

# A Treasure of Coins from Arwad

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The treasure presented here,<sup>1</sup> which is probably completely preserved, is supposed to have been found in September 1983 in the coastland south of Arwad (Pl. I). It consists in 187 coins, only 26 of which have been cleaned<sup>2</sup>; one of these is a silver Athenian tetradrachm, and the other 25 are silver Aradian staters of Persian standard. It would seem that the 161 yet uncleaned coins are also Aradian staters. The pre-alexandrine Aradian coins have not been studied well so far, as their inscriptions are never explicit, and our knowledge of the history of this city during this period is too scarce to be of any help.<sup>3</sup> For this reason the presentation of this treasure is of great interest, even though a full study is not yet possible.

## Catalogue

1. *Obverse*: Fairly worn. Male head, laureate and bearded, to the right; hair and beard represented by lines of dots; eye in profile. Head decentered to the right (Pl. II.1).

*Reverse*: War-galley to the right; oars not represented; row of shields along bulwark; below, three wavy lines representing water. Galley decentered to the top: prow and poop almost entirely off the flan. Phoenician letters in the field above the galley *MJ*<sup>2</sup>. Under the wavy lines, crescent-shaped furrow.

AR. 10.50 g. Diam.: 1.9 cm. Thickness of the flan: .48 cm. \.G.

2. *Obverse*: Rather worn. Similar type to preceding (Pl. II.2).

*Reverse*: War-galley to the right, as on preceding, above two wavy lines (third line off the flan?). Prow off the flan. Poop with *aphlaston* and *stylis*. *M*<sup>2</sup> above. Incuse square bordered with dots (can be seen above and on left).

AR. 9.55 g. Diam.: 1.9 cm. Thickness of the flan: .44 cm. —.G.

3. *Obverse*: Slightly worn. Similar type to preceding (Pl. II.3).

*Reverse*: Slightly worn. War-galley to the right as on preceding, above three wavy lines. Prow with eye and Pataecus. Poop off the flan.

*M*<sup>2</sup>? above. Border of dots above.

AR. 10 g. Diam.: 2.1 cm. Thickness of the flan: .41 cm. \.G.

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1 Private collection; we thank the collector who allowed us to publish a presentation of this treasure.

2 Some of these coins do not seem to have been correctly cleaned.

3 The general background on this subject may be read in P. Naster, "Le développement des monnayages phéniciens avant Alexandre, d'après les trésors," in *The Patterns of Monetary Development in Phoenicia and Palestine in Antiquity* (Jerusalem, 1967), 14. On pre-alexandrine Aradian coins, see C. M. Kraay, *Archaic and Classical Greek Coins* (London, 1975), 290–91; J. Aoun, *Catalogue des monnaies d'Aradus du Cabinet des Médailles* (Paris, 1978; unpublished thesis); J. W. Betlyon, *The Coinage and Mints of Phoenicia, The Pre-Alexandrine Period* (Chico, 1982), 77–110.

4. *Obverse*: Rather worn. Similar type to preceding, decentered to the bottom. Circle of dots (can be seen above). (Pl. II.4).

*Reverse*: Rather worn. War-galley similar to preceding. Traces of prow, with eye and *embolon*. Letters partly off the flan:  $M^2f$ .

AR. 10.35 g. Diam.: 2.1 cm. Thickness of the flan: .50 cm. ←. G.

5. *Obverse*: Much worn. Similar type to preceding (Pl. II.5).

*Reverse*: Rather worn. War-galley similar to preceding. Traces of prow, with Pataecus and *embolon*.  $M^2f$ ? above.

AR. 10.70 g. Diam.: 2 cm. Thickness of the coin: .54 cm. \. G.

6. *Obverse*: Similar type to preceding. Drooping whiskers represented by lines of dots. Crescent-shaped countermark on the right cheek. Top and back of the head off the flan (Pl. II.6).

*Reverse*: War-galley to the right similar to preceding, above four wavy lines. Prow with *embolon*, eye and Pataecus. Poop off the flan.  $M^2$  above. Upper part of an incuse square with a border of dots; cable border on right. Chisel-cut.

AR. 10.50 g. Diam.: 1.9 cm. Thickness of the flan: .49 cm. ←. G.

*Bibl.*: For the obverse, cf. no. 3072 in Collection de Luynes; E. Babelon, *Traité des monnaies grecques et romaines*, II/2 (Paris, 1910), no. 836, pl. CXVI, 24; idem, *Catalogue des monnaies grecques de la Bibliothèque Nationale, Les Perses achéménides* (Paris, 1893), no. 908, pl. XXII, 20; G. F. Hill, *Catalogue of the Greek Coins of the British Museum (= BMC), Greek Coins of Phoenicia* (London, 1910), pl. II, 1 and 13.

7. *Obverse*: Rather worn. Similar type to preceding. Top and back of the head off the flan (Pl. III.7).

*Reverse*: War-galley to the right similar to preceding, above three wavy lines. Prow with *embolon*, eye and Pataecus. Poop off the flan.  $M^2$  above. Incuse square with a border of dots (can be seen above and on right). Grafitto.

AR. 10.40 g. Diam.: 2.1 cm. Thickness of the flan: .49 cm. ←. G.

*Bibl.*: E. Babelon, *Perses*, no. 908, pl. XXII, 20.

8. *Obverse*: Slightly worn. Similar type to preceding. Top and back of the head off the flan (Pl. III.8).

*Reverse*: War-galley to the right similar to preceding. Prow with *embolon* and eye and an uncertain figure-head (Pataecus?). Poop off the flan.  $M^2$  above.

AR. 9.50 g. Diam.: 2.1 cm. Thickness of the flan: .42 cm. \. G.

9. *Obverse*: Slightly worn. Similar type to preceding. Top and back of the head off the flan (Pl. III.9).

*Reverse*: Slightly worn. War-galley to the right similar to preceding. Prow partly off the flan, with eye and Pataecus;  $M^2$  above. Border of dots (can be seen above).

AR. 9.90 g. Diam.: 2 cm. Thickness of the flan: .51 cm. ←. G.

10. *Obverse*: Rather worn. Similar type to preceding (Pl. III.10).

*Reverse*: War-galley to the right similar to preceding. Prow with *embolon* eye and Pataecus.  $M^2S$  above.

AR. 10.10 g. Diam.: 1.9 cm. Thickness of the flan: .50 cm. ←. G.

*Bibl.*: Concerning the reverse, cf. B.V. Head, *Historia Numorum* (Oxford, 1911; 2nd ed.), 788, fig. 345.

11. *Obverse*: Similar type to preceding. Top and back of the head off the flan (Pl. III.11).

*Reverse*: Slightly worn. War-galley to the right similar to preceding. Prow with *embolon*.  $M^2G$  above.

AR. 10.03 g. Diam.: 1.8 cm. Thickness of the flan: .52 cm. ←. G.

*Bibl.*: Concerning the obverse, cf. E. Babelon, *Perses*, no. 914 and pl. XXII, 22 (read  $M^2A|||$  instead of  $M^2_—|||$ ).

12. *Obverse*: Similar type to preceding, decentered to the left (Pl. III.12).

*Reverse*: War-galley to the right similar to preceding. Prow with *embolon*, eye and Pataecus, partly off the flan. Poop obliterated.  $M^2G$  above.

AR. 9.90 g. Diam.: 2 cm. Thickness of the flan: .48 cm. ←. G.

13. *Obverse*: Similar type to preceding. Circle of dots (can be seen on the left). Clipped coin (Pl. IV.13).  
*Reverse*: War-galley to the right similar to preceding. Prow off the flan. Poop with *aphlaston* and *stylis*.  $MJ^2G|||$  above. Border of dots and crescent-shaped furrow (can be seen under the wavy lines).

AR. 9.40 g. Diam.: 1.9 cm. Thickness of the flan: .46 cm. ←. *G*.

*Bibl.*: For the obverse, cf. no. 3074 in Collection de Luynes (Cabinet des Médailles de la Bibliothèque Nationale, Paris) and no. 908, pl. XXII, 20 in E. Babelon, *Perses*. The obverse die may be the same as for coin no. 907 *bis* in *ibid.* (Cab. des Médailles); the type of the reverse is also similar. Cf. G. F. Hill, *BMC Phoenicia*, pl. II, 18 for the obverse and pl. II, 19 for the reverse; M. Chéhab, *Monnaies gréco-romaines et phéniciennes du Musée National, Beyrouth, Liban* (Paris, 1977), no. 577 (obverse).

14. *Obverse*: Rather worn. Similar type to preceding, decentered to the left (Pl. IV.14).

*Reverse*: War-galley to the right similar to preceding. Prow obliterated. Poop off the flan.  $M^2G|||$  (?) above. Border of dots (can be seen above).

AR. 9.40 g. Diam.: 1.9 cm. Thickness of the flan: .47 cm. \. *G*.

15. *Obverse*: Rather worn. Similar type to preceding, decentered to the left (Pl. IV.15).

*Reverse*: Rather worn. Traces of galley. Prow with Pataecus, partly off the flan. Poop off the flan.  $M^2G|||$  (?) above. Upper part of an incuse square with a border of dots.

AR. 9.90 g. Diam.: 1.8 cm. Thickness of the flan: .49 cm. ←. *G*.

16. *Obverse*: Rather worn. Similar type to preceding, very decentered to the left (Pl. IV.16).

*Reverse*: War-galley to the right similar to preceding. Prow off the flan. Poop with *aphlaston* and *stylis*.  $MJ^2G|||$  (?) above. Incuse square with a border of dots (can be seen above and on left).

AR. 9.80 g. Diam.: 2.1 cm. Thickness of the flan: .49 cm. †. *G*.

17. *Obverse*: Rather worn. Similar type to preceding, decentered to the bottom. Circle of dots (can be seen above) (Pl. IV.17).

*Reverse*: Rather worn. War-galley to the right similar to preceding, above one wavy line (other lines off the flan?). Prow off the flan. Poop with *aphlaston* and *stylis*.  $MJ^2G|||$  (?) above.

AR. 9.90 g. Diam.: 2 cm. Thickness of the flan: .53 cm. ←. *G*.

18. *Obverse*: Similar type to preceding, decentered to the left and bottom. Circle of dots (can be seen above) (Pl. IV.18).

*Reverse*: Slightly worn. War-galley to the right similar to preceding, above one wavy line (other lines off the flan?). Prow off the flan. Traces of poop (with *aphlaston*?).  $M^2J^2G|||$  (?) above.<sup>4</sup> Border of dots (can be seen above).

AR. 9.95 g. Diam.: 2 cm. Thickness of the flan: .48 cm. / . *G*.

19. *Obverse*: Similar type to preceding, very decentered to the right. Circle of dots (can be seen on left) (Pl. V.19).

*Reverse*: Rather worn. War-galley to the right similar to preceding, very decentered to the top. Prow, poop, and letters off the flan. In the field under the wavy lines, crescent-shape furrow.

AR. 10 g. Diam.: 1.9 cm. Thickness of the flan: .48 cm. ←.

20. *Obverse*: Similar type to preceding. Crescent-shape countermark under the right ear. Top and back of the head off the flan (Pl. V.20).

*Reverse*: Rather worn. War-galley to the right similar to preceding, very decentered to the top. Prow with *embolon*, partly off the flan. Poop and letters off the flan.

AR. 10.40 g. Diam.: 1.9 cm. Thickness of the flan: .54 cm. \.

*Bibl.*: The obverse coin no. 3071 in Coll. de Luynes, no. 911 in E. Babelon, *Perses* (Cab. des Méd.), and no. 848, pl. CXVII, 3 in E. Babelon, *Traité*.

<sup>4</sup> There is no *mem* in the space between *aleph* and the edge of the flan although it is sufficient for one letter.

21. *Obverse*: Slightly worn. Male head, laureate and bearded to the right; eye almost full; long beard and thin lips (Pl. V.21).

*Reverse*: Rather worn. War-galley to the right similar to preceding, above one(?) wavy line. Incuse square (can be seen above). The rest of field is obliterated.

AR. 10.10 g. Diam.: 2.2 cm. Thickness of the flan: .47 cm. 1.

*Bibl.*: For the obverse, cf. no. 915 in E. Babelon, *Perses* (Cab. des Méd.), and no. 896, pl. XXII, 19 (small denomination); idem, *Traité*, no. 835, pl. CXVI, 22 (obverse).

22. *Obverse*: Slightly worn. Male head, laureate and bearded to the right; eye in profile (Pl. V.22).

*Reverse*: Almost obliterated; traces of war-galley.

AR. 9.70 g. Diam.: 2 cm. Thickness of the flan: .48 cm. 1.

*Bibl.*: For the obverse, cf. nos. 3067 and 3073 in Coll. de Luynes.

23. *Obverse*: Obliterated; square flan (Pl. V.23).

*Reverse*: Rather worn. War-galley to the right similar to preceding. Prow partly off the flan, with *embolon* and *Pataecus*(?). Letters obliterated.

AR. 10.40 g. Diam.: 1.8 cm. Thickness of the flan: .50 cm.<sup>5</sup>

24. *Obverse*: Much worn. Similar type to preceding. Square flan (Pl. V.24).

*Reverse*: Rather worn. War-galley to the right similar to preceding, very decentered to the top. Prow, poop, and letters off the flan.

AR. 10.50 g. Diam.: 2 cm. Thickness of the flan: .49 cm. 1.

25. *Obverse*: Much worn. Similar type to preceding (Pl. VI.25).

*Reverse*: Much worn. War-galley to the right similar to preceding, above two wavy lines (another line off the flan?). Traces of letters and numerals.

AR. 10.80 g. Diam.: 1.8 cm. Thickness of the flan: .70 cm. 1.

26. *Obverse*: Head of Athena to the right; eye in profile; helmet off the flan; hair plated and waved on forehead and temples, and falling about the neck with volute ornaments; large round and full ear-ring (Pl. VI.26).

*Reverse*: Owl standing to the right, head facing, dots above breast and upper part of wings. In the field on the left, crescent and bough of olive-tree; on the right, Greek letters A Θ E partly off the flan.

AR. Attic tetradrachm. 17.40 g. Diam.: 2.2 cm. Thickness of the flan: .70 cm. 1.  $\Delta$ .

*Bibl.*: For the obverse: cf. B. V. Head, *Catalogue of Greek Coins: Attica, Megaris, Aegina* (London, 1888), pl. V, 6 and VII, 2 (obverse); V, 4 (reverse); G. K. Jenkins, *Monnaies Grecques* (Paris, 1972), 89, nos. 158-59; *Journal of Numismatic Fine Arts* 4 (1976), 102, no. 59 and pl. XXXII (obverse and mostly reverse).

The coins with a bearded male head on the obverse and a galley without hippocamp on the reverse belong to the second category of Aradian coins which seems to have come after the category of the deity with dolphins.<sup>6</sup> As the motive of Athena on Athenian coins inspired Aradian engravers,<sup>7</sup> the evolution of the shape of the eye on Aradian coins was probably parallel to that of Athena: the full eye of Athena begins to change at the end of the fifth century and becomes profile-shaped from the beginning of the fourth. Aradian engravers certainly had instant knowledge of this evolution

5 Since the obverse is indistinct, it is impossible to determine the orientation of the coins.

6 Kraay, *Greek Coins*, 291.

7 P. Naster, "Les influences du style grec en Phénicie à l'époque achéménide," in *Atti de settimo Congresso internat. di Archeologia classica I* (Roma, 1961), 331-32, is somewhat reserved on this subject; we shall see later the nature and limits of this borrowing.

because the Athenian coins were exported in large quantities like ordinary goods to the whole Near East. The persistence of an archaizing Aradian style at the beginning of the fourth century cannot be ruled out, but it is less likely than the progressive evolution of the representation of the eye following the Athenian pattern. The series with full eye should therefore, in this case, be dated prior to the beginning of the fourth century.<sup>8</sup>

All the coins that we have studied in this treasure seem to show the eye in profile, except for coin no. 21, having a nearly full eye. This coin obviously belongs to the transition period between the eye in profile and the full eye; this can also be seen from the thin lips and long beard pointing forward. The type with eye in profile displays in general thick lips and a beard that does not point forward so characteristically. The identification of the male head represented on the coins is at present not certain.<sup>9</sup> It is likely, however, that it represents the ichthyomorphic deity of the first Aradian coins. At first, the engravers represented the deity as a whole, and later only his bust, and then only his head.<sup>10</sup>

The war-galley which appears on the reverse is represented with more details than in the first Aradian coins, where it covered only part of the field. The precision of the engraving, as we might expect, seems to increase as a function of the size of the galleys, the most precise one being that of the Sidonian double shekels. The fact that the oars are not represented on the Aradian galley is due either to the difficulty of representing them—because of the small dimensions of the die—or to a simple artistic convention. Even though oars and portholes are not represented, it is probably a trireme<sup>11</sup> shown on the starboard side whereas Sidonian and Byblian galleys are shown on the port side. The representation of a line of shields along the bulwark, characteristic of the Phoenician triremes, is not stereotyped; this may be taken as a proof of their effort toward realism.

For coins where the whole line of shields can be seen, their number varies between eight and twelve.<sup>12</sup> This variation seems to depend neither on the type of the coins nor on their chronology. However, we note a change that could be significant between galleys with and without the figure-head on the prow. In the latter ones, the line of shields (the number of which has not varied) no longer reaches the tip of the forecastle.<sup>13</sup> If the representation of the trireme was accurate, we might draw the conclusion that its length had increased at the moment when the coins with figure-heads on the prow began to be issued. However, we wonder whether the varying number of shields on galleys of the same kind means a variation in the length of the

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<sup>8</sup> In general, the numismatists do not propose for this series a date previous to the beginning of the fourth century (e.g., Kraay, *Greek Coins*, 291). See however Naster, *Les influences du style grec*, 331: "The arguments elaborated from the discoveries of treasures are still insufficient, although some indications seem to show that the higher date (middle of the Vth century for the beginning of Aradian coins) is closer to truth."

<sup>9</sup> Concerning the alternate hypothesis, cf. Betlyon, *The Coinage*, 79–87, 96–105.

<sup>10</sup> Hill, *BMC Phoenicia*, pl. I, 1–11.

<sup>11</sup> Cf., e.g., L. Basch, "Phoenician Oared Ships," *The Mariner's Mirror* 55 (1969), 154; Babelon, *Perses*, pl. IX, 2, 3: three lines of oars can be seen on the side of the Sidonian war-galley.

<sup>12</sup> 8 (nos. 2, 10?, 12); 10 (nos. 6, 13, 16); 11 (no. 7?); 12 (no. 1).

<sup>13</sup> Cf., e.g., G. F. Hill, *BMC Phoenicia*, Pl. I, 6, 18, 19.

triremes. This cannot be ascertained for the size of the shields varies (very small in coins nos. 19 and 21), and they may be side by side (nos. 1, 4) or more or less apart (nos. 2, 13). On coin no. 7, we notice that the size of the shields decreases near the prow, as the distance between them increases. The engraver probably tried rather awkwardly to reproduce the effect of perspective due to the narrowing of the hull in bows; this attempt of his signifies his care for accuracy.

The number of shields approximates the number of port-holes (e.g., nine port-holes for ten shields in coin no. 13); however, the portholes are neither placed systematically between two shields nor at the middle of a shield.<sup>14</sup> From the representation on the coins we may assume that the diameter of a shield corresponded approximately to the distance between two portholes and that the shields were placed at random, independently of the portholes, as can be seen on coins nos. 1 and 6 for instance. L. Basch had pointed out the presence of a small projection inside the portholes on a fine stater from Sidon and supposed that it was a rower<sup>15</sup>; this hypothesis can be confirmed from our coins nos. 6 and 13, which show similar round projections inside the portholes.

On most of the coins, the line of the upper deck makes a curve rising up above the forecastle; at the place where it rises a triangular opening is to be noticed—it could be a hawse-hole for the anchor (nos. 1, 6, 12). However, in the trireme of coin no. 7, the line of the deck remains horizontal and makes a right angle with the forecastle. It is one of the rare coins of this category where the trireme has kept the horizontal profile (except for the projection of the forecastle) of the bulwark of the triremes represented on the category of coins without the eye in profile.<sup>16</sup> A huge eye, characteristic of Aradian coins, is painted on the side of the forecastle.<sup>17</sup> It would seem that on some coins (no. 12 for example), the line of the deck ends at the forecastle with a *stolos* in the Greek way as can be observed on some Sidonian coins.<sup>18</sup> This, however, is unlikely because in such a case the figure-head on the prow is usually placed in front of the *stolos*.

When it is not off the flank, the prow ends with a three-prong *embolon*, as can be seen on coin no. 7. This *embolon* is very long as is the case for all Phoenician triremes; on this coin, its length seems to be about a fifth of the total length of the trireme and at least five times the diameter of a shield. The typical length of the Phoenician *embolon* has been explained by the absence of wales and by the necessity of absorbing the shock by itself.<sup>19</sup> But as L. Basch points out,<sup>20</sup> some coins give the impression that there were at least partial wales; for example, in this treasure it is the case in coins nos. 1, 2, and 7. Besides, in coin no. 7, the upper and lower angles of the forecastle seem to end with a horn shaped tip. The lower horn could be interpreted as a *proembolon* ending a wale; the upper one could rather be a kind of *stolos*. There is no general agreement about the identification of the figure-head on the prow. It appears here on

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14 Contra L. Basch, *Phoenician Oared Ships*, 154–55.

15 *Ibid.*, 155.

16 A similar coin bearing the same inscription is mentioned in E. Babelon, *Perses*, pl. XXII, 20.

17 It seems, however, excessive to say: "the whole shelter is made eye-shaped," as L. Basch, *Phoenician Oared Ships*, 157.

18 There are even sometimes two *stolos*: cf. *ibid.* 233, 18, 19.

19 *Ibid.*, 156.

20 *Loc. cit.*

all the coins where the prow is not off the flan or erased: nos. 3, 5, 6, 7, 9, 10, 12, 15, and perhaps 8 and 23.<sup>21</sup>

When the poop is not off the flan, we may notice at the stern a more or less voluminous swell protruding beyond the hull, which seems to be the rudder (nos. 2, 12, 13). We do not have here big oars as on Byblian or Sidonian coins<sup>22</sup> but another, seemingly more elaborate system. The extremity of the keel at the stern rises in a curve forward. It has been much discussed to know whether this curved ornament was an *aphlaston* like that of the Greek triremes.<sup>23</sup> We believe it is an *aphlaston* since it is an ornament of poop made of the curved tip of the keel; it has only one branch, in contrast to Greek triremes, where it is also made of the end of the wales.<sup>24</sup> The *stylis* which appears later on Greek coins is associated in general with the *aphlaston* in Phoenician coins.<sup>25</sup> Here it has a vertical position (nos. 2, 13, 16, 17); the *stylis* of coin no. 6 bears globes alternating with reversed crescents.<sup>26</sup> That of coin no. 16 bears on its tip an inclined transversed bar and a reversed crescent.

There are always three wavy lines on staters and sometimes two on small denominations. The stater no. 6 is therefore distinct with its four wavy lines; it also has two pellets between the waves and the hull.<sup>27</sup> The coins bear on the obverse a circle of dots and on the reverse a border of dots along the incuse square and the crescent-shaped depression. This circle and border are always partially off the flan. The conjunction of a border of dots and a cable border on the reverse of coin no. 6 is exceptional.<sup>28</sup>

A significant difference in style can be noticed in the representations on the obverse of the cleaned coins. Apart from the skill of the engraver, which was a random factor, we note some borrowings from different arts. The archaic style of the laureate head to the right and the evolution in the shape of the eye are borrowings from the Athenian numismatic art. Coin no. 21 is the only specimen among the cleaned coins belonging to the type with the eye nearly full. Its bared nape, its angular profile, its small and thin mouth with or without an archaic smile relate it to the Greek archaic art; but its pointed beard made of parallel lines<sup>29</sup> and its regular ranges of dots relate it to the Syrian types represented, for example, on the reliefs of Persepolis.<sup>30</sup>

21 Cf. J. Elayi and A. G. Elayi, "The Aradian Pataecus," *ANSMN* 31 (1986), 1-5.

22 E.g., Hill, *BMC Phoenicia*, pl. XI, 12, 13; XIX, 1, 5.

23 J. W. Betlyon, *The Coinage*, 81, 86, 87, 105, and J. N. Svoronos, "Stylides, ancres, hierae, aphlasta, stoloï, akrostolia, embola, proembola et totems marins," *JIAN* 16 (1914), 81-152, consider that it is a more or less well drawn *aphlaston*. In contrast, G. F. Hill, *ibid.*, XXII, and L. Casson, *Ships and Seamanship in the Ancient World* (Princeton, 1971), 96, do not consider it as an *aphlaston*.

24 Cf. Svoronos, *Stylides*, 127. However, there are maybe two branches on coin no. 13.

25 Concerning the function of the *stylis*, cf. E. Babelon, "La *stylis* attribut sur les monnaies," *RN* (1907), 1-39; Svoronos, *ibid.*, 81-89; Basch, *Phoenician Oared Ships*, 230.

26 The same kind of *stylis* can be observed on some Sidonian coins, but in oblique position; Svoronos, *ibid.*, 84, fig. A, no. 13.

27 These pellets exist on other coins; cf. Hill, *BMC Phoenicia*, pl. II, 1; we wonder whether they had any meaning.

28 If the border of dots is usually present on the last Aradian coins, the cable border also sometimes appears on these coins, as is pointed out by Betlyon, *The Coinage*, 103, no. 71.

29 The details of the beard cannot be seen on this rather worn coin.

30 J. B. Pritchard, ed., *The Ancient Near East in Pictures* (Princeton, 1954), no. 61. This kind of head is also to be compared with that on sarcophagus K27 in E. Kukahn, *Anthropoide Sarcophage in Beyrouth* (Berlin, 1955), where the curls are more skillfully done, however.

The coins with the eye in profile keep the same archaizing conventions for the disposal of the hair, whiskers, and beard. But the features and shape of the face may vary: compare, for example, coins no. 11 and 13. In the first one, the face is full, the cheekbones protruding, the lips fleshy, the chin square, which reminds us of Greek art. In the second one, the profile is angular, the face long, the eyes large, the cheeks hollow, the mouth small and thin. Between these two extremes, there exist intermediate styles, such as that of coin no. 6.

Do such differences correspond to an evolution of style? Full faces are represented on coins no. 6, 7, 8, which all bear the inscription  $M^{\rho}\epsilon$ . Long faces appear on coins no. 13 and 14 which bear  $M^{\rho}G$  and numerals. But a type of a rather full face appears, too, on the last category of coins (no. 17 and 18).<sup>31</sup> In contrast, a long face is represented on the coins bearing the inscription  $M^{\rho}\epsilon$ .<sup>32</sup> Therefore, the previous examples do not seem to indicate an evolution of style, but rather the simultaneous existence of several stylistic tendencies among the engravers of Aradian coins. Such tendencies can be found among the sculptors of anthropoid sarcophagi.<sup>33</sup> However, we would point out that angular and long faces seem to appear late in Phoenician art.

Because of the small number of cleaned coins and the fact that most of them are not well-preserved, it is impossible to study the dies link: it may be suggested that coins no. 6 and 9 on the one hand, and no. 17 and 18 on the other, have been struck with the same obverse dies. The dies are oriented at random as is the case in all the Aradian pre-alexandrine coins, probably because of the use of moving dies.<sup>34</sup> The figures are decentered, scarcely contained in the field. The flans are irregular; those of coins no. 23 and 24 are square. Since these two coins have normal weights (10.4 and 10.5 g), we are inclined to think that their overweights were cut out from overweighted flans by the diemaker himself. The case of coin no. 13 weighing only 9.4 g is different. It seems to have been clipped in order to remove some of the metal. There are no fragments of coins or metal in this treasure; this seems to indicate that these coins did not circulate as ware-coins sold for their weight. Among the 26 cleaned coins, we note a single chisel cut (no. 6) made for checking its alloy. This probably means that these coins were generally trusted in this area of circulation. The thickness of the flans varies between .41 and .54 cm (mostly between .48 and .50 cm), which is rather small with regard to all the Aradian pre-alexandrine coins. This width indicates a late date. The thickness of the flans is not a function of the different series represented in this treasure.

A study of the weights of these coins has not much meaning; they are not numerous enough, and the weight of some of them changed because they are worn, clipped, or ill-cleaned. We can, however, make a few remarks. The weights run from 9.40 to 10.80 g.<sup>35</sup> Coins bearing the inscription  $M^{\rho}G$  followed by numerals seem to

31 Cf. also Babelon, *Perses*, pl. XXII, 22.

32 Ibid., pl. XXII, 20. It does not seem that "more and more Hellenic influence may be seen in the coin types," as suggested by Betlyon, *The Coinage*, 96, n. 18.

33 Cf., e.g., the full face on sarcophagus K75 in Kukahn, *Anthropoide Sarcophage*, and the angular long face on sarcophagus K23.

34 Fixed dies would have been used from 240 in Aradian mint; cf. Aoun, *Catalogue*.

35 Hill, *BMC Phoenicia*, XXII-XXIII, mentions 10.77 g as maximum weight for Aradian coins and 11.36 g as exceptional weight. Betlyon, *The Coinage*, 95, n. 10, mentions coins with weights in the range 9.99-10.80 g.

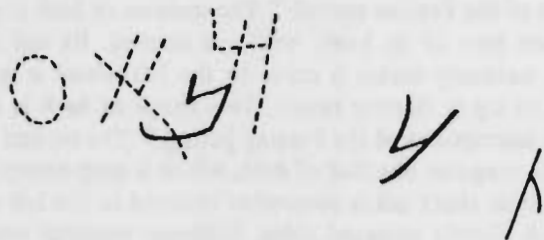


Fig. 1. Graffito on coin no. 7.  $\times 4$ .

have on the average a smaller weight than the Aradian standard; 9.40 g (nos. 13, 14), 9.80 g (no. 16), 9.90 g (nos. 15, 17), 9.95 g (no. 18); the same fact can be observed on other coins of this series.<sup>36</sup> More information on this interesting problem could probably be obtained from complete study of the similar coins included in this treasure (at least 22).

We find in this treasure the known technique of the incuse square on the reverse and, on some coins, the crescent-shaped depression in the field under the trireme. The technique of the semi-incusion common to all Phoenician coins during an apparently varying period of their mint is very difficult to detect in Aradian coins since the lower part of the field where the crescent could be is in general off the flan. It appears here in coin no. 1 bearing the inscription  $M^2$ , in coin no. 13 bearing the inscription  $M^2G$  with numerals and in coin no. 19 having its inscription off the flan. This technique is mainly used in the series with full eye which also bears the inscription  $M^2$ .<sup>37</sup> It is so difficult to detect the crescent that we prefer not to draw any conclusions from these remarks.

Coins no. 6 and 20 bear crescent-shaped countermarks, the former on the right cheek, the latter under the right ear. One of the uncleaned coins also bears a lotus flower(?) as countermark on the right cheek. Countermarks can be found sometimes in the Aradian mint with bearded head on the obverse.<sup>38</sup> They were much diversified and could assume different functions, probably always official; for instance, they could validate the use of an ancient coin or characterize special payments.

In contrast, the graffiti were simple marks of ownership. The graffito which is drawn on the reverse of coin no. 7 (Fig. 1) at the same level as the inscription, comprises three letters which are probably the name of the coin's owner. The letters were incised more or less deeply but are regularly spaced and can easily be read. The first and third letters seem to be Aramean *taw* and *beth*. The incision of *taw* is superficial and regular; its long and oblique stroke is inclined to the right and its hook is rather short and slightly curved. Such form is common on stone inscriptions,

36 Hill, *BMC Phoenicia*, no. 67 (10.01 g), 68 (9.99 g); Babelon, *Perses*, no. 916 (9 g), 917 (9.75 g).

37 Hill, *BMC Phoenicia*, 4, no. 48 ff.; 9, no. 56 ff.; Betlyon, *The Coinage*, 86. Concerning this technique, cf. P. Naster, "La technique des revers partiellement incus des monnaies phéniciennes," in *Centennial Volume of the American Numismatic Society* (New York, 1958), 503–11.

38 Hill, *BMC Phoenicia*, 7, no. 38, 43 (eye in profile;  $M$ ; small denominations); 9, no. 56 (full eye;  $M$ ; stater); Babelon, *Perses*, 128, no. 879 (full eye;  $M^2$ ); 131, no. 910 (eye in profile;  $M^2$ ); Coll. de Luynes, no. 3070 (= Babelon, *Traité*, no. 836, pl. CXVI, 23: eye in profile;  $M^2G$  with numerals); Cab. des Médailles, no. 1975. 249 (eye in profile;  $M^2S$ ).

ostraca, and papyri of the Persian period.<sup>39</sup> The incision of *beth* is irregular: it is deep except for the lower part of its head, which is opened. Its tail is very long—first slightly oblique, it suddenly makes a curve to the left where it is continued almost horizontally; then its tip is slightly raised. This shape of *beth* is as common as the shape of *taw* in the inscriptions of the Persian period.<sup>40</sup> The second letter is difficult to read. The incision is irregular like that of *beth*, which is deep except for the lower part of the head. Its oblique short tail is somewhat inclined to the left at its lower tip; its head is opened with slightly enlarged sides. Different readings are possible, such as *daleth*, *waw*, *kaph*, and *resh*, which are not much differentiated at this time. It could be read *daleth* because of its opened angular head and short tail<sup>41</sup>; but the head with enlarged sides is not very common and mainly characterizes *resh*.<sup>42</sup> Onomastics is not very helpful for such sequences as *TDB*, *TWB*, *TKB*, and *TRB*.<sup>43</sup> Anyway, we prefer not to propose an interpretation for these three letters since the reading of one of them is uncertain. However, the two others seem to indicate that this graffito is Aramean and dates from the Persian period. Since the graffito was written between the date of issue of the coin and the date of burial of the treasure, it was written during the first two thirds of the fourth century. It can be said that this graffito was very probably not incised by an Aradian but by a Semite or a Persian speaking Aramaic and that at some moment, he acquired this coin and put his mark of ownership on it for an unknown reason.<sup>44</sup>

The palaeographic study of the coins' inscriptions is limited because we have only five different letters on the cleaned coins.<sup>45</sup> But it is not without interest because it concerns a period for which the corpus of inscriptions consists only of coin inscriptions. *Aleph* (fig. 2) is traced with three strokes as is the case in Byblian or Cyprian writing,<sup>46</sup> or with four strokes (nos. 3, 12, 14?) as in Byblian writing at least from the end of the fourth century.<sup>47</sup> Its tail is much inclined to the left as in more ancient Aradian coins.<sup>48</sup> On the other hand, in post-alexandrine coins and in the Aradian inscription of the third-second centuries, the tail tends to be rather vertical. Therefore,

39 A. Aimé-Giron, *Textes araméens d'Égypte* (Le Caire, 1931), no. 98, pl. XIII; J. Naveh, *The Development of the Aramaic Script* (Jerusalem, 1970), fig. 4, l. 2; 7, ll. 1,5; J. C. L. Gibson, *Textbook of Syrian Semitic Inscriptions* (Oxford, 1975), 2: no. 23–37.

40 Cf. preceding note.

41 Gibson, *Textbook*, 2: 188; Naveh, *Aramaic Scripts*, fig. 11, l. 4.

42 Aimé-Giron, *Textes araméens*, no. 98, pl. XIII; R. A. Bowman, *Aramaic Ritual Texts from Persepolis* (Chicago, 1968), 144, no. 85, l. 1 and pl. 20; 179, no. 136, l. 1 and pl. 32.

43 In the Aramean texts from Egypt (Aimé-Giron, *Textes araméens*, 87a, 12), an Egyptian name *TWB*?, with a dubious meaning, is mentioned; W. Kornfeld, *Onomastica Aramaica aus Ägypten*, (Wien, 1978), 95, proposes "what belongs to the parvis of the temple." See also in Ugaritic *TWR* (Akk. *tāru*): F. Gröndahl, *Die Personennamen der Texte aus Ugarit* (Rome, 1967), 200. Cf. also in Safaitic *TRB*, "poor, who is in the dust"; G. Ryckmans, *Les noms propres sud-sémitiques* (Louvain, 1934), s.v.; R. Zadok, *On West Semites in Babylonia during the Chaldean and Achaemenian Periods: An Onomastic Study* (Jerusalem, 1977), 144, 171, 318, 343, 409.

44 It may be the owner of the treasure, among several hypotheses.

45 We may add the letter *kaph* which can be read, after *M*?, on two uncleaned coins.

46 J. B. Peckham, *The Development of the Late Phoenician Scripts* (Cambridge, 1968), 24–25, 54–55.

47 *Ibid.*, 55.

48 Hill, *BMC Phoenicia*, table, CXLVI.

COIN N°	ⲡ	G	M	S	ⲉ
6	Ⲫ		ϣ		ⲟ
13	Ⲫ	∧			
7	Ⲫ		ϣ		ⲟ
12	Ⲫ	∧	ϣ		
2	Ⲫ		ϣ		
9	Ⲫ		ϣ		
3	Ⲫ				
16	Ⲫ	∧			
8	Ⲫ		ϣ		ⲟ
14	Ⲫ	∧			
1	Ⲫ				
17	Ⲫ	∧			
15	Ⲫ	∧	ϣ		
18	Ⲫ	∧			
10	Ⲫ		ϣ	ⲛ	

Fig. 2. Epigraphical chart of the cleaned coins. × 1.5.

it would seem that in opposition to Byblian *aleph*,<sup>49</sup> the tail of Aradian *aleph* tends to become vertical. Besides, we notice that the lower tip of the tail tends to become curved to the left (coins no. 1, 7, 10, 13, 14). This tendency was seemingly developed and increased in the post-alexandrine period.<sup>50</sup> A similar tendency appears in Cyprian *aleph* in the fourth and third centuries.<sup>51</sup> The tendency to incurve the lower part of tails to the left is not considered significant by J. B. Peckham in Byblian writing.<sup>52</sup> But it seems to characterize the Aradian post-alexandrine writing on stone and on coins, not only for *aleph*, but also for *daleth*, *gimel*, *he*, *mem*, *nun*, *samek*, and *qoph*.<sup>53</sup> The two crosslines of *aleph* are roughly parallel and are most of the time written vertically. Only the crosslines of coins no. 6, 7 and 10 are slightly inclined to the right. We probably have here a period of transition where the crosslines begin to be inclined since in the post-alexandrine period they are always very inclined and tend sometimes to be horizontal.<sup>54</sup> This phenomenon is linked to the tendency of the tail to become vertical. The upper crossline crosses the tail more or less as it does during the post-alexandrine period, though its variations may not be taken as significant.<sup>55</sup> In coin no. 10, the lower part of the upper crossline is curved to the right. The closest parallels to this kind of *aleph* are those of the Aradian inscription of the third-second centuries and of an inscription from Marathos, a town in Aradian territory, dated from the first half of the sixth century.<sup>56</sup>

Concerning the angular sign following the letters *M*<sup>3</sup> that most numismatists read as "ten,"<sup>57</sup> this reading must be definitively abandoned and *gimel* is to be read, as J. W. Betlyon had proposed without giving any argument for it.<sup>58</sup> The hypothesis of a double representation of ten in the Aradian coins of the same period seems to be unlikely because, even though the sign for ten is sometimes curved in Phoenician inscriptions,<sup>59</sup> it never has the angular form of *gimel*. As the coins bearing *gimel* are probably later than the coins with a horizontal stroke for ten,<sup>60</sup> it would be necessary to admit the unlikely hypothesis that the Aradians replaced the horizontal stroke (representing ten) by an angular shaped sign over some decades and that they used it again during the Hellenistic period.<sup>61</sup> On the other hand, Aradian *gimel* represented with an angular shape (as is the case here) is attested<sup>62</sup>; it is very different from the

49 Peckham, *Phoenician Scripts*, 45, ll. 6, 7; 55.

50 Hill, *BMC Phoenicia*, table, CXLVI; R. Dussaud, "Voyage en Syrie, Octobre-Novembre 1896, Notes archéologiques," *RA* (1897), 332-38 and pl. 8. The inscription published by R. Savignac, "Une visite à l'île de Rouad," *RB* 13 (1916), 576-79 and pl. 4, is much worn.

51 Peckham, *Phoenician Scripts*, 9, ll. 1-4, 6-8.

52 *Ibid.*, 55.

53 Hill, *BMC Phoenicia*, table, CXLVI; Dussaud, *Voyage en Syrie*.

54 Cf. preceding note.

55 As in Byblos; Peckham, *Phoenician Scripts*, 45, ll. 1-7. We have seen that on coins nos. 3, 12, 14(?), the crossline did not traverse the base of the head and that a fourth stroke was added.

56 Dussaud, *Voyage en Syrie*; Peckham, *Phoenician Scripts*, 109, l. 2.

57 Babelon, *Perses*, CLVII-VIII; Hill, *BMC Phoenicia*, XXV.

58 Hill, *BMC Phoenicia*, 91-92, 108-10.

59 *Ibid.*, table, CXLVI.

60 Their style is more archaic and the eye is almost full. Cf. Babelon, *Perses*, CLVIII; Hill, *BMC Phoenicia*, XXV; Betlyon, *The Coinage*, 86.

61 Babelon, *Perses*, nos. 981-1010 (years 110 to 119).

62 Hill, *BMC Phoenicia*, 7, no. 38; 19, no. 142; 22, nos. 166, 167; 23, no. 178.

curved form of Aradian *pe* with which it cannot be confused. Finally, as G. F. Hill himself points out with embarrassment,<sup>63</sup> the style of the coins with the angular shaped sign links them to the series with a varying letter; this is normal since *gimel* is a varying letter.

It will suffice to adduce definitive proof from a coin published by M. Chéhab. It bears the inscription *GM<sup>2</sup>|||* [?], which is quite clear on the photograph.<sup>64</sup> Here of course, we cannot interpret *gimel* as “ten” since the date is indicated after the letters. On the other hand, the type of this coin is the same as the one bearing *M<sup>2</sup>G* and numerals.

The right leg of the *gimel* is longer than its left, and it is a little bit more inclined. The type with unequal legs is found in Byblian writing together with the type with equal legs.<sup>65</sup> However, the difference in slope between the two legs does not seem to start a rotation clockwise as at Umm el-Awamid,<sup>66</sup> because in Aradian post-alexandrine coins, *gimel* has an isosceles form with the tip of its right leg slightly curved to the left.<sup>67</sup>

The tail of the *mem* is somewhat inclined to the right, except for coin no. 2, where it is horizontal, and no. 12, where it is slightly curved to the left. This last form probably announces the beginning of the tendency which characterized the Aradian post-alexandrine writing.<sup>68</sup> Although the tail is not very long, it passes beyond the head. The head is semi-rectangular, but sometimes its left shoulder is rounded (coins no. 9, 12, 15). Both types of head seem to be used during the post-alexandrine period.<sup>69</sup> The crossline hardly traverses the base of the head, which is different from contemporaneous Byblian *mem*<sup>70</sup> and rather reminds one of the Cyprian one.<sup>71</sup> If we consider the coins previous and posterior to the coins of this treasure and the inscription of the third/second century,<sup>72</sup> we notice that the crossline more or less cuts the base of the head, but is never very long.

It is difficult to describe *samek* from an incomplete letter, but this letter can be restored from similar, better-preserved Aradian coins.<sup>73</sup> The tail, curved to the right at its upper and lower tips, reminds us of the letter *samek* of the inscriptions of Umm el-Awamid which are dated from the third century, or Punic inscriptions of the fifth and fourth centuries.<sup>74</sup> The letter *ayin* is closed and roughly round as in the Tyrian and Sidonian inscriptions.<sup>75</sup> The same form is used in the post-alexandrine period together with a semi-circular form.<sup>76</sup> The numbers below ten are represented by quite

63 Ibid., XXV.

64 M. Chéhab, *Monnaies*, 37, no. 576, pl. XXIII, 2.

65 Peckham, *Phoenician Scripts*, 11, l. 1; 27.

66 Ibid., 89.

67 Hill, *BMC Phoenicia*, table, CXLVI.

68 Loc. cit.; Dussaud, *Voyage en Syrie*.

69 Hill, *BMC Phoenicia*, table, CXLVI.

70 Peckham, *Phoenician Scripts*, 60.

71 Ibid., 34.

72 Hill, *BMC Phoenicia*, table, CXLVI; Dussaud, *Voyage en Syrie*.

73 Hill, *BMC Phoenicia*, table, CXLVI.

74 Peckham, *Phoenician Scripts*, 69, ll. 4–6 (Umm el-Awamid); 179, l.1; 213 (Punic inscriptions).

75 Ibid., 98.

76 Hill, *BMC Phoenicia*, table, CXLVI.

vertical strokes, grouped three by three. The lack of contemporaneous Aradian inscriptions does not allow us to date these coins palaeographically; however, some new tendencies, which were developed in the post-alexandrine period, appear in the letters represented on these coins and point to a pre-alexandrine period of transition.

The inscriptions on Aradian coins are abbreviations difficult to interpret. The inscription  $M^{\rho}$  of coins no. 1 to 5 is written on most Aradian coins when it does not fall off the flan. It is generally understood as the abbreviation of  $mn^{\rho}rwd$  with an assimilation of  $nun$ ,<sup>77</sup> but the locative meaning given by the preposition  $mn$  is not quite satisfactory. Besides, this interpretation does not seem to fit the addition of a third varying letter. Another reading has also been proposed:  $M(MLKT)^{\rho}(RWD)$ , "kingdom (or government) of Arwad."<sup>78</sup> But if  $M^{\rho}$  has such a meaning, it is impossible to add a third letter, which is probably the king's initial. We prefer the hypothesis of E. Babelon,<sup>79</sup> which is not contradicted by any inscription on Aradian coins:  $M^{\rho}$  could be an abbreviation of  $mlk^{\rho}rwd$ . The addition of the third varying letter—four of which type are represented here ( $^{\rho}$ , G, S, K on uncleaned coins)—does not contradict this hypothesis. Except for J. W. Betlyon,<sup>80</sup> who proposed to interpret  $gimel$  as the initial of king Gerostratos ( $gr^{\rho}\$trt$ ) who ruled in 333 B.C.,<sup>81</sup> all the numismatists hesitated to interpret the varying letters as initials of kings' names because they considered that the style of these coins was analogous and they thought that they would have hardly extended over eight reigns.<sup>82</sup> In fact, the style of the coins with a varying letter is not at all uniform; compare, e.g., the angular face of some coins bearing the inscription  $M^{\rho}G$ , with the full face of the coins bearing the inscription  $M^{\rho}S$ , and with the intermediate type of face on the coins bearing the inscription  $M^{\rho}c$ .<sup>83</sup> Differences may even exist between coins bearing the same inscription: angular or full face, and one or two lines of portholes in the series with  $M^{\rho}M$ .<sup>84</sup> If, following the chronology of the evolution of the eye, we give Aradian coins with full eye high dates, there is enough time (some 60 years) for the rules of eight(?) kings the initial of whose name could be represented on some coins. In this hypothesis, we must admit that the reigns were rather short, which is not impossible in this troubled period. The dates that also appear on Tyrian and Sidonian coins during the first half of the fourth century can designate either the years of rule as in monumental inscriptions or the number of coin issues. The problem is not simple, and it is easy to understand how helpful a complete study of this treasure, including dies link, would be in order to classify the coins of this period.<sup>85</sup>

77 Babelon, *Perses*, CLV; Kraay, *Greek Coins*, 291.

78 Cf. Betlyon, *The Coinage*, 82 and 100, n. 51, for the state of the question on this particular point.

79 *Traité*, 506.

80 *Ibid.*, 90–92, 108–10.

81 Arrian, *Anabasis of Alexander*, II, 13.

82 Babelon, *Perses*, CLVII; Betlyon, *The Coinage*, 108–9, rightfully denies the hypothesis of Hill, *BMC Phoenicia*, XXIV, who considers that these letters might represent dates.

83 Hill, *BMC Phoenicia*, pl. II, 18 ( $M^{\rho}G$ ); 13 ( $M^{\rho}S$ ); and here coins nos. 7 and 13.

84 Babelon, *Perses*, pl. XXII, 20 (angular face); Hill, *BMC Phoenicia*, pl. II, 14 (full face); *ibid.*, 15 and 14 (1 and 2 lines of portholes); J. Rouvier, "Numismatique des villes de la Phénicie," *JIAN* 3 (1900), 128–37 (series with  $M^{\rho}M$ ).

85 For more detail on this problem, cf. J. Elayi and A. G. Elayi, "Systems of Abbreviations used by Byblos, Tyre and Arados in their pre-alexandrine Coinage," *JNG* (forthcoming).

From what we know about Aradian coins, it seems difficult to establish either an absolute or even relative chronology of the Aradian types of this period. However, we can evaluate the difficulties and solve some of them. It has to be stated first that the type bearing the inscription  $M^2$  followed by numerals is neither represented in the fifteen cleaned coins nor in the 57 uncleaned ones, where the inscription may at least partially be read. Without prejudging the composition of the whole treasure, we can say that it is already significant that this type is not represented in 72 coins out of 187, selected at random regardless of their state of preservation. On the other hand, the type bearing the inscription  $M^2G$  with or without numerals is represented in eight cleaned coins and 41 uncleaned ones where the inscription may at least partially be read. This last type, which appears in at least 49 coins out of 187, seems therefore to be well represented. The type bearing the inscription  $M^{2c}$  is represented in four cleaned and twelve uncleaned coins. The type  $M^2$  is difficult to identify since the rest of the inscription is often located off the flan. The other types ( $M^{2S}$ ,  $M^2K$ ) do not seem well represented. Provided that the quantity of each of these categories of coins is representative of the whole treasure, it may be concluded that the series bearing  $M^2G$  with and without numerals was the last; it was preceded by the series with  $M^{2c}$ ; the series with  $M^{2S}$  and  $M^2K$  were issued earlier.

The problem now is to determine whether the series bearing  $M^2G$  with and without numerals was the last pre-alexandrine Aradian issue. The letter *gimel* could be the initial of the last pre-alexandrine Aradian king's name ( $Ger^c$ aštar), as proposed by J. W. Betlyon.<sup>86</sup> Besides, we have seen that the eye in profile probably characterized the coins issued since the beginning of the fourth century and that paleographic study pointed to a pre-alexandrine period of transition before the Hellenistic period. The presence of the Athenian tetradrachm with Athena's eye quite in profile, the type of its profile, its large ear-ring, the eyes of the owl—without a circle—and the arrangement of feathers round its head seem to indicate a date later than the very beginning of the fourth century.<sup>87</sup> It seems likely, too, that a loss of weight bringing the stater below 10 g concerned only the series bearing  $M^2G$  with or without numerals, which would indicate that this series was the last one of the pre-alexandrine Aradian coinage. Therefore, this series was probably issued under king  $Ger^c$ aštar's rule, which would confirm the hypothesis stating that the letter *gimel* was the initial of his name. If that be the case, it would also indicate that the third letters also represent the initial of the king's name.

Is it possible to draw any conclusions concerning the date and circumstances of the burial of this treasure? We know that the numerals represented on the known Aradian coins of this series go to seven and here at least till six (coin no. 18). This would indicate that the treasure was buried a short time before Alexander's arrival. If the numerals represent regnal years,<sup>88</sup> it is even possible to know the date of burial: 334 or 333. It is tempting to say that the burial coincided with the arrival of Alexander's army. However, we prefer not to follow the general tendency to link a

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86 *The Coinage*, 91–92.

87 See especially *Journal of Numismatic Fine Arts* 4 (1976), 102, no. 59 and pl. XXXII: about 350–300.

88 In this case,  $M^2G$  without a number would represent the year of the king's accession to the throne; similarly, this year was not numbered as a year of rule in Assyrian records; cf., e.g., D. D. Luckenbill, *Ancient Records of Assyria and Babylonia* (Chicago, 1927), I: 201, §557.

burial of treasure to a historical event. The history of this period is not well known and, besides, the reasons for the burial may be private (fear of thieves, for example). We can see that the thesaurization lasted a rather long time since the treasure was probably assembled during the first two thirds of the fourth century. Its composition is homogeneous since, except for the Athenian tetradrachm, it seems to include only Aradian staters. The fact that some coins are worn proves that the owners of the treasure had not selected the coins since he had also collected staters having much circulated.



Pl. I. The whole hoard.



Pl. II: Cleaned coins.  $\times 1.5$ .



7



8



9



10



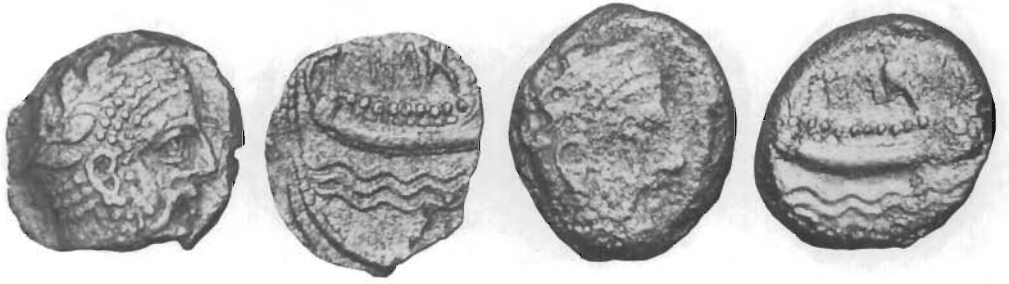
11



12



Pl. III: Cleaned coins.  $\times 1.5$ .



13

14



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16



17

18

Pl. IV: Cleaned coins.  $\times 1.5$ .



19



20



21



22



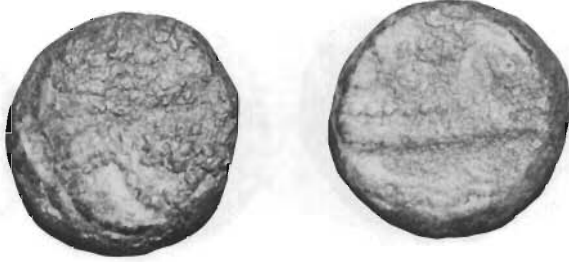
23



24



Pl. V: Cleaned coins.  $\times 1.5$ .



25



26

Pl. VI: Cleaned coins.  $\times 1.5$ .