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# THE APADANA COIN HOARDS, DARIUS I, AND THE WEST

Plate 1 Antigoni Zournatzi\*

For David Stronach

This paper supports a perception of the Apadana coins (*IGCH* 1789) as symbols of Darius I's control of important western sources of wealth and leading centers of western commercial/economic activity. It submits, among other things, that an interpretation of the coins as issues of states already under Persian sway by the time of the foundation of the Apadana need not imply a date as late as the 490s for the foundation of that building. References to important western holdings in this context most likely reflect the prestige that Darius, his Persian predecessors, and earlier Mesopotamian rulers attached to the conquest of far-off western lands.

#### THE DEBATE ON THE SIGNIFICANCE OF THE HOARDS

In 1933 the excavations of the University of Chicago Oriental Institute at Persepolis brought to light two foundation deposits whose contents to this day generate lively discussion and discord. The two deposits, buried, respectively, at the northeastern and southeastern corners of the great audience hall (the Apadana), contained each a pair of tablets, one of gold and one of silver, inscribed with identical trilingual (Old Persian, Elamite, and Akkadian) inscriptions of Darius I (522–486 BC) and

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encased in a carefully wrought stone box. In addition, beneath each box there was a group of archaic gold and silver coins. According to the systematic catalogue, published in Erich Schmidt's final report of the Persepolis excavations, these coins were four gold, light-weight "Croeseids", a tetradrachm of Abdera, and a stater of Aegina in the northeastern deposit, and another four light-weight "Croeseids" and three Cypriot double sigloi in the southeastern one (Plate 1).<sup>1</sup>

Discussions of the find focused initially on the foundation inscription (conventionally designated DPh), which was deemed to offer a valuable (though still approximate) *terminus ante quem* for the construction of the Apadana and a useful datum for the otherwise loose chronology of the coins that were placed in the same deposits (Schmidt 1957: 110).<sup>2</sup> Awareness eventually set in that not only did the Apadana coins have value as potential chronological indicators, they might also be relevant to Darius' imperialist agenda.

In a footnote to his Apadana article published in 1985—thus, at an early moment of modern speculation about the coins' political significance<sup>3</sup>—David Stronach (1985: 444 n. 47) reflected on the possibility that coins (which were after all associated *par excellence* with the West at the time) "may have acquired, at least in the Achaemenid homeland, an extra value as symbols of distant Persian dominion". He indicated that "as such, certain (random?) examples would seem to have been picked out as suitable offerings for interment".

Stronach's suggestion is attractive for a variety of reasons. Inscribed tablets had long been employed in Near Eastern foundation deposits (Ellis 1968), but coinage is not attested in these early contexts.<sup>4</sup> The coins in the foundations of the archaic temple of Artemis at Ephesus (Hogarth 1908: 74–93) might lead one to think that Darius was merely combining time-honored Near Eastern foundation ritual (i.e., the deposition of inscribed tablets) with a practice that was perhaps current in the West. There are, however, a number of indications that the Apadana coins represent more than reflections of the alleged Persian propensity for adopting foreign customs (Hdt. 1.134.3).

In the course of the 1970s, studies by Carl Nylander (1979) and Margaret Root (1979), in particular, drew wide attention to the highly planned character of

- 1. For a bibliography on the deposits, references to previous publications of the hoards, and details on their composition, see the Appendix.
- 2. The impact of the date(s) assigned to the DPh upon modern estimates of the chronology of the coins included in the deposits is especially discernible up to the 1970s (e.g., Kraay 1956: 48; Robinson 1958: 190; May 1966: 52; *IGCH* 1789; Price and Waggoner 1975: 37; Kraay 1976: 32).
- 3. For a still earlier speculation that the coins had a magical purpose, see Herzfeld (1938: 413–414).
- 4. Another possible early instance of the use of coinage in a Near Eastern foundation deposit also appears to date from the reign of Darius. This is a lightweight "Croeseid" that was reportedly "probably found together with another foundation document of Darius" at Ecbatana (Herzfeld 1938: 414–415).

Achaemenid political propaganda and to the instrumental role played by Darius himself in shaping its written and visual expressions. The system of meaning that pervades Darius' works would appear to have also influenced the character of the Apadana deposits.

The sculptured panels of the northern and eastern staircases of the Apadana register in visual terms Persian claims to world rule in depictions of no less than twenty-three subject delegations bearing tribute to the enthroned Persian king (Schmidt 1953: 85–90 plates 27–49).<sup>5</sup> The Apadana foundation inscription conveyed a matching ideological message. In the brief text of the gold and silver tablets, the self-presentation of Darius I, son of Hystaspes, as a "King of Kings" and "King of Countries", and the description of the kingdom, which he acquired by the favor of Ahuramazda, as extending "from the Scythians who are beyond Sogdiana, thence unto Ethiopia; from Sind, thence unto Sardis" (Kent 1953: DPh), were evidently also meant as a proud record of Darius' elevated status as a world ruler. Seen in this light, the coins in the same deposits, which were all minted in areas that had come under Persian sway by the reign of Darius,<sup>6</sup> may also reference dominion.

Several considerations, however, have seemed to counter the interpretation of the coins as allusions to territories controlled by the Persians. In a widely followed

- 5. Despite evidence for Xerxes' involvement in the later stages of construction of the building (below, p. 8), the reliefs are commonly held to have been at least designed under Darius I. Concerning the ideological significance of the reliefs, see the commentary of Root (1979: 227–284).
- 6. The conquest of Lydia by Cyrus the Great is related in Hdt. 1.79-84. If Xenophon is to be believed, Cyprus had gone over to the Persian side already during the reign of Cyrus the Great (Cyrop. 7.4.1-2, 8.6.8); it was certainly a subject at the time of Cambyses' attack against Egypt in 525 BC (Hdt. 3.19). Abdera must have been brought under Persian sway by Megabazus, who was left "General in Europe" following Darius' march against the European Scythians (Hdt. 4.143, 5.2, 5.10). The westernmost limit of Megabazus' conquests in the northern Aegean is indicated by Herodotus' statement that he advanced as far as the Axius River and received tokens of formal submission from the Macedonian king Amyntas (Hdt. 5.18.1). The conquest of the Aegean littoral of Thrace before Darius' return to Persia is implied by Histiaeus' request (set to the time when Darius was still at Sardis) for Myrcinus by the Strymon as a reward for guarding the Danube bridge (Hdt. 5.11.2, cf. 5.23-24). Aegina's offering of "earth and water" to the Persian King (commonly dated to 491 BC [e.g., Burn 1962: 226]) is mentioned in Herodotus' account of the preliminaries to the Marathon campaign of 490 BC (Hdt. 6.48). Aegina's loyalty to Persia during the 490s is postulated (without cogent reasoning) by Calmeyer (1989: 55) in the context of a thesis that the Apadana coins allude to Persia's allies during the Ionian revolt. A perspective on Aegina's still earlier political understanding with Persia is offered below (pp. 11-15).
- 7. This view can be traced to E. M. Cousinéry (cited in Mionnet 1833: 405 n. a) and Borrell (1839-40).
- 8. The hypothesis of a Persian involvement in the production of the "Croeseids", already contemplated in the late nineteenth century (Head 1887: 546) but abandoned in view of the attribution of all "Croeseids" to King Croesus by Babelon (1893: ii–iii), was put anew by Jongkees (1944: 163–168) and Robinson (1958: 188). It was eventually suggested that

opinion, at least some of the prolific, bimetallic lion-and-bull coinage, whose introduction was traditionally ascribed to the Lydian king Croesus,7 was minted by Darius and his Persian predecessors<sup>8</sup> and served as a precursor to the distinctive "royal archer" coinage of the Achaemenids, which was presumably introduced sometime in the reign of Darius I. Viewed as an integral part of the "regal" coinage of the Achaemenids, the "Croeseids" were also liable perhaps to be interpreted as symbols of Persian, rather than Lydian, authority. Michael Vickers enlarged on the latter possibility with a further assumption. He posited that the entire lionand-bull series was minted in the reign of Darius I, arguing among other things that Darius' full authorship of that coinage was in keeping with his simultaneous introduction of a prominent lion-and-bull motif in the sculptured friezes that decorate the monumental staircases of the Apadana at Persepolis (Vickers 1985: 4-9; 1986: 243-253). In keeping with this assumption, Vickers (1985: 6; cf. 1986: 246) suggested that whereas the Apadana silver coins coming from Cyprus, Abdera, and Aegina were "clearly issues of states which, like the tribute bearers on the [Apadana] reliefs, were subject to the Great King at the time of burial", the lion-and-bull emblem of the "Croeseids", which were placed in the same deposits, represented a Persian "warning against rebellion".

The interpretation of the silver coins as issues of subject states has also been challenged. The Apadana foundation inscription, wherein Sardis is mentioned as the uttermost western boundary of Darius' realm (there being no references to the European holdings of Darius) was taken to imply, as early as the 1930s (Herzfeld 1938: 413; cf. Schmidt 1953: 40, 70), that the text was composed (and the building founded) before the beginnings of Persian expansion into Europe; hence, before the expedition of Darius I against the European Scythians (Hdt. 4.83–143), which is generally dated between 514 and 511 BC. In this reconstruction, Abdera and presumably Aegina, both of whose coins are present in the northeast deposit, would not yet have been placed under Persian rule. The annexation of Abdera was of course a direct consequence of the Scythian expedition (cf. n. 6). The chronological discrepancy seemed more pronounced in the case of Aegina, whose submission is commonly dated from a reference in Herodotus to 491 BC (cf. n. 6),

all "Croeseids" were minted after the conquest of Sardis by Cyrus II (e.g., Price 1984: 214). A balanced overview of the available evidence concerning the authorship of the Croeseids up to about 2000 is offered by Le Rider (2001: 101–121, with earlier bibliography). On still more recent developments, see p. 6 and n. 13.

9. Proposed dates for the campaign range between 519 (Balcer 1972: 99–132; Cameron 1975) and "about . . . 510" (Frye 1962: 122). Arguments in favor of 519 have been convincingly refuted (Shahbazi 1982; Gardiner-Garden 1987: 326–330). A date of 514/13 derives from the Tabula Capitolina (*FGrHist* 252 [8]). The latest possible date of 511 BC is inferred from the account of Thucydides (6.59) regarding the marriage of the daughter of Hippias to the son of the tyrant of Lampsacus, Hippocles, whose reported influence with Darius was presumably forged during the Scythian expedition (Beloch² II.2: 60–61; Shahbazi 1982: 234–235).

thus some twenty years later than the latest possible date postulated for the Scythian campaign.

In the 1970s and 1980s, it began to seem appropriate to challenge the view that the foundation of the Apadana predated the Scythian expedition on the strength of archaeological and numismatic indications (e.g., Roaf 1974: 90-91; 1983: 138-139, 150-157; Stronach 1985: 443-444; 2000: 147; Vickers 1985: 6-7; 1986: 246-247; cf. Carradice 1987: 81; Price 1988: 241 no. 307 (b); Calmeyer 1982: 124; 1989: 51, 54-55; 2000: 574; Koch 1987: 151). This development was also held at the time to allow the suggestion that the building was founded after the submission of Abdera and Aegina (or after 491 BC [Vickers]). However, it is evident that the architectural and sculptural remains at Persepolis can lend themselves to widely divergent estimates of the foundation date of the Apadana, 10 and, as we shall see, the chronological implications of the numismatic evidence can no longer be as readily harmonized with the presumed late date of Aegina's submission. On the other hand, as shown by subsequent defenses of the traditional chronology, the general perception of the DPh as providing an accurate statement of the "length and breath of [Darius'] empire at the time he began the Apadana" (Root 1988: 4) has been difficult to dispel.11

Chronological difficulties seem to be directly responsible for more recent, nonpolitical approaches to the coins' significance. For Margaret Root (1988: 5, cf. 6, 11), for instance, the message intended in this instance "may have been related to the overarching concept of non-Persian wealth acquired, but not necessarily tied to a specific idea of actual political control". According to Martin Price (1989: 50) the coins were perhaps selected "not so much because their place of origin may have represented important boundaries of the Persian Empire, but because the types on them" could convey symbolic messages of import. As he stated, while the

- 10. Hence, the contrasting assessments of the Persepolitan remains as fitting an early-fifth-century foundation date (Roaf 1983; Koch 1987) and as supporting a suggestion that the Apadana was founded by 512 BC (Jacobs 1997: 287–291, 298–299).
- 11. Perceptions of the DPh as an accurate record of the extent of Darius' holdings have led to two variant interpretations of the chronological implications. According to the traditional view, recently defended by, e.g., Root (1988: esp. 3–4; 1989: 38–39) and Kagan (1994: 41–43), the lack of references to European holdings places the text before the Scythian expedition. Other commentators, puzzled by the absence of Ionia, a western component of the empire since the reign of Cyrus the Great, have concluded that the text must have been composed during the Ionian revolt (Calmeyer 1982: 123–124; 1989: 51, 54–55; 2000: 574; Koch 1987: 151). Kagan (1994: 42, n. 48) is almost certainly right, however, in stressing the improbability that a Persian king would "formally relinquish what was once his". The inclusion of Thracians along with European Scythians and European Greeks on the list of throne bearers on the "south tomb" at Persepolis (assigned to Artaxerxes II [405–359 BC] by Mayrhofer [1978: 31 no. 7.3]; the text is Kent 1953: A?P) at a time when Persia no longer actually controlled European territory, may serve, as Badian (1998: 220) has suggested, as an example of the reluctance of Persian kings to "admit having ruled a smaller kingdom than their predecessors had".

motif of the lion attacking the bull of Sardis has obvious implications, the symbolic referents of Abdera's griffin, the guardian of gold, and Aegina's turtle, emblem of its maritime power, may also have been recognizable in Mesopotamian contexts. Lately, leaning to the view that the coins were but a "miscellaneous group", Jonathan Kagan (1994: 40) suggested that "the selection was driven by a desire to match evenly, as with the inscribed tablets, gold and silver", and hence, that in this case "purity of metal was more important than mint or type".

The opinions expressed so far underline the difficulties in arriving at any definitive interpretation of the intended significance of the coins, and the uncertainties applying in this case may be more extensive than recognized hitherto. One might question, for instance, the reliability of conclusions drawn from only two foundation deposits. The contents of, say, two further deposits (at the northwest and southwest corners of the building), which perhaps no longer survive (cf. Ellis 1968: 104), could significantly alter our perception of the gamut of coins used for the occasion. However, at least as far as the present selection is concerned, a political interpretation of the coins is arguably still possible to defend on the basis of new considerations.

### THE SIGNIFICANCE OF THE APADANA "CROESEIDS"

Owing, not least, to the discovery in 2002 of two early "Croeseid" fractions, one in gold (of heavy weight) and one in silver, in a sealed destruction layer associated with the Persian capture of Sardis, <sup>13</sup> we are now fully assured that "Croeseid" coinage was not a creation of Darius. <sup>14</sup> Justified though it might have seemed on the strength of evidence that "Croeseids" continued to be minted under the Persian conquerors of Sardis, the possibility that the late lion-and-bull specimens buried in the Apadana deposits might still function as a surrogate Achaemenid coinage also seems remote today. That possibility was pressed in the past in the absence of firm evidence that archers were minted in the late sixth century. Indeed, until 1988 possible allusions to a relatively early date for the introduction of the archers

- 12. Kagan (1994: 39–40) points out that two of the Cypriot coins have test cuts, a circumstance that implies their use as bullion, and notes that the contents of the hoards "provide just the sort of mixed group one would expect to find circulating in the Persian Empire in the last decades of the sixth century BC". The "miscellaneous" character of the group appears to have been generally taken for granted in earlier numismatic commentaries (e.g., Robinson 1958: 190; Kraay 1976: 32).
- 13. A coin discovered in the destruction debris in 1988 also proved on recent cleaning to be yet another silver "Croeseid" fraction. These important recent finds and their implications for the chronology of the early "Croeseids" and the archaic coinage of Asia Minor are discussed by Kroll (Cahill and Kroll forthcoming; summarily announced in Kroll 2003).
- 14. Earlier doubts concerning the validity of Vickers' identification of the "Croeseids" as Darius' own coinage were expressed by Root (1988: 5–8) and Stronach (1989: 256–257, 261–264).

could only be discerned in the consistently archaizing features of type I (depicting a half-length figure with a bow), which is now unanimously placed (following Robinson 1958: 188–190) at the beginning of the Achaemenid series, and which bears a notable stylistic affinity to the Behistun relief of Darius (Stronach 1989: 264–266) safely dated to the beginning of his reign (520–519 BC). However, hard evidence for the circulation of any Achaemenid coinage prior to 500 BC was altogether lacking.

In 1988 Margaret Root published two sealings from a Persepolis Fortification tablet. The two impressions, made by the same seal, depict a kneeling, full-length, crowned figure shooting with a bow, which is the device of type II archers (Root 1988, 10–12, plate 1; seal 1393 on *PFT* 1495 [Hallock 1969]). The date on the tablet confirms that the type was already in existence by the twelfth month of the twenty-second year of Darius, thus by 500 BC. Today, conservative estimates of the chronology of Achaemenid coinage place its beginnings at c. 510 BC (Le Rider 2001: 128–133; cf. Price 1988: 241 no. 307a; Stronach 1989: 266; Calmeyer and Naster 1995: 405a), and that date could be further raised, even by a whole decade, if the archaic style of type I archers implies a closer chronological connection with Behistun.<sup>17</sup>

- 15. For a general overview of Behistun, see Stronach and Zournatzi (1997) with references.
- 16. Although hoard dates are generally only approximate (and may be subject to revision), the earliest datable finds of type I archers (all of silver) are those in the Bairakli (*IGCH* 1166) and Çal Dag (*IGCH* 1178) hoards that are currently assigned to not earlier than c. 500 BC and to c. 480 BC, respectively (Carradice 1987: 78–84, 79 table A, with an overview and catalogue of the finds of gold and silver archers in datable hoards). A recently published early hoard containing type I archers has also been dated to a "few years after 480 B.C." (Carradice 1998: 1–12, plates 1–7 hoard A).
- 17. A close chronological connection of the first archers with the Behistun relief would, equally, allow the introduction of the royal figure on Darius' coinage to be seen as an additional instance of Darius' masterly use of iconography to legitimate his accession to the throne, as suggested by Vargyas (1999: 261; 2000: 38, 43). According to this same scholar (Vargyas 1999; 2000), indications for the introduction of Darius' coinage at the very outset of his reign may also be provided by the Babylonian written record. Thus he suggests that the large number of references to kaspu ginnu (or "ginnu silver") encountered in Babylonian economic documents from the first regnal year of Darius onward could refer to Persian sigloi. The suggestion is attractive but difficult to prove. The term is attested (however rarely) as early as the reign of Cyrus the Great (Vargyas 1999: 254, 263 fig. 1). Vargyas (1999: 258-259) believes that these early occurrences refer to "Croeseids". Thus, even if one supposes, with Vargyas, that kaspu ginnu designated official silver employed in economic transactions (and the present writer is among those who favor this interpretation [Zournatzi 2000: 257-258]) and, moreover, that kaspu ginnu specifically denoted silver in coin form, there can still be no certainty that the term would only have been used of Persian sigloi throughout the reign of Darius.

As already noted by Root (1988: 11–12; 1989: 34–36, 43), these latter developments weaken the likelihood that Darius sought to include any coins of his own in the deposits. It would appear that there is still reason to view the eight gold Apadana "Croeseids" as allusions to Lydia and the sum of the Apadana coins as issues of foreign lands. Chronological considerations—be they related to the foundation of the Apadana or to the respective dates of submission of Abdera and Aegina—arguably do not speak against the further hypothesis that those foreign coins could constitute "strategic" references to western lands controlled by the Persians.

#### Evidence for the Date of the Foundation of the Apadana

In his detailed study of the Persepolis sculptures published in 1983, Michael Roaf undertook a review of the textual evidence for the early history of Persepolis. The review exposes the overall difficulty of documenting (with written testimony) any activity at the site before the Scythian expedition if one excludes the putatively crucial testimony of the DPh inscription. Roaf (1983: 139) also drew attention to epigraphic indications for the date of the completion of the Apadana. These are two kinds of texts inscribed, respectively, on glazed bricks that were once set high on the corner towers of the Apadana and on prepared stone panels that flanked the reliefs at the base of the structure. Texts of the first kind state that Xerxes, the son and successor of Darius, continued the building work started by his father

- 18. Root also argues against the often-repeated assumption (e.g., Herzfeld, 1938: 415; Schmidt 1957: 110; Robinson 1958: 190; *IGCH* 1789; Kraay 1976: 32; Bivar 1985: 616–617; Calmeyer 2000: 574–575) that Darius would have included in the Apadana deposits specimens of his own coinage as a testimony for posterity and thus that the absence of archers in that context affords a reliable *terminus post quem* for the introduction of Achaemenid coinage. In all probability, Darius had the option of using his own archers.
- 19. Cf. also Root's observations that "the eight gold coins evocative of the acquired wealth of Lydia [would be] a fitting inclusion along with inscribed tablets of gold and silver proclaiming proudly an empire which stretched from Sind all the way to Sardis" (1988: 11) and "[t]he rhetoric of the foundation symbolism is most likely to have emphasized an ideological substructure of empire based on allusion to power over non-Persian territories" (1989: 35).
- 20. Roaf (1983: 150) stresses, among other things, that the earliest (published) Persepolis Fortification tablets date from the thirteenth regnal year of Darius I (509/8 BC) (Hallock 1969: 74) and points out that the detailed list of subjects of the DPe, which is directly affixed on the south retaining wall of the Persepolis platform (Schmidt 1953: plate 7B) and might be associated with its construction, includes "the peoples who are across the sea" (Kent 1953: DPe 14–15) and thus possibly dates from after the Scythian expedition. A post-Scythian expedition date is also possible for the DPg (also on the south wall of the Persepolis platform [Schmidt 1953: plate 7D]), which refers to Darius' control over countries that are de ce côté-ci de la mer et de ce côté-là de la mer (here presumably the Mediterranean Sea) (Lecoq 1997: 229–230).

(Schmidt 1953: 70–72, 82; Kent 1953: XPg); while texts of the second kind simply attribute the work to Xerxes without acknowledging any contributions by Darius (Schmidt 1953: 82–83, plate 60; Kent 1953: XPb). According to these texts, then, the Apadana, which was generally thought to have been founded by 511 BC at the latest, was still unfinished at the moment of Darius' death, some twenty-five years later. (Schmidt [1953: 70] estimated the duration of construction at some thirty years or longer.) This was already a strong hint that the generally accepted *terminus ante quem* for the foundation of the building might be mistaken. Roaf (1983: 138–139; cf. 1974: 90) promptly noted that the date of the Scythian expedition of Darius was conjectural. He also surmised that the lack of references to Darius' European holdings in the foundation inscription was not conclusive since "the inscription is extremely brief . . . and in such a short list the Scudra [commonly associated with the Thracians] might well have been left out because they were too unimportant or too unfamiliar to warrant inclusion". 21

Of course, not everyone was convinced that the DPh was not meant "simply and unequivocally to state the four *extremities* of the empire" (Root 1988: 3). It is, however, at least a fact that to date there is still no conclusive evidence that that text was composed before the Scythian expedition of Darius.

In the more detailed rosters of subject peoples that survive from Darius' reign, references to Scudra (e.g., Yoyotte 1972: 256, 258 text 5b no. 17; Kent 1953: DNa 29, DSe 29), the "peoples who are across the Sea" (Kent 1953: DPe 14–15), "the Scythians who are across the sea" (e.g., Kent 1953: DNa 28–29, DSe 28–29), and the "Ionians who bear shields on their heads" (or "petasos-wearing Ionians", usually identified with the Macedonians who wore the *kausia*) (Kent 1953: DNa 29, DSm 10–11) indicate that there was no shortage of terms that Darius (or his scribes) could have used in the DPh to designate Persian possessions to the west of Sardis. There is also no certainty, however, that any of the designations encountered in the lists, or for that matter in any other known official Achaemenid document, adequately described the entire string of fragmented entities that came under Darius' control as a result of his Scythian expedition. <sup>22</sup> Equally, there is no secure evidence that Darius' European holdings were organized into a separate

- 21. The view that the date of the Scythian expedition is not relevant to the dating of the foundation of the Apadana because Darius' empire is described on the tablets in the most general terms was also expressed by Calmeyer (1982: 124; cf. Vickers 1985: 4–5; 1986: 244). A similar explanation is offered for the simultaneous lack of reference to the Ionians by both Stronach (1985: 442–443) and Kuhrt (2002: 22).
- 22. The complex configuration of the northwestern frontier of Darius' empire should also warn us against an assumption (Kagan 1994: 42–43, n. 49) that, although it is always likely to have been administratively subordinate to Sardis, Scudra would still have been mentioned in the DPh if it had already been conquered—in the same way that Ethiopia (which presumably had an analogous administrative relationship to Egypt) was singled out for mention.

satrapy. When the Athenians wished to make an alliance with the Great King in 508/7 BC (thus a few years after the Scythian campaign), they sent their envoys to the satrap, Artaphernes, of Sardis (Hdt. 5.73), who is elsewhere stated to have governed  $\tau \tilde{\omega} v \ldots \dot{\epsilon} \pi i \theta \alpha \lambda \alpha \sigma \sigma i \omega v \tau \tilde{\omega} v \dot{\epsilon} v \tau \tilde{\eta} \dot{\alpha} \sigma \tilde{\eta} \ldots \pi \dot{\alpha} v \tau \omega v$  (Hdt. 5.30.5) and to have also possessed the authority (albeit with Darius' permission) to mobilize an army with a view to conquering the Cyclades and Euboea (Hdt. 5.31–32). If the satrap of Sardis was the head figure of Achaemenid authority in the northwest, as he seems to have been from both the mainland Greek and Achaemenid points of view, Sardis might have represented the westernmost holdings of Persia in a collective sense. Vickers (1985: 4) may well be right in postulating that "... the expression from India to Sardis', rather than implying that the empire stopped at the latter city, probably includes the lands controlled from Sardis, the major satrapy capital at the western end of the Royal Road from Susa".

In dating the Apadana, we are still largely dependent on the probable dating of the coins. And, at least in that domain, it has been possible to make some progress in recent years. Beginning with E. S. G. Robinson, Margaret Thompson, and Colin Kraay, whose opinions are cited by Schmidt (1957: 110), several numismatists felt that the advanced reverse type of the Cypriot issue ascribed to Lapethus (Plate 1 no. 39), could "hardly be earlier than the early fifth century BC.".<sup>25</sup> A second Cypriot coin (of Paphos?) (Plate 1 no. 38) was also placed by Martin Price and Nancy Waggoner (1975: 16; cf. Stronach 1985: 443; Carradice 1987: 80–81) in "the early fifth century" on the basis of comparable evidence from the Larnaca hoard. In the 1980s these numismatic estimates were thought to supply adequate grounds for challenging the traditional assumption (derived, as we saw, from the DPh) that the

- 23. Cf. the arguments of Balcer (1988) against earlier suggestions that Thrace was turned into a satrapy. A more recent conspectus of the evidence and earlier positions on the status of Thrace under Persian rule is offered by Zahrnt (1997).
- 24. Following this line of reasoning one would also be able to account for the corresponding lack of any reference in the DPh inscription to the Ionians, who are otherwise regularly mentioned in Darius' detailed lists of subject peoples, beginning with a listing in the Behistun inscription (Kent 1953: DB I 15, DPe 12–3, DNa 28, DSe 27–28; cf. DSf 33–34, 42–43, 48; Lecoq 1997: 246 DSaa par. 4).
- 25. At the time, the chronology of archaic coinage was (as it still is) too loose to sustain a direct refutation of Schmidt's dating of the deposits. Unwillingness to compromise numismatic judgment (however subjective, cf. Kagan 1994: 40) has surfaced nonetheless in subsequent discussions of the Apadana hoards. The coin in question has been treated as intrusive (e.g., *IGCH* 1879) despite the earlier dismissal of the possibility by Schmidt (1957: 110); or it has been thought to indicate that "even though the building was begun c. 515, and the plaques written before 513, the deposit in the SE corner of the building was not actually made until the end of the century" (Price and Waggoner 1975: 16; cf. Chryssanthaki 2000: 26, 154–157), a compromise shown to be unworkable on archaeological grounds (Stronach, 1985: 443). The difficulty of reconciling the coin's date with a foundation before 511 BC was acknowledged by Kraay, who acquiesced to Schmidt's early chronology of the deposits (Kraay 1976: 32) as late as the early 1980s (Roaf 1983: 139, n. 129).

building was founded before the Scythian expedition and directly accounted for the more specific inferences that the Apadana "must have been started in the last third of Darius' reign", "probably . . . early in the fifth century BC" (Roaf 1983: 139, 157), "after 500 BC" (Stronach 1985: 444), and possibly during the Ionian revolt (Koch 1987: 151).

Subsequent hoard evidence would argue for the limited value of stylistic criteria in determining the dates of the advanced Cypriot issues of the southeast deposit. The contents of the so-called 1990 hoard, published by Jonathan Kagan, indicate that "Cypriot coins with sophisticated obverse and reverse types and inscriptions are found with early one-sided coins of Aegina and Abdera" in hoards datable before 500 (Kagan 1994: 39, cf. 40–41). Analogous evidence is provided, as he noted, by the early Demanhur hoard (*IGCH* 1637, of c. 500 BC?). From Kagan's study it emerges that the Cypriot issues of the Apadana can no longer be safely adduced in support of an early-fifth-century foundation (cf. Stronach 2001: 103, 109 n. 40; Meadows 2003: 343). If Darius used current coinage,<sup>26</sup> a date before 500 BC would be entirely possible for the burial of the deposits. By this estimate, which does not necessarily establish that the Apadana was founded before, as opposed to after, the campaign of Darius against the European Scythians,<sup>27</sup> there is ample room for speculation on the coins' possible allusions to subject states.

#### AEGINA AND PERSIA IN THE LATE SIXTH CENTURY BC

It has been questioned whether Abdera and Aegina were really under Persian control at the time of the burial of the deposits. If the foundation did not predate the Scythian expedition, Abdera, which (as far as one can tell) was annexed in the immediate aftermath of Darius' march against the European Scythians (and seemingly before his return to Persia [cf. n. 6]), could be counted among Darius' possessions.

Judging by the current likelihood that the Apadana was founded by 500 BC, notions of actual political control would still seem difficult to apply to the stater of the Greek state of Aegina, whose submission is mentioned by Herodotus (6.48–

26. At least in the interpretation offered in the present paper, there is no reason to assume that the hoards were expressly composed of (literally or symbolically) antiquated money. See, for example, the analogy that is tentatively drawn by Root (1988: 7) with the (spit) money which, according to Aristotle (*Fragmenta varia* 481), was dedicated in the Argive Heraeum once it was superseded by the new coinage of Argos and the suggestions (Root 1989: 35; Vargyas 2000: 41) that the inclusion of Greek silver issues and gold "Croeseids" in the Apadana deposits could be intended to commemorate their replacement (as monetary media used in the empire) by the newly introduced Persian silver and gold archers, respectively.

27. This point is also adequately emphasized by Kagan's statement (1994: 40) that "While ... the [Apadana] coins cannot be used to provide a *terminus post quem* of 500 for the construction, it does not follow that they provide a reliable *terminus ante quem* for any date in Darius' reign".

49) in a passage that describes the preliminaries to the Marathon campaign and is commonly dated to 491 BC. One should be skeptical, however, about the notion that a political rapprochement between Aegina and Persia would have only come about in the late 490s.

Commercial interests provided a strong incentive for political relationships. In the mid-520s, at a time when Persian rule had not yet been firmly established in the Aegean, Polycrates of Samos voluntarily placed his men at the service of the Persian ruler Cambyses, who was then mounting a major expedition against Egypt (Hdt. 3.44). In so doing, Polycrates effectively joined the Persian camp, which made good sense for a tyrant whose state had high commercial stakes in Naucratis (Hdt. 2.178.3; cf. Braun 1982: 52). Herodotus reports that the Greek installation at Naucratis was subject from the outset to tight control by the Egyptian state. Its establishment (or formal organization) was subject to a pharaonic decree (Hdt. 2.178.1: "[Amasis] ἀπεδέξατο ... καὶ ... ἔδωκε Ναύκρατιν πόλιν ἐνοικῆσαι ... ἔδωκε χώρους ἐνιδρύσασθαι βωμοὺς καὶ τεμένεα θεοῖσι"), and strict regulations applied to Greek commercial conduct (Hdt. 2.179).<sup>28</sup> Good state relations between Egypt and the principal Greek cities (Hdt. 2.178.2–3) whose commercial interests the emporium directly served<sup>29</sup> are not explicitly attested in all instances. They would nonetheless have been indispensable in the case of an emporium founded in foreign sovereign territory with consent of the local authorities, and we at least know that the home bases of the Greeks of Naucratis fell within the geographical compass of the Saites' official friendships and alliances.<sup>30</sup>

- 28. As shown by Loukopoulou (1999: 365–368) and Bresson (2000: 82–84), the settlement of Amasis admits close comparison with the stipulations attested in the treaty regulating the status of the Greek *emporitai* of the commercial installation at Pistiros in the Odrysian kingdom of Thrace (for the text, see Chankowski and Domaradzka 1999, with earlier bibliography).
- 29. The official participation of the founding cities of the κοινόν in Naucratis, at least until Herodotus' time may be inferred (*pace*, e.g., Austin 1970: 31-32, 44-45) by their prerogative to appoint προστάτας τοῦ ἐμπορίου (Hdt. 2.178.3). The analysis of Bresson (1980; 2000: 74–84; cf. Loukopoulou 1999: 365–368; Möller 2000: 182–217; 2001) bears out the settlement's double dependence on Egyptian (and subsequently Persian) authority, on one hand, and on the respective authorities of its several founding cities, on the other, until at least the late fifth century BC.
- 30. Before his entente with the ruler-to-be of Egypt, Cambyses, Polycrates of Samos was a *xenos* and ally of Amasis (Hdt. 3.39.2, cf. 2.182.1, 3.47.1). Formal relations with Miletus and Rhodes are indicated by the dedications of Necho at Branchidae (Hdt. 2.159.3) and of Amasis at the sanctuary of Athena at Rhodian Lindus (Hdt. 2.181.1, 3.47.3; *FGrHist* 532 F1 [29]). Ionia as a whole was a part of the political domain of Amasis' Lydian ally, Croesus (Hdt. 1.77; cf. Xen. *Cyrop.* 7.32–45), and Egyptian collaboration with the Lydian kingdom is attested since the reign of Gyges (Radet 1893: 177–180; Braun 1982: 36–37). Passing remarks to Amasis' financing of the rebuilding of the temple of Apollo at Delphi (Hdt. 2.180.2) and his gift of an elaborately embroidered linen corselet to the Lacedaemonians (Hdt. 3.47, cf. 2.182.1) afford additional indications of his friendly connections with southern Greece

There are no explicit references to Persian dealings with Naucratis once Egypt passed into Persian hands. However, state control of Naucratite commerce would not have lapsed.<sup>31</sup> Greek trading privileges would have also continued to be subject to official agreement, and it is well known that the Great Kings did not enter partnerships of an equal type. Artaphernes' demand (Hdt. 5.73) that the Athenians offer "earth and water" as a prerequisite to concluding an alliance with Darius I in 508/7 BC implies that foreigners who contracted agreements with the Persian state were required to unconditionally recognize the superior status of the Persian ruler (Orlin 1976; Kuhrt 1988). Aegina, as one of the principal members of the Greek trading community at Persian-ruled Naucratis (Hdt. 2.178.3),<sup>32</sup> was quite likely included in the Great King's domain as early as the last quarter of the sixth century.

Greek trading rights in the Persian empire are still poorly understood, and Aegina, which is cited as the only city of central Greece represented at Naucratis, may not have been a typical example. One should keep in mind that organized Greek commerce with the Persian regime was not always direct, and in the period discussed the bulk of Greek overseas trade was in the hands of the Ionians, who were subjects of Persia. Agreements in the Greek-speaking areas of Asia Minor,

and the Peloponnese, home territory of the commercial activity of the Aeginetans. Close relations between Corinth and Egypt would seem to be implied by the Egyptian name, Psammetichus, of Periander's nephew and successor (Sealey 1976: 52). Additional relations of Amasis with the Greek world are attested by his "friendship and alliance" with the inhabitants of Cyrene (Hdt. 2.181). On the necessity of good state relations between Amasis and the principal Greek cities trading with Egypt and on the significance of his dedications to Greek sanctuaries as expressions of such relations, see Bresson (1980: 319, 314).

- 31. The provision, stated by Herodotus (2.179) to have applied before his time, that ships sailing to the country use the Canopic mouth of the Delta and call at Naucratis, aimed no doubt to enable customs control. The appointment of special customs officials at the Canopic mouth of the Nile, which is attested as early as the reign of Amasis (Posener 1947; cf. the Egyptian φύλαξ of Hdt. 2.113-114), is held, with reason, to have continued under the Persian rulers (Yoyotte 1993-94: 683). The control (and exploitation) of foreign sea trade in the Persian period is attested by a maritime customs account, dated to the eleventh year of Xerxes or, perhaps, Artaxerxes I, from Elephantine (Yardeni 1994; Briant and Descat 1998; Bresson 2000: 67-69), as well as by the references to the taxes withheld on Greek imports passing through Thonis and on Naucratite products and transactions, in general, on a stele dated to the first regnal year (c. 380 BC) of Nectanebo I (Gunn 1943; Lichtheim 1980: 86-89; Yoyotte 1993-94: 680-683). Further indication of Achaemenid involvement in the affairs of Naucratis could be provided by a fifth-century bronze seal with an inscription in Aramaic rendering a Semitic personal name (PLT) (Petrie 1886: 41 no. 48, plate XX, 17). It has been suggested that it belongs to an official appointed by the Persian authorities to administer the affairs of the settlement (Yoyotte 1993-94: 680).
- 32. The date of the earliest Aeginetan activity at Naucratis is uncertain but has been suggested to have been possibly as early as the late seventh century BC (Sullivan 1996: 189–190). Concerning the role of the Aeginetans in Greek trade with Naucratis, see the reflections offered by, for example, Milne (1939: 179–181) and Braun (1982: 40).

Cyprus, and the Black Sea could be based on common ethnic descent or traditional metropolis-colony relations. Naucratis' establishment on foreign sovereign territory and her status at the time (above n. 29) would have precluded the option of an "indirect" Aeginetan agreement. The settlement of Amasis, recorded by Herodotus, indicates that the "chartered" (Braun 1982: 41) Greek presence at Naucratis was directly subject to the supreme authority of the Egyptian state.<sup>33</sup> Maritime trade was habitually exposed, furthermore, to the competition and rapacity of the power(s) that had "command of the sea". And, in this respect as well, the Persian-occupied southeastern Mediterranean—then largely in the hands of Phoenicians whose Mediterranean-wide conflict with the Greeks is well attested in our sources (Stylianou 1989: 421-425)—was a formidable domain for Greek outsiders who lacked the guarantees of formal treaties (cf. Meiggs 1972: 267-268; Badian 1987: 7). Greeks were highly sensitive to the requirements of an agreement with their imperial neighbor (cf. Badian 1987: 27-38).34 Aeginetan concessions to Persia in the late sixth century would still be dictated by more weighty, pragmatic concerns.35

This reconstruction need not violate Herodotus' report on the political understanding of Aegina with Persia on the eve of Marathon, which has long framed modern discussions of Aeginetan commercial activity at Naucratis in the late sixth and early fifth centuries. Herodotus relates that Darius sent heralds to demand "earth and water" from mainland Greece and the islands when he was beginning preparations for the Marathon campaign, and that Aegina was among the states that consented to the demand. Taken at face value, his testimony could indeed im-

- 33. Cf. the early-fourth-century edict of Nectanebo I (above n. 31). The supreme authority of the Odrysian kingdom was apparently also a party to the treaty with the Greek *emporitai* at Pistiros (above n. 28).
- 34. Yet, even after the Persian wars, the friendship of the "barbarian" was evidently valued at least by the Argives (Hdt. 7.151).
- 35. Since the island itself of Aegina remained outside the radius of Persian military expansion, that relationship could only be relatively loosely defined, and loose definitions of control were possible in the Persian imperial system. See, for example, the cases of the Ethiopians, Colchians, and Arabians (Hdt. 3.97; cf. Briant 1996: 736–738), and of the island states of Cyprus under Cyrus (Xen. *Cyrop.* 7.4.1–2, cf. 8.6.8).
- 36. Both Figueira (1977: 174, 273) and Vickers (1985: 35), for instance, were alive to Aegina's concern for her trading enterprise in Naucratis. However, this is assumed to have affected Aegina's stance toward Persia only in the late 490s. The presumption that Aegina maintained an independent status after Naucratis came under Persian control also underlies the view that Aeginean trade in Naucratis benefited from the "eclipse" of Samos and Miletus subject to their conquest by Persia (e.g., Figueira 1981: 147, 259–260, 271; Möller 2000: 76). As Georges (2000) has shown, the economic stagnation of Ionia before the Ionian revolt can no longer be taken for granted either.

ply that, at least as far as central and southern Greece was concerned, the question of an alliance with Persia presented itself for the first time on the eve of Marathon, and that that was also the earliest moment of Aeginetan agreement with Persia. However, since Athens was itself allied (however briefly) with Persia before 500 BC (Hdt. 5.73), his report obviously does not rule out earlier agreements. The general demand for "earth and water" of 491 BC, with which Aegina complied, was probably not merely meant to solicit new alliances on Greek soil in view of the upcoming Persian expedition against central Greece. It could have been meant, simultaneously, to reconfirm earlier friendships, stressed, not least, by the recently concluded Ionian revolt,<sup>37</sup> and to take a final count of Persia's remaining adversaries.

The times would have also called for a certain measure of discretion. While ostensibly describing Greek affairs at large in the late 490s, Herodotus (6.49) names only the Aeginetans among the "many dwellers of the mainland and all the islanders" that consented to Darius' demand and more specifically airs an Athenian grievance against Aegina. The Athenians (who themselves had courted Persian friendship in 508/7 BC but who championed the Hellenic cause by the time of the outbreak of the Ionian revolt in 499 BC) are reported to have sent to Aegina's ally, Sparta, claiming that the Aeginetans had betrayed Hellas and requesting Spartan intervention (Hdt. 6.49.2). Given its Athenian bias,<sup>38</sup> the appeal recorded by Herodotus can hardly be expected to have alluded to still older dealings of Aegina with the enemy. Far from strengthening the Athenian case, such allusions would have invited direct comment about Athens' own earlier "medizing"—and that is something that fifth-century Athenians would have at all cost tried to avoid.<sup>39</sup> In short, rather than fixing Aegina's understanding with Persia to 491 BC at the earliest, the testimony of Herodotus could offer, instead, evidence that this important mercantile state was persistently inclined to align herself with the power

- 37. Herodotus places this particular demand for "earth and water" in the immediate succession of Mardonius' efforts to regain control of the Aegean littoral of Thrace (Hdt. 6.43.4–6.45), a year after (Hdt. 6.43.1) Artaphernes' settlement of the revolt in Ionia (Hdt. 6.42); on the chronology, see Beloch' II.2: 57–58.
- 38. Also signalled by the wording of Hdt. 6.49.2: [The Athenians] ἄσμενοι προφάσιος ἐπελάβοντο, . . . ἐς τὴν Σπάρτην κατηγόρεον τῶν Αἰγινητέων.
- 39. See also Herodotus 5.73, wherein Athens' offering of "earth and water" to Persia under Cleisthenes is expressly blamed on the personal (!) initiative of the Athenian envoys to Sardis. The passage is justifiably held by a number of modern historians to represent a fifth-century distortion of the events intended to absolve the Athenian *demos*, and the Alcmaeonids in particular, of responsibility for concluding an alliance that came to be regarded eventually as demeaning and treasonous (Badian 1997: 125–127; Berthold 2002: esp. 260, with references to earlier commentaries in the same sense in n. 6).

that ruled the East and Egypt in order to protect (and promote) her commercial enterprise.  $^{\rm 40}$ 

#### Darius I and the West

Boasts of feats of conquest over and above those accomplished by one's predecessors were an essential element of Near Eastern imperialist proclamations. In such statements, claims of extraordinary expansion in the West appear to have held a special place. Sargon II of Assyria, the first Mesopotamian monarch to expand his dominion beyond the shores of the Levant, proudly proclaimed in a number of texts (including that engraved on a stele reportedly found on the island of Cyprus itself) that he received the submission of seven kings of Cyprus "in the sea of the setting sun", a land whose name his predecessors had not even heard of:

"... [Seven king]s of the land of Ia', a district [of Iad]nana (Cyprus), which [is situated] at seven days' journey [in the midst of] the sea of the setting sun and whose dwellings are distant—[since] far-off days [they had not paid?] the tax of Assyria, for none of the kings, my fathers [who preceded] me [had even hea]rd the name of their land—they heard from the midst of the sea of [the deeds that I had performed] in Chaldea and the Hatti-land, and their hearts beat fast; their [trib]ute: gold, silver, [vessels of] ebony, boxwood, the treasure of their land, [into] Babylon to my presence, [they brought and] they kissed my feet . . ." (Cyprus stele, translated by Stephanie Dalley [Reyes 1994: 51])

The cachet of the Cypriot domain in official representations of the neo-Assyrian empire is also reflected in subsequent statements of Esarhaddon (e.g., *ANET*<sup>3</sup> 291) and Ashurbanipal (e.g., *ARAB* II 340–341 paragraph 876) as well as in catchphrase descriptions of the Assyrian realm as extending from "sunrise to sunset" (i.e., from Dilmun "in the midst of the sea of the rising sun" to Cyprus "in the sea of the setting sun") (e.g., on the Cyprus stele [Reyes 1994: 53]. Cf. *ANET*<sup>3</sup> 534; *ARAB* II 345 paragraph 889, 346 paragraph 893).<sup>41</sup>

The boundaries of Near Eastern imperialist expansion were dramatically redefined by the conquests of Cyrus the Great and his Persian successors. No direct

- 40. The capability of imperialist powers to impose crippling restrictions on the commercial enterprise of their opponents is clearly illustrated by the Athenian decree banning the Megarians from the harbors of the Athenian empire and from the Athenian *agora* (Thuc. 1.67.4, 144.2; Meiggs 1972: 202–203, 266). Cline (1991) argued for a possible Hittite embargo against the Mycenaeans, and at least the prerogative of the rulers of later Near Eastern empires to regulate trading privileges within their realm is evidenced by the treaty of Esarhaddon with his subject ruler, Baal of Tyre (*ANET*<sup>3</sup> 533–534). That Persian rulers would have refrained from such tactics seems hardly likely (cf. Bresson 2000: 69–73, with special reference to Naucratis).
- 41. On the more general notion of the marginality of eastern Mediterranean peoples in Near Eastern visions of imperial space, see Kuhrt (2002).

accounts survive of Cyrus' personal valuations of his western possessions.<sup>42</sup> Still, the Graeco-Lydian elements that are prominently featured in his architecture at Pasargadae (Nylander 1970; Stronach 1978: 11–23, 24–145 passim) would have brought to the heart of the Persian homeland the message of his total conquest of Asia Minor, previously largely outside the compass of Assyrian, Babylonian, and Median control. Cast though it may be in Herodotus' words, the opinion expressed by certain Persians, namely, "that Cambyses was the better man [by comparison to his father Cyrus] for he had kept all of Cyrus' possessions and had won, in addition, Egypt and the sea" (Hdt. 3.34.4), might also be perceived as a reflection of the prestige that the control of territories beyond the shores of Asia conferred upon the leaders of land powers based to the east of the Euphrates.

Darius could justifiably claim to be the first such leader ever to expand into Europe and he seems to have passed up no opportunity to do so. His crossing of the Bosporus was commemorated with two stelae, which do not survive but whose texts recorded, according to Herodotus (4.87), all the nations over which he ruled. There can be little doubt that those texts also marked the acquisition of new territory, as did a further stele reportedly erected by Darius near the sources of the Thracian river Tearus (Hdt. 4.91).

Back in Persia, Darius' bid for the conquest of the West, which was to remain a constant preoccupation of his throughout his reign (cf. Burn 1962: 127-139) and which was passed on to his son and successor, Xerxes, was celebrated by the addition of a representative of Scudra among the personifications of subject peoples depicted on the base of his Egyptian-made statue excavated at Susa (Roaf 1974: 130-132, 251 plate 35.1), and it is possible to identify a Thracian delegation among the groups of foreign subjects paying homage to the king on the Apadana reliefs at Persepolis (Schmidt 1953: 89, plate 45, delegation 19, tentatively identified as Scudrians; contra Roaf 1974: 131-132). On the funerary relief of Darius at Naqsh-i Rustam, the "Scythians who are across the sea", as well as the Scudrians and "petasos-wearing Ionians", take their place among the supporters of the king's dais (Schmidt 1970: figure 44 nos. 24 and 25, figure 49 no. 26, respectively). Moreover, Darius' different overseas possessions were separately featured in his subject lists next to major holdings, such as Babylonia, Lydia, and Egypt, stressing-together with his important acquisition, Sind, in the east—his personal contributions<sup>43</sup> to the deserved claims that "the spear of a Persian man has gone forth far" and that "a Persian man has delivered battle far indeed from Persia" (Kent 1953: DNa 43-45 and 46-47, respectively).

<sup>42.</sup> It is at least interesting, however, that Cyprus appears, together with Egypt, as a western boundary in Xenophon's depiction (*Cyrop.* 8.6.21, cf. 8.8.1) of the elder Cyrus' empire as occupying the totality of the "inhabitable" portions of the earth.

<sup>43.</sup> Cameron (1975: 87) pointed out that the rosters were not meant to offer an "orderly enumeration of the various satrapies, but only a list of some groups of peoples whom the Great King or his bureaucrats deemed worthy of mention".

In the varied repertory of Persian representations of their western holdings, a place might well have been reserved for coinage. Cyrus the Great's scorn directed towards all Greeks "who have a place (i.e., a marketplace) set apart in the midst of their city where they perjure themselves and deceive each other" (Hdt. 1.153.1–3, trans. A. D. Godley, Loeb)<sup>44</sup> implies that from a Persian perspective a unifying perception of the ethnically diverse and geographically and politically fragmented territories of the West could be provided by those territories' economic practices, in which coinage was central. Darius, who was remembered by his fellow Persians as a "royal huckster",<sup>45</sup> and whose enthusiasm for western monetary practices is indicated by the introduction of his own coinage, might have been especially predisposed to use coins as a metaphor for his dominion of the West.

In that case, it would have made sense for him to choose specimens that would make both an ideological and an economic statement, and judging at least by the present selection, he might also be said to have chosen expertly. Lydia, whose conquest marked the beginnings of Persian westward expansion and which was to remain the Achaemenids' "flagship satrapy" (Weiskopf 1982) in the Northwest, was also home of the first "retail-merchants" and the earliest coins as well as the first to produce, among others, a valuable gold coinage from her abundant stores of electrum. The island of Aegina and the city-state of Abdera were, in comparison, tiny spots on the map of the empire. Their coins, however, had far-reaching implications. Surplus silver acquired through Aegina's far-flung maritime commerce both in the East and in the West is held to have prompted her pioneering production of silver coins in Greece, and Aeginetan coinage was established in

- 44. One could question whether the words Herodotus puts into Cyrus' mouth in this instance ought to be taken seriously as something that a Persian king would have said. The reported Persian aversion for marketplaces and for "buying and selling" (Hdt. 1.153.2) may still depict the typical Persian attitude, not least because it is repeated in Strabo (15.3.19) and Aelian (*Varia Historia* 10.14).
- 45. The expression was coined by Olmstead (1948: 185) after the characterization of Darius as a *kapelos* in Hdt. 3.89.3. This characterization appears to rest on the perception that, like a merchant, Darius was out for profit—a motivation suggested by his systematic imposition of annual taxes and "other like measures". As proposed by Tuplin (1991: 280) and Descat (1994), Darius' institution of a Persian coinage might also be relevant to his characterization as a *kapelos*.
- 46. See Hdt. 1.94.1, whose phrasing leaves open, however, the question as to whether, in addition to being the first *kapeloi*, the Lydians were responsible for the introduction of the earliest (electrum) coinage or only for the first coins minted in silver and in gold, respectively. On Lydian gold refining, see Ramage and Craddock (2000).
- 47. Greek tradition associated Aegina with the earliest coinage but in all probability she only introduced the first silver coinage (Kraay 1976: 42, 313; Figueira 1981: 65–80). An instance of her highly successful commercial enterprise is provided by the Aeginetan Sostratos, son of Laodamas, who held a record for profit-making out of trade (Hdt. 4.152.3). A succinct overview of the literary evidence on Aeginetan commercial activity in the Archaic period is offered by Möller (2000: 75–77, with earlier bibliography).

the Archaic period both as an international medium of exchange and as a prototype for Aegean monetary production.<sup>48</sup> Abdera, one of the most important Greek settlements in the northern Aegean and a stronghold of Persian interests in Thrace at least until the time of Xerxes' campaign against Greece (Isaac 1986: 89–90, with references), was also an important supplier in the late Archaic period of silver extracted from the rich Thraco-Macedonian mines and regularly traded in coin form (Kraay 1964; May 1966: 2–4; Chryssanthaki 2000: 26–59, 123–127). Finally, Cyprus, in addition to her undeniable prestige from of old as a symbol of extraordinary Near Eastern imperialist expansion, was, like Aegina, at the forefront of Archaic numismatic production (Kraay 1976: 301, 305) owing, no doubt, to surplus silver amassed largely through the lucrative international trade based on her native copper reserves.

As indicated in the beginning of this discussion, we may be dealing with only two, out of possibly four, deposits that were initially placed in the foundations of the building, and the two groups of coins found are not identical in every respect. There can thus be no certainty that we possess a definitive list of the types Darius used in this context. The stated associations of the specimens included in the present selection may still disclose a criterion of selection: the sum of the coins of the Apadana deposits could stand as symbols of Darius' control of important western sources of wealth and leading centers of western commercial/economic activity.

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48. The Aeginetan standard was used in central Greece (Boeotia, Phocis, Thessaly), the Peloponnese, the Cyclades, and Crete (Kraay 1976: 329 s.v. "Aeginetan"; Figueira 1981: 80–88). The possibility also remains open, however, that Aeginetan weights were disseminated even before the institution of minted coins as a result of Aegina's far-flung trading in silver and other commodities (Kroll 2001: 83).

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References to the classical authors may be conveniently consulted in the Loeb editions unless otherwise indicated in the bibliography.

## APPENDIX: THE APADANA COINS (IGCH 1789)

The Apadana foundation deposits, discovered by Friedrich Krefter during Ernst Herzfeld's directorship of the Persepolis excavations (*Illustrated London News*, 22 February 1936, p. 328; Herzfeld 1938: 413–414), were first published systematically by Erich Schmidt (1953: 70, 79, 98 figure 42 A–B, 99 figure 43; 1957: 110, 113–114, plate 84 nos. 27–39). On the foundation inscription, see Kent (1953: DPh). The standard publication of the hoards is Schmidt (1957: 110, 113–114 [catalogue compiled by S. P. Noe et al.], plate 84 nos. 27–39). Subsequent comprehensive presentations of the coins were offered by Kagan (1994: 36–38, with a discussion of the import of current hoard evidence on the dating of the coins), and Meadows (2003, with supplementary information about their present disposition and about the weights and die axes of ten of the specimens). The contents of the hoards (as numbered in Schmidt 1957) are as follows (see Plate 1):

Northeast deposit: no. 27: Aeginetan stater (Asyut Group II, Price and Waggoner 1975: 69–76) (Herzfeld 1938: 414 figure B; Kagan 1994: 37; Meadows 2003: 342 no. 1); nos. 28–31: gold, light-weight "Croeseid" staters (Herzfeld 1938: 414 figure A; Kagan 1994: 37; Meadows 2003: 342 nos. 3–6); no. 36: tetradrachm of Abdera (period I, group II, May 1966) (Herzfeld 1938: 414 figure B; May 1966: 52, 60 no. 4/1; Kagan 1994: 37; Chryssanthaki 2000: 28–29; Meadows 2003: 342 no. 2).

Southeast deposit: nos. 32-35: gold, light-weight "Croeseid" staters (Herzfeld 1938: 414 figure A; Kagan 1994: 37; Meadows 2003: 343 nos. 10-13); no. 37: uncertain Cypriot mint, double siglos (Herzfeld 1938: 414 figure B; Kagan 1994: 37, plate 7B; Meadows 2003: 342 no. 7); no. 38: tentatively ascribed to Paphos, double siglos (Herzfeld 1938: 414 figure B; Kagan 1994: 37–38, plate 6C [cf. 28–30 no. 42]; Meadows 2003: 343 no. 8); no. 39: attributed to Lapethus (Robinson 1948: 60), double siglos (Kagan 1994: 38 [cf. 36 nos. 65–66]; Meadows 2003: 343 no. 9).

Nos. 28 and 31–39 are presently in the Iran Bastan Museum; nos. 27, 29, and 30 are reportedly kept in the Marble Palace Museum (Meadows 2003: 242–243).

No. 39 was discovered a few years later than the rest of the coins, when the test trench in which the southeastern deposit had been brought to light was re-

examined (Schmidt 1953: 79 n. 57). The possibility (contemplated in *IGCH* 1789 and Root 1988: 2–3) that the coin is intrusive is difficult to accept considering its find spot (Schmidt 1957: 110; Kagan 1994: 38). The hoards have also been reported to contain (only) four "Croeseids" and four Greek silver issues (Noe 1937: 212 no. 806; Schlumberger 1953: 11 no. 43, n. 1) or eight "Croeseids" and "eight miscellaneous Greek pieces in silver" (Robinson 1958: 190; echoed in Kraay 1976: 32). This inconsistency (cf. *IGCH* 1789; Root 1988: 2) is not unlikely to emanate from Herzfeld's initial, ambiguous description of the find as consisting of "coins of gold and silver . . . deposited in fours" and from his lack of specificity about the number of the silver pieces (Herzfeld 1938: 413, 414: "the silver coins are of Greek cities, among them, for example, staters of Aegina, Abdera, and Salamis and Soli (in Cyprus)"). The coins ascribed by Herzfeld (on the basis of information received at the time from Robinson) to Salamis and Soli are nos. 37 and 38.

#### References

- Aelian, *Varia Historia* = Dilts, M. R., ed. 1974. *Clavdii aeliani varia historia*. Bibliotheca scriptorum graecorum et romanorum teubneriana. Leipzig: B. G. Teubner.
- ANET<sup>3</sup>: Prichard, J. B., ed. 1969. Ancient Near Eastern texts relating to the Old Testament, 3rd ed. with supplement. Princeton, N.J.: Princeton University Press.
- ARAB II: Luckenbill, D. D. 1927. Ancient records of Assyria and Babylonia. Vol. 2, historical records of Assyria from Sargon to the end. Chicago: University of Chicago Press.
- Aristotle, Fragmenta varia: Rose, V., ed. 1886. Aristotelis qui ferebantur librorum fragmenta. Leipzig: B. G. Teubner. Reprint. Stuttgart, 1967.
- Austin M. M. 1970. *The Greeks in Egypt in the archaic age.* Proceedings of the Cambridge Philological Society, suppl. 2. Cambridge: Cambridge Philological Society.
- Babelon, E. 1893. Catalogue des monnais grecques de la Bibliothèque Nationale: les Perses achéménides, les satrapes et les dynastes tributaires de leur empire. Chypre et Phénicie. Paris: C. Rollin & Feuardent.
- Badian, E. 1987. The Peace of Callias. Journal of Hellenic Studies 107: 1-39.
- . 1994. Herodotus on Alexander I of Macedon: a study in some subtle silences. In: S. Hornblower, ed., *Greek historiography*, pp. 107–130. Oxford: Clarendon Press.
- . 1998. The King's Indians. In: W. Will, ed., Alexander der Grosse: eine Welteroberung und ihr Hintergrund. Vorträge des Internationalen Bonner Alexanderkolloquiums, 19.–21. 12. 1996, pp. 205–224. Bonn: Rudolf Habelt.
- Balcer, J. M. 1972. The date of Herodotus iv.1: Darius' Scythian expedition. *Harvard Studies in Classical Philology* 76: 99–132.
- ——. 1988. Persian occupied Thrace (Skudra). *Historia* 37: 1–21.

- Beloch<sup>2</sup> = Beloch, K. J. 1914. *Griechische Geschichte*, vol. II, 1–2, 2nd ed. Berlin and Leipzig: Walter de Gruyter.
- Berthold, R. M. 2002. The Athenian embassies to Sardis and Cleomenes' invasion of Attica. *Historia* 51: 259–267.
- Bivar, A. D. H. 1985. Achaemenid coins, weights and measures. In: I. Gershevitch, ed., *The Cambridge history of Iran*. Vol. 2, *the Median and Achaemenian periods*, pp. 610–639. Cambridge: Cambridge University Press.
- Borrell, H. P. 1839–40. An inquiry into the early Lydian money, and an attempt to fix the classification of certain coins to Croesus. *Numismatic Chronicle* 2: 216–223.
- Braun, T. F. R. G. 1982. The Greeks in Egypt. In: J. Boardman and N. G. L. Hammond, eds., *The Cambridge ancient history.* Vol. 3, part 3, *the expansion of the Greek world, eighth to sixth centuries B.C.*, 2nd ed., pp. 32–56. Cambridge: Cambridge University Press.
- Bresson, A. 1980. Rhodes, l'Hellénion et le statut de Naucratis. *Dialogues d'Histoire Ancienne* 6: 291–349. Reprint. Bresson, 2000, pp. 13–63.
- ——. 2000. La cité marchande. Scripta Antiqua 2. Bordeaux: Ausonius.
- Briant, P. 1996. *Histoire de l'empire perse de Cyrus à Alexandre*. Paris: Librairie Arthème Fayard.
- Briant, P. and R. Descat. 1998. Un registre douanier de la satrapie d'Égypte à l'époque achéménide (TAD C3, 7). In: N. Grimal and B. Menu, eds., *Le commerce en Égypte ancienne*, pp. 59–104. Cairo: Institut Français d'Archéologie Orientale.
- Burn, A. R. 1962. Persia and the Greeks: the defense of the West, c. 546–478 B.C. London: Edward Arnold.
- Cahill, N. and J. H. Kroll. 2005. New archaic coin finds at Sardis. *American Journal of Archaeology*. Forthcoming.
- Calmeyer, P. 1982. Zur Genese altiranischer Motive VIII: die "statistische Landcharte des Perserreiches" – I. Archäologische Mitteilungen aus Iran 15: 105– 187.
- . 1989. Das Datum der Gründungsinschrift vom Apadana und die Krone der ältesten "Bogenschützen". In: R. Descat, ed., *Lor perse et l'histoire grecque*, pp. 51–59. *Revue des Études Anciennes* 91.1–2.
- . 2000. Art in Iran III: Achaemenian art and architecture. In: E. Yarshater, ed., Encyclopaedia Iranica, vol. 2, pp. 569–580. New York: Bibliotheca Persica Press.
- Calmeyer, P. and P. Naster. 1995. Münzen. In: D. O. Edzard, ed., *Reallexikon der Assyriologie*, vol. 8, pp. 404–406. Berlin: W. de Gruyter.
- Cameron, G. G. 1975. Darius the Great and his Scythian (Saka) campaign, Bisitun and Herodotus. *Acta Iranica*, 2nd ser. 4: 77–88.

- Carradice, I. 1987. The "regal" coinage of the Persian empire. In: I. Carradice, ed., Coinage and administration in the Athenian and Persian empires. The ninth Oxford symposium on coinage and monetary history, pp. 73–107. BAR International Series 343. Oxford: British Archaeological Reports.
- ——. 1998. Two Achaemenid hoards. Numismatic Chronicle 158: 1–23.
- Chankowski, V. and L. Domaradzka. 1999. Réédition de l'inscription de Pistiros et problèmes d'interprétation. *Bulletin de Correspondance Hellénique* 123: 247–256.
- Chryssanthaki, K. 2000. L'histoire monétaire d'Abdère du VIe avant J.-C. au IIe siècle après J.-C. Ph.D. diss., University of Paris IV–Sorbonne.
- Cline, E. 1991. A possible Hittite embargo against the Mycenaeans. *Historia* 40: 1–9.
- Descat, R. 1994. Darius, le roi kapēlos. In: H. Sancisi-Weerdenburg, A. Kuhrt, and M. C. Root, eds., *Continuity and change. Proceedings of the last Achaemenid history workshop, April 6–8, 1990, Ann Arbor, Michigan*, pp. 161–166. Achaemenid History 8. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Ellis, R. S. 1968. Foundation deposits in ancient Mesopotamia. New Haven: Yale University Press.
- FGrHist: Jacoby, F. 1923-1958. Die Fragmente der griechischen Historiker. v.p.
- Figueira, T. J. 1977. *Aegina and Athens in the Archaic and Classical periods: a socio-political investigation*. Ph.D. diss., University of Pennsylvania, Philadelphia.
- ——. 1981. Aegina: society and politics. New York: Arno Press.
- Frye, R. N. 1962. The heritage of Persia. London: Weidenfeld and Nicolson.
- Gardiner-Garden, J. R. 1987. Dareios' Scythian expedition and its aftermath. *Klio* 69: 326–350.
- Georges, P. B. 2000. Persian Ionia under Darius: the revolt reconsidered. *Historia* 49: 1–39.
- Gunn, B. 1943. Notes on the Naukratis stela. *Journal of Egyptian Archaeology* 29: 55–59.
- Hallock, R. T. 1969. *Persepolis fortification tablets*. Oriental Institute Publications 92. Chicago: University of Chicago Press.
- Hdt. = Hude, C., ed. 1927. Herodoti historiae, 3rd ed. Oxford: Clarendon Press.
- Head, B. V. 1887. Historia numorum, 1st ed. Oxford: Clarendon Press.
- Herzfeld, E. 1938. Notes on the Achaemenid coinage and some Sasanian mintnames. In: J. Allan, H. Mattingly, and E. S. G. Robinson, eds., *Transactions of the International Numismatic Congress, London, June 30–July 3, 1936*, pp. 413–426. London: B. Quaritch.
- Hogarth, D. G. 1908. Excavations at Ephesus: the archaic Artemisia. London: British Museum.
- IGCH: Thompson, M., O. Mørkholm, and C. M. Kraay, eds. 1973. An inventory of

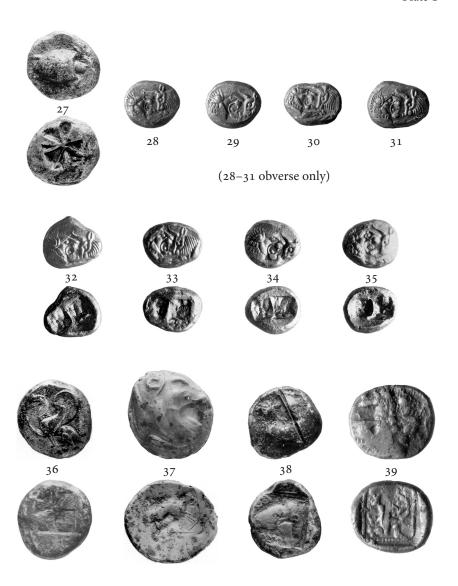
- Greek coin hoards. New York: American Numismatic Society.
- Isaac, B. 1986. *The Greek settlements in Thrace until the Macedonian conquest.* Studies of the Dutch Archaeological and Historical Society 10. Leiden: E. J. Brill.
- Jacobs, B. 1997. Eine Planänderung an den Apadāna-Treppen und ihre Konsequenzen für die Datierung der Planungs- und Bebauungsphasen von Persepolis. *Archäologische Mitteilungen aus Iran* 29: 281–302.
- Jongkees, J. H. 1944. Kroiseios en Dareikos. Jaarbericht van het Vooraziatisch-Egyptisch Gezelschap ex Oriente Lux 9: 163–168.
- Kagan, J. H. 1994. An archaic Greek coin hoard from the eastern Mediterranean and early Cypriot coinage. *Numismatic Chronicle* 154: 17–52.
- Kent, R. G. 1953. *Old Persian: grammar, texts, lexicon*. American Oriental Series 33. New Haven, Conn.: American Oriental Society.
- Kervran, M., D. Stronach, F. Vallat, and J. Yoyotte. 1972. Une statue de Darius découverte à Suse. *Journale Asiatique* 260: 235–266.
- Koch, H. 1987. Einige Überlegungen zur Bauplanung in Persepolis. *Archäologische Mitteilungen aus Iran* 20: 147–159.
- Kraay, C. M. 1956. The archaic owls of Athens: classification and chronology. *Numismatic Chronicle* 6th ser. 16: 43–68.
- ——. 1964. Hoards, small change and the origin of coinage. *Journal of Hellenic Studies* 84: 76–91.
- ——. 1976. Archaic and classical Greek coins. London: Methuen.
- Kroll, J. H. 2001. Observations on monetary instruments in pre-coinage Greece. In: M. S. Balmuth, ed., *Hacksilber to coinage: new insights into the monetary history of the Near East and Greece*, pp. 77–91. Numismatic Studies 24. New York: American Numismatic Society.
- ——. 2003. Who minted the first "Croeseids"? New stratigraphical evidence from Sardis. In: *Abstracts of papers of the XIII Congreso Internacional de Numismatica*, 15–19 septiembre, *Madrid*, pp. 62–63. International Numismatic Commission.
- Kuhrt, A. 1988. Earth and water. In: H. Sancisi-Weerdenburg and A. Kuhrt, eds., *Method and theory. Proceedings of the London 1985 Achaemenid history work-shop*, pp. 87–99. Achaemenid History 3. Leiden: Nederlands Instituut voor het Nabije Oosten.
- ——. 2002. "Greeks" and "Greece" in Mesopotamian and Persian perspectives. J. L. Myres Memorial Lecture 21. Oxford: Leopard's Head Press.
- Le Rider, G. 2001. La naissance de la monnaie: pratiques monétaires de l'Orient ancien. Paris: Presses Universitaires de France.
- Lecoq, P. 1997. Les inscriptions de la Perse achéménide. Paris: Gallimard.
- Lichtheim, M. 1980. *Ancient Egyptian literature: a book of readings*. Vol. 3, *the late period*. Berkeley: University of California Press.

- Loukopoulou, L. 1999. Sur le statut et l'importance de l'*emporion* de Pistiros. *Bulletin de Correspondance Hellénique* 123: 359–371.
- May, J. M. F. 1966. *The coinage of Abdera (540–345 B.C.)*. Royal Numismatic Society Special Publication 3. London: Royal Numismatic Society.
- Mayrhofer, M. 1978. Supplement zur Sammlung der altpersischen Inschriften. Österreichische Akademie der Wissenschaften, Sitzungsberichte philosophischhistorische Klasse 338. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Meadows, A. R. 2003. The Apadana foundation deposit (IGCH 1789): some clarification. *Numismatic Chronicle* 163: 342–344.
- Meiggs, R. 1972. The Athenian empire. Oxford: Clarendon Press.
- Milne, J. G. 1939. Trade between Greece and Egypt before Alexander the Great. *Journal of Egyptian Archaeology* 25: 177–183.
- Mionnet, T. E. 1833. Description des médailles antiques grecques et romaines avec leur degré de rareté et leur estimation, supplement VI. Paris: Testu.
- Möller, A. 2000. Naukratis: trade in archaic Greece. Oxford: Oxford University Press.
- . 2001. Naukratis—griechisches Emporion und ägyptischer "port of trade". In: U. Höckmann and D. Kreikenbam, eds., Naukratis: die Beziehungen zu Ostgriechenland, Ägypten und Zypern in archaischer Zeit. Akten der Table Ronde, 25.–27. November 1999, Mainz, pp. 1–25. Mohnesee: Bibliopolis.
- Noe, S. P. 1937. *A bibliography of Greek coin hoards*, 2nd ed. Numismatic Notes and Monographs 78. New York: American Numismatic Society.
- Nylander, C. 1970. *Ionians in Pasargadae: studies in Old Persian architecture*. Uppsala Studies in Ancient Mediterranean and Near Eastern Civilizations 1. Uppsala: Almqvist & Wiksell.
- ——. 1979. Achaemenid imperial art. In: M. T. Larsen, ed., *Power and propaganda, a symposium on ancient empires*, pp. 345–359. Mesopotamia: Copenhagen Studies in Assyriology 7. Copenhagen: Akademisk Forlag.
- Olmstead, A. T. 1948. *History of the Persian empire*. Chicago: University of Chicago Press.
- Orlin, L. L. 1976. Athens and Persia ca. 507 B.C.: a neglected perspective. In: L. L. Orlin, ed., *Michigan oriental studies in honor of G. G. Cameron*, pp. 255–266. Ann Arbor: Department of Near Eastern Studies, University of Michigan.
- Petrie, W. M. F. 1886. *Naukratis, part I, 1884-5*. Egypt Exploration Fund, Memoir 3. London: Trübner & Co.
- Posener, G. 1947. Les douanes de la Méditerranée dans l'Égypte saïte. Revue de Philologie 21: 117–131.
- Price, M. 1984. Croesus or pseudo-Croesus? Hoard or hoax? Problems concerning the sigloi and double-sigloi of the Croeseid type. In: A. Houghton, S. Hurter, P.

- E. Mottahedeh, and J. A. Scott, eds., *Festschrift für Leo Mildenberg*, pp. 211–221. Wetteren: Editions NR.
- . 1988. Coinage. In: J. Boardman, ed., *The Cambridge ancient history. Plates to vol. IV: Persia, Greece, and the western Mediterranean, c. 525 to 479 B.C.*, pp. 237–248. Cambridge: Cambridge University Press.
- —. 1989. Intervention to Root 1989. In: R. Descat, ed., *L'or perse et l'histoire grecque*, p. 50. *Revue des Études Anciennes* 91.1–2.
- Price, M. and N. Waggoner. 1975. *Archaic Greek coinage: the Asyut hoard.* London: V. C. Vecchi and Sons.
- Radet, G. 1893. La Lydie et le monde grec au temps des Mermnades (687–546). Bibliothèque des Écoles Françaises d'Athènes et de Rome 63. Paris: Thorin & Fils.
- Ramage, A. and P. Craddock. 2000. *King Croesus' gold: excavations at Sardis and the history of gold refining.* London: British Museum Press and the Archaeological Exploration of Sardis, Harvard University Art Museums.
- Reyes, A. T. 1994. *Archaic Cyprus: a study of the textual and archaeological evidence*. Oxford Monographs on Classical Archaeology. Oxford: Clarendon Press.
- Roaf, M. 1974. The subject peoples on the base of the statue of Darius. *Cahiers de la Délégation Archéologique Française en Iran* 4: 73–160.
- ——. 1983. *Sculptures and sculptors at Persepolis*. Iran 21. London: British Institute of Persian Studies.
- Robinson, E. S. G. 1948. Appendix: kings of Lapethos. *Numismatic Chronicle* 6th ser. 8: 60–65.
- ——. 1958. The beginnings of Achaemenid coinage. *Numismatic Chronicle* 6th ser. 18: 187–193.
- Root, M. C. 1979. The king and kingship in Achaemenid art: essays on the creation of an iconography of empire. Acta Iranica 3rd ser., Textes et Mémoires 9. Leiden: E. J. Brill.
- ——. 1988. Evidence from Persepolis for the dating of Persian and archaic Greek coinage. *Numismatic Chronicle* 148: 1–12.
- ——. 1989. The Persian archer at Persepolis: aspects of chronology, style and symbolism. In: R. Descat, ed., *L'or perse et l'histoire grecque*, pp. 33–50. *Revue des Études Anciennes* 91.1–2.
- Schlumberger, D. 1953. L'argent grec dans l'empire achéménide. In: R. Curiel and D. Schlumberger, *Trésors monétaires d'Afghanistan*, pp. 1–64. Mémoires de la Délégation Archéologique Française en Afghanistan 14. Paris: Imprimerie National, Librairie C. Klincksieck.
- Schmidt, E. F. 1953. *Persepolis*. Vol. 1, *structures*, *reliefs*, *inscriptions*. Oriental Institute Publications 68. Chicago: University of Chicago Press.
- ——. 1957. Persepolis. Vol. 2, contents of the treasury and other discoveries. Orien-

- tal Institute Publications 69. Chicago: University of Chicago Press.
- ——. 1970. *Persepolis*. Vol. 3, *the royal tombs and other monuments*. Oriental Institute Publications 70. Chicago: University of Chicago Press.
- Sealey, R. 1976. *A history of the Greek city states ca. 700–338 B.C.* Berkeley: University of California Press.
- Shahbazi, A. Sh. 1982. Darius in Scythia and Scythians in Persepolis. *Archäologische Mitteilungen aus Iran* 15: 189–235.
- Stronach, D. 1978. *Pasargadae: a report on the excavations conducted by the British Institute of Persian Studies from 1961 to 1963*. Oxford: Clarendon Press.
- —. 1985. The Apadana: a signature of the line of Darius I. In: J.-L. Huot, M. Yon, and Y. Calvet, eds., De l'Indus aux Balkans: recueil à la mémoire de Jean Deshayes, pp. 433–445. Paris: Éditions Recherche sur les civilisations.
- ——. 1989. Early Achaemenid coinage: perspectives from the homeland. *Mélanges P. Amiet*, vol. 2, pp. 255–284. Iranica Antiqua 24. Leuven: E. Peeters.
- ——. 2000 [1986]. Apadana II: building. In: E. Yarshater, ed., *Encyclopaedia Iranica*, vol. 2, pp. 146–148. New York: Bibliotheca Persica Press.
- ——. 2001. From Cyrus to Darius: notes on art and architecture in early Achaemenid palaces. In: I. Nielsen, ed., *The royal palace institution in the first millennium BC: regional development and cultural interchange between East and West*, pp. 95–111. Monographs of the Danish Institute at Athens 4. Athens: Danish Institute at Athens.
- Stronach, D. and A. Zournatzi. 1997. Bisitun. In: E. M. Meyers, ed., *The Oxford encyclopedia of archaeology in the Near East*, vol. 1, pp. 330–331. New York, Oxford: Oxford University Press.
- Stylianou, P. J. 1989. *The age of the kingdoms: a political history of Cyprus in the Archaic and Classical periods*. Meletai kai Hypomnemata 2. Nicosia: Archbishop Makarios III Foundation.
- Sullivan, R. D. 1996. Psammetichus I and the foundation of Naukratis. In: W. D. E. Coulson, ed., *Ancient Naukratis II: the survey at Naukratis and environs*. Part 1, *the survey at Naukratis*, pp. 177–195. Oxbow Monograph 60. Oxford: Oxbow.
- Tuplin, Chr. 1991. Darius' Suez canal and Persian imperialism. In: H. Sancisi-Weerdenburg and A. Kuhrt, eds., Asia Minor and Egypt: old cultures in a new empire. Proceedings of the Groningen 1988 Achaemenid history workshop, pp. 237–283. Achaemenid History 6. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Vargyas, P. 1999. *Kaspu ginnu* and the monetary reform of Darius I. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 89: 247–268.
- ——. 2000. Darius I and the daric reconsidered. *Iranica Antiqua* 35: 33–46.
- Vickers, M. 1985. Early Greek coinage, a reassessment. *Numismatic Chronicle* 6th ser. 145: 1–44.

- . 1986. Persépolis, Athènes et Sybaris: questions de monnayage et de chronologie. Revue des Études Grecques 99: 239–269.
- Weiskopf, M. N. 1982. *Achaemenid systems of governing in Anatolia*. Ph. D. diss., University of California, Berkeley.
- Yardeni, A. 1994. Maritime trade and royal accountancy in an erased customs account from 475 B.C.E. on the Aḥiqar scroll from Elephantine. *Bulletin of the American Schools of Oriental Research* 293: 67–78.
- Yoyotte, J. 1972. Les inscriptions hiéroglyphiques, Darius et l'Égypte. In: Kervran et al. 1972, pp. 253–266.
- . 1993–94. Égyptologie 3. Les contacts entre Égyptiens et Grecs (VII–II<sup>e</sup> siècles avant J.-C.): Naucratis, ville Égyptienne (1992–1993, 1993–1994). *Annuaire du College de France, Résumé des cours et travaux* 1993–94: 679–692.
- Zahrnt, M. 1997. Die Perser in Thrakien. In: *Thrace ancienne. Actes 2<sup>e</sup> Symposium International des Études Thraciennes, Komotini, 20–27 septembre 1992*, vol. 1, pp. 91–100. Komotini: Édition de l'Association Culturelle de Komotini.
- Zournatzi, A. 2000. The processing of gold and silver tax in the Achaemenid empire: Herodotus 3.96.2 and the archaeological realities. *Studia Iranica* 29: 241–271.
- . 2004. The Apadana coin hoards, Darius I, and the West. In: *Abstracts. The 105th Annual Meeting of the Archaeological Institute of America, January 2–5, 2004, San Francisco, Calif.*, vol. 27, p. 66. Boston: Archaeological Institute of America.



Courtesy of the Oriental Institute of the University of Chicago The numbers are given following Schmidt (1957)

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