serve in the army, while the *thetes* would only fight as hoplites voluntarily, although they would form the bulk of the hoplite army. But this is contradicted by the information we have seen here, such as that from Aristophanes, also mentioned by van Wees (2002: 67, n. 23; cf. 2001: 59–61)<sup>11</sup>.

Gabrielsen (2002a; cf. 2002b) criticises this theory and points out that everyone was obliged to fight, which does not exclude the possibility of enlisting as a volunteer. This author assumes that the *thetes* were also included on the hoplite lists, but this is confronted to some extent by the sources, which state that the *thetes* did not normally fight as hoplites. The reference made by Thucydides (8.24.2) concerning the hoplites called up from the lists and compelled (*anagkastoi*) to serve as *epibatai* does not mean that the *thetes* were on the list of hoplites, as Gabrielsen assumes (since it was the *thetes* who normally served as *epibatai*), nor that positions of *epibatai* were occupied by volunteers (at least not always), but that in the situation described by Thucydides hoplites on the list were obliged to fight as *epibatai*, a role in which they did not normally serve.

But, unlike van Wees, we agree with Gabrielsen that the *thetes* or those who served in the fleet were sometimes (or perhaps often) obliged to enlist and fight, and that there may have been recruiting lists of *thetes* (drawn up from the demes, as Themistocles' decree shows<sup>12</sup>), both as *nautai* (who also included metics and slaves<sup>13</sup>) and as *epibatai* (hoplites) and *toxotai* (archers). The trierarch played a very important role in enlisting

10 Rosivach 2002a: 42 n. 22, discusses U. Kahrstedt's suggestion (*Staatsgebiet und Staatsangehörige in Athen*, Stuttgart – Berlin 1934, vol. I, 253, n. 5) on Th. 3.16.1, according to which, Rosivach says, a "clever reader misunderstood a reference to the cavalry corps (*hippeis*) as a reference to a Solonic class, and so added *pentakosiomedimnoi* to fill out the set".

11 Cf. Hansen 1981; 1985: 83–89.

12 Cf. lin. 23–26; [Dem.] 50.6; Hammond 1982; 1986.

13 Morrison 1984.

crew<sup>14</sup>, and it may not have been difficult for him to find crew amongst the volunteers for the wages they would receive (which the hoplites on the list also received, in a similar proportion to marines<sup>15</sup>). But the state could also contribute by providing lists of possible candidates for the ships<sup>16</sup>, and making this service obligatory if there was a shortage of crew. In Thucydides (7.16.1), *ek katalogou* refers, as Gabrielsen assumes, both to lists of hoplites and to members of the ships' crews, *nautai* (at a time when more hoplites and more ships were being sent)<sup>17</sup>.

Moreover, the fact that there were volunteers both amongst the hoplites and amongst the ships' crews does not mean that such service was not compulsory (at least on certain occasions), but that citizens could enlist voluntarily for various reasons (for example, wages). But those who had been volunteers could, on another occasion, be called up for compulsory service (contrary to van Wees' view with regard to the *thetes*). Finally, we must consider Aristotle's text (*Pol.* 1303a 8–10) which refers to the decrease of *gnorimoi* in relation to the army recruitment *ek katalogou*<sup>18</sup>. But the philosopher says nothing about the ships nor indicates whether service on them was compulsory or not<sup>19</sup>. Aristotle (*Ath. Pol.* 26.1) also alludes to the list but in relation to the *demos* and the *euporoi*.

In our opinion, the *thetes* were not included on the list of hoplites, possibly drawn up from the first three census classes. However, they were obliged to fight, at least on occasions, such as the battle of Marathon and the expedition to Sicily, and perhaps on a regular basis. There were probably lists (cf. [Dem.] 50.6; 50.16) of marines and seamen recruited from the class of *thetes* for the ships (later assigned by lot, as in Themistocles' decree, with the trierarchs playing an important role). And it can be assumed that the lists of *thetes* could have been drawn up from the demes' registers and this service could have been made compulsory.

If the *thetes* did not normally fight as hoplites, with the exception of the *epibatai*, this means that most, if not all, of the hoplites registered on a list would have come solely from the three first census classes: *pentakosiomedimnoi*, *hippeis* and *zeugitai*. From the evidence available it could be inferred that some 9,000 hoplites fought at Marathon<sup>20</sup>, and on the eve of the Peloponnesian War some 13,000 hoplites would have been available (Th. 2.13.6–7; D.S. 12.40.3). According to most authors' calculations, this figure would imply that more men were hoplites or could have been listed as hoplites in 431<sup>21</sup>, representing 40 % of the citizen population according to van Wees (2006: 374, n. 90),

14 Gabrielsen 1994: 108.

15 Cf. Loomis 1998: 32–61.

16 For example, in Sicily: Th. 6.31.3.

17 Christ 2001: 401, points out that as well as the lists of hoplites, there would also have been lists of horsemen.

18 Cf. Gabrielsen 2002a: 89, 93–94.

19 On the recruitment of oarsmen, Gabrielsen 1994; Pagès 2000.

20 Nepos, *Milt.* 5.1; Paus. 10.20.2; Justin, 2.9.9; 8,000 hoplites in Platea, according to Hdt. 9.28.6; Ste. Croix 2004: 48. According to van Wees 2004: 241–43, these 9,000 hoplites represent the same proportion as the hoplites of 431.

21 Cf. Christ 2001: 401; Thomsen 1964: 162–163. Rhodes 1988: 274, calculates a total of between 21,000 and 29,000 hoplites for 431; Garnsey 1988: 92, between 18,000 and 25,000; van Wees 2001: 51, speaks of 18,000, but according to his calculation in van Wees 2006: 374 n. 90, there were 24,000.

or 50 % in the calculations of Victor Hanson (1995: 114, 366, 478–79 n. 6)<sup>22</sup>. This does not mean that all the hoplites were *zeugitai*<sup>23</sup> or that these were necessarily a military category *per se*. But it would indicate that all the *zeugitai* were hoplites, and that they made up the bulk of the Athenian infantry. They differed both from the *pentakosiomedimnoi* and from the *hippeis* in terms of the way they were treated by the state in various recruiting situations, and from the *thetes*, who were not on the list but with whom the *zeugitai* might serve on the triremes if needed<sup>24</sup>.

In principle, the *zeugitai* were a census class, that is, a group defined on the basis of economic criteria based on property or income, but which had important implications in the political and military arenas. Consequently, they could have been broadly identified with most of the hoplite class perhaps from the fifth century on<sup>25</sup>. This does not mean that we accept the “military” etymology for the word *zeugites* instead of that which relates it to the yoke of oxen<sup>26</sup>, since, as we shall see later, the demarcation of the *zeugite* class in Solon’s times would have been done taking the ownership of oxen into consideration.

1.2. There is another argument for rejecting the explanation put forward by van Wees, who includes the *zeugitai* in the leisured class because he assumes they have at least 8 or 16 ha of land (depending on whether or not fallow land is considered). The decree for the colony at Brea (446, approximately) refers to *zeugitai* and *thetes* as the beneficiaries of the distribution of land in the new colony (*IG* I<sup>3</sup> 46, 43–46)<sup>27</sup>. As Rosivach (2002a: 36–37) has pointed out, this would be a decision “to ensure that the new colony would benefit those at the lower end of the social scale”. On his part, Ste. Croix (2004: 11)

22 For different calculations: Jones 1957: 8–9; Thomsen 1964: 162–166; Hansen 1981; 1982; 1985: 26–64; 1988; 1991: 93 f.; Rhodes 1988: 275.

23 Some hoplites belonged to the two upper classes, and there were also some metics and a few *thetes*.

24 Many *pentakosiomedimnoi* and *hippeis* would have been excluded from the lists of hoplites, either because they belonged to the cavalry (1,000), or because they performed liturgies, or else through string-pulling (by the *strategoi* who made the decisions), as can be surmised from Aristophanes (*Eq.* 1370 ff.). If so, it can be said that the bulk of hoplites would be made up of *zeugitai*, since the *thetes* were not on the hoplite lists either.

25 Particularly if we assume that the qualification for being on a hoplite list was belonging to the *zeugite* class or a higher one; cf. Hansen 1981: 24–29; 1988: 83–89.

26 For the identification of the Solonian census classes with military categories, Whitehead 1981, who undertook an analysis in-depth of the etymology of *zeugites* in its military sense. Hansen 1991: 30, 43–46, 106–109, 329, prefers the etymology of “owner of a yoke of oxen” for *zeugites*, but he accepts its use as the basis for recruiting in the fifth century. Rosivach 2002b rejects the military etymology. On his part, van Wees 2006: 353–357, has now accepted and developed the etymology relating the name *zeugitai* to the ownership of oxen, rejecting in this way his previous view; cf. van Wees 2001: 46. Various authors, finally, doubt the credibility of Aristotle’s account of the measures ascribed to Solon’s classes and emphasise the author’s ignorance concerning the membership qualification for each of them: cf. Gabrielsen 2002a: 96–97 (with bibliography).

27 A similar clause possibly exists in *IG* II<sup>2</sup> 30 (387/6), a decree concerning Lemnos issued after the King’s Peace on the cleruchies; Stroud 1971: 164 (lin. 12) and 171 ff. The decree uses the term *pentakosiomedimnon* and, by analogy with the decree of Brea, it has been suggested: [–πλὴν ἰππέων καὶ πεντακοσιομεδίμων] (“[except the *hippeis* and the *pentakosiomedimnoi*”). Cf. Ste. Croix 2004: 11–12; but see Rosivach 2002a: 43 n. 29.

had suggested that this decree did not exclude the first two census classes, but rather that no citizen belonging to either of these classes would want to emigrate because of the large estates they had in Attica. If the *zeugitai* consisted solely of those who owned more than 8 ha of land, as van Wees claims, it would be difficult to understand why they would have participated in the colonisation and moved to Brea. If, on the other hand, our argument that in the fifth century the *zeugite* class included peasants with plots of approximately 40 *plethra* (3.6 ha) is accepted, it is understandable that some of them would have decided to move to the new colony (perhaps in the hope of obtaining larger plots than those they held in Attica).

This would thus suggest that the *zeugitai* (or a large proportion of them) were not rich and could have been aligned with the *thetes* in the distribution of land. On some occasions, the alignment of these two classes defined by the Solonian census is what is meant by the concept of *demos* as the “lower classes” of the citizenry, not the complete body politic<sup>28</sup>.

1.3. In the general levy of citizens for the fleet of 428 which we referred to earlier (Th. 3.16, and schol. at 3.16.1), only the first two classes, the *pentakosiomedimnoi* and the *hippeis*, were exempted, not the *zeugitai*, who had to man the ships with the *thetes*. This situation once again demonstrates how the first two classes, on one side, and the *zeugitai* and the *thetes*, on the other, could appear aligned at least in practical terms, even if ideologically, particularly in the fourth century, the *zeugitai* and the hoplites were probably associated with the rich, as can be seen in Aristotle<sup>29</sup>. Unlike the *pentakosiomedimnoi* and the *hippeis*, the bulk of the *zeugitai* would not have paid the *eisphora*, the tax levied in times of war that was first collected in 428 (as far as the Peloponnesian War is concerned)<sup>30</sup>. But, as we shall try to demonstrate later, from then on the wealthiest *zeugitai* would have also begun to pay the *eisphora* together with the first two Solonian census classes.

1.4. Furthermore, according to the *Athenian Constitution* (26.2) the *zeugitai* were only included in the archonship a few years after Ephialtes’ reforms, which does not tally with van Wees’ claim that the *zeugitai* belonged to the wealthy leisured class. The passage also hints at the way in which the *zeugitai* became eligible to join the archonship: not all of them would participate, but a group of *zeugitai* would be previously elected to take part in the selection of archons by lot. And on the first occasion only one of the nine archons came from the *zeugitai*. In fact, they had previously held only minor magistracies unless, Aristotle says, some clause in the law had been ignored. It is possible that this situation was precisely what happened after Solon’s reforms during the crisis of Damasias of 580 (*Ath. Pol.* 13.2), with the exceptional election of ten archons, of whom three came from the *agroikoi* and two from the *demiourgoi*.

28 Cf. Gallego 2003: 125–128.

29 For ideological distortions in Aristotle, see van Wees 2002; Gabrielsen 2002a.

30 Christ 2007: 54, also thinks the *eisphora* was established for the first time in 428. Although the possibility of *eisphora* before that date is recognised in two inscriptions: in the decree of the Athenian cleruchies in Hystieia, *IG* I<sup>2</sup> 42, 21–24 (446), and in Callias’ decree, *IG* I<sup>3</sup> 52 (433). Cf. Meritt 1982; Kallet-Marx 1989.

1.5. Another of van Wees' arguments (2006: 374) is that "the 5,000" of the oligarchic revolution of 411 can be roughly identified with the first three classes, *pentakosiomedimnoi*, *hippeis* and *zeugitai*, together accounting for less than 16% of a population of 30,000 citizens. Thucydides (8.97.1) refers to the 5,000 as those able to provide themselves with hoplite equipment; while Xenophon (*Hell.* 2.3.48) alludes to "those who can serve the government with horses and shields"<sup>31</sup>. However, this figure of 5,000 is too small to be the number eligible for inclusion on the hoplite lists<sup>32</sup>, even after the expedition to Sicily when the population had gone down<sup>33</sup>. Consequently, we must assume that it referred to the hoplite elite that, from our point of view, consisted of the first two classes plus the upper echelons of the *zeugitai*.

In our opinion, if this figure had represented the first three classes, as van Wees suggests, we should have expected Thucydides to mention it (since he refers to the census classes in other contexts), indicating that the 5,000 automatically included the first three classes, or perhaps that the *thetes* were excluded from the 5,000. But this is not stated either by this author or by any other that discussed the subject (Lysias, Xenophon or Aristotle). Furthermore, in the argument defended by van Wees membership of this group would have been automatic, that is, based simply on being a member of one of the first three census classes. However, according to Aristotle (*Ath. Pol.* 29.5), ten representatives over the age of 40 from each of the tribes were elected to enlist (*katalexousi*) the 5,000<sup>34</sup>.

Moreover, together with the criterion of arms, both Thucydides and Aristotle (who perhaps follows the historian on this point) mention wealth as a precondition for belonging to these 5,000. According to Thucydides (8.65.3), they would include "those who were most able to serve by both their property (*chremasi*) and their persons (*somasin*)"<sup>35</sup>. This comment is virtually repeated by Aristotle (*Ath. Pol.* 29.5) but using the revealing verb *leitourgein* to refer to the services that the 5,000 citizens should be able to provide<sup>36</sup>. This financial criterion used to determine the group of the 5,000 probably refers to a change that took place at the beginning of the Peloponnesian War, when a group of citizens became prominent by using their wealth to finance the war. This would be related not only to the trierarchy (which was perhaps performed by a smaller number, between 1,000 and 2,000) but above all to the *eisphora*.

31 X. *Hell.* 2.3.48: μεθ' ἵππων καὶ μετ' ἄσπίδων ὠφελεῖν διὰ τούτων τὴν πολιτείαν.

32 In Th. 8.65.3, this figure is the maximum, but in Arist. *Ath. Pol.* 29.5, it seems to be a minimum; in Lysias, 20.13, it even reached 9,000. From the time of the 5,000, perhaps the possibility of extending citizen participation with a greater number of hoplites was contemplated; Rhodes 1981: 380–385.

33 If the figure of 24,000 men eligible to be hoplites in 431 (out of an approximate population of 50,000 citizens) is accepted, the losses due to war probably reduced this hoplite population by about 9,000 (see Jones 1957: 9; cf. Strauss 1986: 179), which means some 15,000 men still had hoplite status in 411 (not counting generational renewal), that is, three times more than the 5,000 who are granted citizenship and that "possess arms".

34 Cf. Rhodes 1981: 384–385. Even if membership was automatic, it would still have been necessary to compile a list of the members.

35 Th. 8.65.3: καὶ τούτοις οἱ ἂν μάλιστα τοῖς τε χρήμασι καὶ τοῖς σώμασιν ὠφελεῖν.

36 This reference to persons perhaps alluded, as well as to fighting in the war, to the importance of certain individuals who served the city by undertaking the trierarchy or other liturgies. Cf. Rhodes 1981: 382–383.

The 5,000 would thus be the approximate proportion of citizens that had started to pay the *eisphora* and had therefore begun to contribute to the cost of the war. It seems unlikely that this number of citizens could be identified in Thucydides with the first three census classes as a whole, at least around 411, since he does not mention them in relation to the 5,000, while he does allude to several of the census classes in other passages of his account. With this in mind, it is plausible that the upper echelons of the *zeugitai* would have begun, perhaps during the war, to stand out as a group with its own specific character because they had started paying the *eisphora*, and because they were aligned with the two census classes above them in practical terms and also, it can be surmised, in ideological terms.

The specific character of this group of *zeugitai* would derive from its association with the *pentakosiomedimnoi* and the *hippeis*, brought about by its integration into the *eisphora* system and confirmed to some extent with the configuration of the 5,000. But it is also important to consider the contrast that already existed between these wealthy *zeugitai* (who, because of their wealth, could effectively act as members of the leisured class responsible for the liturgies) and the *zeugitai* that had to work their own land. In various passages of the *Politics* Aristotle emphasises that the owners of a moderate-sized farm could not be leisured and that they were related to what he considers the most moderate type of democracy. And he even states that serving as a hoplite and farming the land personally go hand in hand (*Pol.* 1291a 30–31: *hopliteuein kai georgein*)<sup>37</sup>. So, a careful reading of Aristotle shows us that those who are entitled to bear arms are generally identified with peasants<sup>38</sup>, that is, with the agricultural people who fight (*georgikos plethos*, *georgikos demos*), but also with non-leisured owners who have to work their own land in order to make a living<sup>39</sup>.

In any case, it seems that as a result of the situation generated by the Peloponnesian War the better-off *zeugitai* (those who paid the *eisphora*) began to stand out or be more clearly differentiated from the rest of the *zeugitai*. And they were possibly included together with the upper classes in the 5,000 of the oligarchic revolution of 411 (or the 3,000 of 404). This situation could explain why some writings of the late fifth or early fourth century used the term *georgos* in a partial and specific sense. Detail from the so-called “Old Oligarch” could be interpreted in this light<sup>40</sup>. Aristophanes also uses the word *georgos* to refer to the agriculturists aligned with the *plousioi* and against the

37 For more references, Gallego 2005a. On *georgos/georgos*, Gallego 2009: 219–22, with further discussions.

38 Most of the time, Aristotle uses the term *georgos* and the derivatives of the verb *georgein* to refer to peasants. Sometimes, he also uses the word *agroikos* but with more pejorative connotations (Arist. *Ath. Pol.* 13.2).

39 For the “agricultural people”, see Arist. *Pol.* 1289b 32; 1317a 25; 1318b 9; 1319a 6 and 19; 1321a 5–6. Cf. Gallego 2005a: 235–40. In *Pol.* 1279a 37–b 4, Aristotle defines the *politeia* as the best regime in which military virtue is associated with the multitude (*plethos*) who bears arms (*ta hopla*). The philosopher also says that the best, first and oldest kind of democracy (which would approach the *politeia*) is that based on the best people (*demos*), the agricultural people; although he recognises that this kind of people can also be involved in a tyranny or an oligarchy (*Pol.* 1292b 25–34). We should not overlook what Aristotle himself says in *Pol.* 1297b 22–25.

40 [X.] *Resp. Ath.* 2.14: οἱ γεωργοῦντες καὶ οἱ πλούσιοι. Cf. Marr & Rhodes 2008: 21, 122.



*penetes*<sup>41</sup>. In effect, as the comedies of Aristophanes during the Peloponnesian War seem to indicate (*Ach.*, *Eq.*, *Pax*), it is possible that some of the *georgoi*, especially the better-off, began to align themselves ideologically with the *plousioi*, particularly in order to try and achieve peace. But the ambiguity remains, since Aristophanes himself sometimes uses the term *agroikos* to define the Athenian *demos* as a farming people (*Eq.* 40–42), which appears to include both well-off farmers and middling or small peasants. The poet prefers to imagine this group as a homogeneous whole (*Pax* 922; cf. 296) capable of aligning itself with the *hippeis* (*Eq.* 1111–50; cf. *Ach.* 7–8), but whose specific interests would lie in preventing manipulation of conscription lists and ending the war so that they could concentrate on farming their land (*Pax* 1127–90).

## 2. Solon's Census Classes and the Sixth Century

2.1. It is difficult to analyse the situation of the Athenian peasantry in the sixth century (and in general for the whole of the archaic period) because most of our sources, such as Aristotle, date to the fourth century. Moreover, Attica is a region where practically no land surveys have been carried out, apart from in the south and on the frontier with Boeotia<sup>42</sup>. However, we can assume that a broad group of small and middling peasants developed, many of whom may have started to arm themselves as hoplites in the course of the sixth century, since we know that some 9,000 hoplites took part in the battle of Marathon in 490<sup>43</sup>. This broad class of hoplite-farmers may well have increased its ranks after Solon's reforms and, in particular, under Pisistratus, who encouraged the development of agriculture and helped many small peasants in Attica by providing low-interest loans<sup>44</sup>.

2.2. On the other hand, a collection of literary, epigraphical and archaeological evidence has led many scholars to consider that in ancient Greece the holdings of self-sufficient peasants, which would form the bulk of the *poleis*, varied between 40 and 60 *plethra*, that is, between 3.6 and 5.4 ha<sup>45</sup>. A size close to the latter would be the minimum suitable for a hoplite farm. Alison Burford (1977/78: 168–72; 1993: 27–28, 67–72, 113–16)

41 Ar. *Ec.* 198: τοῖς πλουσίοις καὶ γεωργοῖς; but see Strauss 1986: 62–63. Cf. Gallego 2005b: 119–120.

42 Lohmann 1992: 56. Cf. Hansen 2004: 625–626; Gallego 2005b: 34–41; Forsdyke 2006.

43 This implies an even greater number considering the total of hoplites that could be mobilised, as in the case of the 13,000 hoplites at the beginning of the Peloponnesian War, when the total would be 24,000.

44 On Solon's law protecting property given in litigation: Ruschenbusch 1966: F 36a; Gagarin 2006: 264–265. On Solon's law prohibiting grain exports: Plut. *Sol.* 24.1–2; this law has been interpreted as favouring Attic peasants: Mele 1979: 41; Baccarin 1990. Solon did not share out the land in equal plots, but probably permitted a distribution of marginal or public land, and land to be returned to ancient debtors: Arist. *Pol.* 1266a–b; Plut. *Sol.* 13.6; Rosivach 1992; Isager & Skydsgaard 1992: 128. On Solon's law limiting the amount of land each person could acquire, Arist. *Pol.* 1266b 13–14. On Pisistratus' measures about agriculture: Arist. *Ath. Pol.* 16.2; Dio. Chrys. 25.3; Aelian, *V.H.* 9.25; D.L. 1.53; Valdés 2003. On Athens as a society of small and middling peasants, Wood 1988; Gallego 2005b: 89–132; Valdés 2006; 2008: 47–87.

45 For a more complete analysis, Gallego 2009: 162–66 (with bibliography).

has associated this type of property with the hoplite or zeugite farm, highlighting the importance of draught animal power for working the land and relating the term *zeugites* with the farm worked with a yoke of oxen. With different emphasis and not always alluding to the *zeugitai*, many scholars have adopted this perspective<sup>46</sup>, except those who argue there was a divergence between the “hoplite farm” and the “zeugite farm”, since they suppose the latter to be larger than the former<sup>47</sup>. Even if the evidence quoted by Burford is scarce and says nothing about either hoplites or *zeugitai*<sup>48</sup>, it is possible to maintain her remarks on the basis of the following criteria.

First, according to modern estimates, using a yoke of oxen would need an average area of about 5 ha for the work to be done properly<sup>49</sup>. Secondly, if the “yoke of oxen” etymology for the word *zeugites* is accepted, then this implies that the *zeugitai* were characterised due to the ownership of oxen. Thirdly, as we shall see later, the previous point supposes to consider the specific conditions of the *zeugitai* not only with respect to the *pentakosiomedimnoi* and the *hippeis* (who obviously owned oxen as well as horses and other resources), but also with respect to the *thetes* (who did not own oxen). Fourthly, according to our view in the first section, since the *thetes* were not normally included on the hoplite lists, it is possible to assume that the zeugite census was the minimum generally necessary to be enrolled as a hoplite *ek katalogou*, which does not exclude that there may have been some hoplites recruited below this class. So, even if this does not mean that owning a 5 ha plot was formally required for membership in the zeugite class, possession of a yoke of oxen supposed this farm size, and then to be a *zeugites* would be, in practical terms, the lowest requisite to serve as a hoplite.

Hence owning about 5 ha of land and using oxen would be the basic material conditions both for a hoplite and for a *zeugites*<sup>50</sup>. The available data suggest that a class of middling peasants developed during the archaic period, the Athenian version of which was the zeugite class. Of course, this group would not be completely homogeneous and property variations could imply differences between them. At the top of the zeugite class some stood out by having more land, which meant that they did not have to work (the

46 Jameson 1977/78: 125 n. 13; 1992: 137, 142; 1994: 58; Hodkinson 1988: 39; Isager & Skydsgaard 1992: 78–79; Alcock, Cherry & Davis 1994: 148; Hanson 1995: 181–201; Bintliff 2006: 328; Nagle 2006: 71. For a critical view, Gabrielsen 2002b: 214 and n. 69.

47 Foxhall 1997: 130–132; van Wees 2001; 2006.

48 The evidence is that analysed by Andreyev 1974: 14 ff.: a third-century B.C. inscription from Pharsalos (*IG IX.2.234*) which indicates that “those who fought at our side”, i.e. beside the Pharsalians, were given full citizenship and 60 *plethra* of arable land; archaeological information from the Kheronesos Taurike on fourth-century and later farms averaging 43–55 *plethra*; the Athenian *rationes centesimarum* dated by Lewis 1973 in the 320s; Th. 3.50.2 on the Lesbian cleruchy of 427, from which Andreyev deduced a *kleros* of 40–60 *plethra*.

49 On the use of a yoke of oxen on plots of land averaging 5 ha, Halstead 1987: 84; Hodkinson 1988: 39–40. See the complete analysis by van Wees 2006: 382–385 (with bibliography and sources).

50 On the value of having oxen, Hes. *Op.* 405, 436–40; Ar. *Ach.* 1022–36; cf. Av. 581–85, 1500; Arist. *Pol.* 1252b 10–12. Oxen could be a source of additional income when they were not used for agriculture. In fact, hiring them to private citizens (*misthosis*) but more particularly for public works is a well-attested fact. See Osborne 1987: 14–16, on the farming year and the possibility of using oxen for building; Salmon 2001: 199–201, refers to income opportunities that public constructions offered to Attic landowners with oxen; cf. Chandezon 2003: 281–284, 399–400.

“leisured” *zeugitai*). But middling peasants were the bulk of the group with enough land for a yoke of oxen and the occasional slave, who could also afford hoplite weapons.

In keeping with hoplite plots size in general, and those of the Attic *zeugitai* in particular, we know plots dimensions allocated in various Greek colonial foundations. The bibliography on the subject enables us to propose a situation that, without being universal, was certainly very widespread<sup>51</sup>. This indicates that there was a certain notion of how much land a citizen would need, and this in turn would be related to his capacity to serve as a hoplite. Moreover, this model would be linked to what it meant to be a *metrios* or *mesos*, a middling peasant who owned his land<sup>52</sup>, and would fulfil an important role in terms of determining Greek egalitarianism, clearly visible according to Eric Robinson (1997: 65–73)<sup>53</sup> in the foundation of colonies, which would demonstrate the expansion of egalitarian principles<sup>54</sup>.

2.3. Aristotle and Plutarch appear to agree that Solon’s aim in establishing the census classes was political, in order to organise participation, especially in certain magistracies, on the basis of landowning, or rather, income in measures of cereals (*medimnoi*). In this respect, the sources are concerned in particular with two offices that were essential at this time, namely the archons and the *tamiai*. The office of *tamiai*, whose importance in the sixth century can be deduced from inscriptions on the acropolis (relating to the Panathenaic games)<sup>55</sup>, was only open to the *pentakosiomedimnoi* (Arist. *Ath. Pol.* 8.1), and the archonship only to the *pentakosiomedimnoi* and the *hippeis* (*Ath. Pol.* 7.3; 26.2). So, according to the *Athenian Constitution*<sup>56</sup>, both the *zeugitai* and the *thetes* were excluded from the most important magistracies (*tamiai* and archons), although the former had access to lesser offices such as the *poletai*, the eleven and the *kolakretai* (*Ath. Pol.* 7.3). This political intention is particularly obvious in the case of the *tamiai*, as can be seen in other laws enacted by Solon which specifically concern them (*Ath. Pol.* 8.1; 47.1).

Another purpose of the census classes may have been of a “fiscal” nature, although the only direct source for this assertion is a report found in Pollux (8.130) that cannot be applied to the economic situation of the sixth century; and therefore, if it refers to a specific instance of levying taxes, should be placed at a later date. In any case, the fact that Aristotle speaks of *eisphora* in Solon’s times (*Ath. Pol.* 8.3), the reference to the naukraric fund, the presence of lesser magistracies such as the *kolakretai*<sup>57</sup>, the im-

51 Cf. Perčirka 1973: 142; Salviat & Vatin 1974; Andreyev 1974; Burford 1977/78; 1993: 67; Boyd & Jameson 1981; Clavel-Lévêque 1982: 27; Graham 1982: 185; Saprykin 1994: 83–87.

52 Cf. Hanson 1995: 108–126, 181–219; Morris 1996: 24–36; 2000: 155–185; also Starr 1986: 94–95; Raaflaub 1996: 150–153; 1997; 2006; Donlan 1997: 45–46; Edwards 2004: 25, 78, 125–126. *Contra*, Foxhall 2002.

53 Cf. McInerney 2004.

54 On land distribution and the extent of egalitarianism, Gallego 2009: 144–147 (with bibliography).

55 The first dates from 550/49: *IG* I<sup>2</sup> 3; Raubitschek 1949: n° 326–328, 330.

56 We shall see later the reason for the apparently contradictory information found in the *Politics*.

57 Arist. *Ath. Pol.* 8.3; Poll. 8.108; Hsch. s.v. *nauklaroi*; Androtion, *FGrHist* 324 F 36; Phot. s.v. *naukraria*. Another indication could be the archaic formula of the *dokimasia* of the archons in which reference is made to the payment of taxes (Arist. *Ath. Pol.* 55.3), although this point could have been

portance of the *tamiai* and the existence of a tax in the times of Pisistratus<sup>58</sup>, would all suggest that even in Solon's times a series of mechanisms for collecting taxes had been organised, perhaps on the basis of belonging to the census classes. This hypothetical collection of taxes, about which we know absolutely nothing more, could have coincided with the Panathenaic games<sup>59</sup>.

How was membership of a census class determined in Solon's times? The sources talk about production (income), and perhaps it can also be inferred that it was based solely on the output of land measured in *medimnoi*, as can be gathered from the name used to designate the first class, the *pentakosiomedimnoi*<sup>60</sup>. However, both Aristotle – followed by Plutarch – and Pollux<sup>61</sup> talk about liquid and dry “measures” (*metra*)<sup>62</sup>, not of *medimnoi*. Perhaps this is a first adaptation<sup>63</sup>. Aristotle and Pollux talk about 500, 300 and 200 measures, and both raise the same doubt (which would be present in the original source they both use) about the qualification of the second class, the *hippeis*, membership of which seems to depend either on these 300 measures or owning horses. Therefore, it is plausible that neither Aristotle nor Pollux had direct access to Solon's law, since in both cases there is an element of conjecture<sup>64</sup>.

2.4. According to van Wees (2001; 2006), the classes were defined on the basis of the wealth obtained from agricultural production; based on calculations and estimates of the yields obtained from Attic land, the author reaches the conclusion, correctly and exhaustively argued, that those who produced 200 measures – that is, the *zeugitai* – must have owned at least 8 or 9 hectares (16 ha including fallow land)<sup>65</sup>. Consistent with these calculations, a *zeugites* would be a fairly well-off landowner belonging to the leisured class, the Athenian elite, which accounted for 10, 15 or perhaps 20 % of the citizen population.

introduced in 403. In Deinarchus' *Against Aristogiton* (2.17–18), the payment of levies which he investigates in the framework of the *dokimasia* is ultimately associated with payment of *eisphora*.

58 This tax could have been a tenth (Arist. *Ath. Pol.* 16.4–6) or a twentieth (Th. 6.54.5).

59 Harris 1995: 9–10. See also Descat 1990; Sancisi-Weerdenburg 1993.

60 Plato (*Leg.* 955d–e) discusses the possibilities of a tax system based both on *timema* (capital) and on income. The amount could also refer to the *medimnos* as a unit of measurement or value, not of production. See Arist. *Ath. Pol.* 10.2; Philoch. *FGrHist* 328 F 200; Poll. 9.60–61; Plut. *Thes.* 25.3; *Sol.* 23.2–4. There was no coinage in Solon's time, but unstamped silver or metal weights did exist; Rhodes 2006: 256 (with bibliography).

61 He possibly used the same source as Aristotle (an early fourth-century Attidographer); Thomsen 1964: 150.

62 Hansen 1991: 43.

63 Gabrielsen 2002a: 97.

64 See the arguments developed by Rosivach 2002a: 39–41, 46–47, and *passim*.

65 The arguments developed by van Wees are based on sound calculations made in documented recent works. In van Wees 2001, less emphasis is given to biennial rotation, so on his hypothetical average only 1/5 of the total arable land producing cereals would be left fallow. Thus, the smallest farm of a *zeugites* would be 8.7 ha. In van Wees 2006, the calculation appears simplified: to obtain 200 measures would require 8 ha, which is doubled because of biennial rotation with fallow, giving a figure of 16 ha for the less wealthy *zeugites*.

However, the weak point of van Wees' argument is that he takes the figures provided by Aristotle literally and applies them to the sixth century, minimising the fact that both Aristotle and his source (as can be seen in Pollux) doubt the criteria for membership of the class of *hippeis*. Aristotle also mentions the conversion of Solonian measures into those of his own time (*Ath. Pol.* 7.4: "dry and liquid measures [*metra*] jointly")<sup>66</sup>. Although van Wees tries to claim that Pollux's text is completely independent of Aristotle's, it is possible, as we said earlier, that they both took their information from the same source.

In addition to these measures, other sources talk about different proportions or measures in relation to the census classes, in terms not of what they produced but the fines to be paid for not attending the Council, according to the spurious constitution of Draco (*Arist. Ath. Pol.* 4.3: 3 drachmae for the *pentakosiomedimnoi*, 2 drachmae for the *hippeis* and 1 drachma for the *zeugitai*); or the amount to be paid to equip an *epikleros* (500 drachmae, 300 drachmae and 150 drachmae, respectively), according to a law that apparently dates back to Solon's times<sup>67</sup>. On the basis of this, van Wees suggests that the lower limit for being a *zeugites* may have been 150 *medimnoi* rather than 200 (although he thinks this unlikely). But, according to the author, landownership would also have been important in this case, since it would imply a minimum of 12 ha if biennial fallow is considered normal or 6 ha if it is assumed that this was not applied. Even if biennial fallow was not used, these calculations assume that even the most modest *zeugites* would have a farm whose size would be similar to that which is usually taken as the upper limit for defining the members of the class of middling farmers.

The problem of the Solonian census measures is far from having been definitively resolved. Rosivach (2002a: 39–41) has suggested that, except for the 500 measures concerning the *pentakosiomedimnoi*, the amounts attributed by Aristotle to the *hippeis* and the *zeugitai* were educated guesses, because the law of Solon would be lost by the philosopher's day. In this respect, we would like to emphasise here the proposal put forward by Ste. Croix (2004: 48–49), who thinks that, except for the first measure (500 *medimnoi*), the other two (300 and 200) were inventions of Aristotle based on numbers such as those which appear in the law of *epikleroi* (500, 300, 150). According to Ste. Croix, in the sixth century the census had not been fixed in a definite, rigid or exact form, while, on the other hand, the census classes would broadly coincide with military categories. Peter Rhodes (2006: 253; cf. 251; 1981: 143) also maintains that Solon would not have defined the measures in exact *medimnoi* (except for the first class), or at least suggests that the law specifying the qualifications of each class would not have survived to Aristotle's times, which implies that the latter would have proposed the measures on the basis of other indications. Rhodes believes that the *hippeis*, the *zeugitai* and the *thetes* already existed as categories before Solon, who created a new top class of *pentakosiomedimnoi* defined by produce; but otherwise Solon did not need to define the classes, and the 300 and 200 *medimnoi* qualifications were invented later by analogy with the top class (Rhodes 1997: 4). He also associates the classes with military categories.

66 Cf. Rhodes 1981: 141–142. On the problems with van Wees' interpretation, Gabrielsen 2002a: 95–98.

67 Lysias, fr. 207 Sauppe = Harp. s. v. *pentakosiomedimnon*; Posidippus, fr. 38 Kassel-Austin = Harp. s. v. *thetes kai thetikon*; [Dem.] 43.54. Solon's law on *epikleroi*: D.S. 12.18.3.

2.5. In our opinion, Aristotle did not, in fact, know what the qualifications were for belonging to the various classes in Solon's times. But this does not mean that he invented the figures he gives, and it is therefore necessary to make sense of them. What appears certain is that the *pentakosiomedimnoi* originally implied 500 *medimnoi* (or more), since this is expressed by their name. This class was probably the only new class created by Solon, or at least the only new designation<sup>68</sup> (the other ones would already exist: Arist. *Ath. Pol.* 7.3)<sup>69</sup>.

On the basis of this picture and the class situation in the fourth century, established in the legislation of 403 (we will return to this shortly), Aristotle attributes certain measures (500, 300, 200) to each of Solon's census classes. The hypothesis that the author of the *Athenian Constitution* does not know with any certainty how much each class produced in Solon's times is consistent, as we have already said, with the fact that in this work he expresses doubts about the class of *hippeis*, not knowing whether they are defined by their condition as owners of horses or by producing 300 *medimnoi*. This demonstrates that Aristotle did not have the measures of the original "law of Solon" to hand (perhaps he had others). An additional indication that Solon's laws were revised in the legislation of 403 would be the law of *epikleroi* reproduced in *Against Macartatus*, attributed to Demosthenes (43.51; 54), which states that illegitimate sons were debarred from inheriting since the archonship of Euclides in 403.

What we said about the doubts of the author of the *Athenian Constitution* concerning the *hippeis* is equally valid for Pollux (8.132) regarding the *zeugitai*. The lexicographer also gives us a clue about the period to which this revision relates. In fact, shortly after his account of the census classes in relation to the system of exacting taxes, the *zeugite* class is referred to as those that "raise oxen"<sup>70</sup>. So, it is possible that in Solon's times the classes were defined as:

- *Pentakosiomedimnoi*: those who produce 500 *medimnoi*.
- *Hippeis*: those who can raise and feed horses (and obviously oxen).
- *Zeugitai*: those who can own a yoke of oxen (which would correspond with a land-holding of about 5 ha); this coincides with Pollux's definition (8.132).
- *Thetes*: the rest, that is, small peasants, day-labourers, hired workers, etc., that cannot afford a yoke of oxen.

Owning a yoke of oxen could be the first step for distinguishing a farmer, indicating perhaps that his farm was not one of the smallest. Thus we find that Aristotle takes up Hesiod (*Op.* 405: "first an *oikos*, a wife and an ox to draw the plough"), saying that "the ox is like a servant (*oiketēs*) for the poor"<sup>71</sup>. While it is clear that owning an ox implied a certain wealth, for Aristotle this did not separate the peasant from the rest of the poor.

68 Postulated by Rhodes 1981: 137; Hansen 1991: 30; Osborne 1996: 221.

69 Perhaps its purpose was to give those who acquired such wealth an important role in political life in order to fill certain specific and important offices (such as the *tamiai*), by opening these offices to those who were wealthy but not aristocrats.

70 Poll. 8.132: καὶ ζευγῆσιόν τι τέλος οἱ ζευγοτροφοῦντες ἐτέλουν.

71 Arist. *Pol.* 1252b 12: ὁ γὰρ βοῦς ἀντ' οἰκέτου τοῖς πένησιν ἐστίν.

From all these arguments, it can be inferred that the *zeugitai* in Solon's times would be middling farmers who had a yoke of oxen and probably owned about 5 ha of land (which did not exclude larger estates). This property was sufficient to make it viable to use oxen, and would at the same time be a size that corresponded both to hoplite plots and to land distributions known for various Greek colonies. Owning an appropriate farm size to use draught animals distinguished these peasants from other rural workers, a number of whom would have farms smaller than those of the *zeugitai*<sup>72</sup>, whereas others would be landless poor<sup>73</sup>.

### 3. Solon's Census Classes and the *Eisphora* System before 378

In this section, we will argue that the need for a tax system based on the *eisphora* during the Peloponnesian War produced a form of taxation that was levied on the wealthiest landowners. Starting from this *eisphora* system, the Solonian classes were remodelled in the new legal code of 403–399 (before the restructuring of 378) for the purpose of levying taxes, which established, on the basis of landownership, that those who produced more than 500 measures would be included in the *pentakosiomedimoi*, those between 300 and 500 measures, in the *hippeis*, and those between 200 and 300 measures, in the *zeugitai*.

First, we should try to know why Aristotle and Pollux referred to 300 and 200 measures for the *hippeis* and the *zeugitai*, respectively, or in what context these amounts should be understood. We think it unlikely that they were a product of Aristotle's or Pollux's imagination, or that they derived from other measures, as Ste. Croix assumes by linking them to the dowries of the *epikleroi*. Perhaps the key can be found in Pollux (8.130), who related the measures of production of the census classes (not the quantity of *medimnoi*) to a tax system:

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 *hippas* 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 *zeugition* 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.

Τιμήματα δ' ἦν τέτταρα, πεντακοσιομεδίμων ἰππέων ζευγιτῶν θητῶν. οἱ μὲν ἐκ τοῦ πεντακόσια μέτρα ξηρὰ καὶ ὑγρὰ ποιεῖν κληθέντες: ἀνήλiskon δ' εἰς τὸ δημόσιον τάλαντον. οἱ δὲ τὴν ἰππάδα τελοῦντες ἐκ μὲν τοῦ δύνασθαι τρέφειν ἵππους κεκληῖσθαι δοκοῦσιν, ἐποιοῦν δὲ μέτρα τριακόσια, ἀνήλiskon δὲ ἡμιτάλαντον. οἱ δὲ τὸ ζευγήσιον τελοῦντες ἀπὸ διακοσίων μέτρων κατελέγοντο, ἀνήλiskon δὲ μναῖς δέκα. οἱ δὲ τὸ θητικὸν οὐδεμίαν ἀρχὴν ἤρχον, οὐδὲ ἀνήλiskon οὐδέν.

72 Burford 1977/78: 170; 2003: 67–68. Cf. Gallego 2005b: 98, 107; 2009: 163.

73 *A thes* or, in Attica, a *hektemoros*; Valdés 2006; forthcoming.

On the basis of this information, our proposal is that the measures were fixed in the new legislation codified between 403 and 399 (which included a revision of Solon's laws)<sup>74</sup>, in order to adapt the register of the census classes to the new tax system introduced after 428 to levy the *eisphora*. On this occasion, the first two census classes together with the richest of the *zeugite* class were taxed based on the produce of their land<sup>75</sup>. In order to determine which of the *zeugitai* would be subject to the *eisphora*, it was then established that they would be those who produced between 200 and 300 liquid and dry measures, as Aristotle (*Ath. Pol.* 7.4) and Pollux (8.130) state<sup>76</sup>. As several scholars have shown, these measures entailed the land plots of wealthy *zeugitai* to be larger than the average farm size of 5 ha attributed to the middling peasants<sup>77</sup>. Pollux's evidence would thus imply that only the upper echelons of the *zeugitai* paid the *eisphora*. Indeed, the fact that the *zeugitai* paying the tax were those who obtained 200–300 measures would have involved soon after the remodelling of the *zeugite* class (which, up to that time, included all the middling peasants capable of owning a yoke of oxen), to adapt it to the new conditions. This re-definition of the *zeugite* class would then be an effect of the implementation of the *eisphora* tax in a period prior to the reform of 378.

Whether Pollux's text refers to a specific levy during the Peloponnesian War or to a tax after this war (perhaps in relation to the *eisphora* in 403 to pay off the debt to the Spartans<sup>78</sup>), it would reflect the new definition of the *zeugite* class introduced at the end of the fifth century (and perhaps the same occurred with the *hippeis*). The text, in fact,

74 Cf. Clinton 1982; Hansen 1990; Robertson 1990; Rhodes 1991. See also Parker 1996: 43 f.; Carawan 2002.

75 As we argued in the first section, after 428, and plausibly during the first part of the Peloponnesian War, there were probably about 5,000 taxpayers (consistent with the 5,000 of the revolution of 411). But it is possible that the number went down at a later date due to the decline in Athenian wealth and in the number of wealthy people (Arist. *Pol.* 1303a 8–10, speaks of the decrease of the Athenian *gnorimoi* during the war). Perhaps there would be some 3,000 in 403, of whom 1,000 would contribute regularly not only to the *eisphora* but also to other liturgies such as the trierarchy. A group of 1,000 is referred to by Lysias (fr. 54) and Isaeus (fr. 33), similar to the 1,200 of the subsequent liturgical class. According to Davies 1971: xx–xxiv, participating in the liturgical class required at least 4 talents. Gabrielsen 1994: 45 ff., questions this figure and assumes a lower one for performing liturgies.

76 This volume of production was not very different, in practical terms, from the minimum assigned to the second class, the *hippeis*, as is observed by van Wees 2001: 47, and Rosivach 2002a: 36–38.

77 Foxhall 1997: 129–130; van Wees 2001; 2006; Rosivach 2002a: 36–38.

78 If, for example, it relates to the levy of 428, the reference to the *zeugitai* – only defined as those who produce between 200 and 300 measures (specifically for tax purposes) – is the result of an *a posteriori* operation that takes the system fixed between 403 and 399 with the new definition of Solon's census classes back to the time before the late fifth-century legislation. It is possible however that Pollux referred to the *eisphora* collected to pay the debt with Sparta, which amounted to 100 talents. Demosthenes (20.12 [*Leptines*]) takes it as an example of the generosity of the *demos*, as an argument for not abolishing the levying of taxes, and therefore we believe that his reference to the payment by the *demos* as a whole should not be taken literally but as a rhetorical device; (cf. Dem. 1.20; 2.31; 24.111; Christ 2007: 54). In fact, Isocrates (8.68) speaks of the people deciding to pay the debt from the public treasury, not that they would be personally responsible for making the payment.



seems to allude to an *eisphora* system that most authors date to the period between 428 and 378, the last year being, as it would appear, when the *symmoriai* were established.

So, the *eisphora* system established in 428 and based on a certain land property was applied to the group of wealthiest owners that would roughly coincide with the first two census classes and the richest of the third one, but without a strict adequacy to the Solonian classes. Since the *eisphora* proved to be effective when money was lacking, during the revision of laws in 403–399 this form of tax collection would have been institutionalized by adapting the Solonian classes to it. In effect, these classes still kept on being the framework in which the Athenian citizens were economically defined and distributed into several groups.

As a matter of fact, the Athenian *eisphora* system in the fourth century, known fundamentally from 378 onwards, was based on the *timema*, that is, on capital, not income, as Pollux's text would seem to suggest. Both Rudi Thomsen (1964) and Patrice Brun (1983) give the impression to accept that the system of census classes for raising the *eisphora* was only used before 378, after which the *eisphora* became a percentage (generally 1%)<sup>79</sup> of the capital of a group of taxpayers from which the less wealthy would be exempt<sup>80</sup>.

Thomsen argues that before 378 the census classes would have played a role in determining collection of the *eisphora*, not in the sense that all the members of a class had to pay the same – since the payment was made on the basis of declared capital (the *timema*, as subsequently<sup>81</sup>) –, but in the sense that all the members of each class that

79 Most of the *eisphorai* of the fourth century were collected at 1 % and the normal rate was 1 or 2 % (although it could sometimes be less, 0.5 %, or more, up to 8 %: cf. Dem. 14.27). In Aristophanes (*Ec.* 823 ff.) a rate of 2.5 % is mentioned (schol. to *Ec.* 835, speaks of *eisphora*). See Ste. Croix 1953: 34–36, 47–53; Brun 1983: 61–62.

80 The number of citizens subject to the *eisphora* is disputed. While Thomsen 1964: 163, postulates a very high number (22,000 in 428), other authors think the number was much lower based on the information in Harpocration (s. v. *symmoria*). Ste. Croix 1953: 32, suggests that the general tone shows that there was a large class of those who were exempt. Jones 1957: 28, thinks the number of taxpayers after 378 was 6,000 (with a minimum capital of 25 minas). Before 378, it is possible the number who paid tax was even lower. See Lysias, 22.13, in reference to the situation in 386. Cf. Brun 1983: 21; Strauss 1986: 42–43; Hansen 1991: 112–113; Christ 2007: 54. With the system of *symmoriai* of 378, there was possibly an increase in the number of taxpayers (whose *timema* would now have reached a certain, unknown, threshold) and, furthermore, perhaps they were all taxed equally, at the same percentage. This no doubt helped the Athenian wealthiest class who also had to contribute to other liturgies such as the trierarchy (which also underwent a change in 358/7), something which is entirely consistent with fourth-century politics. Brun 1983: 19, has proposed that the minimum valuation after 378 would be a *timema* of around 2,000 drachmae, a fact that is perhaps reflected, at the end of the fourth century, in the exclusion from citizenship of those who had less capital, for which reason there would only be 9,000 citizens (D.S. 18.18.5; Plut. *Phoc.* 28.7). Jones 1957: 28–29, speaks of 2,500 drachmae. See, however, Christ 2007: 54.

81 Thomsen 1964: 181–183. For an evaluation of capital (*timema*) in this time, and also for the period after 378, all kinds of property were taken into account (not just immovable property or land). However, Christ 2007 points out that the main difference in the *eisphora* before and after 378 is the application of the *timema* as a criterion for paying it. He bases his account primarily on an *argumentum e silentio*, but there is some evidence such as the procedure of *antidosis*, referred to by the author himself (pp. 57–59), that might indicate the opposite.

paid tax had to pay a proportion of the *eisphora* to be collected, as Pollux suggests: *pentakosiomedimnoi*, one talent; *hippeis*, half a talent; *zeugitai*, ten minas<sup>82</sup>. Perhaps the distinction between census classes would also have served to establish the percentage levied on each census class, which could vary according to the needs of the *eisphora*. So, the *pentakosiomedimnoi* would pay a higher percentage on all their capital, as Thomsen supposes, and not only on their land, while for the *hippeis* and the richest of the *zeugitai* perhaps the percentage was smaller<sup>83</sup>.

It is possible that prior to 378, both taxation based on the *timema* and membership of a census class were carried out by the demes (in the same way as the *katalogoi*)<sup>84</sup>. In this respect, it can be said that Demosthenes (50.8–9) alludes to an extraordinary *eisphora* levied in a later period (362), which was based solely on land and implemented on the basis of information provided by the demes<sup>85</sup>. A similar procedure may well have been operating before the creation of the *symmoriai* in 378. This could help us to elucidate the figures given by Pollux (8.130), which are too low to be what each class paid collectively but too high to be what each person paid individually. But Pollux does not allow to deduce further information<sup>86</sup>.

In any case, Pollux's text is of very little use beyond giving us an idea of the role of the census classes in levying the *eisphora* before 378<sup>87</sup>, and perhaps also of a system that differentiated Athenians subject to the charge according to the class to which they

82 According to Thomsen 1964: 176–177, one talent + half a talent + ten minas for each of the 100 *symmoriai*. The problem with his theory is that it seems clear that the *symmoriai* were not created until 378 (cf. *infra*, n. 84).

83 The sources that mention levying the *eisphora* during the Peloponnesian War, but also in the period prior to 378, allude to large sums (Lysias, 19.29: 10, 30, or even 40 minas; Lysias, 21.2–3, refers to the payment, possibly of a *pentakosiomedimos*, of 30 minas in one *eisphora* and 40 in another). This would not only reveal the existence of greater fortunes in Attica at that time than subsequently (as is assumed by Brun 1983: 19), but would also demonstrate that the tax could be more than 1 %, perhaps for the richest (as suggested by Ar. *Ec.* 823, where is mentioned a 2.5 %). Perhaps something of this can be glimpsed in Isaïos (7.39) which, although written in 354, could contain a recollection of the payment based on census class. See, however, Ste. Croix 1953: 42.

84 Thomsen had suggested that the system of 100 *symmoriai* mentioned by Cleidemus (*FGrHist* 323 F 8) was introduced in Themistocles' times, with the same fiscal functions as the *naucrariai* (of which there were 50 from Cleisthenes onwards). So he had to assume that the *eisphora* collected in 428 (Th. 3.19.1) was based on that institution (the *pentakosiomedimnoi* of a *symmoria* paying one talent). However, various authors have rejected the creation of the *symmoriai* in the fifth century, since Philochorus (*FGrHist* 328 F 41) says that they were established for the first time during the archonship of Nausinicus, in 378. Cf. Ste. Croix 1953: 56–62; Brun 1983: 29–32; Hansen 1991: 112–13; Christ 2007: 63 n. 49.

85 As is stated by Gabrielsen 1994: 57, the inhabitants of the demes were well aware of people's wealth in terms of land. An inscription originating in the deme of Piraeus (*IG* II<sup>2</sup> 1214, 25–26; late fourth or early third century) shows that a man from another deme was required to pay a charge in Piraeus because he had property there. In the *proeisphora* of 362, it is said that Apollodoros, son of Pasion, had properties in three different demes (Dem. 50.8). It is no coincidence that it was the members of the demes who, together with the Council's members, drew up the list. Cf. Ste. Croix 1953: 60; Jones 1957: 28; Brun 1983: 37–38.

86 See e.g. the 200 talents for the *eisphora* in 428, according to Th. 3.19.1 (cf. *supra*, n. 83).

87 Several authors think that the text is corrupt or erroneous; cf. Ste. Croix 1953: 41 ff.; Brun 1983: 32.

belonged<sup>88</sup>, in proportion not only to their individual wealth but also to the percentage that could be applied in each case depending on their class, although it seems fairly clear that after the reform of 378 the percentage applied was the same for all of them<sup>89</sup>.

The main point is that if only those landowners who produced more than 200 measures based on a minimum of 8 ha were subject to this tax after 428 (assuming that fallow would be reduced as much as possible and production intensified to obtain the 200 measures), it is reasonable to assume that this system was introduced at the height of the radical democracy (since most of the peasant-hoplites as well as the *thetes* were excluded)<sup>90</sup>. It did not imply, moreover, any kind of political modification, which would be introduced later. This situation may be associated with the first stage of the Peloponnesian War and with the ascendancy of the more radical political line. So, when the “laws of Solon” were revised in 403, not all the *zeugitai* but only those with a considerable amount of land were taxed, which meant that the *zeugite* class was redefined as those who produced 200 measures or more. This *eisphora* system would remain in force until the reform of 378 because of the need for funds in the years when democracy was being restored and, in particular, during the Corinthian War.

Hence, according to our view, in 403 the economic criterion for determining membership of the *zeugite* class would have been redefined and raised by including in it only the wealthiest part of the *zeugite* class (identified until then by the criterion of possessing a yoke of oxen), that is, possibly a fairly small proportion of the sixth- and fifth-century *zeugitai*. And perhaps the class of the *hippeis* was also remodelled and defined as that whose members obtained between 300 and 500 measures. It could even be that some “old” *hippeis* (until then identified by the criterion of owning horses) were from then on included in the “new” *zeugite* class because they obtained less than 300 measures, even if they probably raised some horses.

So, the wealthy *zeugitai* who had started paying the *eisphora* in 428 would constitute a small proportion of the class, namely those who owned 8 ha or more of land and produced 200 or more measures. Such properties would be almost double the average plot size of 5 ha owned by middling *zeugitai* in sixth and fifth centuries. These “new” *zeugitai* of the late fifth century could be the *georgoi* referred to in Aristophanes’ *Assembly of Women* (197–98), who appear to be aligned with the rich and against the poor

88 Also suggested by Aristotle’s *Athenian Constitution* (4.1) concerning the system of fines, attributed to Draco, for not attending the Council.

89 Ste. Croix 1953: 56, does not accept a progressive *eisphora*, but he offers an interesting theory (followed by Jones 1957: 25–26) for explaining the conflicting passages of Dem. *Against Aphobus*, where a proportion of 1/5 is mentioned (cf. Dem. 21.157; 27.7–9; 28.4; 29.59). But see Thomsen 1964: 60 ff.; Brun 1983: 70 ff.

90 For instance, Socrates is depicted as a hoplite (Pl. *Symp.* 221a), but Xenophon (*Oec.* 2.3) says that his possessions were only worth 5 minas, i.e. a member of the class of *thetes* (van Wees 2002: 68, accepts this figure to say that the *thetes* fought as hoplites voluntarily). Xenophon (*Oec.* 2.6) implies that Socrates did not pay *eisphora*, and also suggests that in the event of war the *eisphora* was applied to the rich. For his part, Aristophanes (*Eq.* 923–26) seems to show that only the rich are registered to pay the *eisphora*. These accounts conflict with that of Diodorus Siculus (13.64.4), but he is writing *a posteriori*: perhaps Alcibiades’ intention was to relieve the constant burden of the *eisphora* on the Athenian rich (since many fortunes would have been lost: Brun 1983: 26).

for ideological reasons. But these *georgoi* could also do so due to economic motives, since the fact that they launched ships, which did not affect the poor economically, would mean that the very rich landowners and the well-off farmers had to pay tax. It would be precisely because of this situation that Aristophanes suggested there was a rift between these two sections of the citizen population.

Plausibly, the owners of 4–5 ha land plots and even more who were *zeugitai* during the sixth and fifth centuries would have become members of the class of *thetes*. In this respect, the legislation adopted in 403 (enacted by the *nomothetai*, not by the assembly) might have caused certain troubling political consequences. But the effects were far from serious for most of the “old” *zeugitai*. The political line that originated during the war and the climate of the restoration of democracy in 403, in which the moderates played an important role, should be considered in this context. It should also be remembered that the bulk of the “old” *zeugitai* had been exempted from paying the tax and that landownership would be an important criterion in that restoration, as may be inferred from the attempt by Phormisios to exclude 5,000 landless Athenians from citizenship, even if it failed<sup>91</sup>. Moreover, particularly after 378, the *zeugitai* gradually lost their political, fiscal and military role completely, as also happened with the other classes, since membership to a census class in order to participate in political life began to be systematically ignored<sup>92</sup> and was no longer relevant for election to office<sup>93</sup>. The redefinition of the *zeugite* class could even have helped to accelerate the process by which the census classes lost their political role, since the “old” *zeugitai* who would have been included in the *thetic* class at the beginning of the fourth century, did not lose the capacity of being chosen to hold the offices. And from then on, the formal restrictions against the *thetes* in the election for upper magistracies such as the archonship became obsolete<sup>94</sup>.

It is on the basis of the situation of the “new” fourth-century *zeugitai* that in *Politics* Aristotle can say that Solon “appointed all the officials from the notables (*gnorimoi*) and the well-to-do (*euporoi*): the *pentakosiomedimnoi*, the *zeugitai* and the third class called *hippas*”<sup>95</sup>. The *zeugitai* of the fourth century would be the richest of the “old” Solonian *zeugite* class, which had originally included all those who owned a moderate landholding and a yoke of oxen, i. e. all the middling peasants possibly identified with

91 Lys. 34.4; Dion. Hal. Lys. 32.

92 Hansen 1991: 88; Rosivach 2002a: 45; cf. Ste. Croix 1953: 41 ff. It should be pointed out, in this respect, that the last reference to a census class in an inscription is that of the year 387/6 (cf. *supra*, n. 27).

93 This may well have been one of the factors that led to the change of the conscription system, if the census classes were involved in that system before the change, as assumed by Hansen 1991: 115–16. Although the prerequisites for inclusion on the hoplite list are not known, perhaps in the fifth century these were membership of the *zeugite* class and family property known to the demarchs. Hansen 1991: 108–109, thinks that changes in the army (with the creation of the *ephebeia*) were introduced at the beginning of the fourth century, eliminating the differences between *hippeis*, *zeugitai* and *thetes* by recruiting everyone equally. Perhaps this was the direct consequence of the rise of the new *zeugite* class after 403 including those with 200 measures of produce. However, see Christ 2001, who postulates that the change occurred after the Corinthian War.

94 Cf. Rosivach 2002a: 45–46.

95 Arist. *Pol.* 1274a 18–21: τὰς δ' ἀρχὰς ἐκ τῶν γνωρίμων καὶ τῶν εὐπόρων κατέστησε πάσας, ἐκ τῶν πεντακοσιμεδίωνων καὶ ζευγιτῶν καὶ τρίτου τέλους τῆς καλουμένης ἱππάδος.

those able to afford hoplite armour. The philosopher perhaps wanted to indicate that only the richest landowners (those with leisure) could devote themselves to politics, and that this had been the case in Solon's times. This picture, however, appears to be refuted by the *Athenian Constitution* (26.2) where the *zeugitai* can only hold minor offices and were not eligible for the archonship until 457.

Consequently, in the second half of the fourth century Aristotle brings together the measures possibly defined in the legislation of 403 (500, 300, 200), no longer used in his own time, and projects them back to Solon. Even so, particularly in the *Athenian Constitution* and in Pollux, something of the fundamental characteristics that defined the classes at an earlier time was retained: raising horses in the case of the *hippeis* and possessing a yoke of oxen in the case of the *zeugitai*, which obviously implied owning at least a certain amount of land.

Much remains unknown and cannot be clarified due to lack of sources, in particular whether Solon established a fixed minimum output (or amount of land) for each class and not just for the *pentakosiomedimnoi*<sup>96</sup>, and whether this remained the same in the fifth century. We do not know, but membership of a census class was probably determined on the basis of an element indicating status, such as owning horses or a yoke of oxen, that also doubtless entailed the possession of a minimum quantity of land known or acknowledged by everyone.

### Conclusions

Our main conclusion is that in Athens during the sixth and fifth centuries there was a broad class of middling peasants that were politically recognised and formed the Solonian *zeugite* class. Aristotle's distortion of the composition of this class arises from his projection back to the sixth century of measures of production drawn up in a special situation, the first stage of the Peloponnesian War, when a system of *eisphora* was established. This was confirmed with the restoration of democracy and led to the legislation of 403 redefining the Solonian classes to adapt them to this system. Probably, the political consequences of the new legislation concerning the census classes with regard to the election of magistrates was not particularly important, since during the fourth century membership of the census classes was not taken into account in the election of officials to the magistracies and to perform other duties.

The idea that a fundamental part of the Athenian *zeugitai* of the sixth and fifth centuries consisted of middling peasants cannot be rejected based solely on the measures given by Aristotle and later by Pollux, who possibly worked from the same source as Aristotle. Up to a point, this group would be equivalent to, or at least coincide with, most of the hoplites. The restoration of democracy in 403, when the new legislation revising the "laws of Solon" came into effect, is plausibly the most likely time for dating the changes to the census classes (still on the basis of land) in order to adapt them to the tax

96 See Rosivach 2005, who argues that the *pentakosiomedimnos*' five hundred *medimnoi* per year would not imply a concrete amount of produce but a valuation of the land's worth, including plots cultivated by his tenants.

needs of *eisphora* at that time. From then onwards, and particularly with the reorganisation of the *eisphora* in 378, the Athenian census classes completely lost their political, military and fiscal role. Aristotle would, therefore, have projected back to Solon's times, without complete certainty, measures that were part of the fiscal organisation adopted by Athens at the beginning of the fourth century.

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