

## IRANIAN COINS & MINTS: ACHAEMENID DYNASTY

### DARIC

## The Achaemenid Currency

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**DARIC** (Gk. *dareiko,s statê'î*), Achaemenid gold coin of ca. 8.4 gr, which was introduced by Darius I the Great (q.v.; 522-486 B.C.E.) toward the end of the 6th century B.C.E. The daric and the similar silver coin, the siglos (Gk. *siglos mediko,s*), represented the bimetallic monetary standard that the Achaemenids developed from that of the Lydians (Herodotus, 1.94). Although it was the only gold coin of its period that was struck continuously, the daric was eventually displaced from its central economic position first by the biga stater of Philip II of Macedonia (359-36 B.C.E.) and then, conclusively, by the Nike stater of Alexander II of Macedonia (336-23 B.C.E.).

The ancient Greeks believed that the term *dareiko,s* was derived from the name of Darius the Great (Pollux, *Onomastikon* 3.87, 7.98; cf. Caccamo Caltabiano and Radici Colace), who was believed to have introduced these coins. For example, Herodotus reported that Darius had struck coins of pure gold (4.166, 7.28: *chrysiou statê'rôn Dareikôn*). On the other hand, modern scholars have generally supposed that the Greek term *dareiko,s* can be traced back to Old Persian *\*dari-* "golden" and that it was first associated with the name of Darius only in later folk etymology (Herzfeld, p. 146; for the contrary view, see Bivar, p. 621; DARIUS iii). During the 5th century B.C.E. the term *dareiko,s* was generally and exclusively used to designate Persian coins, which were circulating so widely among the Greeks that in popular speech they were dubbed *toxotai* "archers" after the image of the figure with a bow that appeared on them (Plutarch, *Artaxerxes* 20.4; idem, *Agésilas* 15.6). The earliest mention of the *dareiko,s* in an inscription occurs in the reckoning of accounts for the year 429/8 by the priests responsible for administering the temple treasury of Athena Parthenos and other gods at Athens (*Inscriptiones Graecae* I3, p. 383 ll. 17-18: *dareiko, chrysiô statêres*; cf. Carradice, pp. 75-76; Melville-Jones, pp. 35-36; for additional references, see Babelon, 1901, pp. 469-72). Eventually, because of the *dareiko,s* dominant position as the single regularly issued gold coin of its time, the term became a synonym among the Greeks for any gold coin, for example, the stater issued by Philip (*dareikoi Philippeioi*; Melville-Jones, pp. 25 ff.).

### Introduction of the daric

The discovery in 1312 Š./1933 of a hoard of coins in the famous Apadâna (q.v.) deposit of Darius at Persepolis, which is unfortunately still inadequately published, has been the focus for a long-standing debate over the date when the daric was first minted (Herzfeld, pp. 413-16; Schmidt, p. 110, pl. 84; M. Thompson et al., no. 1789). Altogether eight gold Croesus staters (of the late type known as "light Croeseids") were found, together with four Greek silver staters, under stone coffers containing the foundation tablets for the building, giving rise to the opinion that at the time when the deposit was made (between 519 and 510 B.C.E.) Darius had still not issued darics and sigloi. The date of the first minting of the coins with the image of the archer, that is, of the change from the old, widely circulated Lydian type with the heads of a lion and a bull to a characteristic Achaemenid type, was thus fixed soon after 515 (Herzfeld; Robinson, p. 190; Kraay, p. 32; Bivar, p. 617). In a

recent but less persuasive study Michael Vickers (pp. 4 ff.) dated the first issue of the Achaemenid archer after 490. The decisive evidence for a date in the last decade of the 6th century at the latest, has, however, now been discovered by M. C. Root (pp. 8-12), who published a small clay tablet from the Persepolis fortification archive bearing a date in the twenty-second regnal year of Darius (500-499); on the reverse there is a clear impression of two *toxotai* of type II (see below). Darius was thus in fact the first Achaemenid emperor to order the striking of the new gold coin with the image of the royal archer. It has been established with certainty, however, that these coins were not the first to be struck at the Achaemenid imperial mint: As die studies (Naster, 1965, pp. 25 ff., pl. 1), in conjunction with analysis of hoards (Noe, pp. 23ff.; Robinson, pp. 187 ff.; Carradice, pp. 73 ff., pls. 10-11), have shown, some of the earlier Croesus staters (*kroisos statêr*) of the lion-and-bull type are to be attributed to the Achaemenid emperors, including Darius I, who took over minting of the type from the Lydian king Croesus (after 546 B.C.E.). Toward the end of the 6th century, when Darius undertook the restructuring of the Achaemenid political system, including in particular the financial and tax systems, he ordered the minting of darics and sigloi. The opinion of Laura Breglia (pp. 659 ff.; cf. Price, pp. 211 ff.; Vickers, pp. 4-9) that all the so-called "Croeseids" are to be attributed to the Achaemenids does not, however, seem persuasive (cf. Cahn, pp. 55-57; Root, pp. 1 ff.).

### Typology

The fundamental type of the Achaemenid daric and siglos is that bearing the image of the royal archer (*toxotês*), which remained stereotyped as the obverse, with only a few minor variations. The reverse was without images, and only an irregular oblong incuse can be recognized. It was E. S. G. Robinson who first established, on the basis of the obverse images, the four main types and the relative chronology that are still generally accepted today (cf. Kraay, pp. 32-33; Carradice, pp. 76 ff.; Stronach, pp. 258 ff.).



**Plat 1. a.** Siglos, type I, 5.30 gr., **b.** Daric, type II, 8.24 gr. **c.** Daric, type III, 8.37 gr., **d.** Daric, type IV, 8.33 gr.

Type I (Plate Ia). Torso of bearded archer with the crenellated crown (*kídaris*) and sleeved chiton (see CLOTHING ii) facing right, a bow in the left hand and two arrows in the right. It is known so far only on sigloi.

Type II (Plate Ib). Kneeling archer dressed as on Type I, facing right, with drawn bow and a quiver on his back. It is attested on darics, sigloi, and fractional coins in silver.

Type III (Plate Ic). The archer as on Type I but in the *Knielauf* (running with bent knees) position, moving to the right, with a bow in his left hand, a lance in his right, and a quiver on his back. This type is further divided into several subtypes, according to stylistic features. It includes darics, sigloi, and fractional coins in gold and silver.

Type IV (Plate Id). The archer as on Type III, in *Knielauf* position moving to the right, with a bow in his left hand, a dagger in his right, and a quiver on his back. This type is also divided into two subtypes according to stylistic features. It includes darics, sigloi, and fractional coins in silver.

Interpretation of the image on the coin as the Achaemenid emperor has not been entirely accepted; the discussion has been summarized most recently by David Stronach (pp. 266 ff.; the conclusions of Hammer, pp. 17 ff. are less convincing). Whether the representation is that of the emperor or of a

of Harrison, pp. 17 ff., are less persuasive). Whether the representation is that of the emperor, or a royal hero, or of a god in special avatar, the image has no convincing parallels in other branches of Achaemenid imperial art, with the exception of isolated occurrences on seals, though the individual elements of the composition are firmly anchored in the ancient Persian tradition (Calmeyer, pp. 303 ff.; Stronach). The image of the royal archer is, however, to be found not only on the darics and sigloi issued by the Achaemenid imperial mint but also on satrapal and dynastic coins of Asia Minor, as well as later on the Babylonian double darics issued under Alexander II of Macedonia (Göbl, pl. 95 nos. 1895, 1914, 1916-18). At the end of the 5th century, when the Persian satraps in Asia Minor began to strike their own coins, it was deemed necessary to express, through images or inscriptions, that the right of coinage was still a royal prerogative. Darius treated such an encroachment as a crime punishable by death (Herodotus, 4.166; cf. Kraay, pls. 12/206, 55/949-50; Göbl, pl. 95 nos. 1901-02, 1906). In fact, the numismatic evidence does not permit identification of the image on the darics and sigloi as anything but that of the emperor; it was adopted by Darius as a dynamic expression of his royal power expressly for his coin issues. These coins were particularly aimed at the Greek west (see below), however, and the choice of image had therefore to be made with reference to its impact on the Greeks among whom the coins would circulate; in addition to their mercantile value, the darics thus had a propaganda function. This type was continued more or less unchanged by Darius' successors; it also served as a model for comparable coin issues by succeeding Persian dynasties, helping to underscore the dynastic principle. As Ian Carradice (pp. 80 ff.) has suggested on the basis of evidence from hoards, types I, II, and III (first version) all seem to have been struck by Darius I. In fact the minting of types I and II appears to have occurred in very close chronological proximity toward the end of the 6th century; perhaps the two types represent parallel issues from two different mint cities. Carradice (pp. 84 ff.) placed the next version of type III around 480 and the introduction of type IV somewhat later, around 450 (cf. Stronach, pp. 261-62). Judging by the quantities of preserved examples of the two latter types, they accounted for the overwhelming bulk of Achaemenid mint production. The peak was clearly reached in the 5th century, though both types were probably still being minted at the beginning of the 4th century; they were thus in circulation for an extremely long time. During the 4th century types III and IV were still minted, but production then declined. One obvious conclusion to be drawn from this pattern is that it was only during the 4th century that the satraps and dynasts of Asia Minor increased their own production of coins and thus partly reduced the amount of imperial currency in use in their own territories.

### **Minting and mint cities**

The central problem of identifying different mint cities can be solved only through comprehensive new finds and detailed die studies. The major mint was certainly Sardis, the seat of the Achaemenid administration for the whole of Asia Minor; it had already been the mint of the former Lydian kings and was kept in operation by the Achaemenids (Kraay, pp. 30 ff.; Bivar, p. 619). As the leading administrative center, Sardis must also have been the collection point for the annual tribute payments from the provinces of Asia Minor, thus ensuring a sufficient supply of precious metals for mint production there. On the basis of evidence from hoards, as well as typological and metrological research, C. M. Kraay (p. 33) has concluded that there were also mint cities in both northwestern and southwestern Asia Minor (cf. Carradice, pp. 84-85). The fact that in the time of Alexander II of Macedonia double darics with the image of the great king were being issued in the eastern part of the empire, perhaps in Babylon (Le Rider), suggests that there may already have been a mint there under the Achaemenids. Paul Naster's exemplary die study of the Croeseids (1965, pl. 1), encompassing identical obverse dies and reverse punches on both gold and silver coins, has considerably clarified Lydian minting practice, which must also have been adopted for the later production of darics and sigloi, though few overlapping series of dies and punches have so far been discovered on Achaemenid coins. In fact, identical reverse punches appear on the overwhelming majority of coins within the different typological groups, suggesting that, as the design lacked imagery, it continued in use for a very long time (Noe; Robinson, pp. 191 ff.).

### **Metrology and denominations**

At the time of Darius' great tax reform a new weight standard for gold was introduced (Herodotus, 3.89, 3.95). In contrast to the lighter Lydian gold stater of slightly more than 8 gr (8.06-8.19 gr), the new daric weighed ca. 8.4 gr and was thus brought into relation with the old Mesopotamian shekel measure (1 mina: ca. 504 gr, 1/60 mina: 8.40 gr), which had previously been the basic weight standard for Lydian electrum issues (Nau, pp. 6 ff.; cf. Karwiese, pp. 35 ff.). The weight of the silver siglos continued to be based on that of the silver Croesus stater (10.75-92 gr) and was minted as a half-siglos of ca. 5.5 gr. Various other fractions of the daric and the siglos are known, though they generally had no significance in the Achaemenid monetary system and still have not been attested for all types. The hypothesis that the weight of the Achaemenid coinage was raised in two successive stages (Robinson, pp. 189 ff.; Kraay, pp. 32-33; Bivar, pp. 617-18) during Darius' reforms has not been conclusively proved and must await the test of additional material.

The Achaemenids thus at first adopted two different weight standards for gold and silver, with a fixed ratio of value between the denominations; in particular, they attempted to gear the two types of coinage to the needs of the respective groups of recipients and users. Herodotus reported (3.89, 3.95) that the annual tribute payments from the individual satraps were to be made in silver according to the Babylonian weight standard and in gold according to the Euboic weight standard; in fact, the weight of the daric does correspond approximately to that of the Euboic-Attic didrachm (ca. 8.5 gr). The monetary policy that led to the minting of the daric was thus clearly oriented toward the Greek west, where the coin was in direct competition with the Attic tetradrachm, which began during the 5th century to gain acceptance as an international trading currency throughout the entire eastern Mediterranean area and as far away as India.

Under Darius the ratio of value between gold and silver in the new Achaemenid imperial system was corrected from the old Lydian ratio of 1:13.3 to 1.13 (Herodotus, 3.95) and the official exchange rate between the daric and the siglos set at 1:20 (Nau, pp. 14 ff.). The exchange rate with the Attic drachm was 1:25, and the siglos was reckoned equivalent to 7.5 Attic obols (Xenophon, *Anabasis* 1.5.6). The daric also provided the basic standard of value for payments to the Persian army: The pay of a simple soldier, and of a mercenary, was usually calculated at one daric a month (Xenophon, *Anabasis* 1.3.21). From the beginning of the 4th century, however, actual payments must have been made partly in Attic coins, which were apparently preferred by Greek mercenaries; the standard pay was about one Attic drachm a day (Xenophon, *Hellenica* 1.5.4 ff.; cf. W. E. Thompson, pp. 120 ff.).

## Circulation

Naturally the main source of evidence on the circulation of coinage comes from hoards. This evidence has most recently been brought together and discussed by Carradice. In general it seems that the circulation patterns of darics and sigloi were fundamentally different; so far there is no single known hoard in which the two types of coins have occurred together. Whereas hoards of sigloi have been found almost exclusively in Asia Minor, and isolated examples have been found only with Greek currency in more distant lands (e.g., Egypt and Afghanistan), darics have been found in closed contexts not only in Asia Minor but also in Greece, Macedonia, and Italy. Nevertheless, the total evidence for the circulation of the daric is extremely meager and does not lend itself to definitive conclusions: No example of type II, III (first version), or IV darics has yet occurred in an archeological context. For the later versions of type III only a few hoards of vastly different sizes (3-2,000 pieces each) have been found, but, as they have not been fully studied, they permit no general conclusions. At any rate, all the finds now known conform without exception to the picture of Achaemenid monetary policy developed by Daniel Schlumberger on the basis of the hoard at Ūaman-e Ho±ūrī near Kabul: The siglos can be identified as a local currency for Asia Minor, whereas it is clear from the importance of the daric in the gold market of antiquity that it was conceived from the beginning as a superregional trading currency. As a continuously minted piece of precious metal with a stable value, it was certainly able to compete with the Attic tetradrachm or the electrum stater from Cyzicus, especially during the 5th century. Its function as a freely circulating means of exchange was nevertheless limited, owing to its relatively high value; it must indeed have been traded primarily as bullion.

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