

## A NEW THESIS FOR SIGLOS AND DAREIKOS\*

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The ancient Greek names for the so-called Achaemenid ‘archer’ coinage are Siglos for silver and Dareikos for gold. There are four types of this coinage always showing an archer (Fig. 1).

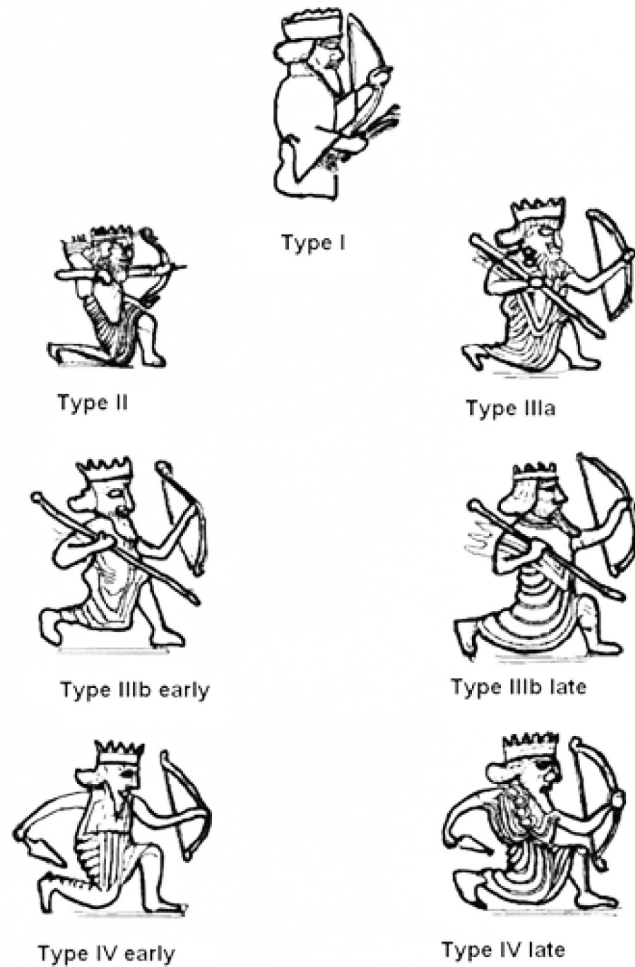


Fig. 1. The types of the ‘archer’ coinage. (Modified from Stronach 1989, Fig.1).

The traditional thesis is that the Achaemenid great king Darius I (521-486 BCE) introduced the ‘archer’ coinage as an imperial Achaemenid coinage around 510 BCE.<sup>1</sup> If this thesis is correct the following points should hold:

\* A great deal of support is acknowledged to Bruno Jacobs, Basel. For a more detailed publication see Corfù 2010.

<sup>1</sup> Head 1877, latest: Le Rider 2001, pp. 123-25; 147; Nimchuck 2002, p. 55.

- The ‘archer’ coins should have circulated and dominated in the whole empire or at least in those parts with coin use.
- Today hoards should be found either in the whole empire or at least in those parts with coin use.
- The coins should have been accepted everywhere in the empire.
- Ancient authors should provide information about them.

### Find-spots of hoards

It has long been known that Sigloi are mainly found in Western Asia Minor,<sup>2</sup> but a statistical overview is missing up to now, except that of I. Carradice.<sup>3</sup> An up-to-date list contains 76 hoards with almost 30,000 Sigloi and 20 hoards with about 3700 Dareikoi.<sup>4</sup> Fifty-one per cent of the hoards with Sigloi and 81% of the hoards with Dareikoi were found outside Western Asia Minor, but they contained only 3% of all Sigloi and 13% of all Dareikoi. The almost complete lack of ‘archer’ coins in the centre of the Achaemenid empire has to be stressed – there are only 13 Sigloi and seven Dareikoi found in Iran,<sup>5</sup> so they were really rare even compared to the small number of Greek coins found in the Achaemenid centres.<sup>6</sup> Therefore a comparison of the ‘archer’ coinage with older Western Asia Minor coinages such as the Lydian coinages is appropriate. From the sixth century BCE we know electron coinage and the so-called Kroiseioi. An up-to-date list for Lydian coins contains 33 hoards with about 1200 pieces;<sup>7</sup> thirty per cent of the hoards were found outside Western Asia Minor, but contained only 3% of pieces. The three maps (Figs. 2-4) show clearly that the find-spots of the Lydian coins are in the same area as those of the ‘archer’ coins. To cut off the ‘noise’, only find-spots with hoards that contain at least 20 and 10 pieces respectively are plotted, as single coins can be found very far from their origin without having any further meaning. The drift towards the west of Dareikoi is due to the lack of significant emissions of gold coins in the Greek world before the middle of the fourth century BCE. Starting from the absolutely plausible premise that the highest density of find-spots indicates the production area, one should suppose that all these three coinages were issued in the same area, namely in Western Asia Minor.

There are further common features of ‘archer’ coins and earlier Lydian coins:

*‘archer’ coins and Kroiseioi:*

- Bimetallic system
- Same type in silver and in gold
- Same weight standard for silver

*‘archer’ coins and Kroiseioi as well as other Western Asia Minor coins:*

- Same irregular oval and thick flan
- Reverse incuse especially for small coins: from Camirus, Chius, Cyzicus, Ephesus, Lesbus, Miletus, Phocaea, Samus, Smyrna, and Teus

The flan and the reverse punch of the ‘archer’ coins are the same as those of the Lydian electron coins, the Kroiseioi and of some Western Asia Minor coins from the above-mentioned mints. These features show that the ‘archer’ coinage fits very well in the minting tradition of Western Asia Minor of the late sixth century BCE.

<sup>2</sup> Kraay 1964, p. 83; Kraay 1976, p. 33.

<sup>3</sup> Carradice 1987, Tab. A.

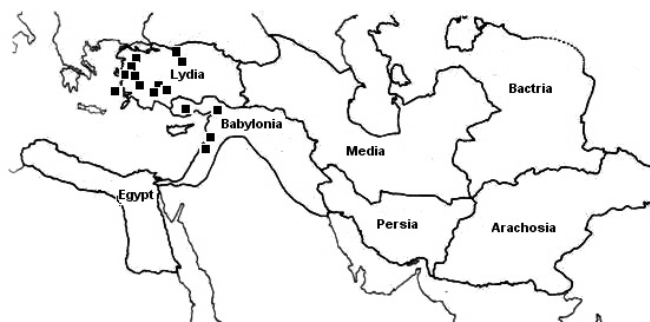
<sup>4</sup> Corfù 2010, Tab. 1-3.

<sup>5</sup> Corfù 2010, Tab. 1, 3.

<sup>6</sup> Hoards from Iran are rare: but a hoard published by M. Thompson

(1973, Nr. 1790) contained 393 Greek coins but only one Siglos. At Persepolis in the treasury complex no ‘archer’ coins were found but several Kroiseioi and Greek coins despite the looting of Alexander’s army (Schmidt 1939, pp. 76-78).

<sup>7</sup> Corfù 2010, Tab. 4.



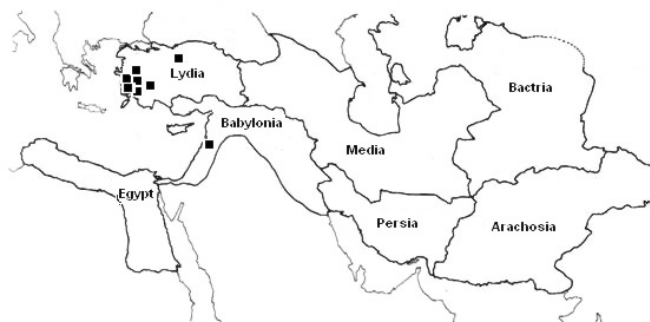
Great satrapies under Darius III

Fig. 2. Find spots of hoards with at least 20 Sigloi.



Great satrapies under Darius III

Fig. 3. Find spots of hoards with at least 10 Dareikoi.



Great satrapies under Darius III

Fig. 4. Find spots of hoards with at least 10 earlier coins of Lydia (electron and Kroiseioi).

## **Domination**

A look at the local coinage in the western empire shows that:

- 82 mints in the satrapy of Lydia existed (not all always active)<sup>8</sup>
- Many different weight standards were used
- Coinage was always independent from the Achaemenid court
- The types are in Greek style

These facts show that there were plenty of different coinages in the satrapy of Lydia, which contradicts the existence of an official imperial coinage.

If the ‘archer’ coinage is an imperial coinage it should dominate in all parts of the empire with coin use.

- Cilicia: 91 Sigloi were found.
- Cyprus: no hoard with Sigloi was found.
- East-Mediterranean Levante: 318 Sigloi were found out of 6366 coins published by J. and A.G. Elayi.<sup>9</sup>
- Egypt: 24 Sigloi were found out of 8423 coins published by M. Thompson.<sup>10</sup>
- Cyrenaica: no hoard with Sigloi was found.

There are only 433 Sigloi out of about 15,000 Sigloi with testified find-spots found in parts of the Achaemenid empire with coin use outside the satrapy of Lydia. So there is absolutely no domination of Sigloi over the local coins outside the satrapy of Lydia. Even in the eastern part of the great satrapy Lydia – the main satrapy Cappadocia<sup>11</sup> – no hoards with ‘archer’ coins were found (Figs. 2 and 3).

A special feature of Sigloi is that they were frequently countermarked.<sup>12</sup> Countermarks are used to validate a coin outside the region where it was minted or to re-validate worn pieces. That is a feature of local and not of imperial coins. This feature is shared by:

- Lydian Electron coins<sup>13</sup>
- Kroiseioi in silver<sup>14</sup>
- Anatolian local coins of the Achaemenid period<sup>15</sup>

Also coins from an area close to the satrapy of Lydia can have many countermarks. The presence of countermarks on Sigloi proves that the Sigloi were not directly accepted everywhere. Obviously their weight and purity was checked, and they were countermarked accordingly. An official imperial coin would have been accepted without any further tests in all regions of the Achaemenid empire.

## **The new thesis**

The points presented above lead to a new thesis:

The ‘archer’ coinage – Siglos and Dareikos – is the local / civic coinage of a mint in the satrapy

<sup>8</sup> Corfù 2010, Tab. 5,6.

<sup>9</sup> Elayi/Elayi 1993.

<sup>10</sup> Thompson 1973 (IGCH), Nr. 1632; 1634-1663.

<sup>11</sup> Jacobs 1994, Map 1.

<sup>12</sup> Carradice 1987, p. 91.

<sup>13</sup> Klose 2000, p. 453.

<sup>14</sup> Noe 1956, p. 23.

<sup>15</sup> Boardman 2003, pp. 140, 212.

of Lydia. In other words: there was never an official imperial Achaemenid coinage initiated by the court; rather, there was only the coinage of a traditional mint issuing a new series, and that mint is highly probably Sardis.<sup>16</sup> The ‘archer’ coinage is just the successive emission of Sardis in the series of first the electron coinages, and then the Kroiseioi.

### Ancient sources

Do ancient sources verify this new thesis?

#### *Eastern sources*

There are several thousands of clay tablets found at Persepolis recording administration affairs.<sup>17</sup> The Persepolis fortification tablets do not mention silver or gold.<sup>18</sup> The Persepolis treasury tablets mention gold just once;<sup>19</sup> but silver very often – silver mainly in fractions of karsha and shekel.<sup>20</sup> The weight of a karsha is 83g,<sup>21</sup> and that of a shekel is 8.3g,<sup>22</sup> not 5.4g. and 5.6g. respectively as that of the Siglos.<sup>23</sup> Mainly shekels in broken numbers are mentioned. This and the difference in weight prove that in the Persepolis tablets the Siglos is not mentioned. Already P. Naster has shown that the Persepolis treasury tablets contain no hints of coins.<sup>24</sup> P. Vargyas proposed that the Akkadian expression ‘kaspu ginu’ – translated as ‘standard silver’ – used in Babylonia during the reign of Darius I is the same as the Siglos.<sup>25</sup> But the purity is less than that of Sigloi (87.5%<sup>26</sup> instead of *c.* 97%<sup>27</sup>). The weight system is different (8.4g. instead of 5.6g.), and the expression disappears after Darius I.<sup>28</sup> Therefore ‘kaspu ginu’ is not the equivalent of Siglos.

#### *Greek sources*

Two passages of Herodotus (III, 89-97 and IV, 166) are normally used to support the traditional thesis of the existence of an imperial Achaemenid coinage.

Herodotus describes in III, 89 that Darius I installed the satrapies and the tribute in silver and gold (without mentioning coins). But the satrapy system as well as the tribute existed already under Kambyzes who ruled before Darius I, and the list of satrapies given by Herodotus is not consistent with the Persian sources.<sup>29</sup> Furthermore, the relations of weight standards given by Herodotus are not correct.

In the second passage - IV, 166 - Herodotus writes that Darius I issued gold coins of highest purity as no king did before him;<sup>30</sup> and also that the satrap in Egypt Aryandes thereafter started to issue silver coins of highest purity as did Darius I with gold coins. This is wrong as all gold and silver coins of the sixth century BCE are of about the same high purity (95-99%).<sup>31</sup> The Kroiseioi in gold, which are minted before Darius I, were of the same purity as Dareikoi, namely 98-99%.<sup>32</sup> Furthermore, no coins of the satrap of Egypt Aryandes are known to us. Therefore, Herodotus

<sup>16</sup> Le Rider 2001, pp. 133-39.

<sup>17</sup> Henkelman 2005, pp. 138-39; Henkelman 2008, pp. 75-83.

<sup>18</sup> Henkelman 2008, pp. 83f.

<sup>19</sup> Cameron 1948, p. 198.

<sup>20</sup> Cameron 1948, p. 2; Cameron 1958, p. 162.

<sup>21</sup> Joannès 2001, p. 665.

<sup>22</sup> Naster 1970, p. 131.

<sup>23</sup> Naster 1970, pp. 130-1.

<sup>24</sup> Naster 1970, pp. 129-34.

<sup>25</sup> Vargyas 1999, p. 258.

<sup>26</sup> Vargyas 1999, p. 254; Vargyas 2001, pp. 24-34.

<sup>27</sup> Gale et al. 1980, Tab. 3; Calliari, Vismara 1998, Tab. 3.

<sup>28</sup> Vargyas 1999, p. 254; Vargyas 2001, p. 32.

<sup>29</sup> Jacobs 1994, pp. 93-96; Jacobs 2003, pp. 307-11; Ruffing 2008.

<sup>30</sup> Herodotus does not mention the Dareikos.

<sup>31</sup> Gale et al. 1980, Tab. 3, 4; Ramage / Craddock 2000, pp. 169-74, Tab. 7.4-6; Price 1984, p. 215; Cowell et al. 1998, p. 530, Tab. 1-2.

<sup>32</sup> Gondonneau et al. 2002, Tab 2; Healy 1989; Cowell et al. 1998, Tab. 1.

provides no support for the traditional thesis because his statements are untrustworthy.

Xenophon provides the oldest mention of Siglos (Anabasis I,5,6) and writes that on the market of the Lydians one paid with Sigloi.

Hesychius living in the fifth century AD writes (sigma 585) that the Siglos is a Persian coin, which is correct for his time: he refers to the Sasanian coinage. Hesychius also writes in the next passage (sigma 586) that Siglos is also a coin of Sardis: 'but it is also a coin of Sardis' – a direct support for the new thesis.

Pollux states (Onomasticon III, 87,6) that the Dareikos is named after Darius I as he set up procedures for pure gold. Pollux relies on Herodotus passage IV, 166, which is untrustworthy. Many authors tell stories mentioning Dareikoi which take place in Western Asia Minor.

Therefore the ancient sources are consistent with the new thesis.

## Discussion and conclusion

The facts put forward here might not be new to some scholars, but they were up to now not gathered together and published in this way, and the conclusion that the 'archer' coinage is not an official imperial Achaemenid one is new. M.C. Root states that the 'Persian Archer coins... are primarily associated with the west...' <sup>33</sup> But she goes on to write of '...essential Persianness either of the message or of the coin bearing the message'. <sup>34</sup> There is absolutely no reason to qualify a coinage minted and circulating only in Western Asia Minor as 'Persian imperial coinage'.

One might speculate whether the satrap Artaphrenes I of Sardis (a half-brother of Darius I), who was in charge from 513 BCE on, <sup>35</sup> or Darius I, who stayed at Sardis in 512/511 BCE, <sup>36</sup> gave the impulse to issue a new type of coinage. That would not mean that the 'archer' coinage is an official imperial one, but it could explain why the type I, the oldest of the 'archer' coinage, looks so 'Achaemenid' <sup>37</sup> that so many scholars of today believe that the emission was initiated by the Achaemenid king or court in Persepolis. <sup>38</sup> With type II to IV a posture of western origin was introduced with the scheme of a running-kneeling archer ('Knielauf-Schema'), a pose which is abundant in sixth- and fifth-century BCE Greek art for heroes, especially for Heracles. The often stated opinion that the archer on the coins depicts the Achaemenid great king is not proven, <sup>39</sup> as in the official Achaemenid art there is no equivalent to the archer on Sigloi and Dareikoi. <sup>40</sup>

There were about 20 mints in Western Asia Minor active in the late sixth century BCE, <sup>41</sup> and some were active already before the Persian period, such as Cyzicus, Ephesus, Lampsacus, Miletus, Phocaea and Smyrna. They continued to issue coins under the Persians in their own traditions. Sardis did precisely the same. As the capital of the great satrapy of Lydia its emission was naturally important and big. Therefore it is not astonishing that the archer was copied by other mints of Anatolia in the fifth and fourth centuries BCE, i.e. during the Achaemenid period. A type of coin does not necessarily have to be imperial to be copied. Also Alexander III copied the Dareikos by minting double Dareikoi, which reflects the importance of the civic coinage of Sardis during the Persian period, as gold coins were rare before the mid fourth century BCE. <sup>42</sup> As O.D. Hoover has shown, <sup>43</sup> there was a civic coinage in the Seleucid empire right from the beginning under Seleucus

<sup>33</sup>Root 1991, p. 15.

<sup>34</sup>Root 1991, p. 16.

<sup>35</sup>Jacobs 1996, p. 283.

<sup>36</sup>Boardman 2003, p. 209.

<sup>37</sup>The half figure is similar to the so-called Aura Mazda presentations in Achaemenid art.

<sup>38</sup>Root 1989, p. 45; Vargyas 1999, p. 247; Le Rider 2001, pp. 123-25; 147; Nimchuck 2002, p. 55.

<sup>39</sup>The debate is ongoing: Seyrig 1959, pp. 52-56; Alram 1993, p. 27; Lintz 2006.

<sup>40</sup>Alram 1993, p. 27.

<sup>41</sup>Corfù 2010, Tab. 6.

<sup>42</sup>Apart from Dareikoi only Philippos II of Macedonia emitted gold coins in significant amounts.

<sup>43</sup>Hoover 2009, unpublished.

I onwards. This fact makes it probable that civic coinages continued to exist from the preceding Persian period.

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