

ATHENIAN FINANCE, 454–404 B.C.

ABSTRACT

This paper presents a survey of Athenian financial history from the transfer of the Delian Treasury in, probably, 454 to the end of the Peloponnesian War some fifty years later, in the hope that future research will profit from an overview of the achievements of 20th-century scholarship.¹

From 431 onward, sufficient evidence survives for me to offer a chronological presentation of the topic of 5th-century Athenian finance, but before this date the situation is very different, and readers may find it helpful to have before them a summary of the main premises upon which my reconstruction is based. These are five in number:

1. At some date in the 440s, probably between the conclusion of the Peace of Kallias and the inception of the Acropolis building program, the decision was taken to merge the funds of the Delian League with the funds of Athena.
2. Total centralized resources following this merger amounted to the sum of 9,700T.
3. This 9,700T reserve became the main source of funding both for the Periklean building program and for military and naval expeditions.
4. Capital expenditure on the building program was offset by annual transfers of surplus imperial income to a total of 3,000T.
5. These 3,000T formed part of the 6,000T reserve of 431.

1. Of the many scholars whose publications are drawn upon I have learned most from the work of W. S. Ferguson, A. W. Gomme, and the editors of the *Athenian Tribute Lists*.

2. I am extremely grateful to George Huxley and Robert Parker for their comments on a preliminary draft of this paper, and to the two anonymous readers for criticism and helpful suggestions.

Athenian finance is, however, a notoriously problematic subject, and I must make it clear to nonspecialist readers that the above premises are, all five of them, controversial, and that alternative reconstructions are equally possible given a different set of assumptions.²

454–431

CAPITAL RESOURCES AND EXPENDITURE

THUC. 2.13.3

According to the manuscript text, Perikles, in the course of his review of Athenian resources in spring 431, reminds his audience that there still remained on the Acropolis 6,000T of coined silver, and Thucydides, in an editorial comment, proceeds to explain that the whole amount had once been as much as 9,700T, but had been reduced to its present level by expenditure on the Propylaia and the other buildings and by costs incurred at Poteidaia. 9,700T is a colossal sum of money, but perhaps credible on the assumptions that it represents the combined funds of Athena and the Delian League³ and that a special audit was held, and the result made public, when the decision was taken to merge these two collections of money. The editors of *The Athenian Tribute Lists*, finding it impossible to believe that Athenian resources could ever have amounted to as much as 9,700T, prefer to adopt the variant text preserved in a scholium to Ar., *Plut.* 1193, according to which Perikles reports that there was a regular standing amount of 6,000T on the Acropolis, and Thucydides provides the additional information that the current balance was in fact 300T below this level because of extra disbursements for the Propylaia and the other buildings and for Poteidaia.⁴ The only documentary support for this reading is the fragmentary Papyrus Decree (Strasbourg Papyrus Graeca 84) on the bold assumption that, despite its reference (line 5) to the year of [Eu]thydemus, archon in 431/0, the decree in fact dates to 450/49, so that “the talents stored up in the state treasury to a total of 5,000 [collected] according to the assessment of Aristides” (lines 6–8) represents the current balance of the league funds transferred from Delos some four years earlier.⁵ Both the variant text quoted by the scholiast, and the above interpretation of the Papyrus Decree, should, in my view, be rejected.

THE FUNDING OF THE BUILDING PROGRAM

Apart from the chryselephantine statue of Athena, which involved an outlay of between 700T and 1,000T (*IG I³* 460), the cost of the Periklean

3. Neither resource can be precisely quantified. For the tribute reserve we have only the unreliable testimony of Diodorus Siculus, who gives variant figures of 8,000T (12.38.2) and 10,000T (12.40.1–2, 12.54.3, 13.21.3) for the total sum accumulated in the league treasury at the time of its transfer to Athens. This took place in, probably, 454, shortly before the publication in 453 of the first quota list audited by the *Logistai* in Athens (*ATL* list 1 = *IG I³* 259), but see, in favor of an earlier date, Pritchett 1969; Robertson 1980, pp. 112–119. For the funds of Athena, which must certainly have amounted to

a four-figure sum, see Ferguson 1932, pp. 153–154; Pritchett 1974, pp. 101–104.

4. See *ATL* III, pp. 118–132. The editors present an impressive array of arguments, but, with the notable exception of Rhodes (1988, pp. 194–195), few historians are now prepared to entertain the scholiast’s reading. For objections to the scholium, see in particular Gomme (1953–1954 and in *HCT* II, pp. 26–33); Huxley 1983, pp. 200–201; and Kallet-Marx 1993, pp. 101–103.

5. See Wade-Gery and Meritt 1957. According to their reconstruction, Perikles, in the year of Euthynos, 450/

49, moved a decree for the funding of the building program which included two main provisions: (a) the 5,000T of accumulated tribute in the state treasury were to be carried up to the Acropolis and given to Athena, and (b) an additional 3,000T were subsequently to be carried up during the course of the forthcoming building operations. This reconstruction was accepted, with some reservations, by Meiggs (1972, pp. 515–518), but the objections to it are formidable: see Huxley 1983, pp. 201–202; Kallet-Marx 1989a, pp. 254–256; and Fornara and Samons 1991, pp. 93–96.

building program cannot be estimated from what survives of the published accounts, but the manuscript text of Thuc. 2.13.3 would seem to imply total expenditure of about 3,000T, allowing some 700T for initial expenses at Poteidaia,⁶ and a sum of precisely 3,000T is recorded as voted to, and recently received by, Athena in the first Kallias decree of, probably, 434/3 (*IG I³ 52A*, lines 3–4). Both the date and the interpretation of this text are controversial,⁷ but one possible explanation of the large sum voted is that the *Ekklesia* had earlier approved a budget of 3,000T for the forthcoming building program on condition that the capital outlay was recovered from the annual surpluses left unspent by the *Hellenotamiai*.⁸ If so, the most likely context for the introduction of such a repayment scheme is the extended debate on the funding and potential cost of the Periklean building program (Plut., *Per.* 12.1–4, 14.1–2), which presumably dates to the interval between the conclusion of the Peace of Kallias in, perhaps, 449/8 (Diod. Sic. 12.4),⁹ and the inception of the Parthenon in 447/6 (*IG I³ 436*). Despite Plutarch's apparent implication that a state of war with Persia still existed at the time of this debate, the termination of hostilities by mutual consent would seem to have constituted a necessary precondition for the decision to draw upon the tribute reserve, and it was probably now that the accumulated funds of the Delian League were transferred from the custody of the *Hellenotamiai* to the treasury of Athena.¹⁰ The fact that Athena's 3,000T are specifically recorded as paid entirely in Attic currency (*IG I³ 52A*, line 4) could perhaps be taken to indicate that the decree for the allied adoption of Athenian coins, weights, and measures (*IG I³ 1453*) was already in force,¹¹ but both the date and the content of the decree are the subject of continuing controversy.¹²

THE FUNDING OF MILITARY AND NAVAL EXPEDITIONS

Our earliest surviving record of military expenses (*IG I³ 363*) lists three payments, totaling over 1,400T, made by the Treasurers of Athena to the

6. See Gomme in *HCT* II, pp. 20–23. Heliodoros, the author of a lost work concerning the Athenian Acropolis, is reported to have quoted a sum of 2,000T for the cost of the Propylaia alone (*FGrHist* 373 F 1; for the text, see Keaney 1968). This testimony is perhaps credible on the assumptions that the figure quoted derives from an official record and that it represents the total sum spent on the Acropolis building program as a whole: see *ATL* III, p. 124, note 15; ML, pp. 164–165. In this case, if building expenses amounted to some 3,000T in all, about 1,000T were spent on other projects. For surveys of the Periklean building program, see Boersma 1970, pp. 65–81; Knell 1979.

7. See below, note 23.

8. See *ATL* III, pp. 326–328; Lewis in *CAH* V², p. 125 with note 24.

Gomme (in *HCT* II, pp. 31–32) takes these 3,000T to represent a single credit transfer from the state treasury, but it is difficult to believe that so large a sum could have been accumulated from surplus domestic revenue.

9. For differing views on the credibility of this date, see Badian 1993, pp. 48–49, 58–60; Pritchett 1995, pp. 167–171.

10. See, briefly, Lewis in *CAH* V², pp. 125–127; and, for a fuller discussion, Samons (1993), who rightly argues, against Gomme (in *HCT* II, p. 26), that Athena now became the legal owner of this money. It must however be conceded that there is no direct evidence for any such merger. The treasury of Athena certainly constituted the main source of funding for the Acropolis building program, but it was by no means the only source, and

a case can be made for supposing that the Parthenon at least was paid for without recourse to the tribute reserve: see Kallet-Marx 1989a; Giovannini 1990.

11. See Starr (1970, pp. 64–72), who believes that the measure was introduced soon after the Athenians had completed the task of recoinage the large accumulation of non-Attic silver found in the league treasury after its transfer from Delos.

12. For full discussion, see now Figueira (1998, pp. 319–423, 431–465), who argues, against the consensus, that the decree did not in fact prohibit allied minting of silver, as section 12 had been thought to establish, but merely stipulated that any city which did mint in silver must at the same time accept Attic coin as valid local tender.

generals engaged in suppressing the revolt of Samos during the two years 441/0 and 440/39,¹³ and the stipulated source of funding for these operations would seem to confirm that the tribute reserve was no longer in the custody of the *Hellenotamiai*.¹⁴ We have no information about the financial arrangements for Phormion's mission to Amphilochia ca. 438 (Thuc. 2.68.7–8)¹⁵ or for Perikles' expedition to the Black Sea ca. 436 (Plut., *Per.* 20.1–2),¹⁶ but the grants of 26T and 50T voted to the two squadrons sent to Corcyra in 433 were funded, once again, by the Treasurers of Athena (*IG I³* 364). These two payments, which should have been affordable from current income, would seem to indicate that it was now official policy for expeditions to be funded from reserve,¹⁷ and it is a reasonable inference that this practice dates from the transfer of the tribute reserve to the treasury of Athena. If so, expeditionary costs become a significant factor in our financial equation.

CONCLUSION

On their surrender in 439, the Samians had agreed to repay the costs of the war over a period of time (Thuc. 1.117.3). We have no evidence as to the precise terms negotiated, but special payments from Samos are mentioned in a decree of 426 (*IG I³* 68, lines 21–24) and are subsequently recorded as a source of funding in the treasurers' accounts for 423/2 (*IG I³* 369, lines 42–43), 418/17 (*IG I³* 370, lines 18–19), and 414/13 (*IG I³* 371, lines 16–17). Since these payments represent income of Athena, they are probably to be identified as annual installments of the war debt, and their lengthy duration perhaps suggests that the settlement of 439 had provided for the indemnity to be repaid at a fixed rate of 50T per annum over a period of twenty-six years,¹⁸ which would have left a sum of 1,000T still outstanding in 431.¹⁹ If this assumption is correct, and if we allow a no-

13. For the chronology of these three payments, see Fornara 1979; Lewis in *CAHV²*, p. 502.

14. See Stevenson 1924; *ATL* III, p. 337. But the implication that the funds of Athena now constituted the only available reserve is by no means universally accepted: Gomme (1953–1954, pp. 16–17; and in *HCT* II, pp. 31–32) argues for a substantial reserve in the state treasury; Kallet-Marx (1989a, pp. 259–260) believes that the tribute reserve in fact remained in the hands of the *Hellenotamiai*. These theories, if correct, would have major implications for our understanding of Athenian finance.

15. This episode is timeless in Thucydides, and the question of its date remains controversial: see Hornblower 1991, pp. 353–354.

16. The approximate date of this expedition is no longer in doubt: see

Stadter 1989, pp. 216–217; Lewis in *CAHV²*, p. 146, note 113.

17. During each of the three years 435/4, 434/3, and 433/2 what appears to be money left unspent by generals on campaign was paid in to the *Hellenotamiai* and was transferred by them to the Commissioners for the Propylaia (*IG I³* 464, lines 105–108; 465, lines 128–130; 466, lines 144–145). We have however no evidence to determine the original source of funding, and the sums transferred may in fact represent the tithes set aside for Athena from the sale of booty brought home by the generals. For full discussion, see *ATL* III, pp. 329–332; Thompson 1970a.

18. See *ATL* III, pp. 334–335. If, as the editors of *ATL* assume, the payment of 414/13 represents the final installment of the series, the moneys from Samos subsequently recorded as paid by voucher in the treasurers'

accounts for 410/9 (*IG I³* 375, lines 20–21, 34–37) constituted a different category of revenue, probably funds collected at Samos for use in the field.

19. For a different view, see Gomme (in *HCT* II, pp. 17–18, 33), who argues from the silence of Thucydides at 2.13.3 that the indemnity had been paid in full by 431, and interprets the later payments from Samos as contributions to the imperial budget in lieu of tribute. This reconstruction would require the assumption that the Athenians had insisted on a substantial down payment in 439, as Plutarch (*Per.* 28.1) perhaps implies; cf. the terms imposed upon Thasos after her surrender in 463/2 (Thuc. 1.101.3). For further discussion, see Shipley 1987, p. 118; Stadter 1989, p. 256, both skeptical of the notion that the Samians were allowed as long as twenty-six years to discharge their debt.

tional sum of 2,000T for military and naval expeditions, and for other capital expenses such as colonization²⁰ and shipbuilding,²¹ then Thucydides' figures are at least possible.²²

THE KALLIAS DECREES

In, probably, 434/3 the *Ekklesia* passed two important decrees concerning the organization, management, and use of sacred resources.²³ The first of these (IG I³ 52A) provides for the repayment of debts to the gods now that the 3,000T voted to Athena have been brought up to the Acropolis (lines 2–4).²⁴ The debts in question are to be repaid from the funds already earmarked for this purpose, namely, the moneys now with the *Hellenotamiai*, other moneys in the same fund, and the sum realized by the *dekate* whenever it is sold (lines 4–7).²⁵ The precise sum owing is to be calculated by the thirty *Logistai*²⁶ after due search of the records (lines 7–13), which suggests that some of the loans were by no means recent. We learn from the second decree (IG I³ 52B, lines 21–23) that a sum of 200T had apparently already been voted to cover the estimated cost of repayment, and a later clause in decree A (lines 30–32) stipulates that any money left over is to be spent on the dockyard²⁷ and walls. Whereas the 3,000T voted to Athena had been paid entirely in Attic silver (lines 3–4), the foreign coins listed in an inventory of 429/8 (IG I³ 383, lines 15–35) suggest that the debt to the other gods may have been repaid in a variety of different currencies.²⁸ The decree says nothing about interest, but the *Logistai* may have

20. See Jones 1957, pp. 168–174; Brunt 1966.

21. See Blackman 1969, pp. 208–212; Gabrielsen 1994, pp. 131–132.

22. Cf. the calculations of Unz (1985, pp. 26–27 with note 24), who suggests a figure of at least 1,000T for the combined cost of (a) military campaigns undertaken between 448/7 and the Thirty Years' Peace of 446/5, and (b) Perikles' subsequent expedition to the Black Sea.

23. Until comparatively recent times there was a general consensus among historians that these decrees should be assigned to 434/3: see ML, pp. 157–161, and Meiggs (1972, pp. 519–523, 601), who examines, and in my view refutes, the case for dating them as late as 422/1 or 418/17. 434/3 still seems to me the most probable date for Kallias to have moved these decrees, but see Kallet-Marx (1989b), who presents strong arguments for dissociating the two texts and for assigning decree A to summer 431, soon after Perikles had presented his review of Athenian resources on the eve of war.

24. We have no evidence to

determine how recently, or for what purpose, this money had been voted to Athena. For the hypothesis, accepted here, that the 3,000T were voted some time before the inception of the Acropolis building program and were paid in a series of annual installments to offset expenditure from reserve, see ATL III, pp. 326–328; Lewis in CAH V², p. 125 with note 24. Proponents of a later date for the decree explain these 3,000T as a sum recently voted for the replenishment of a reserve heavily depleted by expenditures incurred during the course of the Archidamian War: see Mattingly 1968, pp. 460–465 (= 1996, pp. 227–232), and 1975 (= 1996, pp. 353–360), arguing for 422/1; Fornara 1970, arguing for 418/17. That so large a sum could have been raised by 418/17 is perhaps conceivable, but, on Mattingly's dating of the decree, the source of these 3,000T becomes a major difficulty, which he does not, in my view, satisfactorily resolve: cf. also Meiggs 1972, pp. 521–523.

25. In common with those of other taxes, the contract for the collection of this otherwise unattested *dekate* was

presumably sold at auction to the highest bidder (see Langdon 1994, pp. 258–261), but we have no means of determining whether it constituted an imperial tax regularly administered by the *Hellenotamiai* or a domestic tax, the revenue from which was, on this particular occasion, to be earmarked for the repayment of the debt to the gods. The former is the view of the editors of ATL (III, p. 326), who suppose that the tithe was levied on the cargoes of merchant ships passing through the Bosphoros (cf. Cawkwell 1975, p. 54, note 4), but Mattingly (1968, pp. 471–473 [= 1996, pp. 240–242]) presents a strong case for supposing that the tax was levied and collected locally, and suggests the mining industry as a possible source.

26. A board of public auditors first attested in 454/3 (ATL list 1 = IG I³ 259, prescript): see Rhodes 1972, p. 111.

27. Total outlay on the dockyards was afterwards estimated at 1,000T (Isok. 7.66).

28. See Eddy 1973, p. 49.

been expected to allow for this as a matter of course, and we should not necessarily assume that none was payable, despite the apparent lack of urgency in settling the debt.

The remainder of decree A is concerned with the establishment, on the model of the Treasurers of Athena, of a new financial board, the Treasurers of the Other Gods, to assume responsibility for the management of funds currently housed in local sanctuaries, most, but not all, of which were now to be concentrated on the Acropolis.²⁹ These new treasurers are to be selected by lot whenever the other magistracies are filled,³⁰ and they are to keep in the Opisthodomos the sacred moneys entrusted to them,³¹ sharing responsibility for security (cf. *Ath. Pol.* 44.1) with the Treasurers of Athena (lines 13–18). On receipt of these temple properties from the various local officials responsible for their safekeeping,³² the new board is to count and weigh them on the Acropolis in the presence of the *Boule*, and is then to prepare a comprehensive inventory to be published on a single *stele*—with the property of each god separately listed, silver and gold distinguished—and a summation of total resources (lines 18–24). In future years, each successive board of treasurers is to publish an audited record of capital balance, income received, and expenditure incurred during its term of office from Panathenaia to Panathenaia (lines 24–30), and these instructions are duly observed in the only surviving document from the series, a combined inventory and statement of income and expenditure for the year 429/8 (*IG I³ 383*).³³ The prescript contains a reference to the previous year's board (lines 9–10)³⁴—the fourth to hold office, on the orthodox dating of the first Kallias decree.

The second decree (*IG I³ 52B*), the text of which has sustained considerable damage, includes the following provisions:

1. The Pro[pylaia], the golden *Nikai*, and their marble [bases]
are to be completed (lines 2–3). The number of *Nikai* under

29. Some temples, including those at Eleusis and Rhamnous, were totally exempted from the forthcoming move, and the rest apparently were permitted to keep some funds on site (*IG I³ 383*, lines 186–187), presumably to defray local expenses.

30. The decree says nothing about qualification for office, but the Treasurers of Athena were chosen exclusively from the highest property-class (*Ath. Pol.* 8.1, 47.1), and the same rule may have applied also to the new board. We have no contemporary evidence to determine precisely when magistracies were filled at this time, but, in the 4th century at least, generals and other military officers were normally elected in the seventh prytany (*Ath. Pol.* 44.4). For a recent discussion see Cawkwell (1997, pp. 107–110), who boldly assigns the decree to the interval between the debate on Corcyra's appeal

for help against Corinth (Thuc. 1.44) and the end of the Panathenaic year 434/3.

31. Probably to be identified as the reconstructed western chamber of the Dörpfeld temple destroyed in 480/79: see Dinsmoor 1947, pp. 127–140; Harris 1995, pp. 1–5, 40–41.

32. Listed in lines 18–19 as “the present *tamiai*, *epistatai*, and *hieropoioi* in the temples, who now have charge of the treasures,” a formulation which, quite clearly, implies that these treasures had not yet been brought up to the Acropolis at the time when the decree was passed: see Kallet-Marx 1989b, pp. 105–108.

33. For discussion and analysis of this complex document, see Ferguson 1932, p. 97, note 2; Thompson 1967, pp. 231–234; and Linders 1975, pp. 14–38. Detailed accounts of income and expenditure must also have been

prepared by the Treasurers of Athena for purposes of audit (cf. *Ath. Pol.* 54.2), but these were apparently never published. The financial records which they did set up (*IG I³ 364–382*) are, technically, not accounts at all, but statements of loans to the Athenian state, with each transaction precisely dated by the prytany calendar for subsequent calculation of interest by the *Logistai*: see Ferguson 1932, pp. 96–100; Davies 1994, pp. 207–208.

34. This fact should be sufficient to establish that the decree was passed no later than summer 430, in advance of the Panathenaic year 430/29: see Kallet-Marx 1989b, pp. 105–108. Mattingly (1968, pp. 458–460 [= 1996, pp. 225–227]) argues, in my view implausibly, that decree A did not in fact institute the treasurers of *IG I³ 383*, but called instead for the reorganization of this board of officials.

commission is not specified, but at least two were subsequently dedicated ca. 430 (*IG I³ 467*), and two more in 426/5 (*IG I³ 468*).³⁵ Work on the Propylaia continued through 433/2 (*IG I³ 466*), but operations were apparently then suspended to conserve resources for the impending war.³⁶

2. An annual budget of 10T is to be allocated for what appears to be supplementary building work on the Acropolis, perhaps concerned primarily with security. The plan is to be prepared by the architect of the Propylaia, and operations are to be supervised by the Treasurers of Athena and the Commissioners for the Propylaia (lines 4–12).
3. Apart from this special fund, no sum in excess of 10,000 drachmas may be drawn from the treasury of Athena without a previous vote of indemnity (lines 12–19).³⁷ These restrictions on capital expenditure perhaps explain why a rider to a decree of ca. 432 concerning the public water supply (*IG I³ 49*, lines 14–16) proposes that any work undertaken should be charged to the current year's tribute.
4. [The money owed to the gods (?)] is to be deposited with the Treasurers of Athena by the *Hellenotamiai* during the course of the year,³⁸ and, once the debt has been repaid from the 200T voted for this purpose, the administration of Athena's treasury is to be located on the right of the Opisthodomos, that of the other gods on the left (lines 19–25).³⁹
5. The Treasurers of Athena currently in office are to complete the weighing and counting of the sacred treasures in their custody, in cooperation with the four boards of treasurers who held office during the previous Panathenaic quadrennium (lines 26–29). This instruction has been thought to anticipate the publication of the three series of extant Parthenon inventories (*IG I³ 292–362*), which begin in 434/3,⁴⁰ but is perhaps more plausibly interpreted as a reference to certain stocks of unweighed bullion and uncounted money currently held in the Opisthodomos.⁴¹

35. See Thompson 1970c.

36. See Boersma 1970, pp. 70, 200–201.

37. No votes of indemnity are in fact recorded either in the treasurers' accounts for 433/2 (*IG I³ 364*) or in what is preserved of their accounts for succeeding years prior to the second prytany of 418/17 (*IG I³ 370*, line 15). Mattingly (1968, pp. 450–451 [= 1996, pp. 215–216]) includes this negative evidence among his arguments for dating the decree to 422/1, but the sporadic recording of the sanction is probably to be explained as a peculiarity of emphasis: see Ferguson 1932, p. 17, note 2; Thompson 1967, pp. 221–223.

38. The restoration of this clause

(lines 19–21) is problematic, and a case can be made for an alternative text whereby the *Hellenotamiai* are to deposit either their receipts or their surpluses with the Treasurers of Athena: see Ferguson 1932, pp. 157–159; Gomme in *HCT* II, pp. 433–434.

39. On the solitary, and apparently superfluous, reference to the Opisthodomos in the accounts of the *Logistai* for the quadrennium 426/5–423/2 (*IG I³ 369*, lines 19–20), see Samons 1993, p. 130, note 10.

40. Although not inscribed in their present form until the beginning of the Panathenaic year 432/1, at earliest: see Samons 1997.

41. See Samons 1996.

PERIKLES' REVIEW OF RESOURCES IN 431

INCOME

"They had on average 600T of tribute coming in annually from their allies, to say nothing of their other revenue" (Thuc. 2.13.3). The pre-war quota lists imply receipts of under 400T,⁴² but allowance can be made for non-tributary sources of overseas income, such as Amphipolis (Thuc. 4.108.1), Samos (*IG I³* 68, lines 21–24), and sacred estates in allied territory (Hill B96).⁴³ A considerable part of the incoming tribute for the year was presumably reserved for recurrent expenses, such as salaries of overseas magistrates (*Ath. Pol.* 24.3: cf. *IG I³* 34, lines 5–11); maintenance of the fleet,⁴⁴ dockyards, and walls; and the program of naval training introduced by Perikles (Plut., *Per.* 11.4).⁴⁵

The "other revenue," not quantified by Perikles, comprised domestic income paid into the treasury of the *Kolakretai*,⁴⁶ which amounted to some 400T per annum if we accept the figure of 1,000T quoted by Xenophon (*An.* 7.1.27) for combined overseas and domestic income in 431. It was derived from such sources as taxes, court fees, mining concessions, market tolls, harbor dues, rents, fines, and confiscations (*Ar., Vesp.* 658–659). Of these the two most lucrative were probably the silver mines at Laureion, the revenue from one of which, the Hephaistikon, had helped to defray the cost of the Acropolis building program (*IG I³* 444, lines 249–250; 465, lines 126–127), and the contract for the collection of the 2% customs duty levied at the Peiraieus, which was sold for 30T in 402/1 and for 36T a year later (Andok. 1.133–134).⁴⁷ The harbor dues payable by shipowners and merchants at Sounion (*IG I³* 8), Phaleron (*IG I³* 130), and the Peiraieus (*IG I³* 133) provided ongoing financial support for local cults.⁴⁸

We know nothing about the mechanics of 5th-century domestic finance, but, since the *Kolakretai* appear to have served for a term of only one prytany (*IG I³* 73, lines 25–29; cf. *IG I³* 36, lines 4–10),⁴⁹ they must have worked to a budgeted routine of some kind. Court fees, for example, seem to have been reserved exclusively for the funding of jurors' pay ([Xen.], *Ath. Pol.* 1.16; Poll. 8.38).⁵⁰ Because of the large number of civilian sti-

42. For the theory that income from tribute was significantly higher than the figures implied by the quota lists, see Gomme in *HCT I*, pp. 273–279; French 1972; and, especially, Unz (1985), who argues that the lists record only the quotas paid to Athena on the *surplus* of each year's tribute, namely the money that was actually sent to Athens and not expended in the field.

43. See Gomme in *HCT II*, pp. 17–19; Meiggs 1972, p. 258. Kallet-Marx (1993, pp. 99–101), reluctant to believe that Perikles could have used the technical term *phoros* to include revenue other than tribute, takes him to mean that 600T came in annually from the

empire, the greater part of which consisted of tribute. For this interpretation, which is perhaps better suited to the word order, see also Huxley 1983, p. 198.

44. For the financial responsibilities of individual trierarchs in connection with the commissioning and upkeep of ships, see Gabrielsen 1994, pp. 19–39, 105–125.

45. For a more detailed analysis of the Athenian budget, covering both imperial and domestic expenses, see Podlecki 1998, pp. 165–168.

46. For these pre-Kleisthenic officials, and their functions under the 5th-century democracy, see *ATL III*,

pp. 359–366; Rhodes 1972, p. 102 with note 5; and Harding 1994, pp. 91–94, 134–138.

47. The 1% tax at the Peiraieus mentioned by [Xenophon], *Ath. Pol.* 1.17, seems from the context to have been duty levied on the property of disembarking passengers.

48. See Parker 1996, p. 125.

49. See Wilhelm 1939.

50. See Harrison 1971, pp. 92–94; Kallet-Marx 1994, pp. 246–248. For the theory, not accepted here, that tribute was used to fund political pay in Athens, see Finley 1981, pp. 41–61; Fornara and Samons 1991, pp. 67–74.

pend and other domestic expenses (*Ath. Pol.* 24.3), the revenues administered by the *Kolakretai* may have been regarded as unavailable for purposes of war.⁵¹

COINED RESERVES

“There still remained, on the Acropolis, 6,000T of coined silver” (Thuc. 2.13.3). This total may represent the combined funds of Athena and the Other Gods now housed together in the Opisthodomos,⁵² but the subsequent reference to “the considerable sums of money from the other temples” (Thuc. 2.13.5) would seem to imply that Perikles is here thinking exclusively of the funds of Athena.⁵³ It follows, if so, that the reserve funds on the Acropolis totalled well over 6,000T at the time of the review, since 766T were borrowed from the treasury of the Other Gods during the seven years 433/2–427/6 (*IG I³* 369, lines 102–105).⁵⁴ At least half of Athena’s 6,000T reserve comprised Attic coin paid in prior to the first Kallias decree (*IG I³* 52A, lines 3–4). Non-Attic silver, gold, and electrum made up the remainder, but we have no means of estimating the sum of these holdings.⁵⁵

UNCOINED RESERVES

“They had in addition uncoined gold and silver in private and public dedications, sacred vessels used in processions and competitions, Persian spoils and other treasures of like nature, worth not less than 500T” (Thuc. 2.13.4). The figure quoted is many times greater than the Parthenon inventories lead us to expect, but is perhaps credible on the assumption that it encompasses dedications and other treasures not included in these inventories, and also reserves of unwrought gold and silver bullion.⁵⁶ The gold plate weighing 40T or more on Pheidias’ statue of Athena is separately itemized (Thuc. 2.13.5).

51. So *ATL* III, p. 333, but Gomme (in *HCT* II, p. 19) rightly objects that we have no real idea of the total annual cost of these recurrent commitments: cf. also Jones 1957, pp. 5–6; Podlecki 1998, pp. 166–167. The 150T per annum quoted for jurors’ pay in the 420s (Ar., *Vesp.* 661–663) is certainly an inflated figure: see Sinclair 1988, p. 225; Kallet-Marx 1994, p. 247, note 62.

52. So *ATL* III, p. 333; Gomme in *HCT* II, pp. 23–24.

53. So Rhodes 1988, pp. 194–195; Cawkwell 1997, pp. 107–108.

54. The loss of the total interest figure for the Other Gods in the accounts of the *Logistai* (*IG I³* 369, line 120) makes it impossible to determine how early these loans began, but expenses incurred before the outbreak

of war in 431 were perhaps funded exclusively from the treasury of Athena: see Cawkwell 1997, p. 108.

55. See Mattingly 1968, pp. 462–463 (= 1996, pp. 229–230). Part of the tribute received in 453 had been paid in Kyzikene electrum staters (*ATL* list 1 = *IG I³* 259, postscript, lines 10–13), and, in the case of certain Hellenistic cities, payments in this currency apparently continued to be acceptable: see Eddy 1973; Figueira 1998, pp. 274–279. A supply of electrum was in fact given to the first board of Parthenon commissioners (*IG I³* 436, lines 31–32), but, for whatever reason, the coins remained unused and the experiment was not repeated.

56. See Gomme in *HCT* II, p. 23; Mattingly 1968, pp. 456–459 (= 1996, pp. 222–225); and Harris 1990–1991.

FUNDS OF THE OTHER GODS

The “considerable sums of money from the other temples” (Thuc. 2.13.5) are, we have suggested, probably to be identified as the funds of the Other Gods now housed in the Opisthodomos. The fact that these resources are left unquantified is, however, a matter for some surprise, given the comprehensive yearly accounts to be drawn up and published under the terms of the first Kallias decree (*IG I³ 52A*, lines 24–30), and this omission could, quite legitimately, be taken to imply that the funds in the local sanctuaries had not yet been brought up to the Acropolis and counted.⁵⁷

LOANS AND INTEREST

“These resources might be used for their safety on condition that no less was replaced afterwards” (Thuc. 2.13.5). This proviso probably refers specifically to the state’s obligation to replace any dedications removed for melting,⁵⁸ but we know from the accounts of the *Logistai* (*IG I³ 369*, lines 98–111) that, with effect from the financial year 433/2, payments from the sacred treasuries were also treated as loans to the state. The Athenians had, in addition, contracted to charge themselves interest on all such loans, at one drachma a day for one talent down to the end of the financial year 427/6, and one drachma a day for five talents thereafter, which represents a reduction from 6% to a purely nominal 1.2% per annum.⁵⁹ If we are right in supposing that the 6,000T reserve of spring 431 does not include the funds of the Other Gods, the total sum available for loan by the two boards of sacred treasurers at the beginning of the financial year 433/2 was probably of the order of 7,600T, allowing some 6,700T for the funds of Athena⁶⁰ and some 900T for the funds of the Other Gods.

Our records show some loans made direct to generals, and others to the *Hellenotamiai* for transfer to the generals, and there is evidence to suggest that the term of office served by the *Hellenotamiai* may have been changed from the civil to the Panathenaic year so as to correspond with the term of office served by the two boards of sacred treasurers (cf. *IG I³ 369*, lines 25–29; *IG I³ 377*, lines 23–25).⁶¹ The change of sacred treasurers took place on 28 Hekatombaion, and these texts have been thought to establish that outgoing boards of *Hellenotamiai* were still in office on Prytany I.26 = (?)14 Hekatombaion 424, and on Prytany I.20 = 20 Hekatombaion 406.⁶²

57. See Mattingly 1968, pp. 456–458 (= 1996, pp. 222–224); Kallet-Marx 1989b, pp. 109–110. The editors of *ATL* (III, p. 333), who include the centralized funds of the Other Gods in the 6,000T reserve, assume that Perikles is thinking of extra money potentially available from sources which had been exempted from the provisions of the first Kallias decree. These included the treasury of the two goddesses at Eleusis, in which 90T of

coined silver had accumulated by the end of the Archidamian War (*IG I³ 385*, lines 5–6), and that of Nemesis of Rhamnous, whose resources in the 440s had amounted to over 9T (*IG I³ 248*, line 38).

58. See Gomme in *HCT* II, p. 26; Hornblower 1991, p. 255.

59. See West 1930, pp. 234–235; *ATL* III, pp. 342–343.

60. This estimate assumes high initial expenses at Poteidaia:

cf. Gomme in *HCT* II, pp. 21–22; Kallet-Marx 1993, p. 104.

61. See Meiggs 1972, p. 234.

62. So Meritt 1928, pp. 18–19; 1932, p. 126; and 1964, p. 212, but see the objections of Pritchett (1977c), who believes that the *Hellenotamiai* took up office on Prytany I.1, the first day of the new financial year.

431–421

PERIKLES

During the three financial years preceding the death of Perikles in autumn 429, the Athenians borrowed over 3,800T from the sacred treasuries: an estimated 1,145T in 432/1, 1,370T in 431/0, and an estimated 1,300T in 430/29.⁶³ Capital on this enormous scale was needed to fund operations at Poteidaia, which finally surrendered in winter 430/29 after a siege costing at least 2,000T (Thuc. 2.70.2; Isok. 15.113), and to pay for the expensive naval expeditions mounted against the Peloponnese in 431 (Thuc. 2.23.2) and again in 430 (Thuc. 2.56.1–2).⁶⁴ Such levels of expenditure could not be sustained indefinitely, and Athenian anxiety about the potential cost of the war, should it prove to be protracted, is illustrated by the decision, taken as early as summer 431, to set aside an iron reserve of 1,000T from the funds on the Acropolis, to be used only in the event of an enemy fleet attacking Athens (Thuc. 2.24.1).⁶⁵

Thucydides nowhere explains the principles of Athenian war finance,⁶⁶ but, in the early years at least, as he perhaps implies at 2.24.1, it seems likely that the reserves on the Acropolis were to constitute the main source of funding for the war,⁶⁷ with any surplus imperial revenue perhaps transferred to the sacred treasuries at the end of each financial year, thereby reducing the debt to Athena and the Other Gods.⁶⁸ The surpluses available for transfer were, however, very much smaller than in pre-war years, since 40T of tribute had been lost in consequence of the revolt of Poteidaia and her local allies in 432,⁶⁹ and 30T more after the expulsion of the population of Aigina in 431 (Thuc. 2.27.1). No attempt seems to have been made to compensate for these losses in the assessment of 430,⁷⁰ but firm action was now taken against defaulters. In autumn 430 a squadron of six ships was sent out to collect money in Karia and Lykia (Thuc. 2.69.1),⁷¹ and a fragmentary decree (*IG I³ 60*), now thought to date no later than 430,⁷² provides for the mobilization of a much larger force of thirty ships and 1,200 hoplites to ensure that both *phoros* and *epiphorai*⁷³ are collected

63. See ML, p. 217.

64. Fourteen payments—ten for Macedon and Poteidaia, and four for the Peloponnese—are recorded in the treasurers' accounts for 432/1 (*IG I³ 365*), but the totals, and half the individual figures, are missing; see Thompson 1968. By contrast, the accounts for 431/0 (*IG I³ 366*) are lost apart from the summation (lines 9–15), which records expenditure of over 1,267T, plus two supplementary grants, one of 50T, for new triremes: see *ATL* III, p. 342; Gomme in *HCT* I, pp. 144–145.

65. See Kallet-Marx 1993, pp. 110–111.

66. See Gomme in *HCT* I, p. 26,

excellent on the whole question of Thucydides' treatment of the financial aspect of the war, and not, in my view, invalidated by the counterarguments of Kallet-Marx (1993). See also, for pertinent criticism of Thucydides, Hornblower 1991, pp. 341–342; Lewis in *CAH V²*, p. 385.

67. On the primacy of the reserve in Periklean financial strategy, see Kagan 1974, pp. 36–40; Kallet-Marx 1993, pp. 196–198.

68. We have no direct evidence for any such transfers, but the possibility that some were made within this period is not excluded by the accounts of the *Logistai* (*IG I³ 369*), which supply no details of financial transactions effected

before 426/5: see Kallet-Marx 1989b, pp. 102–103.

69. See Gomme in *HCT* I, pp. 210–212; Meiggs 1972, pp. 309–310.

70. See Meiggs 1972, pp. 310–311, 531–532.

71. For the scale of default in this part of the empire, see Meiggs 1972, pp. 246–247, 306–307. The tribute which was lost amounted to no great sum, but this was, perhaps, less important than the example to be set: see Rhodes 1988, p. 249.

72. See Meritt 1953.

73. Probably to be interpreted as the interest charged on late payments of tribute: see *ATL* I, pp. 450–453; Meiggs 1972, pp. 432–433.

in full. The quota list for 431/0 is lost, but the scale of this expedition seems to indicate that there had been a significant shortfall in revenue.⁷⁴

KLEON

I have suggested that the war had thus far been funded mainly, if not exclusively, from capital, but the unexpected revolt of Mytilene in 428 seems to have served as the catalyst for a reappraisal of financial strategy. Faced with the prospect of another long and expensive siege, the Athenians, in autumn 428, for the first time levied an *eisphora*, or property tax, which raised 200T,⁷⁵ and they also imposed a special levy on their allies (Thuc. 3.19.1).⁷⁶ These emergency measures may well have been proposed by Kleon, the most influential politician of the day (Thuc. 3.36.6), if 428/7 was the year in which he claimed credit for the amount of money which he had succeeded in raising as a member of the *Boule* (Ar., *Eq.* 773–776).⁷⁷ In addition, there is a strong case for supposing that the next assessment of tribute, not due until 426, was brought forward by two years to provide additional revenue.⁷⁸ The overall level of increase cannot be inferred from the figures preserved in the fragmentary quota list for 428/7 (*ATL* list 27 = *IG* I³ 283), but the state is estimated to have borrowed no more than 300T from the sacred treasuries during the course of the two years 428/7 and 427/6, compared with 600T in 429/8.⁷⁹ Imperial income had evidently now become the primary source of funding for the war, with the drain on the reserve limited to the amount needed to make up any deficit.

No new assessment of tribute seems to have been made at the Great Panathenaia of 426,⁸⁰ but a decree moved by Kleonymos in the second prytany of 426/5 provided for the appointment of foreign nationals to assume personal responsibility for the collection of tribute in cities throughout the empire, with the aim of ensuring that the current assessment was realized in full without further recourse to expensive naval expeditions (*IG* I³ 68: cf. Antiph. F 52 Thalheim). This measure may have improved the machinery of collection,⁸¹ but the increased level of borrowing in 426/5, six loans totaling 262T (*IG* I³ 369, lines 2–16), served to reinforce the case

74. Money-collecting ships were again sent out in 428, to raise extra funds for the siege of Mytilene (Thuc. 3.19.1), and in 425/4 (Thuc. 4.50.1; 4.75), probably in connection with the new assessment of tribute (*IG* I³ 71): see generally Kallet-Marx 1993, pp. 160–164; Hornblower 1996, p. 206.

75. The significance of the *eisphora* of 428 is disputed. Taken literally, Thucydides appears to mean that it was the first ever to be levied in Athens, but *eisphorai* are attested as an established institution in the second Kallias decree (*IG* I³ 52B, lines 17 and 19). Historians who date this decree to 434/3 accordingly suppose that the *eisphora* of 428 was either (a) the first of the war

(Gomme in *HCT* II, p. 278; Meiggs 1972, pp. 256–257, 519–520), or (b) the first to raise as much as 200T (Hornblower 1991, pp. 403–404). Those who advocate a later date for the decree conclude that the *eisphora* of 428 was indeed the first ever to be levied: see Mattingly 1968, pp. 451–456 (= 1996, pp. 216–222); Kallet-Marx 1993, pp. 134–136.

76. See Kallet-Marx 1993, pp. 136–137.

77. See Gomme in *HCT* II, pp. 278–279; Meiggs 1972, p. 318. Kleon, or possibly Lysikles (cf. schol. Pl., *Menex.* 235e), should perhaps also be credited with the establishment of the *Poristai*, an emergency financial board first attested in 419

(Antiph. 6.49), and still officiating in 405 (Ar., *Ran.* 1505): see Andrewes in *HCT* V, p. 111; Rhodes 1981, p. 356.

78. See *ATL* III, p. 70; Meiggs 1972, pp. 532–534.

79. These estimates assume that the rate of interest payable to Athena and the Other Gods remained unchanged until the end of the financial year 427/6: see ML, p. 217.

80. See Meiggs 1972, pp. 322–323.

81. But perhaps not to the extent that Kleonymos had anticipated: see Fornara and Samons (1991, pp. 179–181), who argue that the Kleinias decree (*IG* I³ 34) should be dated to the 420s and interpreted as an attempt to rectify shortcomings in the procedure introduced by Kleonymos.

for a new assessment, and this was duly introduced in autumn 425 through an enabling decree moved by Thoudippos (*IG I³ 71*), who is probably to be identified as a son-in-law of Kleon (cf. *Isai.* 9.17–20).⁸²

The reassessment of 425 aimed to bring in a grand total of between 1,460T and 1,500T (*IG I³ 71*, line 181).⁸³ We have no documentary evidence for the amount of tribute actually collected,⁸⁴ but the return evidently proved insufficient to balance the Athenian budget without further recourse to the reserve, since 130T had to be borrowed in 425/4, 163T in 424/3,⁸⁵ and as much as 253T, including loans of 6T from Athena Nike and 55T from the Other Gods, in 423/2 (*IG I³ 369*, lines 16–48 [loans from Athena Polias], lines 51–97 [loans from Athena Nike and the Other Gods]).⁸⁶ Rising costs and an upturn in public expenditure at home (cf. *Plut.*, *Arist.* 24.5) may help to explain why capital continued to be withdrawn from the sacred treasuries. Jurors' pay was certainly increased, from two obols to three obols a day (*Ar.*, *Eq.* 797–800; schol. *Vesp.* 88, 300), building operations continued,⁸⁷ and the maintenance of war orphans (*Thuc.* 2.46.1; *Ath. Pol.* 24.3) now represented an increasingly expensive commitment.⁸⁸ Significantly, the reassessment decree provides for the generals to submit annual estimates, and, if the current year's tribute proves insufficient to cover anticipated expenses, to apply for an extra levy (*IG I³ 71*, lines 46–50).

The decree also prescribes, in the strongest possible terms, that there must in future be a new assessment of tribute every four years, at the time of the Great Panathenaia (*IG I³ 71*, lines 26–33). An assessment was accordingly due in summer 422, and three fragments survive of an assessment list (*IG I³ 77*) which is now thought to date to 422. Only one district total, that of the Hellespont, is preserved, a sum of [1]96T (*IG I³ 77*, col. IV, line 13), compared with 250+T in the assessment of 425 (*IG I³ 71*, col. III, line 123). If this level of reduction is typical, the total sum levied may have been scaled down from 1,460+T in 425 to a more realistic figure of about 1,000T in 422, with the island district perhaps more favorably treated than the rest of the empire.⁸⁹ Apart from featuring a special clause concerning six Chalkidian states currently in revolt from Athens (*Thuc.* 5.18.5),

82. But see, against the consensus, Bourriot 1982, pp. 410–418.

83. For full discussion, see Gomme in *HCT* III, pp. 500–504; Meiggs 1972, pp. 324–332.

84. The figure of 2,000T quoted by Aristophanes (*Vesp.* 656–660) for total income from all sources in 422 accurately reflects the scale of the new assessment, but can be no guide to the precise sum realized: see Gomme in *HCT* III, pp. 503–504, *contra* the view expressed in *ATL* III, pp. 344–345. On the silence of Thucydides and its possible implications, see Kallet-Marx 1993, pp. 164–170; Hornblower 1996, pp. 94–96.

85. Comprising four payments recorded as made to the *Hellenotamiai* of the previous year, D[- - and colleagues, and to the new ones], Charopides of Ska[mb]onidai and colleagues (*IG I³ 369*, lines 25–36). This is usually taken to mean that the *Hellenotamiai* of 425/4 had left office after the first payment on Prytany I.26, but see Pritchett 1970, pp. 98–103, for the suggestion that they were continued in office for a second year, serving jointly with the incoming board.

86. The two supplementary loans from the Other Gods, 31T on Prytany I.25 and 24T on Prytany X.20, probably reflect the escalating cost of

operations in the Thraceward district: see Gomme in *HCT* III, pp. 627–630.

87. See Miles 1989, pp. 221–235.

88. See Stroud 1971, pp. 288–290.

89. See ML, pp. 226–227; Meiggs 1972, pp. 340–343. For the islands, cf. the quota lists for 417/16 and 416/15 (*ATL* lists 38–39 = *IG I³ 288–289*). The expressions “250+T,” “1460+T,” e.g., are intended to indicate “any sum greater than 250T,” “any sum greater than 1460T”; the expressions “27T+,” “3T+,” e.g., which are used elsewhere in this article, indicate a sum between the one stated and the next highest increment in numbers of talents.

the tribute assessment of 422 was not affected by the Peace of Nikias.⁹⁰ There could clearly be no question of any return to pre-war levels of assessment until the debt to the sacred treasuries had been repaid. As regards imperial revenue other than tribute, an estimated 70T had been lost when Amphipolis fell to Brasidas in winter 424/3 (Thuc. 4.108.1),⁹¹ but this may have been counterbalanced by a gain of 90T if, as seems likely, the rent formerly payable to the 2,700 cleruchs on Lesbos (Thuc. 3.50.2) was transferred to the state treasury when these settlers were subsequently withdrawn, possibly in 425 or 424.⁹²

CAPITAL AND INCOME

Tribute was due for payment at the Dionysia in time for the opening of the campaigning season (schol. Ar., *Ach.* 504; cf. Isok. 8.82), yet every spring during the quadrennium 426/5–423/2, at precisely the time of year when this incoming tribute should have been available for the war effort, a sum of 100T was disbursed by the Treasurers of Athena (*IG* I³ 369, lines 12, 22, 33, 44). These payments evidently reflect an agreed procedure, whereby a fixed sum was to be released from reserve at the beginning of each new campaigning season, and their timing has been thought to imply that incoming tribute in excess of the budgeted requirements of the *Hellenotamiai* was now being banked with Athena immediately after the Dionysia, to be borrowed back at interest as required.⁹³ In this case, however, we should have expected the principal to be reduced each year by the amounts paid in, yet no such adjustments appear in the accounts of the *Logistai*. The simpler, and more probable, view is that the war continued to be funded from a combination of capital and disposable income, with Athena now making a fixed contribution of 100T at the beginning of the campaigning season, followed by smaller payments as need arose.⁹⁴

THE RESERVE IN 422

By the end of the financial year 423/2, when the *Logistai* closed their accounts for the quadrennium, the debt to the sacred treasuries had reached a figure of 5,600T, plus accumulated interest of, perhaps, 1,400T (*IG* I³ 369, lines 112–123). On the assumption that the base figure in 433/2 had been 7,600T, total remaining reserves amounted to at least 2,000T,⁹⁵ the equivalent of two years' revenue from the empire, and capital of this magnitude will readily explain why financial exhaustion is not included among the Athenian motives for peace in 422/1 (Thuc. 5.14.1–2).⁹⁶

90. This is established by figures preserved in *ATL* list 33 = *IG* I³ 287, now redated from 422/1 to 418/17: see Meritt and McGregor 1967; Meiggs 1972, pp. 340–343. The editors of *ATL* (III, pp. 347–353) had earlier dated *IG* I³ 77 to 421, and argued for a general reduction in tribute levels after the Peace of Nikias.

91. See *ATL* III, p. 339, note 58;

Kallet-Marx 1993, pp. 175–176.

92. See Kagan 1974, pp. 166–167.

93. See Gomme in *HCT* II, pp. 433–435.

94. See ML, pp. 216–217.

95. Considerably more, if we allow for savings from current income:

cf. Gomme in *HCT* III, pp. 687–689.

Using different arithmetic, the editors of *ATL* (III, pp. 341–345) arrive at the

much lower figure of 1,444T, which would have left a disposable reserve of under 500T, since the emergency fund of 1,000T set aside in 431 continued to be protected by special sanctions (Thuc. 2.24.1, 8.15.1).

96. See Kagan 1974, pp. 336–337; Kallet-Marx 1993, pp. 178–180.

421–410

AFTER THE PEACE OF NIKIAS

A new assessment of tribute was due at the Great Panathenaia of 418, and five fragments survive of what is now agreed to be the quota list for 418/17 (*ATL* list 33 = *IG* I³ 287). Extrapolation from the three preserved figures in the Hellespontine panel (col. II, lines 9–11) seems to establish that the level of tribute set in 422 had been broadly maintained after the Peace of Nikias, so that a return of 1,200T a year (Andok. 3.9) is by no means impossible if taken to refer to overseas income as a whole.⁹⁷ No trace has survived of the record of expenditure for the quadrennium 422/1–419/18, but in 418/17 the Treasurers of Athena made four payments totaling 56T for operations in Thrace and the Argolid (*IG* I³ 370, lines 1–23). Of these the second involved a previous vote of indemnity, and the fourth was funded from current income in the form of the money from S[amos].⁹⁸ Three further payments followed in 417/16 (*IG* I³ 370, lines 24–35), all involving the vote of indemnity, but the figures are lost apart from a sum of 10T, the first of two payments for the Melian expedition.⁹⁹ The procedures governing withdrawal of capital prescribed by the second Kallias decree (*IG* I³ 52B, lines 12–19) were evidently now being strictly observed pending liquidation of the debt to Athena, and it is significant that the financial assistance against Sparta which was promised to Argos in the treaty of 416 was to be funded from tribute (*IG* I³ 86, lines 11–12). For no very obvious reason, the funds for the Argolid voted in the second prytany of 418/17 were paid, mainly if not entirely, in Kyzikene electrum staters (*IG* I³ 370, lines 11–15), the first recorded instance of the use of this currency in Athenian war finance.

A question raised by the treasurers' accounts for 418/17 and 417/16 is whether the seven payments attested are to be understood as a record of total military expenditure or as supplements to a military budget funded in the first instance from imperial income. The latter would seem the likelier interpretation, since the initial payment of 10T for the Melian expedition is extremely small in relation to the size of the force mobilized (Thuc. 5.84.1). One other financial document survives from this period, a small fragment of a coinage decree (*IG* I³ 90) now thought to date ca. 416. It seems to have been mainly concerned with the exchange of gold for silver, but the text is too poorly preserved for us to assess its significance.¹⁰⁰

During these years of relative peace, surplus imperial revenue was regularly available for transfer to reserve, and it is clear that by 415 substantial savings had been accumulated (Thuc. 6.12.1, 26.2). Andokides (3.8) claimed that the Peace of Nikias had in fact enabled the Athenians to deposit as much as 7,000T on the Acropolis. The historical errors in this speech are so gross and extraordinary that one hesitates to attach any credence to the figure quoted, but it could perhaps represent the target set in a lost decree of 421 which provided for the phased repayment, with interest, of the loans made by the two boards of sacred treasurers from 433/2 to the end of the Archidamian War.¹⁰¹ How far achievement matched aspiration is impossible to determine, but if, say, 500T a year had been saved since 421,

97. See Meiggs 1972, pp. 340–343; Andrewes in *CAH* V², p. 441.

98. Payments continue to be precisely dated by the prytany calendar, which implies that, technically at least, they constituted loans at interest: see Thompson 1967, p. 227; ML, p. 234. On the question of the 9T “advanced” to the *athlothetai* in the second prytany of 415/14 (*IG* I³ 370, lines 66–68), see Davison 1958, pp. 31–32; Lewis 1959, p. 246.

99. Two payments to an occupation force on Melos are partly preserved in the accounts for 415/14 (*IG* I³ 370, lines 69–72), but the record of intervening expenses is lost.

100. For full discussion, see Figueira 1998, pp. 424–430.

101. See *ATL* III, pp. 346–347, 353–356.

total resources on the eve of the Sicilian Expedition would have amounted to over 5,500T, inclusive of the 2,000+T remaining on hand at the end of the Archidamian War.

THE SICILIAN EXPEDITION

Hard figures for the cost of the great Sicilian Expedition of 415 were not available to Thucydides (cf. 6.31.5), but a fragmentary inscription (*IG I³ 93*, lines 47–49) may tell us that a sum of 3,000T was eventually set aside to fund the enterprise, once the three generals had finalized their requirements under the plenary powers voted to them (Thuc. 6.26.1).¹⁰² Such a massive capital investment may have seemed justified at the time, since it was expected to yield a dividend in the form of extra imperial revenue (Thuc. 6.24.3), but the Athenians were not to know that their remaining reserves would subsequently be depleted by, perhaps, as much as 500T through further payments to the forces in Sicily: 300T in spring 414 (Thuc. 6.94.4; *IG I³ 370*, lines 73–74), 120T in winter 414/13 (Thuc. 7.16.2; *IG I³ 371*, lines 6–8),¹⁰³ and a third payment, figures lost, in spring 413 (*IG I³ 371*, lines 12–13).¹⁰⁴ Part of this outlay may have been recouped from the sales of confiscated property recorded on the Attic *Stelai* (*IG I³ 421–430*),¹⁰⁵ but by summer 413 the Athenians, for the first time in the war, found themselves in serious financial difficulties (Thuc. 7.28.4, 8.1.2: cf. 7.27.1–2).

THE AFTERMATH OF SICILY

Once it became clear that the Sicilian Expedition had ended in total disaster, extra revenue for the military budget needed to be generated as a matter of urgency and, probably in autumn 413, the decision was taken to replace the annual tribute with an ongoing 5% levy on seaborne trade throughout the empire (Thuc. 7.28.4).¹⁰⁶ The introduction of this harbor tax was accompanied by constitutional change and cuts in public expenditure at home (Thuc. 8.1.3: cf. 8.4),¹⁰⁷ but any savings achieved were largely neutralized by the effects of the occupation of Dekeleia, which Sparta and her allies had seized and fortified in spring 413 (Thuc. 7.19.1). Essential supplies from Euboea now had to be transported by sea, and the extra costs

102. The treasurers' accounts for 416/15 appear to have included only relatively small sums disbursed in connection with costs incurred during the mobilization of the fleet (*IG I³ 370*, lines 49–58): see Ferguson (1932, pp. 159–162), who inferred that surplus imperial revenue accruing after the Peace of Nikias had been used to create a separate imperial fund on deposit with the Treasurers of Athena, from which major expenses could be met without further recourse to the funds of Athena herself.

103. For the figure, fully preserved

in only one manuscript of Thucydides and restored in *IG I³ 371*, see Dover in *HCT IV*, p. 393.

104. See *ATL III*, pp. 356–357.

105. See Lewis 1966.

106. The inception of this 5% levy cannot be precisely dated, but Thucydides appears to imply that it was introduced, not in 414 when a regular assessment of tribute was due, but some time later than the Spartan occupation of Dekeleia in spring 413: see Dover in *HCT IV*, p. 402; Meiggs 1972, pp. 438–439. Although Thucydides describes the new tax as a substitute for tribute, it

may also have been payable by Aigina (cf. Ar., *Ran.* 363) and other Athenian settlements abroad: see Meiggs 1972, p. 369.

107. It may have been now that naval pay was reduced from one drachma to a more affordable three obols a day (Thuc. 8.45.2: cf. 6.31.3): see Andrewes in *HCT V*, pp. 97–99, *contra* the view of Pritchett (1974, pp. 14–29), who believes that the three-obol rate was standard, and the one-drachma rate exceptional.

incurred, combined with loss of internal revenue, had already begun to impose severe strains on the domestic budget (Thuc. 7.28.1–4). More than 20,000 slaves deserted (Thuc. 7.27.5), and, as pressure on the countryside intensified, the silver mines at Laureion seem to have gone out of production (Xen., *Vect.* 4.25: cf. Thuc. 6.91.7). Electrum had occasionally been disbursed during the quadrennium 418/17–415/14 (*IG I³* 370, lines 13–14, 57–58, 64–65), but in 413/12 the Treasurers of Athena paid out the enormous sum of 61,697 [Kyzikene] staters (*IG I³* 372, line 4), the equivalent of 250+T and a sure indication that stocks of silver were now rapidly running out.¹⁰⁸ We do not know how this money was to be spent, but timber for shipbuilding was probably the most urgent priority after the losses sustained in Sicily (Thuc. 8.1.3).

THE OLIGARCHIC REVOLUTION

Faced with the revolt of Chios, their most powerful ally, in summer 412, the Athenians finally turned to the protected fund of 1,000T which they had set aside in the first year of the war, and voted to make this money available for the immediate mobilization of naval reinforcements (Thuc. 8.15.1; Philoch., *FGrHist* 328 F 138). The accounts for 412/11 are lost, but the costs incurred during the first year of the Ionian War were undoubtedly substantial,¹⁰⁹ and the oligarchic revolution was largely motivated by the hope of attracting Persian money to Athens through the influence of the exiled Alkibiades (Thuc. 8.47–48.3). Alkibiades, however, proved unable to deliver (Thuc. 8.56), and, by the time the Four Hundred seized power on 22 Thargelion 411 (*Ath. Pol.* 32.1), capital resources were apparently close to exhaustion (cf. Thuc. 8.76.6). All available revenue was accordingly now requisitioned for the military budget, and civilian stipends were duly abolished for the duration of the war except for those of the nine archons and the *prytaneis* (*Ath. Pol.* 29.5), who were presumably exempted as nominal and effective heads of state, respectively.¹¹⁰ The partially preserved accounts of the treasurers of the Four Hundred (*IG I³* 373) include a payment of 27T+ dated 21 or 22 Hekatombaion 411, the first of the new civil year. This was evidently a military payment, probably connected with operations close to home, but we have no evidence to determine its precise purpose.¹¹¹ The Five Thousand, who succeeded the Four Hundred about the end of Metageitnion 411, renewed the ban on civilian stipends (Thuc. 8.97.1; *Ath. Pol.* 33.1) and appointed new treasurers to replace the board which had served under the Four Hundred,¹¹² but, apart from a tiny fragment (*IG I³* 374), their accounts are lost. What little evidence we have suggests that the limited resources available to the Five Thousand were reserved for the military budget at home, leaving the generals in the Hellespont¹¹³ to fund their operations from emergency levies (Xen., *Hell.* 1.1.8, 12).

During their brief regime, the Four Hundred had published a “constitution for the future,” under which the sacred funds of Athena and the Other Gods were to be managed by a single board of ten treasurers, and imperial and all other secular funds by a single board of twenty *Hellenotamiai* (*Ath. Pol.* 30.2). The reforms envisaged in this document evidently en-

108. See Ferguson 1932, p. 75, note 3; Andrewes in *HCTV*, p. 194. Some Attic coin continued to be disbursed, but the figures are lost apart from a sum of 13+T (*IG I³* 372, line 2), the final payment of the year.

109. For ship numbers, see Andrewes in *HCTV*, pp. 27–32.

110. So Rhodes 1981, p. 382. Each of these officials was to receive three obols a day, which may represent a reduced rate of pay: see Jones 1957, p. 136, note 5; Sinclair 1988, p. 66, note 84.

111. If, as seems likely, these treasurers had taken up office on 1 Hekatombaion 411, at the same time as the new archon, any earlier expenditure authorized by the Four Hundred would have been recorded in the lost accounts for 412/11: see Ferguson 1932, pp. 145–146 with note 1; Andrewes in *HCTV*, pp. 193–195.

112. See Andrewes in *HCTV*, pp. 195–196.

113. See Andrewes 1953.

tailed (a) the merging of the two collections of sacred funds in the Opisthodomos, in consequence of which the Treasurers of the Other Gods were to be abolished and their duties transferred to the Treasurers of Athena, and (b) the merging of the imperial and domestic revenues in the state treasury,¹¹⁴ in consequence of which the *Kolakretai* were to be abolished and their duties transferred to an enlarged board of *Hellenotamiai*. Whatever the thinking behind this abstruse document, the idea that the two central treasuries of Athens should each be managed by a single board of officials seems eminently sensible.

Both reforms were in fact subsequently implemented, but not as the package which we might have expected. The next surviving accounts of the Treasurers of Athena (*IG I³ 375*) establish that a board of twenty *Hellenotamiai*, probably taken two from each tribe,¹¹⁵ was in place by 410/9, the first full year of the restored democracy. A decree of 410/9 (*IG I³ 102*, lines 34–36) confirms that the *Hellenotamiai* now pay for the setting up of *stelai*, a duty previously discharged by the *Kolakretai*, who are last attested, and last attested in that role, in a decree of 418/17 (*IG I³ 84*, lines 26–28).¹¹⁶ The sacred treasurers, on the other hand, continued to function as two separate boards until, probably, the beginning of the new Panathenaic quadrennium on 28 Hekatombaion 406, when the Treasurers of Athena finally assumed responsibility for the management of the funds of the Other Gods, henceforth officiating either as “The Treasurers of the Sacred Properties of Athena and the Other Gods” (*IG II² 1370*, lines 1–2) or as “The Treasurers of Athena and the Other Gods” (Andok. 1.77).¹¹⁷ An earlier amalgamation had perhaps been ruled out by the constitutional commissioners appointed after the deposition of the Four Hundred (Thuc. 8.97.2).

FUNDS OF THE OTHER GODS

The Treasurers of the Other Gods had earlier funded the two cult statues commissioned for the Hephaisteion in 421/0 (*IG I³ 472*, lines 1–20), and, under the provisions of a decree of 418/17, were to receive the annual rent from the newly leased *temenos* of Kodros, Neleus, and Basile (*IG I³ 84*, lines 15–18). We have no information about their contribution to the military budget after the Peace of Nikias, but all available reserves in the Opisthodomos were presumably drawn upon in the later stages of the war, and some of the non-Attic currency disbursed by the joint boards of 406/5 and succeeding years may well have come from the treasury of the Other Gods.¹¹⁸

114. Both types of revenue were now collected and paid in by the *Apodektai* (Poll. 8.97), a board of public receivers apparently attributed to Kleisthenes by Androtion (*FGrHist* 324 F 5), but, apart from a dubious restoration in the Standards Decree (*IG I³ 1453*, section 6), not attested before 418/17 (*IG I³ 84*, lines 15–18): see Harding 1994, pp. 90–94. We know nothing about the administration of the state treasury, but the two collections of

money had evidently been kept separate, to be drawn upon by the *Hellenotamiai* and the *Kolakretai*, respectively: see Rhodes 1972, p. 102 with note 7, *contra* the view expressed in *ATL* III, pp. 360–361.

115. So Meritt (1932, pp. 98–103; 1971, pp. 106–107), but see the objections of Pritchett (1970, pp. 104–116; 1977c), who argues that the *Hellenotamiai* were now elected irrespective of tribe.

116. Some historians accordingly infer that the *Kolakretai* may already have been abolished, and the reform implemented, before the oligarchic revolution of 411: see Pritchett 1970, p. 111; Harding 1994, pp. 91–94.

117. See Ferguson 1932, pp. 3–7, 104–109; Thompson 1970b, pp. 61–63.

118. See Woodward 1963, pp. 154–155.

410/9–404/3

410/9

THE ACCOUNTS

All payments in 410/9, the first full year of the restored democracy, are funded from *epeteia*, the annual income of Athena Polias and Athena Nike (*IG I³* 375, lines 3–5). This is usually, and quite reasonably, taken to imply that the democrats had inherited an empty treasury,¹¹⁹ but not all of the balance in hand at the end of the financial year 410/9 need necessarily have been newly accumulated,¹²⁰ and it is possible that a formal decision had been taken to fund the current year's expenditure without recourse to what was left of the reserve.

The payments recorded in *IG I³* 375 fall into six main categories:

1. The Great Panathenaia of 410: just over 6T paid in Prytany II (lines 5–7).¹²¹
2. Two military payments: 6T to Hermon, commander at Pylos (line 10), and 3,740 dr. to Eukleides, the general from Eretria (lines 17–18). The latter is entered as a book-transaction, presumably representing money collected and spent in the field.
3. A record, again in the form of book-transactions, of moneys collected and disbursed at Samos (lines 20–21, 34–37): about 96T in all.¹²² Samos was at this time the main base for naval operations in the Aegean, and the bulk of this money may have been transferred to Thrasylos, by previous arrangement with the home authorities, when he visited the island at the beginning of his Ionian expedition of summer 409 (Xen., *Hell.* 1.2.1–2).¹²³
4. Fodder for the cavalry: six payments, amounting to over 16T, in Prytanies I, III, IV, and VII. For whatever reason, these are the only accounts in which *sitos* features as an item of expenditure, and the extent to which these payments reflect the size of the Athenian cavalry in 410/9 is disputed.¹²⁴
5. The *diobelía*, a dole introduced by the influential Kleophon

119. See ML, p. 258; Andrewes in *CAHV*², p. 485.

120. The balance inherited, and disbursed, by the treasurers of 409/8 comprised Attic, non-Attic, and uncoined silver (*IG I³* 376, lines 66–85), three electrum currencies (lines 95–105), and two types of gold bullion (lines 105–116), to a total value of some 350T: see Ferguson 1932, pp. 36–37.

121. It is commonly assumed that payments for the Panathenaia were made in advance of the festival to cover its estimated cost: see Meritt 1928, pp. 93–95; Dover in *HCT* IV, p. 266. If this was the case in 410, then one of two conclusions must follow: either the

treasurers of 410/9 entered upon office before 28 Hekatombaion or their record includes payments made by the outgoing board. For a different view, see Pritchett (1977c), who argues that payments for a festival were not normally made until after the event, to enable the *athlothetai* to balance their books in cases where income had failed to cover expenses. This is a tenable hypothesis, but, on balance, I prefer the theory that it had become established practice, when the year's accounts were prepared for publication by the *Logistai*, for payments made between Prytany I.1 and 28 Hekatombaion to be attributed to the incoming board: see Meritt

1971, pp. 104–107, 114–115.

122. See *ATL* III, pp. 365–366, whose editors infer that all imperial revenue, whether brought to Athens or spent in the field, was now deemed to constitute income of Athena. This is accepted by Thompson (1967, pp. 226–231), but see the objections of Pritchett (1977a, pp. 33–38), who concludes, in my view rightly, that the imperial revenues remained at the disposal of the *Hellenotamiai*.

123. See Andrewes 1953, pp. 5–6.

124. See Bugh 1988, p. 60, note 86; Spence 1993, pp. 100–101.

(*Atb. Pol.* 28.3): five payments, again amounting to over 16T, in Prytanies III, IV, V, and VII. If, as seems likely, this dole was restricted to citizens not otherwise in receipt of money from the state,¹²⁵ civilian stipends must already have been reinstated, funded as before from the domestic revenue collected by the *Apodektai*, but now paid by the *Hellenotamiai*.

6. Purpose unspecified: sixteen payments, amounting to about 38T, in Prytanies VI–X. With the exception of the sum of 3T+ disbursed on Prytany VIII.12 (lines 27–28), which is recorded in another text as paid to the general Oinobios (*IG I³* 101, line 47),¹²⁶ the destination of these payments is impossible to determine, but distribution of the *diobelia* must have continued at regular intervals, and this duty may have been specifically assigned to the *Hellenotamiai* Dionysios and Thrason. If this assumption is correct, the total cost of the dole in its first year of operation amounted to over 34T.¹²⁷

Total expenditure adds up to about 180T—approximately 84T from *epeteia*, and some 96T from the Samian collections—but, for whatever reason, these accounts do not include the money collected and spent by the generals in the Hellespont.¹²⁸ Previously dependent on emergency levies (Xen., *Hell.* 1.1.8, 12), Alkibiades and his colleagues had now provided themselves with a regular source of income by establishing a fortified customs station at the southern entrance to the Bosporos, where they proceeded to collect a 10% duty on the cargoes carried by Pontic shipping (Xen., *Hell.* 1.1.22).

THE PROPOSED RECONSTRUCTION OF THE RESERVE

In the third prytany of 410/9 a decree was passed which endorsed a proposal, submitted by a board of *syngrapheis*, that as much capital as possible should henceforth be accumulated on the Acropolis for the repayment of the debt to Athena (*IG I³* 99).¹²⁹ We have no information about the specific measures adopted, but this decree provides an acceptable context for the first of the two *eisphorai* levied by the restored democracy (Lys. 21.3), and there is evidence to suggest that the decision may now have been taken to abolish the 5% harbor tax introduced in 413 and to reimpose tribute. Five fragments survive of a late assessment list (*IG I³* 100), which perhaps dates to 410,¹³⁰ and in 409/8 the generals in the Hellespont negotiated an agreement with the satrap Pharnabazos, whereby Kalchedon was to pay her regular tribute plus the arrears which had accumulated since her defection (Xen., *Hell.* 1.3.9).¹³¹ A recent revival of the tribute system, with the prospect of a significant increase in imperial revenue, perhaps explains the decision to reintroduce loans at interest with effect from Prytany VI.1, the midpoint of the financial year.¹³²

409/8

The accounts for 409/8 (*IG I³* 376) appear from the concluding entry (lines 63–64) to have been concerned exclusively with the war effort, and each

125. See Buchanan 1962, pp. 35–48; Rhodes 1981, pp. 355–357.

126. Probably in connection with operations in the Thraceward district: see Andrewes 1953, pp. 7–8.

127. So Andrewes 1953, pp. 5–6, but see the reservations of Pritchett (1977a, p. 41).

128. For possible explanations, see Andrewes 1953, pp. 5–6; Thompson 1967, pp. 229–231.

129. See Ferguson 1932, p. 34; *ATL* III, pp. 363–366.

130. See *ATL* III, pp. 91–92; Meiggs 1972, pp. 369–370, 438–439.

131. But see Mattingly (1967, pp. 13–14 [= 1996, pp. 205–208]), who argues against this supposed revival of the tribute system. In his view, *IG I³* 100 should be dated to 418, and the payments from Kalchedon treated as a special case.

132. This follows from the fact that the prytany, but not the day, is given in the record of payments for the first half of the year (*IG I³* 375, lines 1–14), whereas the exact date, which was necessary for the calculation of interest on loans, is quoted for all payments made in the second half of the year (lines 14–40): see Thompson (1967, pp. 226–231), who infers that payment of interest had been suspended by the Five Thousand.

item of expenditure is this year charged either to the *epeteia* collected by the treasurers currently in office, or to the capital balance inherited from the previous year's board, or to a combination of both. The text is too poorly preserved for us to identify the precise destination of any of these payments, but the package of funds for the Peloponnese put together early in the year (lines 3–11) is probably to be connected with Anytos' abortive expedition to relieve Pylos (Diod. Sic. 13.64.5–7; *Ath. Pol.* 27.5).¹³³ Outside the military budget represented by these accounts, the *diobelia* continued to be a recurrent commitment (cf. *Ath. Pol.* 28.3), presumably funded by the *Hellenotamiai* from their own resources; approval was given for the resumption of work on the Erechtheion (*IG* I³ 474); and two more *Nikai* appear to have been commissioned at about this time (*IG* I³ 469, lines 26–37), perhaps as a thanks-offering for the great victory at Kyzikos in spring 410.

Disappointingly few figures are preserved in the record of payments, but the summation establishes the surprising fact that the total sum of money passing through the accounts of 409/8 was well in excess of 400T.¹³⁴ Between 50T and 100T of silver were disbursed from *epeteia* (lines 85–91), and the overall total for silver, inclusive of expenditure from capital account (lines 66–85), adds up to a sum of [3]60T (lines 91–94). Three electrum currencies (lines 95–105, 122–125)¹³⁵ and two types of gold bullion (lines 105–122)¹³⁶ were also disbursed, to a total value of, perhaps, 80T. Some of this bullion is recorded as sold by the *Hellenotamiai* (lines 110–116), and the rest was presumably exchanged for silver currency with other financial boards. In addition, silverware of some kind was removed from the Parthenon (lines 14–15), the earliest recorded instance of the appropriation of temple property by the state. Expenditure on the scale indicated by these accounts is difficult to reconcile with the plan approved in the third prytany of 410/9, whereby a new reserve was to be established on the Acropolis, but financial strategy had perhaps been overridden by financial necessity.

408/7

The accounts for 408/7 are lost, but the extent to which the state had depleted its currency reserves is illustrated by a decree of 408/7 which required the Eleusinian *epistatai* to hand over from the treasury of the two goddesses to the Treasurers of Athena a sum of 3T 2,000 dr. in exchange for a stated quantity of gold bullion deposited in the Opisthodomos as a pledge (*IG* I³ 386, lines 173–183).¹³⁷ The 100T which Alkibiades collected in Karia and brought home with him in summer 407 (Xen., *Hell.* 1.4.8–12) were presumably put to reserve, but the bulk of this money may have been set aside to fund the armament which he proceeded to assemble some two months later, comprising 1,500 hoplites, 150 cavalry, and 100 ships (Xen., *Hell.* 1.4.21). There is certainly no indication that the treasurers of 407/6 inherited any part of this windfall.

407/6

Our next surviving set of accounts, the notoriously problematic *IG* I³ 377, is interpreted by most historians as an inverted record of funds disbursed

133. See Ferguson 1932, pp. 43–45; Thompson 1971, p. 586, note 35.

134. See Ferguson 1932, pp. 36–37, estimating capital expenditure at 350T and expenditure from *epeteia* at 89T, which is extremely close to the corresponding figure for 410/9.

135. See Woodward 1914, pp. 278–280; Bogaert 1963, pp. 105–107; and Thompson 1971.

136. See Wade-Gery 1930; Thompson 1964, pp. 105–111.

137. See Thompson 1964, pp. 104–105. The 90T of coined silver which the two goddesses had once possessed (*IG* I³ 385, lines 5–6) had evidently long since disappeared.

during the second, eighth, ninth, and tenth prytanies of 407/6 and the first two prytanies of 406/5, the final payment on Prytany II.1 = 8 Metageitnion (lines 26–27) having been appended in error, since it dates to the Panathenaic year 406/5. On this reading, the lower text (lines 28–52) records payments made between Prytany II.13 and Prytany II.36, 407/6; the upper text (lines 1–27) payments made between Prytany VIII.23, 407/6, and Prytany II.1, 406/5.¹³⁸

The sums disbursed by the treasurers are small, particularly in the second prytany of 407/6, when twelve separate payments for the *diobelia*, all apparently funded from incoming *epeteia*, add up to less than 2,500 dr.¹³⁹ This already suggests financial constraint, and, whatever the explanation of the intervening hiatus, it is clear from the record of expenditure in the last three prytanies of 407/6 (lines 1–23) that shortage of funds had become a factor of critical significance. The *Logistai*, for the only time on record, are now actively involved in the payment process, and, with effect from Prytany IX.7, the dole seems to have been reduced to a single obol (lines 9–11).¹⁴⁰ In the first prytany of 406/5 we find the two-obol rate restored (lines 23–25), possibly through the influence of Archedemos the Blear-eyed, chief administrator of the *diobelia* in 406/5 and a leading politician (Xen., *Hell.* 1.7.2),¹⁴¹ but no trace survives of any grant for the Great Panathenaia of 406. Total expenditure on the *diobelia*, up to and including the payment made on Prytany I.20, may have amounted to 17¼T (line 26),¹⁴² exactly half the figure inferred for 410/9, but fodder for the cavalry,

138. The main arguments in favor of this reading are the irregular layout of the text and the order of tribes in prytany: see Ferguson 1932, pp. 26–32; Meritt 1932, pp. 116–127; 1964, pp. 200–212; and 1974. Against it are the facts that it leaves the entry in lines 26–27 unaccounted for and that it fails to explain why the first of the two masons who cut this inscription should have begun in the middle of the stone and then continued at the top. For a different reading, see Pritchett (1970, pp. 22–38; 1977b), who interprets this document as a consecutive record of payments made during the last three prytanies of the financial year 408/7 and the first two prytanies of the financial year 407/6, discounting the theory of Ferguson (1932, p. 27, note 1) that in 408/7 the prytanies were filled in reverse tribal order. Pritchett's reading does at least explain the inclusion of a payment of 1T made after the Panathenaia on Prytany II.1 = 8 Metageitnion (lines 26–27), and derives additional support from the fact that the same tribe is in prytany, and officiating during the same month,

both above and below the vacant space which separates the upper and lower texts. On the other hand, this interpretation would entail the conclusion that the *Hellenotamiai* Lysitheos and Protarchos served for a second term of office. We know nothing about the regulations governing the appointment of *Hellenotamiai*, but such iteration seems unlikely in the case of financial officials: see Develin 1989, p. 175. Pritchett presents a cogent case, but, on balance, I am inclined to accept Meritt's interpretation of this document, though not without considerable misgivings.

139. Three different *Hellenotamiai* are named as recipients of these payments: Lysitheos of Thymaitadai, Thrasylochos of Thorikos, and Protarchos of Probalinthos. The purpose of the later payments recorded in the upper text is not always specified, but grants for the *diobelia*, or for the single-obol allowance which temporarily replaced it, were certainly paid to at least four members of the board: Lysitheos, Protarchos, Athenodoros of Melite, and [Kephali]on of Kopros.

The involvement of so many officers, and the fact that Protarchos also received a grant for the garrison at Thorikos (lines 19–20), are difficult to reconcile with the theory of Andrewes (1953, p. 5 with note 16) that the principle of differentiation by function continued to apply.

140. So Meritt 1974, pp. 260–263, but Pritchett (1977a, pp. 45–46) prefers to identify the *obolos* as the daily allowance to war orphans quoted in a decree of 403 (*SEG* XXVIII 46, lines 9–10).

141. Meritt (1974, pp. 263–264) makes Archedemos a *Logistes* with special responsibility for the *diobelia*, but Pritchett (1977a, p. 42) identifies him, in my view more plausibly, as the chairman of a board of *epimeletai*. Kallikrates of Paiania, who subsequently abolished the *diobelia*, after first promising to increase the grant to three obols (*Att. Pol.* 28.3), presumably served in the same capacity.

142. This seems the likeliest interpretation, since 17¼T is too small for a grand total, and, on the evidence of other preserved figures, too high for

the other main item of expenditure in 410/9, does not feature in these accounts, and the omission perhaps suggests that the *hippeis*, like the *trieropoioi* (IG I³ 117, lines 4–9), were now given a fixed allocation for which revenue in the state treasury had been earmarked in advance. Konon presumably received a grant from some source when he assumed command of the Aegean fleet in spring 406 (Xen., *Hell.* 1.5.18), but the only item of military expenditure which can be identified in these accounts is a payment of 1T to the garrison at Thorikos (line 20), a defensive outpost of Laureion which had been fortified in 409 (Xen., *Hell.* 1.2.1).

Toward the end of the period covered by these accounts, a relief force of 110 ships had to be commissioned at short notice to sail to the rescue of Konon, trapped with his fleet in the harbor at Mytilene (Xen., *Hell.* 1.6.15–24). Extra resources were needed to meet the cost and, late in the year of Antigenes, 407/6, the *Ekklesia* approved proposals to begin melting down the eight golden *Nikai* (Hellanikos, *FGrHist* 323a F 26; Philoch., *FGrHist* 328 F 141),¹⁴³ together with the dedications housed in the three chambers of the Parthenon, to provide both an emergency gold currency and additional supplies of silver.¹⁴⁴ The first repository to be raided was, apparently, the Pronaos, stripped of its silverware during the opening month of the year of Kallias, 406/5 (IG I³ 316), shortly before the amalgamation of the two boards of sacred treasurers, which, we have suggested, probably took place at the time of the Great Panathenaia of 406.¹⁴⁵

406/5

In the first month or so of 406/5 the *Ekklesia* agreed to the introduction of a second emergency currency in the form of bronze coins plated with silver (Ar., *Ran.* 725–726 with schol.; Ar., *Ecl.* 815–816).¹⁴⁶ This token money was evidently designed to facilitate domestic retail transactions, for which the new gold coins were unsuitable because of their high value,¹⁴⁷ and we may assume (cf. Ar., *Ran.* 718–726) that civilian stipends and the dole were now paid, mainly if not exclusively, in bronze, with silver and gold reserved for foreign exchange and the war effort.¹⁴⁸ We have no evidence to determine what was done about money currently in circulation, but a decree may have been passed requiring small silver to be exchanged for

a single payment, but this line of argument would have to be abandoned if Pritchett (1977a) is correct in reading figures of 11½T and 10+T for the payments made on Prytany VIII.23 (lines 3–4) and Prytany X.23 (lines 20–22): see his table of loans (p. 34), with his comments (p. 33, note 2). Three payments of more than 10T each in the closing months of the year are, in his view, scarcely compatible with the financial crisis of summer 406, and provide additional confirmation that these are the accounts of the previous year.

143. The *Nikai*, made to a standard

design and each of them weighing approximately 2T, were collectively worth about 192T on a gold to silver ratio of 12:1: see Thompson 1970c; Harris 1995, pp. 272–275. Only one of the original eight (Harris 1995, pp. 131–132, no. 91) survived these melting operations, which continued into 404/3 (IG I³ 380, lines 23–28): see generally Harris 1990–1991.

144. For the theory that the decree for the conversion of these properties was not in fact moved until early in the year of Kallias, 406/5, see Ferguson 1932, pp. 8–15, 85–95.

145. This inference is based on the

assumption, probable though not certain, that the six treasurers named as handing over the silverware of the Pronaos belonged to the board which left office on 28 Hekatombaion 406: see Tréheux 1965, pp. 5–38; Thompson 1965. For the amalgamation of the two boards of sacred treasurers, see above, p. 116.

146. See generally Figueira 1998, pp. 497–511.

147. The smallest denomination, the hemiobol, being the equivalent of one silver drachma on a mint ratio of 12:1: see Thompson 1964, pp. 111–112.

148. See Thompson 1966.

bronze within a specified period, on the firm understanding that these tokens would be redeemed by the state as soon as it was in a position to do so.¹⁴⁹ Such a measure would have brought in substantial extra revenue to supplement whatever had so far been raised from the appropriation of temple properties, and the fragmentary accounts for 406/5 (*IG I³ 378*) do in fact reveal that the reserve of electrum and silver in the Opisthodomos was not drawn upon until 27 Mounychion 405 (lines 19–25).¹⁵⁰ Some degree of financial recovery would seem to be indicated, and what survives of the record of expenditure from *epeteia* points in the same direction. A large payment of 30T was made late in the financial year (line 14), and the *athlothetai* also received a grant for the Lesser Panathenaia of 405 (lines 14–15). We have no idea of the scale on which silver and other currencies were being privately hoarded at this time, but the orator Lysias claimed to have had three talents of silver, four hundred Kyzikene staters, one hundred Persian darics, and four silver cups secreted in a strongbox at home (12.10–11).¹⁵¹

405/4

The treasurers of 405/4 published two complementary accounts (*IG I³ 379*) inscribed back to back on the same *stele*. The obverse (lines 1–79) carries a record of gold and silver dedications handed over for melting, and of payments made in currencies which included Attic gold staters and Persian darics. The reverse (lines 80–116) is a record of quantities of barley and wheat distributed on specified days over a period of at least three prytanies.¹⁵² These distributions evidently coincided with the siege of Athens in winter 405/4, when the threat of starvation hung over the city for three months or more (Xen., *Hell.* 2.2.10–11, 16, 21), and we may assume that the emergency measures approved by the *Ekklesia* in anticipation of this siege (Xen., *Hell.* 2.2.4) had included the transfer of all available stocks of grain to the custody of the sacred treasurers for subsequent distribution to the people. Some silver continued to be disbursed (lines 103–104), but, in the case of jurors at least, grain was now being allocated in lieu of cash payments (lines 100–101), and it was probably now that the *diobelia* was formally abolished by Kallikrates (*Ath. Pol.* 28.3), to be replaced, like jurors' stipends, by payments in kind.¹⁵³ At the same time, under the terms of an amnesty decree proposed by Patrokleides, citizen rights were restored to all who had lost them, including those registered as state debtors (Andok. 1.73, 77–79; Xen., *Hell.* 2.2.11). Earlier, after the decisive Athenian defeat at Aigospotamoi in the late summer of 405, all of Athens' remaining allies had deserted her with the exception of the Samians (Xen., *Hell.* 2.2.6), and a decree rewarding the Samians for their loyalty provides our last extant record of the activities of the *Hellenotamiai* (*IG I³ 127*, lines 38–40) prior to the abolition of the office in, probably, 404.¹⁵⁴

404/3

The sacred treasurers continued to make payments for public purposes under the oligarchic regimes of 404/3, and, just as the previous year's board, used both sides of a *stele* to post their accounts (*IG I³ 380*).¹⁵⁵ The obverse

149. See Giovannini 1975, p. 190; Kroll 1976, pp. 336–337.

150. See Ferguson 1932, pp. 75–77.

151. See Millett 1991, pp. 169–170; Figueira 1998, pp. 100–101.

152. For discussion and analysis of these fragmentary accounts, see Ferguson 1932, pp. 77–84; Woodward 1956, pp. 109–121.

153. See Ferguson 1932, pp. 82–84; Rhodes 1981, pp. 355–357.

154. The *Hellenotamiai* are mentioned in a decree of 403 (*SEG XXVIII* 46, line 18), but this was, almost certainly, an allusion to the fact that they had previously administered the fund for war orphans: see Stroud 1971, pp. 292–295.

155. See generally Woodward 1963, pp. 144–155; Krentz 1979.

(lines 1–22) carries a dated record of payments, all perhaps funded from *epeteia*, with a total entered for each prytany. The reverse contains particulars of at least one *Nike* removed for melting by decree of the *Boule* (lines 23–28), possibly to pay for the upkeep of the Spartan garrison on the Acropolis (Xen., *Hell.* 2.3.13–14; *Ath. Pol.* 37.2),¹⁵⁶ and also what appears to be either a summation of total expenditure for the year or a record of disbursements from reserve (lines 30–35), including payments in the silver staters of Aigina and Corinth and in the electrum currency of Phokaia. No disbursements of any kind are recorded as having been made during the first four prytanies of the year (lines 1–5), during which time public expenditure must have been funded exclusively from state income, but three or more payments amounting to just under 4T are recorded in Prytany V (lines 5–10), and upwards of ten, one in excess of 2T, in Prytany X (lines 16–22).¹⁵⁷ The frequency of these later payments suggests that a regular allowance of some kind was now being distributed, possibly the daily grant to war orphans cited in a decree of 403 (*SEG XXVIII* 46, lines 9–10), or even the *diobelía*, temporarily revived to relieve public hardship.¹⁵⁸ Payments are made to officials who appear to have served for a term of only one prytany (line 11), but their precise number is uncertain. They are sometimes identified as the last *Hellenotamiai* to hold office,¹⁵⁹ but this board should have been redundant after loss of empire, and service for a single prytany perhaps suggests that the financial intermediaries of this document are in fact *Kolakretai*, revived by the Thirty to replace the *Hellenotamiai*.¹⁶⁰ If so, the reform proved short-lived, since in 403/2 the sacred treasurers themselves provided funds for such domestic purposes as the award of crowns and the publication of decrees (*Tod* 97, lines 18–20, 26–28).

EPILOGUE

Under the second restored democracy of 403/2 the treasures removed from the Parthenon were gradually replaced,¹⁶¹ but the cash debt to Athena was written off, and, although the *Opisthodomos* remained in use (*Dem.* 24.136), the sacred treasurers ceased to play any major role in public finance.¹⁶² Instead, it became the responsibility of the *Apodektai* to distribute incoming revenue among the various spending departments according to a fixed schedule of allocations, and two consecutive days were set aside for this purpose each prytany (*Ath. Pol.* 48.1–2).¹⁶³ The evolution of this system cannot be traced, but it was certainly in place by 386 (*Tod* 116, lines 18–22), and may have been introduced soon after 403/2 under the revision of the legal code prescribed by the decree of Teisamenos (*Andok.* 1.83–84). Meanwhile, as we have seen, funds continued to be disbursed by the sacred treasurers, and they apparently published at least one more set of accounts (*IG I³* 382). This includes a payment in Attic gold staters (lines 7–8), which is consistent with the fact that at least one *Nike* had been melted down for currency in 404/3 (*IG I³* 380, lines 23–28). Whatever system was in operation during the 390s, financial recovery seems to have been rapid, since the state was now able to budget both for the introduction of Assembly pay (*Ath. Pol.* 41.3) and for the demonetization of the bronze currency introduced in 406 (*Ar., Eccl.* 821–822).¹⁶⁴

156. See Thompson 1966, pp. 338–339; Krentz 1979, pp. 61–63.

157. No figures are preserved in what survives of the intervening record of payments (lines 10–16).

158. Woodward (1963, p. 150) boldly restored line 11 to show the *diobelía* being distributed as early as Prytany VI, midwinter 404/3, but see the objections of Krentz (1979, p. 60).

159. So Woodward (1963, p. 150 with note 10), followed by Develin (1989, p. 186). Both rely on the fact that two of these officials come from the same tribe, and assume a system of rotation whereby a section of the annual board, probably four in number, was selected to service treasury grants each prytany.

160. For the theory that the *Kolakretai* had been revived as early as 410, in connection with the reintroduction of jurors' pay, see *ATL* III, p. 364.

161. See Harris 1995, pp. 29–32.

162. See Ferguson 1932, pp. 128–140.

163. See Jones 1957, pp. 102–103.

164. Neither initiative can be precisely dated. For Assembly pay, which had risen from one obol to three obols by 392 (*Ar., Eccl.* 289–310), see Hansen 1989, pp. 147–151; Gauthier 1993. On the demise of the bronze currency, which had ceased to be legal tender by 392 (*Ar., Eccl.* 821–822), see Giovannini 1975, p. 190 with note 19; Kroll 1976, pp. 338–341; and Figueira 1998, pp. 510–511.

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