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COINS OF PUNIC SICILY *

Part 3 **

CARTHAGE SERIES 2-4

Abbreviations

ANSCV	American Numismatic Society, Centennial Volume (New York 1958)
Bisi Stele	Bisi, A. M., <i>Le Stele Puniche</i> (Studi Semitici 27, Rome 1967)
Cintas Manuel	Cintas, P., <i>Manuel d'Archéologie Punique I</i> (Paris 1970)
CIS	Corpus Inscriptionum Semiticarum (Paris 1881-)
Crawford RRC	Crawford, M., <i>Roman Republican Coinage</i> (Cambridge 1974)
El Hofra	Berthier, A. and Charlier, R., <i>Le Sanctuaire Punique d'El Hofra à Constantine</i> (Paris 1955)
Gsell	Gsell, S., <i>Histoire Ancienne de l'Afrique du Nord</i> (Paris 1913-1928)
Harden	Harden, D., <i>The Phoenicians</i> (London 1971)
Hours-Miedan	Hours-Miedan, M., <i>Les Représentations figurées sur les stèles de Carthage, Cahiers de Byrsa I</i> , 1951
Kraay ACGC	Kraay, C. M., <i>Archaic and Classical Greek Coins</i> (London 1977)
Moscatti	Moscatti, S., <i>The World of the Phoenicians</i> (London 1973)

Introduction

The present article continues the treatment of the Carthaginian silver coinage, of which series I (horse/palm-tree) belonging to the years 410-390 B.C. was covered in the previous instalment (SNR 1974, 23 ff.). Here will be dealt with three further series: series 2 (head of goddess/horse with palm-tree, plates 1-9), series 3 (head of goddess/horse head with palm-tree, plates 9-21) and finally series 4 (head in Phrygian cap/lion and palm-tree, plate 22). Series 4, as discussed below, represents a parallel issue with part of series 3 and not a continuation of it. The final series 5 (Melqart head/horse head and palm-tree, here Fig. 1) will be covered in a subsequent article.

Series 1 terminated about 390 B.C., as was established in SNR 1974, 23 ff. A considerable interval must have followed before minting was resumed. It will be shown from hoard evidence that the coinage of series 2 can hardly have begun before about 350/340 - and thus more or less at the same time with the beginning of the regular gold series from the mint of Carthage itself. The size of the issues of series 2 and 3, which together form the bulk of the present article, while considerable is not extraordinary; and it may well be that the total resources of the Carthaginian state in

* Publication started in SNR 50, 1971, 25 ff. (part 1) and continued in SNR 53, 1974, 23 ff. (part 2). The present instalment (part 3) will be followed by the final article (part 4).

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Sicily were further augmented by the coinage of the city mint of Rsmlqrt (SNR 1971, 53 ff.) which also began to operate at about the same time. In addition, the mint of Panormos – SYS (SNR 1971, 38 ff.) – was active continuously from the late fifth to the late fourth century.

The period in question, 350/340 B.C., was that of the great Greek revival in Sicily under Timoleon who refounded Syracuse in 344. On the other side, Carthage was quick to see the challenge and mounted several great armadas in Sicily, remaining at open war with Syracuse until the battle of the Krimissos in 339. Perhaps even more significantly it was at this same period that Carthage concluded the second treaty with Rome (348 B.C.) in which her policy of «mare clausum» in the western Mediterranean appears to have been reasserted and strengthened – a sign that Carthage was in any case mobilising herself to a more active policy concerning her whole strategic position ¹.

After 339 conditions in Sicily returned to the status quo, with the Carthaginian frontier at the Halykos (mod. Plátani). There is no further sign of open conflict until the time of Agathokles at Syracuse (317–289) when once again Carthage was embroiled with the Greeks in a varied and dramatic series of hostilities including Agathokles' invasion of Africa, until once again peace was restored in 306.

From the beginning of series 2 of the Carthaginian coinage, minting continued without a break into series 3 which is marked by the appearance of the legend 'MMHNT (people of the camp), a variant of MHNT' which was common in series 1; this comes in around the time of the rise of Agathokles at Syracuse (317) and this series, though not always the full legend, continued until towards the end of the century, at least until the peace of 306. Coin hoards buried at the end of the fourth



Fig. 1



Fig. 2



Fig. 3



¹ Diodoros XVI. 66 ff. – For the treaty cf. Moscati 163 f.

century represent the coinage of Carthage as far as the end of series 3 along with the «quadriga» tetradrachms of Agathokles (Fig. 2). The subsequent phase both of Carthage and Syracuse is to be found only in later hoards containing together the Agathokles Kore/Nike and trophy coins (Fig. 3) and those of Carthage series 5 (Fig. 1).

Types

The basic type of the horse or horse's head with palm tree was discussed for series 1 (SNR 1974, 27) as symbol of Ba'al Hammon; this does not exclude the horse as symbol of Tanit as recently emphasised by C. Picard (Karthago XVII 1976, 104). The obverse of series 2 and 3 consists of the head of a goddess. She has often been identified as Tanit, the chief female deity of the Carthaginian pantheon²; for instance, Harden calls her «Tanit in the guise of the Sicilian Persephone»³. This may be so, though others prefer to regard her simply as Kore-Persephone⁴. Tanit «Pene Ba'al» (= the face of Ba'al) was the consort of Baal Hammon and by her title might be thought to have been inferior to him. That she was in fact the more important of the pair is clear from the religious dedications from Carthage itself and from numerous other sites, in which she is named first, before Ba'al (the opposite being exceptional, as at El-Hofra near Constantine)⁵. Were the head on the coins to be regarded as Tanit, it would seem at first sight to offer a convenient expression of the same concept, the supreme goddess accompanied on the reverse by the symbols of Ba'al Hammon, the horse and palm.

In fact the matter is far from simple. A preliminary caution seems imposed by our comparative ignorance of how Tanit could be expected to be shown, at this period, in terms of any Punic iconography; here there is a considerable dearth of evidence, allowing for the fact that the sign so commonly represented on the numerous stelai is generally regarded as a symbol of Tanit, whether in its more geometrical form or a more humanised form. In any case that sign has been much discussed and good authorities have expressed great reserve as to its precise origin and significance. Anyhow the so-called «sign of Tanit» hardly helps to envisage any possible iconography in terms of figured art. What is clear however is that in Greek terms we have little option but to think of the goddess whose head is shown on the coins as being any other than Kore-Persephone, as Acquaro has recently argued⁶. At least in series 2 there are a number of issues, including the first ones of the series, where particular

² However Cintas, Manuel 313 questions whether Tanit and Ba'al Hammon were necessarily the chief deities of Carthage: cf. J. G. Fevrier, *Cahiers de Byrsa* VI 1956, 13 ff., for the view that the supreme deity was Ba'alsamin as the equivalent of Zeus in the «oath of Hannibal».

³ Harden 158.

⁴ Müller; recently Acquaro, note 6 below.

⁵ El-Hofra, *passim*, esp. p. 183.

⁶ E. Acquaro, *Sulla lettura di un tipo monetale punico*, RIN 1971, 25 ff.

emphasis is given to the corn-ears of the wreath; and this makes the point very clear, especially by contrast with the rarity of this feature at Syracuse whence most of the prototypes are derived⁷. The same head with corn-ears dominates the important gold coinage which started at the Carthage mint in the mid-fourth century and continued to be the exclusive form of the deity on all subsequent Carthaginian coinage⁸.

As regards Kore-Persephone, it is further to be recalled that these deities were worshipped at Carthage after 396 B.C., presumably in their Greek cult⁹. If Persephone was given a Punic name, we do not apparently know it; on the well-known stele from Carthage showing a figure of Persephone in Hellenistic style, dedicated by Milkyaton the suffete, the goddess is identified purely by the cornucopiae which she carries, and is not named in the accompanying inscription¹⁰. We lack evidence apparently as to which precise Punic deity would have been regarded as the nearest equivalent to Persephone. Tanit herself included a definite element of the fertility goddess and to that extent might conceivably be represented in Greek terms as Kore. But evidence is lacking.

A further point is that in the coin series here covered many of the most typical heads are evidently not of Kore after all, being imitations of the Syracusan Arethusa type in very varying degrees of faithfulness. It is possible to wonder whether these can necessarily be deemed to signify much more, intrinsically, than for instance the Athena heads on coins of the Himyarites¹¹, namely the continuance of a customary coin design simply as such.

The types of series 4 will be discussed separately below (p. 25).

Legends and mint

Before considering the question of the mint, it is necessary to summarise the occurrence of the legends on the coins. First comes an issue inscribed QRTHDST (series 2a, 49–60). Next is an issue bearing only the single letter *mem* (series 2a, 60–67). After this there is no legend for the rest of series 2 (the only exceptions being the unique *btw'l* on series 2a, 85, and the pair of letters *beth beth* on series 2c, 91–100; all of these are most probably abbreviations of personal names). In series 3a there is the regular legend 'MMHNT («people of the camp»), varied only on 176 and 187–189 to S'MMHNT; series 3b has M M (*mem mem*); series 3c is a single issue with the letter '*ayin*'; and then series 3c has the single letter *mem*. Series 4 has once again the S'MMHNT legend found on series 3a with which, as will be shown below, it is in any case closely associated.

⁷ Tudeer 46, 47, 66 are the only heads with corn-ears in the Syracuse series.

⁸ Jenkins-Lewis group 2 and especially group 3 onwards.

⁹ Harden 81.

¹⁰ Harden pl. 45; CIS I. i, 176.

¹¹ BMC Arabia etc. pl. VII.

The legend QRTHDST had been fairly regular in series 1 (for which see Part 2 of this publication) but now appears only at the very beginning of series 2 and then never again in the entire Carthaginian coinage. The legend MHNT (= «camp») was likewise common in series 1: the form 'MMHNT' (= «people of the camp») ^{11a} now dominates series 3 which is thus clearly designated, as was series 1, as the mint of the «camp», that is of the army. It seems highly probable that this designation belongs by extension to the rest of the coinage, even where, as in series 2 largely, there is no legend of any kind. The continuity of the mint at least is sufficiently assured by the die-link which joins series 2d to series 3a (O46) and again the link from series 3a with 'MMHNT' to series 3b with M M (O63). Moreover it seems overwhelmingly probable, in default of any other plausible suggestion, that the single letter M in series 2a and in 3d should also stand for the word MHNT. The letters M M of series 3b are not at first sight quite so simple to explain; Müller suggests that these stand for *mbnt* and *mbsbm* respectively ¹², but this seems unconvincing, and I understand that there is little reason why the first *mem* should not be regarded as a prefix to the word *mbnt* for which the second *mem* could be the initial letter, thus *mm(bnt)* ¹³.

It seems clear enough that the mint is that of the «camp» throughout. A coinage so specifically named as a military issue is something virtually unique in the ancient world. Of course there must have been many other coinages at various times and places which were in fact military issues, without this being expressly stated ¹⁴. For instance it is virtually certain that a number of military coinages were issued under the Roman Republic, though none of them is labelled as such in so many words ¹⁵. There is one possible analogy, from Parthian coins of the first century B.C. attributed to Gotarzes I (c. 90–80 B.C.) ¹⁶ which carry a supplementary legend ΚΑΤΑΣΤΡΑΤΕΙΑ – an otherwise unattested word but one which conveys a clear suggestion of a «camp mint», even if it should be the name of a town so named after the royal camp.

To find perfectly explicit and unquestionable parallels for the Carthaginian MHNT however, it is necessary to go to the later Islamic world. There coins bearing the formula «darb urdu», viz. the Royal Camp Mint, is to be found on coins of the

^{11a} Acquaro in RIN 1974, 79 f., discusses the distinction between 'M («popolo») as in 'MMHNT and B'L (cittadino») as in B'L SYS etc.

¹² Müller II p. 21; *mbsbm* (= quaestores) does not occur except in series 5, the Melqart head/horse head coinage (Fig. 1), to be dealt with in the subsequent instalment of this publication.

¹³ Advice from L. Mildenberg; cf. Friedrich, Phönizische Grammatik, p. 198–200.

¹⁴ E.g. Kraay ACGC 280–281 for issues by Persian satraps one of which with the type of a hoplite comes close to being an explicit military issue. Naturally the coinages associated with Hannibal in Italy, though less explicit, can be regarded in the same light (for these, cf. Robinson, NC 1964, 37 ff.). Another coinage of a military nature was that of the «Libyans», associated with the revolt of the mercenaries (241–238 B.C.); on some of those the letter *mem* appears, which it has been suggested may stand for MHNT (Robinson NC 1953, 30).

¹⁵ Crawford RRC 604 etc.; the phrase «moneta castrens» belongs solely to literature (Lucan), cf. Babelon, Traité I, i 850.

¹⁶ Sellwood Parthia, type 30/12 (p. 79).

Mongol Great Khans in the thirteenth century, on coins of Shah Isma'il the first Safavid monarch of Iran (1502–1524) and further on coins of the Mogul Empire¹⁷. Something of an analogous mint organisation is also to be found in the later Roman empire, where after 368 the coinage of gold was carried out not by the regular local mints of the empire but was concentrated on the imperial *comitatus*. In these circumstances the mint would not have had a permanent fixed location but would have moved about with the imperial court¹⁸. This would of course apply equally to the Camp mint in the Islamic instances cited.

Naturally these later parallels, interesting as they are, come from quite other times places and circumstances from those which concern us in the case of the Punic coins. If they have any relevance, it must be simply by suggesting that a military mint is not by definition one which has a permanent fixed location, serving a particular locality for general purposes, in the way that a city mint was designed to do. This need not necessarily imply that the Carthaginian camp mint was forever on the move and indeed it is much more probable in the historical circumstances that it would normally have resided at Lilybaion, the main Carthaginian base in Sicily. However it seems useful to keep in mind the notion that the camp mint was not of its nature tied to a particular place, and this helps to envisage the possibility, mentioned in Part 2, that it may originally have been set up at Carthage itself and only later transferred to Sicily. If so, the question at what point the move occurred is still an open one. In Part 2 it was suggested that the move could have occurred in the course of series 1 and thus before c. 390 B.C. On the other hand such a move may only have effectively taken place when the mint resumed operations at about 350/340 B.C. with series 2 and the introduction of the «Kore» head. The legend QRTHDST which there appears need be no argument to the contrary, since the name, denoting «New city»¹⁹, most obviously and basically can be taken to describe the authority under which the coins were struck without necessarily implying anything as to the place of mintage. It is also possible that «New city» may be an expression of some ambivalence conveying not exclusively the notion of «Carthage» but that of Lilybaion, the new city founded after the destruction of Motya in 397 B.C.

In fact, if it is correct to suppose that the prolific gold coinage of the Carthage mint was likewise being started at about the same period as our series 2, c. 350/340

¹⁷ For this information and references I thank my colleague Nicholas Lowick: Mongols – C. J. Rodgers, Catalogue of the Indian Museum Calcutta, part IV, 1896, no. 9759; Iran – twelve-tankah piece, B. M. Yearbook 1975 (forthcoming); Moguls – Whitehead, Punjab Museum Catalogue II, p. xxxviii.

¹⁸ J. P. C. Kent in Essays Harold Mattingly 190 ff. – I thank him for information and discussion of this point.

¹⁹ Originally the «new city» in Africa as the name of Carthage, founded 814 B.C., as contrasted with the «old city» (TYQH) as the name of Utica, founded in 1110 B.C.; cf. Albert Dietrich, Phönizische Ortsnamen in Spanien, Abhandlungen für die Kunde des Morgenlandes, Leipzig 1936, 31 citing Movers etc.

B.C.²⁰, it becomes at once clearer that the latter must have been minted in Sicily and not at Carthage, if only because of the total disparity in style and in every way between the gold issues and the silver coinage here discussed.

It seems on the whole most probable then that the Camp mint was, at least for the period here under discussion, operating in Sicily and in practice this should mean normally at Lilybaion. It was argued in Part I that this should exclude the possibility of another mint, which would be that of the city, having been in operation also at Lilybaion. It seems difficult to prove anything about this one way or the other, but it is appropriate to mention here the suggestion, made recently by Robinson²¹, that perhaps the mint named RSMLQRT, often in the past attributed to Herakleia Minoa or to Kephalaion, might in fact be of Lilybaion. The question of its location remains a difficult one and evidence is still lacking. It need only be remarked further that the die-link between a coin of the Carthaginian type (Part I plate 21.73) and the Rsmllqrt series can prove nothing to the point; the «Carthaginian» type in question, with a walking horse and palm-tree on the reverse, is such that it will not fit at all into the Carthage series 2 and seems unlikely even to belong to the same period. It must be regarded as something quite irregular.

Commentary

Series 2a (49–85) Plates 1–4

This sequence as here arranged begins with a «Kore» head, equipped with prominent corn-ears, though from 77 onwards this is replaced by an Arethusa head of the Syracusan type. The first «Kore» heads may be thought to reflect somewhat the style of the Kimon decadrachms, at some remove; and a similar style is found on gold coins (whose date as given by Jenkins-Lewis may need to be a little lowered if the dating of the present silver series is acceptable²²). After the first dies O 13–O 15 appears a head of much more «punic» style (O 16 etc.); then O 21–22 are again more Greek. With O 24 we have a fairly close derivative of the Euainetos Arethusa type, followed by other versions of the same; O 24 itself gives much the same sort of relation to the Euainetos original that we find in the fourth century in mainland Greece as at Phe-neus, Messene or the Locrians of Opus²³, a relatively faithful copy of the prototype but reinterpreted in typically fourth century style.

The internal sequence of this series is not much attested by die-links and could in principle be varied if there seemed any particular reason to do so. The placing first of O 13 etc. is in accord with the fact that these are the only coins (49–60) of series 2 –

²⁰ Jenkins-Lewis group 3, and p. 22 ff.

²¹ Robinson, *Gulbenkian Catalogue* (Lisbon 1971) p. 70.

²² Jenkins-Lewis group 2 «375/360».

²³ Kraay *ACGC* 321–322, 406.

and indeed the only ones in the whole Carthaginian coinage after series 1 – to show the legend QRTHDST. The letter *mem* present on 61–67 is as discussed above (p. 9) plausibly to be regarded as an abbreviation for MHNT, as later in series 3d. The only other inscription present in series 2a is the BTW'L of 85; this seems best regarded as a personal name, though there is no exact parallel for it among the Carthaginian personal names collected by Halff²⁴. Müller²⁵ rightly rejects a theory that it stands for the name of a city, e.g. Eryx, and supports the interpretation as a personal name from the Old Testament Betuel, a nephew of Abraham (in Genesis 22, 22).

Confirmation that series 2a should in fact be placed first of series 2 may be obtained from the evidence of hoards. The hoards which are relevant are: Nissoria (= Leonforte, IGCH 2133), Gibil Gabib (IGCH 2132) and a new find here referred to as hoard G²⁶. The burial date of each of these is approximately the same, namely c. 340/330 B.C., and each of them contains the first issues of Corinth period V – Nissoria has the E and N issues, Gibil Gabib the N issue, hoard G the E issue. The date of these hoards is the same as for the hoards from Centuripe (IGCH 2131) and Licata (IGCH 2130). The Nissoria hoard included a specimen of Carthage 75, Gibil Gabib specimens of Carthage 70 and 74, while hoard G had specimens of 17 (series 1) with 57, 71 and 74 of series 2a. This means that c. 330 B.C. is the terminus ante quem for Carthage down to no. 74. That being so we could not plausibly extend the beginning of series 2 further back than the decade 350/340. The coinage may thus well be connected with the preparations for war which belong to that decade.

Series 2 b (86–90) Plate 4

By contrast with the final group of series 2a, we now have a return of the «Kore» head with corn-ears, and the same time wearing a pendant necklace of the kind adopted definitively for the gold and electrum issues of the Carthage mint. At the

²⁴ Halff, G., *Onomastique punique de Carthage*, *Karthago* XII 1965, 63 ff.

²⁵ Müller II 81 f. Bisi in *Annali* 16–17, p. 94, n. 94, doubts Müller's explanation and suggests that b t k 'l would be equally acceptable as a reading.

²⁶ A small correction: the Gibil Gabib hoard (IGCH 2132) did not as there stated contain three *Rsm1qrt* coins but one (Jenkins part 1, SNR 1971, p. 63 no. 18) and two *Thermai* (Jenkins part 1, p. 72, no. 1). – Hoard G appears in essentials to have contained the following: *Motya*: as Jenkins part 1, no. 47. *Panormos-sys*: as Jenkins part 1, nos. 20, 23, 27, 37, 38, new combination of obv. 10' rev. 30, new combination of obv. 11 rev. 33 (an important item which provides a definite link between the «swan» group nos. 36–39 and the *sys* group nos. 40–41), 44, 46, 48, 50. *Rsm1qrt*: as Jenkins part 1, nos. 26, 27, 29. *Thermai*: as Jenkins part 1, no. 4. *Carthage*: as Jenkins part 2, no. 17 and part 3, nos. 57, 71, 74. – It was reported that the same hoard contained a number of fifth century Sicilian coins and some decadrachms, also specimens of the Syracusan tetradrachms of the Kimon (Tudeer 105) and Euainetos (Tudeer 106) types; whether or not this was so, the burial date should be of the 330's, allowing for the presence of Corinthian pegasi down to period V letter E (see above).

same time, on the silver coins, the head is accompanied by dolphins, deriving no doubt from the Syracusan prototype²⁷. On two of the dies we also have the well-known «sign of Tanit», a religious symbol familiar from the numerous Punic stelai of Carthage and elsewhere (e.g. Figs. 5–7)²⁸. The symbol occurs either in geometrical forms, as here²⁹, or sometimes on the stelai in a more humanised form (Fig. 4) holding up a caduceus in one of the «arms»³⁰; the origin and significance of the symbol have been much discussed. The present occurrence of it is the only one in the series of coins here studied though there are rare and isolated occurrences of it elsewhere in the Carthaginian coinage, and at Panormos³¹. It might be thought that the presence of the sign of Tanit beside the head on our coins should indicate that the head is to be identified as that of Tanit. This would not be strictly logical, in view of the comparative obscurities surrounding the possible significance of the sign, as also the fact that elsewhere it can, on the coins, accompany a quadriga (at Panormos) or a horse (at Carthage). At El-Hofra, where exceptionally Ba'al Hammon takes precedence consistently over Tanit, it seems to be as much a sign of Ba'al Hammon as of Tanit³². Above all, the spasmodic manner in which Punic religious symbols seem to be placed on the coins hardly permits us to associate this sign with the head exclusively in such a sense as to identify the head as Tanit.

At the same time on no. 86 we have a rayed disk, a definitely solar symbol which is the attribute of Ba'al Hammon³³, in this instance supporting the interpretation of the horse type already discussed in part 2, series 1 of this publication. Then the flower (a lily?) also seen on no. 86 finds a partial analogy to various such flower symbols on Punic stelai, for instance the lotus³⁴. Most frequent in its appearances on the stelai is the caduceus, here present beside the horse on nos. 87–90. On the stelai it often accompanies the «sign of Tanit» and is undoubtedly an important symbol in Punic religion, associated with Tanit and Ba'al Hammon (Figs. 4–7).

Returning to the head, the other characteristic here is the pendant necklace, a feature not developed further in the present coinage (and one which, like the corn-ears, only recurs at nos. 120–121), where generally a «Hellenising» head copying the

²⁷ It is interesting that the dolphin is also found on Punic stelai and thus has its place in the symbolism of Punic religion (cf. Hours-Miédan p. 52 and plate xxiii, El-Hofra p. 202 f.).

²⁸ Hours-Miédan p. 26 ff.; El-Hofra p. 181 ff.; Bisi Stele *passim*; Cintas in *Archaeologia Viva* «Carthage, its birth and grandeur» vol. 1, no. 2, Paris 1968/69, p. 4–11.

²⁹ The form shown in coin 86 (O 29) is that of Hours-Miédan plate VII, 9; that of coins 88–90 (O 31) that of her plate VII, 0.

³⁰ E.g. El-Hofra plate VI, A.

³¹ Jenkins-Lewis nos. 2–3; Ferron, *Africa I*, plate II, 2, 5, 6; Paris *Luyens* 3773 (mid-third century), do. 3779 (second century); Panormos, Jenkins part 1, plate 10, 39.

³² El-Hofra p. 183.

³³ El-Hofra p. 190; a sun above a «Tanit», El-Hofra plate XXIV, D. – a sun-disk with sixteen rays is shown within a crescent on one stele from Carthage, Hours-Miédan plate XIII, g, but this seems unusual, the normal crescent and disk standing for the moon and planet Venus, cf. note 54 below.

³⁴ Hours-Miédan plate XXI.

Euainetos prototype holds the field, in company with a number of «Punicising» adaptations. The style of the head with both corn-ears and pendant collar was however taken up and constantly used for the gold coinage of the Carthage mint ³⁵, and became the established iconography for almost all the later Carthaginian coinage.

The place of series 2 b in the series as a whole is here deduced merely by inference from the likely positions of the other series. Series 2 a, as we have seen, is satisfactorily indicated as such by hoard evidence; while series 2 c and 2 d are attested as such by the Megara Hyblaia 1949 hoard, and series 2 d must in any case come last owing to its die-linkage with series 3 a. Series 2 b however is not represented in any relevant hoard ³⁶. At first sight one might wish to connect the corn-ears and pendant necklace of series 2 b with nos. 120–121 of series 2 c; but we have placed that latter in series 2 c as continuing the crescent symbol from 114 ff. of series 2 c and the prominence of the caduceus in series 2 b is equally an argument for placing these coins, as here, directly before series 2 c where also the caduceus is at first prominent.

Series 2c (91–121) Plates 5–7

The sequence of this group hinges on the connexion between 112 and 113, where the relative condition of the reverse seems to give a clear indication. The rather pure style «Euainetos» head of O 39, associated with reverses having the crescent symbol, is thus preceded by other obverses of a rather rich fourth century style. Of these the first are O 32 and O 33, with the thymiaterion symbol, corresponding to reverses with the Nike, caduceus and letters H B. A strange offshoot of the latter is 100, of inferior style and with Greek letters added on the reverse; an issue which hardly fits comfortably anywhere. At the end of this series have been placed 120 and 121 on the grounds that they continue the crescent symbol from the preceding issues, though otherwise the heads with corn-ears and pendant collar would seem naturally closer to series 2 b (86–90).

The relative place of series 2 c in the coinage as a whole seems clear enough. The next series, 2 d, joins directly to series 3 a (141–142), and the Megara Hyblaia 1949 hoard ³⁷ gives a homogeneous representation exclusively of series 2 c and 2 d together, which seems to show that 2 c must be adjacent to 2 d and if so before it.

In this series occur some symbols which, although not without Greek parallels, are really of significance for Punic religion, as is shown by the symbols which are constantly used on Punic stelai connected with the worship of Tanit and Ba'al

³⁵ Jenkins-Lewis group III onwards.

³⁶ Specimens of coin 89 in the Palermo hoard (cf. p. 24), of coin 90 in the Megara Hyblaia 1966 hoard (IGCH 2180) and of coin 86 in the Mineo hoard (IGCH 2184) give no indication; all these being hoards of the end of the fourth or early third century.

³⁷ Megara Hyblaia 1949 (IGCH 2135): series 2c, 91, 91, 94, 106, 116; series 2d, 124, 126, 126, 129. The tenth coin is a problem, and could be an unofficial imitation.

Hammon. Most of the stelai of this kind appear to be of the fourth century and later, though the close chronology of this class of material is by no means so precise as that of for instance the coins³⁸. One symbol, the so-called «sign of Tanit», has already been mentioned in connexion with the coins of series 2b, where this sign makes its appearance. The precise significance and derivation of such symbols is often far from clear.

The *thymiaterion* appearing on coins 91–100 is an incense-burner of similar kind to the Greek equivalent as depicted for instance on coins of Corinth³⁹. In origin it seems to be an object which can be traced back at least as far as seventh-century Assyrian art⁴⁰. Its first appearance on Punic stelai is apparently not earlier than the fourth century⁴¹. There are good examples of it on stelai of the fourth century from



Fig. 4 Punic stele from Constantine (after Moscati L'Épopée des Phéniciens, pl. 16; in the Louvre).

Fig. 5 Punic stele from Lilibaion (after CIS 138; in Palermo).

³⁸ In general, see the works of Bisi, Hours-Miédan and the El-Hofra publication.

³⁹ Ravel Corinth period IV series vii, xiii, of the fourth century.

⁴⁰ E.g. on the relief of Assurbanipal (669–626 B.C.) from Kuyunjik: Frankfort, Art and architecture of the ancient orient, London 1956, pl. 114.

⁴¹ Bisi 95 etc.; Picard as quoted by Bisi 64.

Carthage and of the third century from Lilybaion (Fig. 5)⁴². It is of interest to note that the name of Ba'al Hammon is interpreted as «Lord of the incense altar»⁴³. This might suggest that the thymiaterion is specially connected with Ba'al Hammon. But it is to be noted that on the coins (91–100) it is shown beside the female head of the «Arethusa» type – who as mentioned above is unlikely to stand for Tanit. As in the case of the «sign of Tanit» included on coins 86 and 88–90 of series 2 b we have really to dissociate the symbol from the type as having its own separate significance.

The *caduceus* is seen on coins 91–98 (as previously on 87–90), here specifically in conjunction with a flying Nike. The caduceus as such, in its Punic context, has been seen by some as having extremely ancient origins and possible connexions with Babylonian symbols⁴⁴. Others allow that it may after all have been taken over from



Fig. 6 Punic stele from Carthage (after Antonielli, *Notiziario Archeologico* 1922, tav. 3).

Fig. 7 Neo-Punic stele from El-Hofra (after Berthier-Charlier pl. xxii).

⁴² Hours-Miédan plate XIX a has one flanked by palm-trees. Bisi fig. 45 shows a stele from Carthage depicting a priest sacrificing before a thymiaterion (IV–IIIc); the Lilybaion stele CIS 138 is of the third century.

⁴³ Moscati 178.

⁴⁴ Hours-Miédan p. 35.

the Greeks⁴⁵. In any case it is a symbol of the greatest importance and frequency on the Punic stelai (Figs. 4–7) often associated with the sign of Tanit; sometimes the handle of the caduceus takes the form of the trunk of a palm-tree⁴⁶. On some monuments the caduceus is held in the hand by a figure of Ba'al Hammon, or by a semi-humanised (Fig. 4) Tanit. Those who admit a possible classical origin for the Punic caduceus have usually assumed that it is taken over as an attribute of Hermes⁴⁷. This is possible, of course, but it is interesting to note that it is equally possible as an attribute of Nike. On the present series coins 91–100 have the caduceus exclusively in conjunction with Nike, and this connexion is even more apparent in the coins of series 1 where the flying Nike (as on O 3) carries a caduceus with her wreath. The caduceus as an attribute of Nike is further attested on Greek coins such as those of Kamarina and Terina⁴⁸.

Also seen on coins 91–100 are an enigmatic pair of Punic letters H B, which are almost impossible to elucidate. Müller's suggestion⁴⁹ that they are in some way mint names (e.g. = «Hybla» and «Abakainon» – both towns in eastern Sicily and far from the Punic zone!) needs to be mentioned only as a curiosity. On the whole it seems more likely that these letters stand for a personal name⁵⁰ as in the case of BTW'L on coin 85; if so perhaps the Greek letters which are added on coin 100 stand for some Greek equivalent. Once, on coin 99, the Punic letters are written BH instead of HB but this may be due to the fact that here the whole type is reversed. It may be mentioned that single letters which are found on certain stelai, among them B, H and T have there been interpreted as the initials of deities – Ba'al, Hammon, Tanit⁵¹; but this hardly helps with the coins, and in any case one could hardly imagine the name of Ba'al Hammon being written as HB (Hammon Ba'al).

The *poppy* is a prominent symbol on the obverse of coins 101–110 and again on the reverse of 117–119. It does not, apparently, occur as a symbol on the Punic stelai where there is quite a variety of other vegetable symbols such as the pomegranate⁵². It is to be presumed that the poppy symbol is Greek, and if so perhaps as a symbol of

⁴⁵ Bisi 204 note 4 (citing Picard); El-Hofra p. 184.

⁴⁶ E.g. Hours-Miédan plate IX. It is interesting too to see that the sign of Tanit itself sometimes takes on the partial form of a caduceus, Hours-Miédan plate VII, v; an even more curious combination is shown there plate IX, h and XI, d, where a palm-tree trunk terminates at the top in form of a caduceus, with two «arms» each holding a sign of Tanit.

⁴⁷ On Hermes in the Punic context and his equivalent Sakon, C. Picard, *Karthago* XVII, 1976, 114 ff.

⁴⁸ Westermark-Jenkins, *Coinage of Kamarina* (London 1977) no. 167 and notes 347–348. – Another caduceus beside the quadriga on Rsmlqrt coin 23 (part 1), whether or not connected with the Nike above.

⁴⁹ Müller II, p. 84.

⁵⁰ There does not seem to be a satisfactory example in Halff's repertoire, but in El-Hofra no. 23 there is a personal name on a neopunic stele provisionally read as Habdis (ḤBDS), of which the first two letters at least are clear.

⁵¹ El-Hofra pl. XLII and p. 208 f.; Hours-Miédan p. 27 and plate VI, f.

⁵² Hours-Miédan plate XX.

Persephone; for instance on the Syracusan head by Phrygillos which wears a wreath of corn-ears there is also a poppy head worked into the wreath ⁵³.

The *crescent*, on coins 114 etc. of series 2c, inevitably recalls the frequent presence on the stelai of a symbol consisting of a crescent containing a disk. This latter is interpreted as a symbol of Tanit, consisting of the image of the planet Venus surmounted by the lunar crescent ⁵⁴. A crescent alone, without the disk, is extremely rare on the stelai though there are examples; one of these, from El-Hofra ⁵⁵, shows a crescent with the points upwards, whereas on our coins the crescent always has the points downwards as is usually the case with the crescent-and-disk ⁵⁶.

Series 2d (122–141) Plates 8–9

This group is mainly characterised by an almost total absence of symbols letters or legends of any kind. Also characteristic is that the horse on the reverse is usually shown in action, either leaping, prancing or stepping, once merely standing. The goddess' head is mostly of rather good Greek style and of the «Arethusa» type; only O 44 has a more «punic» flavour. The only special marks are a pellet on O 43 recalling distantly the Euainetos decadrachms, Gallatin J III, though here the pellet is set in front of the face instead of below the chin as at Syracuse; an analogy for this is seen at Panormos ⁵⁷. Then there is on O 45 the shell symbol likewise deriving ultimately from Syracuse, Gallatin E I, but transferred from behind the neck to below the chin; a closely similar die again with the shell occurs in series 3a (O 49).

The relative positions of the various issues composing series 2d are not positively indicated by any links, each sub-group being discontinuous with the others. But we know that the last issue, coins 135–141, must be the last because its obverse die O 46 leads without a break into series 3a; and the close similarity of 133–134 to 135 etc. is such that it seems very plausible to put 133–134 directly before 135. The other issues 122–127, 128–130 and 131–132 would be susceptible of some variation, were there any reason for it. In fact the relative positions here given are well consistent with the

⁵³ Tudeer rev. 29: the poppy is very clear in Hirmer 107. A poppy symbol occurs at Corinth, Ravel period V series i. – The poppy could be an attribute of Aphrodite, as shown by the statue at Sikyon by Kanachos (Pausanias II, 10, 5); to claim any Punic significance on that score would involve emphasising the equivalence of Aphrodite with Astarte, as attested by the cult at Eryx (cf. CIS 135, 140; cf. also CIS 115 mentioned below p. 29).

⁵⁴ Hours-Miédan p. 37; her plate XIII e shows a stele with a crescent-and-disk on the left and a rayed sun on the right. Her plate XIII g seems to combine the two concepts, showing a sun-disk within a crescent. – On a stele in G. C. Picard, Cat. Musée Alaoui I 1955 Cb 577, a «Tanit» forms a single entity with a crescent-and-disk above, the disk becoming the «head» of the Tanit.

⁵⁵ El-Hofra plate VI A.

⁵⁶ It appears on third century coins, e.g. SNG Copenhagen 271, 274.

⁵⁷ SNR 1971 plate 13, 63; cf. also Morgantina, E. Boehringer ZfN 1935, pl. IX, 3; perhaps also of this period.

showing of the Megara Hyblaia 1949 hoard, which as mentioned above (p. 14 and note 37) included specimens of series 2 c along with 2 d; and those from series 2 d are consistently from the earlier issues, namely 124, 126 (2) and 129. The same hoard is vital for our estimate of the absolute date of series 2 d. Consistently with the later stage of the Carthage coins included, as against the Nissoria hoard and others mentioned in connexion with series 2 a above (p. 12), the Megara Hyblaia 1949 hoard also contained some later Corinthian issues, those with Δ and ΑΔ. The Nissoria hoard and others of that phase, it will be recalled, contained only Corinth E and N, the first issues of Corinth period V⁵⁸, and are to be dated about 340/330 B.C. It would be appropriate to suggest for Megara Hyblaia 1949 a date of about 330/320 B.C.⁵⁹. In that case, as the final issues of series 2 d are missing from the Megara Hyblaia hoard, it seems hard to think of a date before 320 for the end of series 2 d and the beginning of series 3 a, and the transition could well be several years after that.

Series 3 a (142–206)

As just stated, the transition to series 3, which develops directly out of series 2 using the same obverse die (O 46) should be dated to about 320 B.C. or the years following, in other words to the first period of Agathokles' tyranny at Syracuse (317–314). At first Carthage under Hamilcar seemed the abettor rather than the opponent of Agathokles, until the treaty of 314; but then there was a change, when Hamilcar was overthrown and replaced by another Hamilcar, son of Gisgon, who seems to have started on active preparations against the Syracusan tyrant, culminating in the victorious battle at Eknomos in 311 which left all Sicily, apart from Syracuse itself, in Carthaginian control for the time. In the light of the new active policy at Carthage⁶⁰ it is significant that the prolific series 3 begins with the issue where the legend 'MMHNT' comes into prominence as if to underline the purpose of this new coinage. As will be shown below (p. 25) at this same time belong the coins of series 4, which may well have been connected with the same occasion.

The first obverse die O 46, carried over in worn condition from series 2 d, is of an elegant Greek style followed on subsequent dies until 166; in one case (O 49) with the same shell symbol found on die O 45 of series 2 d. In contrast to this series of fine Greek-style dies, from 166 onwards other styles, plainer and less elegant, take over;

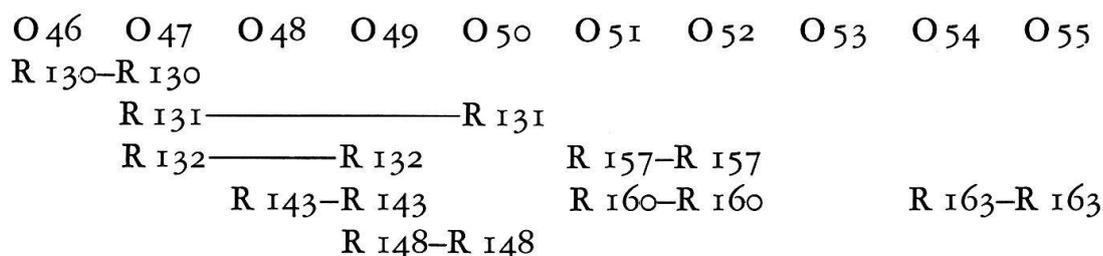
⁵⁸ The sequence of the issues of Corinth period V was already discussed by the writer in ANSCV, 367 ff. and on the whole seems confirmed by the synoptic evidence of hoards (among which that of Pachino 1957, IGCH 2151, is important as one of the very few sizeable hoards of which we have adequate details, published by di Vita in *Annali* 1958/59). With one small modification, I would repeat the probable sequence as follows: E N Δ ΑΔ Α Γ I AP ΔI AY ΔO.

⁵⁹ IGCH 2135 «350/325» would now seem to me to suggest a date a shade too early, as indeed does that of Vallet-Villard, «vers le fin du 3^{me} quart», viz. c. 325; cf. part 1, p. 43 for a mention of this same hoard with regard to the Panormos series.

⁶⁰ Cf. e.g. Gsell 3, 18 ff.

of these it seems clear that O 50, 52 and 55 might be by one hand, and O 53, 54 are closely related to these. O 51 stands somewhat apart in style, being the only die in the whole of series 3 where the head faces to the right; simultaneously the horse's head on R 156 also turns to the right and on this and two other reverse dies the legend is given in the form S'MMHNT, otherwise without parallel in this series. As will be seen below, there are analogies with one of the issues of series 4.

The scheme of die-linkages shows that the plainer style of O 50 was brought into use at the same time with the finer Greek style of O 46-49:



Following on this group come O 56-57 (linked by R 171) and then O 58-60 all of which display an arid and formal style different from all the previous dies. Finally the good Greek style returns briefly, linking on to series 3 b. Although both obverse and reverse of 203-205 would intrinsically go better with the earlier part of the series it seems impossible to fit them in there, quite apart from the fact of the direct connexion with series 3 b attested by O 63.

Each of the main different obverse styles seems to have a corresponding style of reverse. The reverses which go with O 46-O 49 are quite distinctive and two of them overlap with O 50. However the style of O 50 must correspond with that of the reverse (R 149) which comes in at no. 168; it is considerably less elegant and notably has the legend written in quite a different hand and in larger letters. This style of reverse is typical until 189, with the exception of the reverses which must be by the same hand as O 51 (R 156, 158, 159). With O 56-57 there is another distinctive reverse style (e.g. R 168), and with O 58-60 yet another (e.g. R 172); the connexion between these however is demonstrated by the use with O 56 (no. 190) of a reverse (R 167) which could by style equally well belong with O 58-60.

Few incidental details seem to call for notice. There is a dearth of symbols except for the shell already mentioned (on O 49), and on O 56 a sign that is probably rightly described as a «swastika». The latter in a more normal form is not unknown on other Siculo-Punic coins (e.g. Panormos tetradrachm 70), and, as a recognised solar symbol appearing for instance with the head of Apollo at Rhegion⁶¹, is not unexpected in a Punic context in view of the importance of Ba'al Hammon as sun-god in Punic religion. However this sign as it occurs here has a very peculiar form, almost like a letter *mem* but if so strangely deformed; in fact the interpretation as a swastika is almost certainly correct though it is difficult to find a parallel except from

⁶¹ Herzfelder, *Les monnaies d'argent de Rhegion* (Paris 1957), 98.

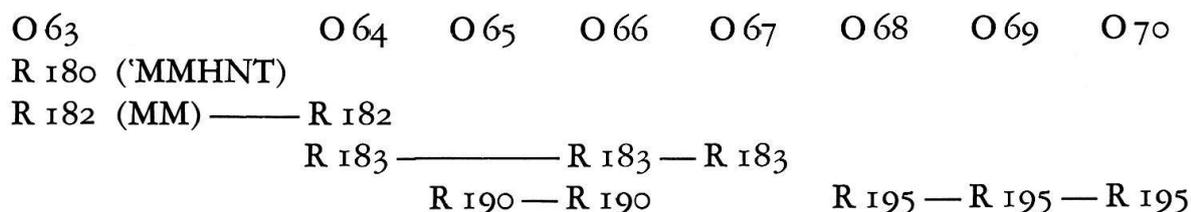
a much later period – a stele from El-Hofra of the neopunic period ⁶² does show a swastika symbol rendered as a reversed S with a crossbar, similar to the sign on our obverse O 56 (Fig. 7).

Series 3b (207–228) Plates 16–18

These issues lead directly out of series 3a, the first reverses with the letters M M being linked by a common obverse to the 'MMHNT' coins. For the rest of series 3b there is no further revival of the Greek style seen in O 63, the die which links the two series, and the remaining issues show little homogeneity. O 64 initially appearing in an unfinished state with only one dolphin, then completed by the addition of two more, is a rather chubby and agreeable style, while O 65 and 66 though not dissimilar look rather more serious and formal. The odd proportions and expression of O 67 are such as to prompt the description «Punic» style while O 68 and O 69, more expressive, seem likewise more Greek. These three dies are all marked by the appearance of a caduceus on the obverse; which as remarked above regarding series 2c is an important religious symbol frequently found on Punic stelai, though very possibly of Greek origin. Finally O 70 is again of a style that can only be called Greek, though more meticulous and detailed.

Among the reverse dies there seem to be three main styles. The first is exemplified by R 182, the horse's head rather small and compact; the second by a more exuberant treatment as in R 187–188 with the throat of the horse bulging forwards in a strong curve; the third by the dies such as R 192, of very large proportions, which evidently go with the rather large heads of that group, 223–228. It is the second of these styles which catches the attention since it anticipates one of the fine and strong styles of horse head to be met with in the coins of series 5, Melqart head/horse head (fig. 1). If this were the only indication it would be tempting to place the M M series at the end of the whole series 3 in order to bring these horse heads closer to those of series 5. However the connexion with series 3a must remain the determining criterion. In any case there need, in all probability, be an interval of not much more than a decade or so between series 3b and series 5 – on the assumption that the latter began not far from 300 B.C. This will be discussed further in part 4 of this publication.

The scheme of die-links for series 3b is as follows:



⁶² El-Hofra plate XXII A and p. 185 f. – It is interesting to note a rather similar form of the Lykian diskelis, shaped like an S with a stroke added at the middle (e.g. the coin of Uteve, Babelon, *Traité* plate 93, 13): another version of the same basic solar symbol.

Series 3c (229) Plate 18

This consists of a single issue (229) for whose position in the series as a whole there is no real evidence. It is isolated both from the MM and the M issues, and shows only a letter '*ayin*' in the equivalent position below the horse's head. On the other hand this coin is clearly of the same approximate period as the MM and M issues, and there was for instance a specimen in the Palermo hoard where the two latter groups were prominent. The head has some analogy with some of those in series 3d – e.g. O 72, O 75 – but hardly resembles any others. The possible meaning of the letter '*ayin*' is a matter for speculation. It would presumably be legitimate, if so desired, to regard this coin as of a different mint, but this too would be purely speculative.

Series 3d (230–269) Plates 18–21

This series on which the letter M (=MHNT?) appears is rather varied and prolific and in fact falls into two groups; linkages as follows.

O 72 O 73 O 74 O 75 O 76
 R 199 — R 199
 R 201 — R 201
 R 203 — R 203
 R 206 — R 206

O 77 O 78 O 79 O 80 O 81 O 82
 R 210 ————— R 210
 R 211 — R 211 ————— R 211
 R 212 ————— R 212
 R 213 ————— R 213
 R 219 — R 219
 R 220 ————— R 220
 R 221 — R 221

The first obverse O 72 is of a reasonably Greek style, not far from for instance O 70 in the previous series; it seems probable that there are really four dolphins round the head of O 72 though this is not clear on extant specimens apart from a vestige of something below the head on the London specimen of 232 which may be a fourth dolphin. Four dolphins would be expected from the other dies of this series. O 72 also has a dot below the chin recalling Syracusan prototypes. This die goes through three phases with some recutting; the most remarkable being the final phase where the die takes on an appearance strikingly similar to the Syracusan tetradrachms of Aga-

thokles⁶³ – with which it is indeed contemporary (fig. 2). After this come two dies of what we can only call a more «Punic» aspect, O 73, O 74. These are followed by O 75 which is closer to O 72. This group then closes with a die which is much more authentically Greek, elegant and expressive (O 76). In the second group distinctively Greek styles are again at first rather prominent; O 77 is again close to the type of O 72 etc., though the treatment is somewhat weaker, and again there is a dot below the chin. The next die O 78 is an astonishing manifestation of Greek artistic quality, clearly in the Praxitelean tradition; it somehow recalls the head from a drachm of Corinth⁶⁴. For the rest of this group however things are very different. After O 79, which – if competent at its own level – is stolid and rather expressionless, O 80 is a peculiar and mannered little head; then O 81 is coarse and vapid, while the last die O 82 seems as «punicized» as any other head in the series.

With the strange array of heads in series 3d there are linked, in the first group, horse heads of considerable competence and consistency; whereas in the second group there are as many contrasts as with the obverses. For instance, there is the small short-nosed horse of R 210 etc. with three prominent tufts on the forehead; the very large R 211–213 with heavily furrowed nose – these perhaps by the engraver of the generously proportioned head O 78? –; and finally the very odd and somewhat feeble dies like R 221-2-3 presumably by the engraver of O 82 (the last two R 222 and R 223 seem to lack any form of legend).

As we have seen above series 3 started during the early years of Agathokles at Syracuse (c. 317–314 or so). The entire duration of series 3 can hardly have been very much more than a decade. As mentioned above (p. 7) the series 3 coins are fully accounted for in hoards which belong to the final decade of the fourth century. For practical purposes, the most important of these is the Pachino 1957 hoard⁶⁵, in which the coins of Corinth period V were virtually all represented and only the ΔO issue which belongs to the Ptolemaic occupation of Corinth (308–306)⁶⁶ is missing. The date of this hoard is c. 305/300. Also represented in the Pachino hoard were the «quadriga» tetradrachms of Agathokles. The presence of these, again together with a significant number of our series 3, is a pattern exactly repeated in a pre-war hoard from Palermo of which the data are preserved in the British Museum. The relative date of both the Agathokles quadriga type and the Carthage series 3 is attested by the fact that it is only in a number of later hoards⁶⁷ that there appear the Agathokles

⁶³ Cf. below 24. – The style of the Agathokles tetradrachms (e.g. here p. 6, Fig. 2) seems reflected also in the Panormos issues 75–83 (SNR 1971 plate 14).

⁶⁴ BMC Corinth 225 pl. IX, 7.

⁶⁵ IGCH 2151.

⁶⁶ IGCH 85, Chiliomodi (Ravel's publication).

⁶⁷ E.g. IGCH 2180, Megara Hyblaia 1966; IGCH 2182, Cammarata; IGCH 2184, Mineo; IGCH 2185, Camarina-Scoglitti; also IGCH 2154, Cefalú, which must be later than «c. 300» owing to the presence of the Melqart/horse head type (Carthage series 5). Cf. also Essays Robinson, 151.

Kore head/Nike type together with the Carthage series 5 (Melqart head/horse head – to be dealt with in part 4 of this publication).

The coins of Carthage included in the Pachino hoard are: series 2, 81; series 3, 142, 157, 188, 189, 206, 237, 242; series 4, 271, 272. Those from the Palermo hoard are: series 2 – 89, 132, 139; series 3 – 148, 170, 186, 209, 223, 224, 227 (3 specimens), 229, 230, 248, 257 (2 specimens), 265 (2 specimens). Also from the Palermo hoard were two *R̄sm̄lq̄rt* coins – 37, 47 (not, as stated in part 1 p. 59, only no. 47). The date associated with the Palermo hoard in the B. M. material is 1936, but this can only signify the date at which the information came to hand, and the hoard must in fact have been found by 1933, since the specimen of Carthage 148 was available in time to appear in the Hamburger sale 98, April 1933 (see catalogue).



Fig. 8 Dido supervising the building of Carthage: Tyre 3 c A.D.



Fig. 9 Head of Mithras (?): Amastris 4 c B.C.

Series 4

Nos. 270–272: Head in Phrygian tiara / lion and palm-tree

The fact that this group has been placed here is merely for convenience and is by no means intended to signify its true position in the coinage. Clearly we are here confronted with several special issues marked by the use of exceptional types. The evidence of hoards confirms some loose association of these issues with series 3, and hoard X⁶⁸ perhaps suggests that the series 4 coins belong in the area of the first part of series 3. Such evidence is not very conclusive but is at least consistent with stylistic indications which definitely seem to put these coins near to those of series 3 a or even the final phase of series 2 d.

Each of the issues 270–272 is a distinct entity and was struck from a single pair of dies without any connexion between issues.

⁶⁸ Hoard X included: Carthage series 3a, 139, 206; series 4, 270, 271, with Corinth V groups Δ I Γ AP – if complete it is therefore slightly earlier than that of Pachino 1957 (A. di Vita, *Annali* 1958/59, 125 ff. = IGCH 2152) which contained: Carthage series 2a, 81; series 3a, 142, 157, 188, 189, 206; series 2d, 237, 242; series 4, 271, 272, with Corinth V all groups except ΔO, therefore buried in the last decade of the fourth century, or c. 300 B.C. (di Vita). Hoard X is therefore more indicative for series 4.

The fine and sensitive head of no. 270 is evidently close to that of O 46, the obverse which links series 2 d with series 3 a, and could well be by the same engraver. The palm-tree on the reverse is close to what we see with the prancing horse in series 2 d, and the whole conception of the lion reverse seems to derive from that of the current horse and palm-tree and to form a variant of it⁶⁹. The style of writing in the legend is close to that of the reverses of 142–152 which correspond with obverses O 46 and O 47.



Fig. 10 Artemis in Phrygian dress (after Daremberg-Saglio fig. 2380).

Fig. 11 Artemis with lion (after Daremberg-Saglio fig. 2372).

No. 271 does not afford any close analogies of this kind though in general the style of the head is also comparable more with that of O 46 and kindred dies than with others. The palm-tree with its flat spreading branches may recall that of 128 (in series 2 d) or of 168 (series 3 a) but is not entirely similar to either. The writing of the legend is quite without parallel and betrays confusion, since while reading, as it should, from right to left each letter is reversed as if to read in the other direction.

Finally no. 272 where the head is turned to the right seems closest to the head O 51 in series 3 a, also exceptionally turned to the right, as if to suggest that this was the direction that came naturally to this particular engraver. Style and expression have much in common. Much the same may be said of the reverse of 272, comparing it with R 156 of series 3 a, 176 and equally with R 157–158 of 178–179, all of which one might reasonably attribute to the engraver of O 51. There is the same slightly shaggy aspect of the lion as well as of the palm-tree of 272, which closely parallels

⁶⁹ The lion and palm-tree type at Velia (e.g. SNG Oxford 1319 ff.) has little bearing on the Carthaginian type, as it forms but one of a number of types with the signature ΦΙ and varying symbols – cicada, pentagram, dolphin, corn-ear, palm-tree, grapes, triskelis, trident.

the horse head and palm-tree of 176. The palm-tree of 272 might by itself be compared with that of an earlier coin, 132 (series 2d) but this is probably less indicative since the head of the obverse of 272 is unquestionably so closely akin to O 51. The connexion with the latter is further underlined because of the legend. The legend of 272 is strikingly close to the epigraphy of 176, which, even more important, also uses the form S'MMHNT instead of the normal 'MMHNT otherwise constant in series 3. In 176 then we have a close stylistic and epigraphic parallel for 272.

Thus we must conclude that the approximate date indicated for the series 4 issues should be the same as that of the earlier part of series 3, perhaps even the latter part of series 2d. A date around 320 or during the following years seems to be indicated, in accordance with the chronology of series 2 und series 3 discussed above (p. 20). If it is possible to envisage dating the beginning of series 3 as late as 314 or so, when Carthage adopted a new active policy against Agathokles under the leadership of Hamilcar son of Gisgon, it may be that the special issues of series 4 may also be connected with his preparations for war. The coins under consideration might then be considered as possibly presentation pieces for the elite battalion of 2000 citizens which headed the new armada ⁷⁰.

The interpretation of the types used for series 4 has been varied, and it cannot be said that any really positive or satisfying result has so far been reached.

In the first place, the idea that the head in the Phrygian tiara stands for Dido = Elissa the foundress of Carthage is rather a charming one and not in itself by any means implausible ⁷¹. Her true name Elissa, etymologically = «Dieu-femme» or «virago» (female warrior), is considered to begin with the element *Ela* = divinity; the name Dido, later popularised by Vergil, is evidently a sobriquet of uncertain significance but possibly bearing some analogy to that of David, the most famous king of Israel, a name likewise suspected of being a title rather than a true name. Elissa was a perfectly real historical figure, sister to Pygmalion king of Tyre (825–813 B.C.), and incidentally great-niece to Jezebel, the wife of Ahab king of Israel 875–853 B.C. ⁷². Elissa was married to Pygmalion's high priest Acharbas; the latter having been murdered by the king, Elissa with a band of supporters fled the country, eventually arriving in Africa where she founded the city of Carthage. The foundation date, 814 B.C., is firmly based on a perfectly consistent tradition and in spite of other theories which have been advanced is now strongly supported by the eminent Punic archaeologist, Pierre Cintas ⁷³.

If the coins were intended to represent Elissa, this would be a usage which can be well paralleled from that of various Greek colonies. Examples of founders depicted

⁷⁰ Diodoros XIX, 106.

⁷¹ Supported by e.g. Hill, Sicily 145 (with the proviso «purely conjecture»); Boston catalogue addenda 36 («a queen»).

⁷² Harden 48 gives a useful family tree showing the connexion of the royal houses of Tyre and of Israel.

⁷³ For most of this paragraph, see Cintas, Manuel, esp. pp. 11–21, 463–470.

quite explicitly on Greek coins include that of Leukippos at Metapontion and Pheraemon at Messana; others are not explicitly named. Many of the Greek examples are indeed of purely mythological and non-historical figures⁷⁴, but the practice of portraying a founder on the coins was well-established and thus makes it perfectly possible and plausible for the same usage to be envisaged in the case of the Carthaginian coins in question, for which there can be little doubt that Greek or at least Greek-trained engravers were employed.

In line with the interpretation as «Dido» is the interesting comment on her head-gear by the writer (P. S.) in the foreword to MMAG sale 43 (p. 6): «Une allusion transparente à son origine, la désigne comme une reine de Tyr, lorsque cette tiara prend par l'imagination d'un graveur la forme baroque du murex, coquillage à pourpre qui fit la richesse de cette ville.» The precise scheme of the rigid, crisp folds as shown on the obverse of 272 is not without parallel in earlier Greek art, as in the headdress of an Amazon on a vase by the Orpheus painter, c. 430 B.C.⁷⁵. We need only add that the single certain representation of Dido-Elissa to be found on ancient coins is that of third-century AD Tyre, where a female figure of the foundress is shown overseeing the construction of her new city in Africa (Fig. 8)⁷⁶.

Possible doubts about the identification of the head on our coins as that of Elissa may however arise; the identification does not coincidentally suggest any particular explanation for the exceptional type of the lion on the reverse. It is surely impossible to regard the lion as being a nationalistic symbol for Carthage, and especially in view of the use of the lion type on the mid-third century coins of the Libyans and mercenaries precisely at the moment of their great revolt against the Carthaginian state (241–238 B.C.)⁷⁷. The possible significance of the lion as somehow standing for «Libya» has however been argued in support of the identification of the head as «Libya»⁷⁸. It is of course by no means impossible to envisage a personified Libya in this way, and such a personification was indeed known from Greek art of the fifth century B.C., where such a figure formed part of a chariot group set up by the sculptor Amphion in honour of Battos I of Cyrene⁷⁹. Yet this interpretation, for the coins we are considering, not only seems in itself comparatively banal (like Rizzo's «Carthago») but in any case perhaps hardly consistent with Carthaginian nationalism – the Libyans after all were an indigenous people subject to Carthaginian domination.

⁷⁴ Such as: Iokastos (Rhegion); Aigestes (Segesta – see L. Mildenberg in CIN 1973 New York – Washington, Proceedings 1976, 113 ff.); Taras (Tarentum); Herakles (as Oikistes at Kroton); other possibly historical «founders» include «Archias» (Syracuse, Seltman GC² pl. XLV 9), «Antiphemos» (Gela-Jenkins, Gela p. 114 but see also do. p. 115 addenda for reference to an article by Manganaro considering the same figure as Leukaspis). The case of Leukaspis at Syracuse is somewhat different. On the whole topic, see Lacroix, *Monnaies et colonisation dans l'occident grec* (Brussels 1965).

⁷⁵ Arias-Hirmer, *History of Greek Vase-painting*, no. 192.

⁷⁶ BMC Phoenicia pl. XLIV, 8.

⁷⁷ Robinson, *A hoard of coins of the Libyans*, NC 1953, 27 ff.

⁷⁸ Robinson, *Gulbenkian catalogue* p. 122.

⁷⁹ Pausanias 10, 15, 6.

It seems clear that we ought to consider the question of the head on these coins in conjunction with the lion on the reverse. There remains the obvious possibility that the head is that of a goddess and that this should be a goddess who has some special association with lions. Müller identifies her as Venus, while Gsell suggests the Phoenician Astarte or alternatively the divinity of Eryx⁸⁰ – who too is Astarte in Phoenician but in Greek terms could only be Aphrodite. One may well feel uneasy about these suggestions. If it is Aphrodite, the Phrygian headgear and the lion are inappropriate; if Astarte, she had no significant place in the cults of Carthage at this period, having been supplanted by Tanit.

Since it seems clear in any case that the coins we are considering were executed by Greek engravers, it would seem proper to try to identify the types in terms of Greek iconography.

In the first place the female head is wearing an oriental tiara or Phrygian cap. Such a headgear is commonly used in Greek art, especially in vase-painting, to denote not only Amazons, but Trojans, Persians: Persians are also of course familiar enough from coins, wearing an equally distinctive headgear⁸¹. On an Apulian vase of the fourth century B.C. there is a young male head similarly attired who is identified as Adonis⁸². Another such appears on fourth century coins of Amastris, possibly Mithras (Fig. 9)⁸³, and later on imperial-period coins of Asia minor a similar head is common for the god Mên, once also for the legendary king Midas (Prymnessos). More relevant to the present problem however is another figure often shown in similar headgear, and that is the goddess Artemis (Fig. 10); examples are to be found among Attic and Tarentine terracottas of the fourth century, and elsewhere⁸⁴. It does not seem to have been suggested before that the figure represented on our coins might, in Greek terms, be Artemis. The idea seems plausible, especially in view of the fact that Artemis is a goddess much associated with lions and very frequently so presented in Greek art in her role of *Potnia Theron* (Fig. 11)⁸⁵. Several fourth century terracottas from Sicily show Artemis with a lion or palm-tree or both⁸⁶. In fact one might say that the lion and palm-tree on the reverse of our coins serves to support the identification of the head as that of Artemis.

If this is correct, we may be able to take a further step, which in fact brings us back to the Carthaginian goddess Tanit. Now of course it is well known that the accepted

⁸⁰ Müller II, p. 75–76, nos. 16–17; Gsell IV, p. 273, n. 5; the goddess of Eryx, cf. n. 53 above. – Harden p. 292, note to plate 110, suggests «Tanit in Punic headdress».

⁸¹ Robinson NC 1948, 43 ff.; Schwabacher, *Essays Robinson* 111 ff. (Lykia); Cahn, SM 1975, 84 ff.

⁸² Arias-Hirmer, colour plate L and p. 391.

⁸³ Imhoof-Blumer, *Monnaies grecques*, 227 f. – Richter, *Gems* I no. 674 identifies a head similar to those of series 4 as being a portrait of Queen Amastris, on admittedly tenuous grounds.

⁸⁴ Higgins, *BMC Terracottas* no. 731, 1212, 1362 etc.

⁸⁵ Cf. H. A. Cahn, *Kleine Schriften*, p. 27.

⁸⁶ *Archeologia classica* 9, 1957, pl. XIV, 2.

equivalent of Tanit in the Greco-Roman pantheon is Juno Caelestis, and there is no question that this was so especially in Roman times. However the whole question of equivalences between Punic deities and the corresponding Greek and Roman ones is not entirely straightforward and direct clear-cut «translations» are not always to be expected – as witness the difficulty experienced in finding satisfactory equivalents in Punic terms for the deities mentioned in the famous «oath of Hannibal»⁸⁷. Naturally the question is not simplified by the fact that some Greek deities were also worshipped as such, and in their Greek cults, at Carthage (as Demeter-Persephone). However there is one guide which can prove useful, afforded by the evidence of theophoric names and their Greek equivalents. We have examples of these in certain bilingual (Phoenician-Greek) stelai from Athens and elsewhere⁸⁸. These stelai date to the Hellenistic period, as is indicated by the style of the Greek lettering. One of these is a stele dedicated by a man named Abdtanit ('*bdnt* = «servant of Tanit»), a Sidonian, whose equivalent Greek name is given as Artemidoros. That such name-translations are by no means arbitrary is shown by other examples: the name of Abdtanit's father, mentioned on the same stele, is Abdshemesh ('*bdšmš* = «servant of the sun-god») and



Fig. 12 Goddess (Anat) sitting on lion: Hierapolis 4 c B.C. (Seyrig RN 1971).

Fig. 13 Goddess enthroned between lions: Hierapolis 3 c A.D.

this is rendered quite literally – and not surprisingly – as Heliodoros. In another similar stele, the name of another Sidonian, Abdashtar ('*bdštrt* = «servant of Astarte») becomes in Greek Aphrodisios. By this evidence it seems clear enough that just as the sun-god Shemesh is in Greek Helios and Astarte is (as is well known) Aphrodite, so Tanit is here Artemis. It is true that Tanit was most important in the west and there had a position comparable with that of Astarte in the east: and the stele which provides the evidence here considered was dedicated by a Sidonian and not a Carthaginian. At the same time, it is obvious that Tanit had some meaning also for the Phoenicians of the east, as witness not only the name of Abdtanit in the inscription cited, but also from another inscription from Carthage itself mentioning

⁸⁷ Moscati 181 ff.: but now see J. G. Février, *Cahiers de Byrsa* VI 1956, 13 ff.

⁸⁸ CIS I, i, p. 139 ff., no. 115; p. 141 ff., no. 116. – Stele no. 116 reads: ΑΡΤΕΜΙΔΩΡΟΣ ΗΛΙΟΔΩΡΟΥ ΣΙΔΩΝΙΟΣ. Phoenician text: *mšbt skr bhym l'bdnt bn 'bdšmš hšdny*. Translation in CIS: «Cippus in memoriam inter vivos, Abdtanito, filio Abdsemesi, Sidonio».

Astarte together with «Tanit of the Lebanon»⁸⁹. With all necessary qualifications, the Tanit-Artemis equivalent provided by the Athens stele seems highly suggestive for our purpose.

If we may in Greek terms identify the head of the goddess in the tiara on our coins as Artemis, it is very tempting to apply the evidence here cited to make the «trans-



Fig. 14 Kybele riding on lion: Dokimaion 3 c A.D.
 Kybele in lion chariot: Kotiaion time of Caracalla
 Astarte (?) riding on lion: Sidon 3 c A.D.

lation» into Punic terms as Tanit. Artemis, viewed as in some sort a nature goddess, is in any case by no means inconsistent with the general concept of Tanit, especially when her close relation with the sun-god, her brother Apollo, is so clearly parallel to the relation of Tanit with the Punic sun-god Ba'al Hammon⁹⁰. In particular, the close association of Artemis with lions – an association which she shares with



Fig. 15 Sekhmet (= Tanit?) as «Genius tutelar Africae»: Roman 47/46 B.C.

⁸⁹ Harden p. 79 f.: CIS 3914: P. Ronzevalle, *Mélanges de l'Université de St-Joseph, Beyrouth*, V, 1912, 75 ff. – One piece of evidence for an eastern cult of Tanit seems to be provided by coins of Askalon showing a warrior-like figure (often identified, though by no means conclusively, as male) accompanied by the legend ΦΑΝΕΒΑΑ and even once by a «sign of Tanit» (BMC Palestine, p. 129, no. 187). It is presumably Tanit in some forme, and the title is precisely paralleled in an inscription from El-Hofra, written in Punic language but Greek letters (El-Hofra p. 167), the first lines of which read: ΛΑΔΟΥΝ ΛΥ ΒΑΛ ΑΜΟΥΝ ΟΥ ΛΥ ΡΥΒΑΟΩΝ ΘΙΝΙΘ ΦΑΝΕ ΒΑΛ (viz. *l 'dn l b'l hmn w l rbtm tnt pn b'l* = «To the Lord Baal Hammon and the Lady Tanit face of Baal»).

⁹⁰ J. G. Fevrier, *Cahiers de Byrsa VI*, 1956, 13 ff.: J. Ferron, *Africa I*, 1966, 41 ff.

Apollo – once again finds a parallel on a larger scale with the oriental Astarte-Asherat-Atargatis-Anath etc., even Kybele the «Magna Mater» of Asia Minor; these too are typically associated with lions, as we know from fourth century coins of Hierapolis and from later coins of Sidon and of Phrygia (Figs. 12–14)⁹¹.

Seen in this wider context, what has been said here may suggest the possibility of a satisfying interpretation of the coin types of series 4. If it is correct however it reflects back indirectly to the problem mentioned above concerning the «Kore» and «Arethusa» heads of series 2 and 3; by implication the possibility of those heads also conceivably standing in some sense for Tanit must be thought to be diminished if in series 4 we have the Carthaginian goddess represented as Artemis.

⁹¹ Cf. Cahn, *Kleine Schriften*, p. 27: Seyrig RN 1971, pl. II, 11: BMC Cappadocia etc. pl. XVII, 14: BMC Phoenicia pl. XXV, 8 (Sidon): BMC Phrygia pl. XXI, 4, XXIV, 6. – There is a further association of Tanit with lions, though of later date, if it is correct that this goddess is represented in the form of the Egyptian lion-headed goddess Sekhmet in statues from Thinissut (first century A.D. – G. C. and C. Picard, *Life and death of Carthage*, London 1968, plate 27). In this connexion compare the Sekhmet figure on Roman denarii minted in Africa 47/46 B.C. (BMC RR II, Africa 8–9), holding in the hand an object usually described as an «ankh» but which from its shape would be better described as a «sign of Tanit» (Fig. 15).

Catalogue

Summary

Series 2 a Plates 1-4: 49-85 Dies: obverse 16, reverse 34

Head of Kore with corn-ears	Horse before palm-tree, stepping to left
49-60 QRTḤDŠT	
60-67 M	
68-76 nil	
Head of Arethusa (without corn-ears)	Horse stepping to right
77-85	85 BTW'L

Series 2 b Plate 4: 86-90 Dies: obverse 3, reverse 5

Head of Kore with corn-ears and pendant collar, dolphins	Horse before palm-tree, standing to right
86 sign of Tanit	86 sun symbol, flower (lily?)
87 nil	87-90 caduceus
88-90 sign of Tanit	

Series 2 c Plates 5-7: 91-121 Dies: obverse 10, reverse 28

Head of Arethusa (without corn-ears)	Horse before palm-tree, stepping to right
91-93 head left thymiaterion	91-98 Nike crowning horse, caduceus, Punic letters ḤB
94-99 head right thymiaterion	99 do. but letters BH
100 do. dot below chin	100 Nike crowning horse, caduceus, Punic letters ḤB, Greek ΣΩ
Head of Arethusa (without corn-ears) two dolphins	Horse before palm-tree stepping to right
101-110 poppy head	
111-112 nil	
Head of Arethusa, four dolphins	113 Horse stepping
113-119	114-119 Horse standing
	114, 116 crescent
	117 poppy head
	118-119 poppy head, crescent
Head of Kore with corn-ears and pendant collar, dolphin	Horse standing
120-121	120-121 crescent

Series 2 d Plates 8-9: 122-141 Dies: obverse 5, reverse 18

Head of Arethusa (without corn-ears)	Horse before palm-tree
122-127 empty field	122-127 leaping
128-130 three dolphins, pellet	128-130 stepping
131-132 head right, four dolphins	131-132 prancing
133-134 head left, four dolphins, shell	133-134 standing
135-141 do. (no shell)	135-141 prancing

Series 3 a Plates 9–16: 142–206 Dies: obverse 18, reverse 53

Head of Arethusa to left, four dolphins	Horse head to left, palm-tree 'MMHNT
160–165 shell	
176–180 head right	176 horse head right 176, 178–179 S'MMHNT
190–194 «swastika»	

Series 3 b Plates 16–18: 207–228 Dies: obverse 8, reverse 15

Head of Arethusa to left	same type letters M M
207–208 four dolphins	
209 one dolphin	
210–221 three dolphins	
222–227 one dolphin, caduceus	
228 three dolphins	

Series 3 c Plate 18: 229 Dies: obverse 1, reverse 1

Head of Arethusa, one dolphin	same type letter 'ayin
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Series 3 d Plates 18–21: 230–269 Dies: obverse 11, reverse 17

Head of Arethusa	same type letter M
230–233 three (?) dolphins	
234–260 four dolphins	
261 three dolphins	
262–269 four dolphins	268–269 head right

Series 4 Plate 22: 270–272 Dies: obverse 3, reverse 3

Head of goddess wearing Phrygian tiara	Lion walking before palm-tree S'MMHNT
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Dates

Series 2 c. 350–320/315 B.C.
Series 3 c. 320/315–c. 305/300 B.C.
Series 4 c. 320–315 B.C.

Legends etc.

QRTHDŠT

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†~9月×97

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†~9月†97

Letter Mem

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Sign of Tanit

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Caduceus

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Letters *Heth Beth*

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9H

'MMHNT

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143	ቶነዞሃሃፊ	170	ቶነዞሃሃሮ
144	ቶነዞሃሃሮ.	171	■ ነዞሃሃሮ
146 see 167		172	ቶነዞሃሃሮ
147 see 163		175	ቶነዞሃሃሮ
148	ቶነዞሃሃሮ	176 178 see Š'MMHNT	
149	ቶነዞሃሃሮ	180	ቶነዞሃሃሮ
151	ቶነዞሃሃሮ	182	ቶነዞሃሃሮ
153	ቶነዞሃሃሮ	183	ቶነዞሃሃሮ
154	ቶነዞሃሃሮ	184	ቶነዞሃሃሮ
155	ቶነዞሃሃሮ	185	ቶነዞሃሃሮ
156	ቶነዞሃሃሮ	187	ቶነዞሃሃሮ
157	ቶነዞሃሃሮ	188	ቶነዞሃሃሮ
158	ቶነዞሃሃሮ	189	ቶነዞሃሃሮ
160	ቶነዞሃሃሮ	191	ቶነዞሃሃሮ
161	ቶነዞሃሃሮ	193	ቶነዞሃሃሮ
162	ቶነዞሃሃሮ	197	ቶነዞሃሃሮ
163	ቶነዞሃሃሮ	199	ቶነዞሃሃሮ
164	ቶነዞሃሃሮ	200	ቶነዞሃሃሮ
165	ቶነዞሃሃሮ	204	ቶነዞሃሃሮ
167	ቶነዞሃሃሮ	206	ቶነዞሃሃሮ
168	ቶነዞሃሃሮ		
		190 («swastika»)	፩

Š'MMHNT

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Letters Mem Mem

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Letter 'ayin

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Plate 1

Series 2 a

- 49 O 13 Head with triple-drop earring and plain necklace, wearing wreath with corn-ears. Legend QRTĤŠT
R 43 Horse walking in front of palm-tree; double ex. line, linear border
17.02 Egger 45, 840
16.70 Guadan
17.00 * London (PCG pl. 31, 20)
– Palermo
- 50 O 13
R 44 Similar; single ex. line?
16.80 * ANS
- 51 O 13
R 45 Similar; double ex. line
16.47 Lockett SNG III 1048 =
Egger 26. 11. 1909, 434 =
SC 1927, 1152
16.66 * Naples 4780
- 52 O 14 Similar, smaller head, corn-ears more protruding; fragment of inner linear border near top of head and cutting legend; outer linear border.
Legend QRTĤDŠT
R 46 Similar, double ex. line; more compact, branches of palm-tree less spreading
16.25 Berlin
17.38 Boston 494 = Warren 420
16.49 Lloyd SNG II 1627
17.02 * London = Morgan 193
17.07 * Paris 2367
- 53 O 14
R 47 Similar, thicker tree trunk
17.00 Hirsch 21, 4664
16.88 * London
- 16.62 Oxford SNG 2157 = Lockett SNG III 1047 = Münzh. Basel 4, 1164 = Platt 3. 4. 1933, 219
16.99 Private collection Y = Jameson 912 = Montagu II 448
- 54 O 14
R 48 Similar, single ex. line (?), tree trunk thinner, drooping branches
17.35 * Copenhagen 75
17.05 Paris Luynes 1435
– Pennisi (SNR 53, 1974, pl. 6, B)
- 55 O 14
R 49 Similar, branches of tree more spreading
17.50 * Allotte de la Fuye 1727
- 56 O 14
R 50 Similar
16.21 Naples 4781
17.29 * Paris 2324
- 57 O 14
R 51 Similar
– * ANS
16.77 Schulman 264, 1976, 5088
- 58 O 14
R 52 Similar, horse's head lower, hooves not touching ex. line
16.75 * Paris Vogué 45
- 59 O 15 Similar to O 14 but smaller.
Legend QRTĤDŠT
R 53 Similar
17.30 * Lewis = Leu Sicilia 1962, 148

Plate 2

- 60 O 15
R 54 Similar, horse's hind hoof stretching back
– * Myers-Adams 5, 1973, 63
- 61 O 16 Taller head, wreath with corn-ears, single-drop earring, plain necklace. No border. Letter *mem* in field
- R 55 Similar, horse standing more rigidly with foreleg sharply bent; branches of tree compact, trunk tapering. Single ex. line
16.88 * Glasgow Hunter 3 (cat. pl. xciii. 9)

- 62 O 16
R 56 Similar, trunk of tree not touching ex. line
17.05 * Berlin
- 63 O 17 Closely similar to O 16 and possibly recut from it; triple earring. Letter *mem* in field with longer tail
R 57 Similar, hind legs closer together, tree trunk thicker; no ex. line
16.20 ANS
17.26 * London
17.33 Oxford SNG 2156
– Paris 2347
- 64 O 17
R 58 Similar to R 55–56, palm branches assymetrical, single ex. line
17.13 Copenhagen 76
17.02 * Gulbenkian 369 = Naville 6, 581
- 65 O 18 Similar to O 16–17 but larger and of more strongly «Punic» style; triple-drop earring, plain necklage, wreath with corn-ears. Letter *mem* in field
R 59 Similar, foreleg very sharply bent, tree trunk thick, no ex. line
16.95 Paris Luynes 1443
– Pennisi
17.28 * Private collection Y = Naville 6, 582 = Prowe 1904, 1789 = Ciani 1955, 198
- 66 O 18
R 60 Similar, tree higher, no ex. line
16.94 Cambridge SNG 1478
16.97 * London
17.18 MMAG 43, 14
- 67 O 18
R 61 Similar, branches of tree more projecting, no ex. line
17.17 * Berlin
– Sambon 6. 7. 1921, 221
- 68 O 19 Similar but smaller and neater head, wreath with corn-ears, no letter in field
R 62 Similar but horse's foreleg doubly bent, no ex. line
17.16 * Lockett SNG 1045 = Naville 5, 3002
16.50 Vienna 6738
- 69 O 20 Smaller variant of previous die
R 62
16.97 * Berlin
- 70 O 21 Head of Greek style, hair compactly rendered, wreath with single leaf and corn-ears, single-drop earring, dotted necklage; dotted border
R 63 Horse with front legs crossed, hind hoof overlapping tree trunk, tree with compact branches, heavy ex. line
16.95 ANS = Hirsch 13, 4616 = Bourgey 15. 10. 1909, 63
17.00 Cleveland = Hirsch 32, 622
– Glendining 9. 6. 1930, 605
17.43 * London
17.05 Syracuse 48299, Gibil Gabib hoard
- 71 O 21
R 64 Similar with small variations
16.78 * London Lloyd 1626 SNG = AC 14, 152
17.36 Schulman 264, 1976, 5089

Plate 3

- 72 O 21
R 65 Similar, horse's front hooves crossed, tree less regular
17.23 * Naville 6, 591 = Hirsch 31, 649
16.70 Vienna 6741
- 73 O 22 Similar to O 21 except in detail, leaf of wreath points more upward
R 66 Similar but palm-tree higher above horse
16.39 * Berlin

- 74 O 22
R 67 Similar, horse's legs straighter, tall tree with wider spreading branches
– * Palermo
– Syracuse 48300, Gibil Gabib hoard
– Schulman 1976
- 75 O 22
R 68 Similar
– * Syracuse 54548, Nissoria hoard
- 76 O 23 Similar but two prominent leaves in wreath
R 69 Similar to R 66 but horse's head more up
16.92 ANS
16.83 * Cambridge McClean 3035
16.60 MMAG list 351, 3 =
Neville 1, 3297
- 77 O 24 Head of strongly Greek style to right; wreath with three prominent radiating leaves but no corn-ears; triple earring, dotted necklace
R 70 Horse to right, standing with one foreleg raised, tree of regular shape, low above horse's back, single ex. line
16.92 * Hague
16.68 * Gulbenkian 370 = Neville 6, 589
14.28 Leu-Hess 1957, 140
- 78 O 24' Basically same die but after some reworking, as on the upper outline of the hair and especially the upper leaf of the wreath which is now more bent, and the eye and mouth
R 71 Similar, horse's hind legs flexed
16.72 Cambridge McLean 3042
17.18 London Lloyd SNG 1625
17.15 * Private collection Y =
MMAG 13, 1225
- 79 O 24' Die now showing signs of wear in field
R 72 Similar
16.64 * Copenhagen 77
- 80 O 25
R 73 Similar
18.45 * MMAG 43, 17
15.89 Naville 10, 363 = Münzh.
Basel 1948, 506
- 81 O 25' Recut?
R 73
16.56 Berlin
16.36 * Hague
17.00 Hamburger 27. 5. 1929, 176
16.73 Hirsch 33, 987
16.28 Syracuse, Pachino hoard 1957 (di Vita no 33)
16.58 Vinchon 3. 3. 1975, 18
- 82 O 25'
R 72
16.81 * Leu-Hess 1956, 234

Plate 4

- 83 O 26 Similar but slightly plainer style, leaves of wreath simplified
R 74 Similar, horse's hind legs straight, head erect
18.01 * ANS = Neville 6, 590
17.04 Cumberland Clark 355
- 84 O 27 Similar, refined but slightly austere style
R 75 Similar
16.50 Lockett SNG 1044 = AC
12, 1072
17.79 * London
16.35 Paris Luynes 1438
- 85 O 28 Similar, compact head
R 76 Similar, horse's foreleg raised high. Below along palm-tree, legend BTW'L
16.61 * Copenhagen 78
– Sicilian hoard, Zograph NC
1928, p. 115 note 2
- Series 2 b
- 86 O 29 Tall head to right, triple-drop earring, pendant necklace, wreath with corn-ears; in front, two dolphins. Behind in field, «sign of Tanit»

- R 77 Horse standing stiffly in front of palm-tree, which has thick branches and large date clusters; on double ex. line, flower with central spike (lily?); above in field sun-disk with sixteen rays
 – Berlin
 17.13 * London
- 87 O 30 Larger head with deepset eye, earring pendant necklace, wreath with corn-ears; in front two dolphins, behind a further dolphin (partly visible on Copenhagen specimen only); plain border
- R 78 Similar, palm-tree with wide branches and very thick trunk; single ex. line; in front caduceus
 17.04 * Copenhagen 79
 17.07 Oxford SNG 2154
 – * SC 24.3. 1902, 15 (SNR 1971 pl. 21 A)
- 88 O 31 Similar but more expressive style, wreath with corn-ears, earring and pendant necklace; in front and below, three dolphins; plain border; behind in field «sign of Tanit»
- R 79 Horse standing with one leg flexed, palm-tree with thin trunk leaning slightly forwards relative to ex. line; in front in field caduceus (of which the head is partly obscured on many specimens by a die-break)
 – Berlin
 17.10 Cahn 80, 496 = Helbing 70, 540
 16.75 Hague
 17.03 * Hague
 16.88 Hirsch 15, 1346 = Merzbacher 1910, 895
 17.05 Hirsch 32, 624 = Egger 45, 837
 17.44 Leu-Hess 1962, 131
 17.15 MMAG 43, 16
 17.08 Naville 6, 592 = Hirsch 32, 623
 – Paris 2365
 15.98 Paris Luynes 1439
 16.56 * Private collection X
- Salton
 17.11 Schulman 264, 1976, 5087 (not hoard)
 – Syracuse 25283, Mineo hoard
- 89 O 31
- R 80 Similar, horse standing higher, trunk of palm-tree thicker, head of caduceus smaller
 – ANS
 17.15 Berlin
 16.51 Egger 10. 12. 1906, 416
 17.19 * Gulbenkian 368 = Naville 10, 364
 16.75 Hirsch 30, 628 = Hess 1935, 286
 17.10 Hirsch, 14, 597
 17.27 Leu-Hess 1964, 94
 16.53 Leu-Hess 1956, 230
 16.65 Lockett SNG 1039 = Naville 1, 3299
 16.72 London Lloyd SNG 1619 = Benson 799 = SC 1927, 1154
 16.89 London Lloyd SNG 1620
 17.34 Naville 5, 3003 = Ratto 1909, Froehner 5730
 16.70 Paris Luynes 1440
 – Pennisi
 17.14 * Private collection X, Palermo hoard
 16.50 Ratto 1927, 446
 15.84 Vatican 939
- 90 O 31
- R 81 Similar, horse's head slightly lowered, tree trunk slightly out of line above and below horse, caduceus leans towards horse
 16.49 Aberdeen SNG 98
 16.96 Egger 40, 855
 17.05 * Hague
 17.09 * London
 17.16 Naples 4784
 – Palermo
 -- Syracuse, Megara Hyblaia hoard 1966

Plate 5

Series 2 c

- 91 O 32 Head to left with earring and dotted necklace, wreath without corn-ears; no dolphins in field. In front, thymiaterion
- R 82 Horse with front leg flexed and slightly raised, head level; at end of ex. line, caduceus, above which Nike flying to crown horse, her feet almost touching caduceus. On ex. line below horse, letters HB
- 17.27 Lockett SNG 1040
- 17.12 * MMAG 43, 20
- 16.50 Syracuse 55851, Megara Hyblaia hoard 1949
- 16.00 Syracuse 55852, Megara Hyblaia hoard 1949
- 92 O 32
- R 83 Similar, horse's head lowered, Nike's knee touching caduceus; letters HB on ex. line
- 17.21 Baltimore = Naville 6, 588
- Berlin
- 16.71 Cambridge McClean 3040 = Sotheby 19. 12. 1907, 507
- 16.18 Hague
- 16.63 London
- 17.06 * Lloyd SNG 1621
- 17.35 Paris Luynes 1446
- 93 O 32
- R 84 Similar, caduceus smaller, touching horse's front leg, Nike higher up; letters HB on ex. line
- 17.04 * Niggeler 542
- 94 O 33 Head to right, with earring and necklace both linear and dotted; less refined style than O 32. In field thymiaterion. Dotted border
- R 85 Similar, horse wearing collar, caduceus leaning forward, letters HB on double ex. line
- Berlin
- 17.30 Gulbenkian 367
- Hirsch 8, 942
- Hirsch 26, 119
- 16.90 Hirsch 19, 648
- 17.16 Lewis
- 16.47 * London Lloyd SNG 1622
- 16.44 London
- 16.87 Naville 6, 585 = Bourgey 29. 5. 1911, 49 = Hirsch 29, 878
- 17.16 Naville 4, 997 = Hirsch 34, 535 = Sotheby 19. 12. 1907, 505
- 17.32 Paris Luynes 1444
- 17.22 Paris 2352
- 17.05 SC 1927, 1150
- 16.75 Sotheby 19. 12. 1907, 506
- 16.95 Syracuse 55846, Megara Hyblaia hoard 1949
- 95 O 33
- R 86 Similar, horse stepping out with raised foreleg; single ex. line, on which letters HB
- 16.95 AC 16, 931
- 17.15 Brussels Hirsch 831
- 17.25 Hirsch 13, 4615 = Hirsch 20, 469
- 16.86 Hirsch 16, 695 = Münzh. Basel 4, 1165
- * Myers 1971, 51
- 15.70 SC 1927, 1151
- 96 O 33 Signs of wear on die
- R 87 Similar, horse's movement more restrained, caduceus very tall; letters HB on ex. line
- 17.27 * Hague = Hess 18. 3. 1918, 756
- 16.30 Hamburger 29. 5. 1929, 498 = Glendining 18. 4. 1955, 229
- 17.28 Hirsch 21, 4673 = Merzbacher 2. 11. 1909, 3187 = Naville 12, 1071
- 17.07 Lockett SNG 1041 Munich
- 97 O 33
- R 88 Similar, letters HB above ex. line; Nike and caduceus off flan, but presumably present on die
- 17.21 * ANS = Merzbacher 2. 11. 1909, 3188

- 98 O 33 Increased wear of die
 R 89 Similar, horse wearing collar, small caduceus touching Nike's feet; letters HB on ex. line
 17.01 ANS
 – Berlin
 17.11 Jameson 910 = Leu-Hess 1956, 231
 17.20 * Leu-Hess 1968, 118 = Naville 5, 2999
 16.91 London
 17.12 Naples 4819
 – Paris 2353
 – Platt, collection A 1930, 816
- 99 O 33 Die showing increased wear
 R 90 Type of left, Nike and caduceus as before, double ex. line, letters flanking horse's foreleg BH
 17.20 AC 15, 433 = Hirsch 16, 696
 17.26 ANS = AC 16, 930
 – Berlin
 – Glendining 31. I. 1951, 313
 16.65 Hirsch 32, 621 = Luneau 936
 17.10 Leu Sicilia 147
 17.25 Lewis
- 16.96 Lockett SNG 1042 = Naville 5, 3001
 17.13 London
 17.25 MMAG 43, 19
 16.56 Naville 5, 3000
 17.44 Naville 6, 587 = Hess 207, 226
 17.08 * Private collection Y = Sotheby 21. 2. 1929, 37
 17.14 * Stockholm Smith 447 = Naville 6, 586
- 100 O 34 Similar head but of cruder style; below chin; pellet; in front thymiaterion
 R 91 Horse and palm-tree to right generally similar to those of nos. 91 ff., horse standing on short thick (double?) ex. line, small caduceus in front of horse's head, dotted border. Letters HB below, Greek letters ΣΩ in field above
 17.15 AC 15, 434
 17.15 ANS
 17.45 * Leu-Hess 1962, 132
 17.13 * London Lloyd SNG 1623 = Naville 10, 362
 17.13 Naples S 8097

Plate 6

- 101 O 35 Head closely similar to O 33, triple-drop earring, dotted necklace. In front two dolphins, behind poppy head. Dotted border
 R 92 Very tall horse standing stiffly, raising foreleg, tall palm-tree, double ex. line
 17.51 ANS
 – Berlin
 16.70 Guadan
 16.67 Hirsch 15, 1350 = Maddalena 628
 17.24 Hirsch 14, 602 = Hirsch 29, 880
 17.13 * London (NC 1926, pl. viii 6)
 17.10 Naville 6, 595 = Hess 207, 225
 17.32 Leu-Hess 1957, 141
 16.83 Leu-Hess 36, 1968, 119 = Naville 5, 3007
 – Paris 2355
- 16.20 Paris Luynes 1437
 17.35 Sotheby 19. 12. 1907, 502
- 102 O 35
 R 93 Similar, horse's hind legs apart
 16.06 * London Lloyd SNG 1624
 16.07 Naville 4, 1001 = Hirsch 19, 652
- 103 O 35
 R 94 Similar
 17.20 Hamburger 27. 5. 1929, 177
 16.36 * Myers 12, 1972, 105
- 104 O 35
 R 95 Similar, horse's hind legs together
 16.89 * Leu-Hess 1956, 233
 17.23 Lockett SNG 1043 = Naville, 1002
 17.03 Naples S 8095
 – * Private collection Y
 17.10 Schulman 16. 12. 1926, 213

- 105 O 36 Closely similar to O 35, dolphins in front, poppy behind
R 96 Horse's front legs together
—
17.10 * Baltimore = Naville 6, 596
— Bourgey 25. 5. 1950, 91
- 106 O 36
R 97 Horse has one front leg raised
17.20 * Sotheby 19. 12. 1907, 503
16.65 Syracuse 55845, Megara
Hyblaia hoard 1949
- 107 O 36
R 98 Similar
17.00 * Boston 493
- 108 O 37 Similar, a more refined version of preceding heads, dolphins in front and poppy behind
R 99 Similar to R 96
17.16 Leu-Hess 1956, 232
17.16 * Lewis = MMAG 11, 503
- 109 O 37
R 100 Similar, horse and tree taller
16.44 * Brussels
- 110 O 37
R 101 Similar, tall slender horse, thick ex. line
17.10 Helbing 1930, 163 =
Glendining 9. 3. 1931, 1181
17.20 * MMAG 43, 18
- 111 O 38 Head of similar refined style but large; dolphins in front but no poppy
R 101
16.96 * AC 15, 435
16.97 Cambridge SNG 1479
17.32 Lewis = Leu-Hess 1957, 142

Plate 7

- 112 O 38
R 102 Similar but larger
16.95 AC 16, 933
— ANS
— Berlin
16.95 Leu-Hess 1962, 129
17.35 Naples 4783
— * Private collection Y
16.80 Vienna 6737
- 113 O 39 Head to left, of the Syracusan Euainetos style, with four dolphins; dotted border
R 102 Die showing signs of wear
17.64 Brussels
17.02 * London Lloyd 1617 =
Naville 4, 998 = Egger 46,
2772
17.24 Montagu I 808
- 114 O 39
R 103 Horse standing with all four legs straight, thick ex. line, tree with wide branches. In field above, crescent
17.14 Brussels, Hirsch 830
17.47 * Leu-Hess 1956, 229
- 115 O 39
R 104 Similar horse, leaning forwards on the front legs; no crescent
17.31 * Cambridge McClean 3038
17.04 Copenhagen 81
16.35 London
17.06 Naville 12, 1073 = Hirsch
19, 649 = Baranowsky 4,
785
- 116 O 39 Die showing signs of wear
R 105 Similar to R 103; double ex. line, crescent placed sideways close to rump of horse
— Berlin
16.45 Hirsch 14, 598 = Schulman
7. 6. 1937, 152
17.31 Leu-Hess 1962, 130
17.31 Lewis
16.58 * London
16.91 Merzbacher 1910, 896
16.50 Paris Luyne 1441
15.95 Syracuse 55844, Megara
Hyblaia hoard 1949

- 117 O 39
R 106 Similar to last but horse taller; on ex. line poppy, in upper left field crescent (? – trace on ANS specimen)
16.72 ANS
16.85 * London, Victoria and Albert Museum, Salting SNG 14
- 118 O 39
R 107 Tall horse, body rising towards the front; on ex. line poppy (larger than on R 106), in upper left field crescent
16.97 * London
- 119 O 39 Die now at its most worn
R 108 Similar to last, horse's body stouter and more level; poppy on ex. line, crescent in field
16.90 Cambridge McClean 3039
16.35 Hess-Leu 1957, 139
17.09 * London Lloyd SNG 1618
– Private collection Y
– Sotheby 26. 7. 1920, 34
– Syracuse, Gagliardi 1004
- 120 O 40 Head to left, of Punic style, wreath with corn-ears, triple earring, pendant necklace. Behind in field, dolphin
R 109 Horse standing rigidly before palm-tree (as in R 103 etc.); double ex. line. In field, crescent
16.71 ANS
17.12 Berlin
16.95 Hirsch 15, 1348
16.91 London
16.94 * London = Lockett 1046
17.32 MMAG 43, 15
– Pennisi
17.00 * Private collection X = Hamburger 98, 460
- 121 O 41 Head of a different style, but similar with corn-ears, pendant necklace and dolphin
R 109
– Berlin
17.21 Brussels = Carfrae 354
17.27 * Cambridge McClean 3036
17.12 * Sambon 19. 12. 1907, 504
16.60 SC 1927, 1153

Plate 8

Series 2d

- 122 O 42 Greek style head, a rather plain version of the Syracusan Euainetos head; field empty; dotted border
R 110 Horse, in front of palm-tree, leaping up, hind legs together on the ground, front legs raised thick ex. line
17.11 * Cambridge McClean 3037
16.26 Ward 370
- 123 O 42
R 111 Closely similar, slightly smaller and front legs closer together
16.80 Hirsch 31, 651 = Sotheby 19. 12. 1907, 509
17.22 Leu-Hess 1956, 228
17.02 * London Lloyd SNG 1616
16.63 Merzbacher 2. 11. 1909, 3190
17.09 Niggeler 541
- 124 O 42
R 112 Similar to R 110 but horse's tail thicker, shape of palm-tree different and date bunches larger
17.13 * AC 16, 934
17.22 ANS = Hirsch 14, 603 = Hirsch 32, 626 = Delbeke 240
– Berlin
17.02 Boston 488
16.50 Syracuse 55849, Megara Hyblaia hoard 1949
- 125 O 42
R 113 Horse and tree both taller, horse's tail with a pronounced wiggle, thin ex. line
17.07 * AC 15, 436 = Naville 10, 365
17.16 Leu-Hess 1962, 128

- 126 O 42
 R 114 Similar to last, tail of horse further back and head slightly more up
 – Berlin
 17.24 Brussels = Hirsch 20, 471
 17.22 * Gulbenkian 363 = AC 13, 383
 17.00 Paris Luynes 1433
 17.05 Sotheby 19. 12. 1907, 508
 16.95 Syracuse 55847, Megara Hyblaia hoard 1949
 16.10 Syracuse 55848, Megara Hyblaia hoard 1949
 – Syracuse, Megara Hyblaia hoard 1967
- 127 O 42
 R 114' Altered form of previous die; horse's tail and ex.line thickened; horse's neck and mane cut back towards date-bunch
 17.34 Gulbenkian 364 = Naville 6, 597
 17.23 Hirsch 19, 653
 17.20 Hirsch 14, 604
 17.09 Jameson 913
 17.13 * Lockett SNG 1037 = AC 14, 153 = Naville 1, 3298
 17.08 MMAG 43, 21
- 128 O 43 Greek style head of the Euainetos type, more animated than the last; pellet in front, three dolphins (flaw – not corn-ear – above)
 R 115 Horse stepping in front of palm-tree, one forehoof and one hind-hoof off ground; branches of tree rather broad
 17.00 Hirsch 14, 601
 16.68 London
 17.01 * MMAG 43, 22
- 129 O 43
 R 116 Similar, palm-tree has much broader branches and high top
 16.86 Copenhagen 83
 16.97 Hirsch 19, 651 = Leu-Hess 1966, 176
 16.83 Lloyd SNG 1614 = Hirsch 20, 470 = Naville 4, 1000 = Hirsch 13, 4617 = Hess 18. 3. 1918, 757 = Merzbacher 2. 11. 1909, 3189
 17.15 * London
 17.21 Niggeler 540
 17.25 Private collection Y = Hess 1954, 207
 16.95 Syracuse 55843, Megara Hyblaia hoard 1949
- 130 O 43
 R 117 Similar, branches of palm-tree intermediate between those of R 115 and R 116
 17.24 AC 16, 932
 – Berlin
 16.38 Glasgow Hunter 2
 16.66 Hartford, Conn. = Sotheby 1924, 6
 16.88 * Lockett SNG 1035 = Sotheby 19. 12. 1907, 510 = Naville 1, 3296
 17.23 Naville 6, 594
 – Paris 2360
- 131 O 44 Head to right, a large and «punicized» version of the Euainetos scheme; four dolphins; dotted border
 R 118 Horse prancing in front of palm-tree; the tree very tall with strongly splayed branches; double ex. line
 17.05 Cambridge McClean 3043
 17.21 Gulbenkian 366 = Naville 5, 3006
 17.19 Hirsch 33, 986
 17.19 London
 17.04 * Private collection Y = Münzh. Basel 8, 329
- 132 O 44 Die showing signs of wear
 R 119 Similar, palm-tree which much lower top and flatter branches, trunk leaning forward relative to ex. line
 16.61 Berlin
 17.50 Boston 492
 17.09 * Copenhagen 82
 16.72 Delbeke 242
 17.02 * Lockett SNG 1038 = Naville 4, 999 = Hirsch 19, 650
 17.29 London Lloyd SNG 1615 =

Naville 6, 593 = Late
 collector 499
 - Palermo hoard
 - Paris 2363

17.15 Paris Luynes 1436
 16.74 Platt 3. 4. 1933, 220 =
 AC 15, 437
 16.90 Vienna 38909

Plate 9

133 O 45 Head to left, of good Greek style in
 the manner of Euainetos; below the
 chin, shell; four dolphins; dotted
 border
 R 120 Horse standing, with raised foreleg,
 before palm-tree; thick exergua base-
 line; small pellet at tip of lower left
 branch
 16.80 * ANS = Sotheby 19. 12. 1907,
 511
 16.60 Hart, Blackburn
 16.97 * Leu-Hess 31, 1966, 177
 16.90 Lewis
 17.02 Nanteuil 411 = Hirsch 33,
 985 = Montagu 447 =
 Benson 796

134 O 45 Some signs of die-wear, as in the shell
 R 120' Same die with some alterations in
 the area above the horse's back, the
 date-bunches smaller and some
 alteration of the horse's mane
 16.45 * Hague
 16.61 MMAG 43, 23
 17.00 Paris 2357
 17.31 * Private collection Y =
 Castro Maya 35

135 O 46 Similar to previous with four
 dolphins but no symbol; dotted
 border
 R 121 Horse prancing to left, before palm-
 tree, head well down; thick ex. line
 16.98 Boston 489
 16.99 * London

136 O 46
 R 122 Similar, horse's front legs closer
 together
 17.04 Carfrae 11
 17.21 * Cambridge SNG 1477 =
 Weber 1773
 17.01 Lockett SNG 1036 =
 Locker-Lampson 115

- Syracuse
 - Syracuse, Megara Hyblaia
 hoard 1967

137 O 46
 R 123 Similar, horse's hind legs closer
 together, branches of tree wider, tip
 of left branch and date-bunch partly
 hidden by horse's mane
 16.78 * Lewis = Sotheby 21. 11. 1929,
 35

138 O 46 Signs of wear beginning on dolphin
 in front of nose
 R 124 Similar, horse's head up a little, front
 legs more apart
 17.28 Berlin
 17.23 Gulbenkian 365
 17.20 * Hague
 17.17 Hindamian 286
 17.15 Lewis CCCC 426
 17.14 Merzbacher 1910, 897 =
 Sotheby 11. 12. 1907, 512
 16.87 Niggeler 544

139 O 46
 R 125 Similar, horse's head a little more up,
 front legs closer, tree leaning relative
 to ex. line, tips of left branches
 hidden by horse's mane; linear border
 - Berlin
 - Hirsch 26, 120
 17.20 Hirsch 29, 879
 - Hoard X, Plate 22
 17.32 Leu-Hess 1958, 113
 17.04 * MMAG 43, 24 = Palermo
 hoard
 17.15 Paris Luynes 1442

140 O 46
 R 126 Similar, horse's head down a little,
 very close to R 124 but date-bunches
 lower relative to horse; linear border
 17.29 London

- 17.35 * Naville 5, 3005 = Hirsch 15, 1349
- Series 3 a
- 141 O 46
R 127 Similar, horse's head right up, front legs well apart, palm-tree leaning relative to ex. line and left branch-tips hidden by horse's mane; linear border
16.59 ANS = Kondylis 206
16.83 Leu-Hess 1959, 116
15.40 Naples 4785
– Paris 2358
– Paris 2359
17.10 Paris Luynes 1434
16.99 * Private collection Y = Münzh. Basel 8, 328
- 142 O 46 Same die carried over from series 2 d, now showing considerable signs of wear
R 128 Horse's head with palm-tree beside; deeply curved truncation; linear border; legend 'MMHNT'
16.78 AC 14, 150 = AC 15, 921 = White King 262
– Berlin
17.06 Cambridge McClean 3044
16.64 Hirsch 29, 873
17.35 * London
16.95 Münzh. Basel 4, 1159
– Sotheby 25. 3. 1935, 31
17.01 Syracuse, Pachino 1957 hoard (di Vita 30)
– Syracuse Gagliardi 1006
- Plate 10
- 143 O 46
R 129 Horse's head smaller, with very shallow s-curve truncation; legend 'MMHNT'
17.16 ANS
– Baranowsky 1934, 4678
16.93 Cahn 68, 1760
16.96 * London Lloyd SNG 1630
16.66 Private collection, Catania
- 144 O 46
R 130 Similar, horse's head slightly larger, shallow curved truncation; legend 'MMHNT'
– ANS
– Archaeologist and Traveller 113
17.10 Boston 490
– Glendining 14. 6. 1915, 117
17.01 Niggeler 545
17.21 * Oxford SNG 2158
- 145 O 47 Similar to previous die, but larger head and dolphins closer
R 130 Die of 144
16.91 AC 16, 920
16.95 * Hirsch 15, 1345 = AC 13, 382
17.03 Num. Fine Arts 11, 1976, 82
– Sotheby 11. 7. 1899, 75
- 146 O 47
R 131 Similar but truncation arched, the front end pointing down; legend 'MMHNT'
Die of 168
15.75 * Sotheby 25. 5. 1925, 360 = Hess 27. 10. 1902, 729
– Syracuse, Syracuse 1955 hoard
- 147 O 47
R 132 Similar, horse's nose more tapered and top of tree much lower; legend 'MMHNT'
Die of 164
15.78 * Sotheby 21. 4. 1909, 15 = Merzbacher 1910, 892 = Hess 7. 3. 1935, 285
- 148 O 47
R 133 Similar, horse's head larger; legend 'MMHNT'
16.79 ANS
16.30 Cahn 80, 495 = Helbing 17, 177 = Helbing 70, 539
17.10 Bourgey 7. 6. 1909, 149
16.97 Leu-Hess 1956, 236
16.44 Lloyd SNG 1631, Cefalú hoard
17.04 * London

- 17.08 MMAG 43, 25 =
Hamburger 98, 450;
Palermo hoard
– Nervegna 1907, 800
16.75 Naples 4791
– Palermo
16.90 Paris Luynes 1458
– Syracuse 48419, Syracuse
1927 hoard
– Syracuse Gagliardi 1005
16.40 Uncertain, cast in B. M.
- 149 O 47
R 134 Closely similar to last, marginally
smaller, palm-tree taller and thinner
on top; legend 'MMHNT'
– Berlin
17.05 Cambridge SNG 1487
17.00 * Hirsch 29, 876 = Naville 4,
1003 = Naville 10, 357
- 150 O 47
R 135 Similar, horse's head turned more *en*
face, palm-tree taller and closer to
horse's mane; legend 'MMHNT'
16.93 * Münzh. Basel 4, 1158
- 151 O 47
R 136 Similar, truncation more S-shaped;
legend 'MMHNT'
- 17.07 * Brussels
16.95 Hess 18. 12. 1933, 46
- 152 O 47
R 137 Similar, truncation less curved;
legend 'MMHNT'
16.91 * Schulman 265, 1976, 71
- 153 O 48 Similar generally to O 46–47 but
more delicate and the dolphins more
spaced out from the head, no small
curls on the neck
R 138 Horse's head much smaller, and
palm-tree relatively lower, truncation
with moderately shallow curve;
legend 'MMHNT'
17.04 AC 16, 922 = Hirsch 26,
118 = Hirsch 30, 625
17.13 Brussels Hirsch 834
16.85 * Glasgow Hunter 9
– Glendining 9. 6. 1930, 604
= Cahn 84, 473 = Ready
215
16.94 Jameson 917 = Bunbury
533 = Leu-Hess 1960, 104
16.61 London Lloyd SNG 1629,
Cefalú hoard
16.88 Naples 4790
– Paris Vogué 651
– * Private collection Y

Plate 11

- 154 O 48
R 139 Closely similar to last, truncation
more arched, branches of tree
narrower; legend 'MMHNT'
17.08 Brussels
16.95 London, Victoria and Albert
Museum, Salting SNG 15
14.79 Naples 4787
16.82 * Private collection X
17.00 SC 19. 12. 1907, 513
- 155 O 48
R 140 Closely similar to R 138, palm-tree
with wider branches and foot of
trunk below horse truncation;
legend 'MMHNT'
- 16.65 Hirsch 30, 624
16.90 Leu-Hess 1957, 143
17.01 * London
17.00 Vienna 6743
- 156 O 48
R 141 Closely similar to R 139, horse's
nose a shade larger and palm-tree
taller; legend 'MMHNT'
– Berlin
16.88 * Boston 491
16.85 Glendining-Seaby I 582
16.70 Hirsch 29, 872 = 34, 534
= Naville 5, 2989
17.02 Leu-Hess 1964, 93
17.10 Naples S 8073

- Paris 2320
 – Paris Smith-Lesouef 19
 17.00 Walcher Molthein 497
- 157 O 48
 R 142 Similar, horse's nose down more, palm-tree very small; legend 'MMHNT
 16.93 * Copenhagen 84
 17.06 Leu-Hess 1968, 117
 16.98 Lockett SNG 1050
 16.99 Maddalena 631, 18
 17.00 Naples 4788
 17.10 Syracuse, Pachino 1957 hoard (di Vita 28)
- 158 O 48
 R 143 Similar, palm-tree larger, horse's throat curves out more; legend 'MMHNT. Die of 159
 16.79 ANS
 17.11 Courtauld 43 = AC 12, 1062
 17.10 * Hamburger 27. 5. 1929, 172 = AC 15, 427
 17.07 Münzh. Basel 10, 147 = Ashburnam 249 = Schulman 7. 6. 1937
- 159 O 49 Closely similar to O 45 of series 2 d, details of earring and positions of dolphins slightly different; shell below chin
 R 143 Die of 158
 – Bourgey 5. 12. 1932, 289
 16.82 Hirsch 20, 467
 17.13 * London
- 160 O 49
 R 144 Closely similar but details of truncation and mane/palm-tree different; legend 'MMHNT
 17.10 * ANS = Hirsch 13, 4613 = Rosenberg 1914, 164
 16.42 Naples S 8081
- 161 O 49
 R 145 Horse's head has very shallow nearly straight truncation, tall palm-tree; legend 'MMHNT
- 16.69 AC 16, 924
 16.40 AC 12, 1069 = MMAG list 351, 4 = Hess 27. 10. 1902, 728
 16.97 * AC 13, 380
 17.26 ANS = Egger 10. 12. 1906, 410
 16.92 Hamburger 96, 223
 – Martinetti 801
 16.61 Naples S 8080
 17.01 Naples S 8076
 – Philadelphia
 16.78 Sotheby 2. 5. 1905, 192
 16.85 Whitehead 13
- 162 O 49
 R 146 Closely similar to last, truncation slightly more curved and palm-tree not so close; legend 'MMHNT
 17.03 * AC 13, 381 = Naville 10, 356
 17.05 Brussels
 17.25 Cambridge SNG 1489
 17.25 Hess 208, 803
 17.40 Hirsch 33, 981
 16.95 Hirsch 14, 593
 16.95 Glasgow Hunter 8
 16.41 MMAG list 351, 4
 17.07 Naples S 8078
 17.83 Naples S 8079
- 163 O 49
 R 132 Die of 147
 16.86 * Aberdeen SNG 99
 16.93 AC 16, 923 = Münzh. Basel 8, 185 = Helbing 17, 176 = Helbing 70, 538
 – Berlin, Regling MaK 734
 17.05 Cambridge SNG 1488
 17.00 Copenhagen 85
 – Hess 1949, 33
 17.27 Hirsch 19, 644 = Hirsch 33, 980
 – * Private collection Y

Plate 12

- 164 O 49
 R 147 Similar, truncation acutely arched, small palm-tree; legend 'MMHNT
 17.27 Leu-Hess 1959, 117
 17.19 Leu-Hess 1962, 127 =
 Num. Fine Arts 11, 1976, 81
 16.98 Lockett SNG 1051 = Ratto
 4. 4. 1927, 450 = Hirsch 19,
 643
 16.84 * London
 17.40 * Naville 6, 580 = Benson
 795
 17.12 Oxford SNG 2159
 - Paris 2323
 - Rollin-Feuardent 22. 5. 1908,
 205 = H. Smith 372
 17.11 Salton
- 165 O 49
 R 148 Similar, well curved truncation, larger palm-tree; legend 'MMHNT
 - Berlin
 16.68 Lewis
 16.94 Naples 4793
 17.20 * Paris Luynes 1469
 - Pennisi
 16.68 Sellwood
- 166 O 50 Head of plainer style, wreath containing only two main leaves, heavy earring; four dolphins, dotted border
 R 148 Die of 165
 - * Hirsch 12, 64
- 167 O 50
 R 131 Die of 146
 16.87 * Berlin
 17.07 Cambridge SNG 1485
- 168 O 50
 R 149 Horse's head of completely different style, long topknot and two tufts below it, shallow V-shaped truncation, tall palm-tree with flat branches; in large letters, legend 'MMHNT
 - Glendining 1953, 111
 17.10 Glendining 1955, 230
 16.57 * Hague
- 17.12 London Lloyd SNG 1635
 16.98 Oxford SNG 2160
 17.15 Paris Luynes 1459
 - Paris 2322
 17.31 Paris Delepierre
 17.14 Ratto 8. 11. 1928, 822
 16.81 Schulman I 206
- 169 O 50
 R 150 Similar, horse's neck narrower, branches of tree narrower; legend 'MMHNT
 17.08 * Hirsch 30, 623
- 170 O 50
 R 151 Similar, more arched truncation, tall palm-tree with tufty branches; legend 'MMHNT
 16.99 Boston 497
 16.98 Lewis = Lockett SNG 1053
 = Naville 12, 1065
 - Palermo
 - Palermo hoard
 17.05 Paris Luynes 1461
 - * Private collection Y,
- 171 O 50
 R 152 Similar to R 149 but with truncation a little more arched, very tall palm-tree; legend 'MMHNT
 17.17 Hamburger 98, 452
 16.20 Hirsch 34, 533
 17.03 London
 16.83 Merzbacher 2. 11. 1909,
 3184
 17.22 Naville 4, 1004 = Butler 98
 16.33 * Private collection X =
 Hamburger 98, 454
- 172 O 50' Same die with earring and necklace altered; first, second and fifth specimens flaw on truncation
 R 153 Die of 174
 Small horse head with long plaits on top, palm-tree not touching; legend 'MMHNT
 16.60 Baranowsky VI 511
 17.36 Brussels

16.84 Lloyd SNG 1634, Cefalú
hoard
17.09 * London
17.95 MMAG 43, 28

173 O 50'
R 154 Horse head a little larger than last
with truncation a little more arched,
palm-tree with flat spreading
branches; legend 'MMHNT'
17.08 * Brussels Hirsch 836

Plate 13

174 O 50'' Same die with further alterations to
earring necklace and truncation
R 153 Die of 172
– * Sotheby 5. 7. 1910, 90

175 O 50''
R 155 Closely similar to R 152
16.48 * Num. Fine Arts 20. 3. 1975,
61

176 O 51 Head to right, of another different
style, two-leaved wreath, earring and
necklace as before, four dolphins,
dotted border
R 156 Horse head to right, shaggy style,
palm-tree on left with spreading
branches; dotted border; legend
Š'MMHNT
– Baltimore
16.66 Brussels Hirsch 837
– Glendining 24. 11. 1950,
1537
16.90 Hirsch 21, 4669
15.28 Münzh. Basel 4, 1163
– Paris 2319
17.50 * Private collection X
– Private collection Y
– Syracuse, Megara Hyblaia
1967 hoard
16.70 Vienna 6742

177 O 51 Signs of wear beginning in lower
part of die
R 157 Die of 182
Large horse head to left close in style
to R 133 etc. with regular curve of
truncation, palm-tree close with
compact branches; legend 'MMHNT'
16.91 * Berlin
– Paris 2318
17.00 Schlessinger 26. 2. 1934, 374

178 O 51 Die wear increased, flaw below chin
R 158 Small horse head to left, of shaggy
style with very shallow truncation,
tall palm-tree close; linear border;
legend Š'MMHNT
– Baltimore
– ANS
16.98 Benson 798
– Berlin
17.22 Brussels Hirsch 838
17.12 Leu-Hess 1956, 240
16.98 * London
– MMAG list 351, 5
– Paris Vogué 652
16.60 SC 19. 12. 1907, 517
– Syracuse 24743, Mineo hoard

179 O 51 Die now considerably worn
R 159 Horse head of shaggy style but larger,
palm-tree not touching; linear border;
legend Š'MMHNT
16.98 ANS
17.17 Hess 207, 224
16.51 Hirsch 19, 642 = Naville 5,
2988 = Hirsch 29, 875 =
Helbing 70, 537
16.96 Lewis
16.85 Naples S 8083
– Paris 2317
– * Uncertain (cast in B. M.)

180 O 51
R 160 Die of 181
Similar to R 157, horse's nose more
raised, palm-tree not so close;
legend 'MMHNT'
17.05 AC 15, 430 = Ratto 1909
Froehner 5728
– Berlin
17.20 Glendining-Seaby III 1184
17.32 * London
17.15 Yale = Helbing 1927, 1811

- 181 O 52 Similar style to O 50, more compact and rounded outline, upper leaf of wreath across cranium; four dolphins, dotted border
- R 160 Die of 180
 17.14 AC 12, 1063
 17.23 AC 12, 1064 = Delmonte 18. 11. 1933, 205
 – Berlin
 17.30 Hess 202, 2678 = Benson 797
 – SC 19. 12. 1907, 515
 17.00 * Vatican 932
- 182 O 52
- R 157 Die of 177
 17.00 Cambridge SNG 1486
 16.25 Helbing 8. 11. 1928, 3717
 17.25 Münzh. Basel 8, 186
 17.15 Niggeler 546
 17.04 * Paris Delepierre
- 183 O 53 Head of more Greek style but without the refinement of O 46 etc., three prominent leaves in wreath; four dolphins; dotted border
- R 161 Style similar to R 149 etc., shallow truncation, tree with flat branches; legend 'MMHNT'
 – Berlin
 – Burel 107
 17.40 Hamburger 98, 455 = Schulman 31. 5. 1938, 107
 17.24 Glasgow Hunter 7
 17.13 * London Lloyd SNG 1633
 17.23 MMAG 1971, list 326, 10
- Palermo hoard
 – Platt 3. 4. 1933, 216
- 184 O 53
- R 162 Similar, truncation in smoother curve, palm-tree smaller; legend 'MMHNT'; linear border
 17.15 ANS
 16.79 Cambridge SNG 1481
 16.92 Hirsch 19, 639
 16.77 Glasgow Hunter 10
 16.91 Leu-Hess 1959, 118
 17.10 Merzbacher 1910 = Ratto 4. 4. 1927, 448
 16.94 * MMAG 43, 27
 17.30 Naples 4786
 16.91 Naville 4, 1006 = Weber 1775 = Headlam 181
 16.92 Naville 5, 2990
 – Paris Chandon de Briailles 716
 – Pennisi
 – Private collection Y
 – Private collection Y
- 185 O 54 Style similar to O 52 etc. but three prominent leaves in hair, dolphin behind neck in line with necklace; four dolphins; dotted border
- R 163 Similar to R 162 but smaller and horse's head more up, tall palm-tree; linear border; legend 'MMHNT'
 17.04 * London Lloyd SNG 1636, Cefalú hoard

Plate 14

- 186 O 55 Similar to O 54 but smaller face, one dolphin in front touching tip of nose, dolphin behind neck above necklace; four dolphins; dotted border
- R 163 Die of 185
 17.08 AC 16, 926 = O'Hagan 165
 17.24 Boston 496
 16.40 Brandis 376
 17.10 Cahn 35, 225
 17.36 Cahn 66, 480
 17.07 Cambridge SNG 1484
- 17.09 * Cumberland Clark 356 = Hirsch 16, 694 = Mann 9
 17.04 Egger 10. 12. 1906, 411 = Egger 45, 838
 16.85 Hamburger 98, 451
 17.10 Helbing 20. 3. 1928, 453 = Hess 18. 3. 1918, 754
 17.06 Hirsch 32, 615
 16.91 Munich
 – Myers 1971
 17.29 Naville 6, 579
 17.25 Paris Luynes 1460

- Syracuse 42956, Pachino
1922 hoard
- 187 O 55
R 164 Similar but taller and more arched
truncation, tall palm-tree with
compact branches; linear border;
legend 'MMHNT'
– ANS
17.07 Florange-Ciani 17. 2. 1925,
137
16.80 Hamburger 96, 222 =
Glendining-Seaby III 1182
= Ratto 4.4. 1927, 449
17.14 Hamburger 98, 453 =
Naville 10, 355
16.96 Leu-Hess 1956, 237
17.09 Naples S 8072
16.92 Private collection R
15.48 Private collection X
– Private collection Y
16.93 * Stockholm KMK
- 188 O 55
R 165 Closely similar to R 157, palm-tree
has thicker branches and horse's head
thicker hair on top; linear border;
legend 'MMHNT'
17.08 AC 16, 925
16.61 ANS
– Berlin
16.80 Brussels Hirsch 835
– * Cahn 1950/1
17.01 Cambridge SNG 1493
17.04 Delbeke 241 = Balmanno
43
16.98 Hague
16.93 Leu-Hess 1960, 106
17.20 Locker-Lampson 116 =
AC 15, 428
16.99 London Lloyd SNG 1638
– Morgan
16.70 Private collection X
16.80 SC 19. 12. 1907, 514
17.11 Sandeman 264
17.27 Syracuse, Pachino 1957
hoard (di Vita 26)
16.85 Ward 363
- 189 O 55
R 166 Similar to R 161–162 but truncation
more curved, palm-tree tall and
stands away from horse's neck;
linear border; legend 'MMHNT'
16.97 ANS
– Berlin
16.88 Cahn 84, 472
16.99 Cambridge SNG 1482
16.97 * Leu-Hess 1966, 178
16.93 London
16.88 Montagu 446
17.09 Schulman 16. 12. 1926, 211
= Egger 10. 12. 1906, 412
17.25 Schulman 7. 6. 1937, 149 =
Löbbecke 581
– SC 22. 6. 1906, 199 =
Rosenberg 72, 804
– Syracuse
17.08 Syracuse, Pachino 1957
hoard (di Vita 27)
- 190 O 56 Different, harder style; three
dolphins; dotted border; behind neck
swastika (?)
R 167 Horse's head tall, with almost straight
truncation, reminiscent of e.g. R 145;
linear border; legend 'MMHNT'
16.64 Hirsch 19, 641
16.67 * London
16.59 Naville 4, 1005
- 191 O 56 Die more worn, flaw below chin;
earring altered
R 168 Horse's head of very different style,
rather fat and rounded, with wild
hair on top, arched truncation, palm-
tree stands away from horse's neck;
linear border; legend 'MMHNT'
17.05 * Berlin
17.06 Castro Maya 36
17.00 Hirsch 13, 4612
17.10 Lewis = Hindamian 289 =
Hirsch 32, 614
16.96 * Salton = AC 16, 927
17.00 Schulman 21. 10. 1935, 235
- 192 O 56
R 169 Closely similar to last but flatter
truncation; legend 'MMHNT'

- 17.61 Lanz V 1975, 98
 17.12 * Lockett SNG 1052
 16.68 Auctiones A. G. 6, 322
- 193 O 56
 R 170 Similar but truncation has a deeper curve, palm-tree closer; legend 'MMHNT'
 17.38 * Copenhagen 88
 – Engel-Gros 1921, 22
 16.70 * Leu-Hess 1960, 105
- 194 O 57 Similar to last but a distinct die, the necklace parallel to the truncation, the dolphin below more curved
 R 170 Die of 193
- Plate 15*
- 196 O 58
 R 172 Similar, almost straight truncation, palm-tree away from neck; linear border; legend 'MMHNT'
 17.08 * Sotheby 23. 5. 1900, 498
- 197 O 59 Very similar but smaller, necklace parallel to truncation; four dolphins; dotted border
 R 173 Similar, horse's nose shorter and back of neck curved, palm-tree lower; linear border; legend 'MMHNT'
 16.58 Lempertz 1926, 660
 17.18 Lewis
 16.13 * London
 17.00 Münzh. Basel 4, 1160
 16.95 Oxford SNG 2161
 16.90 SC 1927, 1149
 16.55 Vatican 362
 17.12 Ward 362
- 198 O 59
 R 174 Similar, neckline straighter; legend 'MMHNT'
 16.56 ANS = Bourgey 15. 12. 1909, 59 = Sambon 19. 12. 1907, 516
 16.96 * Headlam 181
- 199 O 59
 R 175 Similar, palm-tree taller; legend 'MMHNT'
- 16.59 * Cahn 60, 1226 = Cahn 66, 482
 16.50 Glendining-Seaby III 1183 = Ratto 24. 6. 1929, 544
 17.10 Hess 224, 1908
 – Syracuse, Syracuse 1955 hoard
- 195 O 58 Larger head, face and chin more elongated, more formalised treatment; four dolphins; dotted border
 R 171 Horse's head tall, like R 167 but truncation? (not visible); legend? (presumably 'MMHNT')
 16.78 * Hague
- 17.17 * AC 15, 429
 – Morgan 192
- 200 O 59
 R 176 Similar, palm-tree closer to horse's neck; legend 'MMHNT'
 17.27 Cahn 61, 199
 17.12 Cahn 80, 494 = Cahn 71, 700 = Rosenberg 72, 805 = MMAG list 326, 9
 17.29 Lewis CCCC SNG 428
 17.54 * London Lloyd SNG 1632
 16.73 Naples 4792
- 201 O 59
 R 177 Similar, slightly concave truncation, palm-tree not so close; legend 'MMHNT'
 17.03 * Naples 4789
 – Platt 3. 4. 1933, 217
- 202 O 60 Closely similar to O 59 and possibly adapted from it; the roll of hair at the back of the neck enlarged, the earring and necklace altered
 R 177 Die of 201
 15.72 * Private collection X
- 203 O 60
 R 178 Similar, especially to R 176; legend 'MMHNT'
 – * Uncertain original, Mionnet cast

- 204 O 61 Closely similar to O 47 but with necklace; die-flaws horizontally across hair and on brow
 small differences of detail and expression, dolphin behind neck closer to necklace; four dolphins; dotted border
 R 179 Die of 204
 – * Syracuse, Megara Hyblaia hoard 1967 (photo slightly small)
- R 179 Similar to R 136, very tall thin palm-tree; linear border; legend 'MMHNT'
 16.75 Paris 2321
 – * Private collection Y
 – Syracuse, Megara Hyblaia hoard 1967
- 205 O 62 Similar, many differences of detail, dolphin behind neck higher than
 205 A O 62' Same die with same prominent flaw, but the face largely remodelled giving a cruder expression
 R 179 Die of 204
 – ANS
 16.89 * Paris Delepierre = Naville 1, 3300 = SC 24. 3. 1902, 9

Plate 16

- 206 O 63 Similar to O 61 with differences of detail, dolphin in front closer to nose
 R 180 Similar to R 179, truncation more arched; legend 'MMHNT'
 16.80 * Hague
 – Hoard X
 – Platt, May 1921, 121
 16.88 Schweiz. Bankverein Herbst 1975, 128
 17.11 Syracuse, Pachino 1957 hoard (di Vita 29)
- 209 O 64 Head of new and derivative but pretty style; one dolphin behind neck, none in front – unfinished die
 R 182 Die of 208
 17.03 * Palermo hoard
- 210 O 64' Same die now finished by addition of two more dolphins in front
 R 182 Die of 208
 16.72 ANS
 16.66 * Lewis
 16.71 London
- Series 3 b
- 207 O 63 Die of 206 (series 3 a)
 R 181 Large horse head with shallow curved truncation, head up; similar to style of R 192 below; legend M M
 16.24 * Private collection Y = Naville 5, 2997 (illust. = cast and original)
- 208 O 63' Same die, worn; pellet added below chin
 R 182 Small horse's head of different style, stiffer treatment, palm-tree with branches and date-bunches splayed out; linear border; legend M M
 16.85 ANS
 17.16 * Copenhagen 87
- 211 O 64'
 R 183 Fairly small horse's head, straight mane, compact palm-tree; linear border; legend M M
 – * Cancio
 16.38 Hirsch 20, 468
- 212 O 64'
 R 184 Similar to R 182 but compact palm-tree
 16.73 * Paris Delepierre = 15, 432
- 213 O 64'
 R 185 Similar to R 183 but curving mane
 16.52 Paris Luyne 1464
 – * Ratto 9. 10. 1934, 259

- 214 O 64'
R 186 Similar to R 185 but head down
16.93 * London
- 215 O 65 Larger head, similar in style to O 64
but differently proportioned; three
dolphins; dotted border
R 187 Horse's head of powerful expressive
style with strongly curved throat,
palm-tree tall and compact;
legend M M
- 16.70 Allotte de la Fuye 1925,
1728 = Feuardent
26. 5. 1914, 161
17.02 * Leu-Hess 1959, 119
16.09 Weber 1774 = Naville 5,
2992
- 216 O 65
R 188 Similar to last
17.02 Hirsch 19, 645
17.23 * London = Hirsch 19, 646

Plate 17

- 217 O 65
R 189 Similar, back of neck straighter;
dotted border; legend M M
16.78 Paris Delepierre =
Baranowsky 1934, 4677
16.92 * Private collection X
- 218 O 65
R 190 Horse's nose more detailed, throat
less bulging truncation more vaulted;
linear border; legend M M
– Ciani 1929, 185
16.73 * Gustav VI Adolf, King of
Sweden, SNG 44
17.03 Hague = AC 12, 1070 =
Merzbacher 2. 11. 1909,
3185
16.58 Leu-Hess 1956, 239
16.71 Naples S 8074
17.14 Paris Delepierre
16.86 Private collection X
16.86 Private collection X
16.98 Private collection X
– Private collection Y
- 219 O 66 Closely similar to O 65, the head
straighter on the neck, the earring
hanging back instead of forward,
dolphin behind neck further back;
three dolphins
R 190 Die of 218
16.43 * London Lloyd SNG 1637,
Cefalú hoard
17.05 Vienne 6744
- 220 O 66
R 183 Die of 211
– Berlin
16.71 * London
- 221 O 66
R 191 Similar to R 183 etc., straight mane,
upward lock on top; linear border;
legend M M (legend partly obscured
by die-break)
16.72 * London
17.00 * Private collection X
- 222 O 67 Head with tall neck and rather vapid
expression; in front, one dolphin
and caduceus; linear border
R 183 Die of 211, 220
16.51 * Cambridge McClean 3045
17.50 Canessa (Brandis) 375
- 223 O 67
R 192 Horse head of large expansive style,
shallow-curved truncation; palm-tree
short with flattish branches and
prominent hanging date-bunches;
linear border; legend M M
16.46 Gulbenkian 374 = Naville
6, 584 = SC 19. 12. 1907,
518 = Merzbacher 2. 11.
1909, 1729
16.63 London
– * Private collection Y,
Palermo hoard

- 224 O 68 Large head of exuberant Greek style; in front, one dolphin and caduceus close to lips; linear border
 R 193 Similar, palm-tree very tall; legend M M
 – Berlin
 16.85 Hirsch 14, 596
 17.22 Lewis = Nobleman 1955, 231; Palermo hoard
 16.71 * London
 16.77 Naples 4797
 17.36 Naville 5, 2998
- 225 O 68
 R 194 Similar, palm-tree of intermediate length, base of trunk below corner of truncation; linear border; legend M M
 – * Private collection Y
- 226 O 68
 R 195 Similar, with downward-arching truncation, tall palm-tree with plume-like branches; linear border; legend M M
 17.07 * Boston 495

Plate 18

- 227 O 69 Closely similar to O 68 but numerous differences e.g. the earring, and caduceus not so close to lips
 R 195 Die of 226
 – ANS
 16.68 Brussels Hirsch 839
 17.28 Leu-Hess 1956, 238
 17.21 Leu-Hess 1958, 114
 16.73 * London
 – Palermo hoard
 – Palermo hoard
 – Palermo hoard
 17.03 Paris Delepierre = Allotte de la Fuye 1729
 17.09 Paris Luynes 1463
 – Pennisi
 17.00 Strozzi 1357
 – Martinetti-Nervegna, Sangiorgi 1907, 803
 16.95 MMAG 43, 30
- 228 O 70 Neater Greek style; linear border; three dolphins
 R 195 Die of 226, 227
 17.01 * MMAG 43, 29
- Series 3 c
- 229 O 71 Head of restrained Greek style; one dolphin below truncation (crescent-shaped mark in right field probably a die-flaw)
- R 196 Horse head of neat compact style with slightly curved truncation; palm-tree close, base of trunk above corner of truncation; linear border; below letter 'ayin
 17.10 ANS
 16.78 ANS = SC 22. 6. 1906, 197
 17.31 Berlin
 16.95 * London, BMQ 1938 XII, pl. xlix. 3, Palermo hoard
- Series 3 d
- 230 O 72 Modest Greek style head; three (four?) dolphins; pellet below chin; dotted border (flaws by mouth and chin)
 R 197 Horse head with lowered nose and deeply arched truncation, tall palm-tree; linear border; legend M
 – * Palermo hoard
 17.00 Paris Luynes 1468
 17.09 Schulman 16. 12. 1926, 210
- 231 O 72
 R 198 Similar to last, different treatment of mane; legend M
 – Berlin
 17.27 Cahn 66, 481
 16.71 * Copenhagen 86
 17.03 Hague
 – Paris 2345

- 16.94 * Private collection X = Hess
202, 2679 = NC 1925, pl. vi
(o), Cefalú hoard
17.40 Private collection X
- 232 O 72' Same die with nose and mouth recut,
also parts of dolphins and earring
(on which flaw, first specimen)
R 199 Similar to last, palm-tree stands more
away from horse's mane and above
corner of truncation; linear border;
legend M
16.85 ANS
17.12 * London (PCG IV C 21)
- 233 O 72'' Same die more extensively recut,
especially the hair and wreath (flaw
on earring remains from 232)
R 199 Die of 232
16.85 * Schweizerischer Bankverein,
Herbst 1975, 127
- 234 O 73 Tall compact head of formal style;
four dolphins; dotted border
R 199 Die of 232-233
16.99 Baltimore
17.00 * London
- 235 O 73
R 200 Closely similar to last, right corner
of truncation curves back; linear
- border; legend M
17.03 * Naples 4795
- 236 O 73
R 201 More compact with head up and
nearly straight truncation, palm-tree
tall with compact top; linear border;
legend M
17.09 MMAG list 326, 11
17.00 * Private collection X
- 237 O 74 Closely similar to O 73 but slightly
larger and fuller in the chin; four
dolphins
R 202 Similar but head lowered a little,
truncation in shallow S-curve;
legend M
- ANS
17.30 Cahn 68, 1761 =
Glendining-Seaby II 252
17.12 Hirsch 32, 617 = AC 12,
1069
16.85 Paris Luynes 1467
- * Private collection Y
16.95 Ratto 9. 10. 1934, 260
16.82 Syracuse, Pachino hoard
1957 (di Vita 32)
- Syracuse, Megara Hyblaia
hoard 1967

Plate 19

- 238 O 74
R 203 Similar to R 201, truncation quite
straight, palm-tree taller; legend M
17.16 Hirsch 19, 640 = Hirsch 29,
874
16.69 Lewis
15.75 * London Lloyd SNG 1640 =
Martinetti 802
- Platt collection A, 814
- 239 O 74
R 201 Die of 236
- Berlin
16.92 * Hague
17.02 London
17.15 Naples 4794
- 240 O 75 Head of freer and prettier style
comparable with O 72 but smaller;
four dolphins; in field behind neck,
pellet; no border
R 203 Die of 238
17.05 * Hamburger 27. 5. 1929, 173
- 241 O 75
R 204 Similar to R 203 with straight
truncation but larger, and palm-tree
with thicker trunk; linear border;
legend M
16.55 Münzh. Basel 4, 1162
17.07 * Paris Delepierre =
Neville 6, 583 = Allotte de
la Fuye 1726

- 242 O 75
 R 205 Fine style head with S-curved truncation, palm-tree leaning inwards; no border; legend M
 17.02 AC 15, 431 = Naville 4, 1007
 16.98 Glendining 31. 1. 1951, 315
 16.33 Leu-Hess 1958, 115
 16.80 Lockett SNG 1054 = AC 14, 151
 16.99 London
 17.27 Münzh. Basel 4, 1161
 17.00 Naville 5, 2993 = Montagu 453 = Prowe 1904, 1790
 16.85 Paris Luynes 1466
 16.68 Private collection X
 17.02 * Private collection X
 – * Private collection Y
 – Sartiges 386
 16.96 Syracuse, Pachino hoard 1957 (di Vita 31)
- 243 O 75 Worn die
 R 206 Similar to R 201, truncation in very shallow S-curve; linear border; legend M
 – Berlin
 16.93 * London Lloyd SNG 1639
 – Paris 2346
 16.89 Stockholm
- 244 O 76 Head of fine and delicate Greek style; four dolphins; no border
 R 206 Die of 243
 – * Private collection Y
- 245 O 77 Generally similar to O 72 but more loosely composed; pellet below chin; four dolphins; dotted border
 R 207 Not unlike R 206 but head lower and truncation well arched; legend M
 16.78 * London
 16.72 Private collection X = Hamburger 98, 459
- 246 O 77
 R 208 Similar, larger, truncation in S-curve; legend M
 17.50 * Hirsch 30, 626
- 247 O 77
 R 209 Similar to R 207 but truncation shallower, palm-tree leaning to left; legend M
 17.00 * Canessa (Brandis) 373
- 248 O 77
 R 210 Die of new style, small compact horse's head with bulging eyes and prominent locks radiating from the top, palm-tree tall with radiating plume-like branches; linear border; legend M
 16.87 Cancio
 17.16 Glasgow Hunter 4
 17.10 Lewis = Glendining 13. 12. 1963, 198; Palermo hoard
 – * Private collection Y

Plate 20

- 249 O 78 Large Greek head of fine expressive style; four dolphins; dotted border
 R 211 Very large, strong and detailed horse's head, truncation almost straight, palm-tree close with bush-like top; dotted border; legend M
 17.04 Egger 10. 12. 1906, 415
 17.05 * Jameson 2437 = Hamburger 27. 5. 1929, 174 = MMAG 43, 31
 16.84 London
 16.91 Naville 5, 2996 = Ratto 26. 4. 1909, 5726
 17.03 Paris 2344
 16.83 Private collection X
 – * Private collection Y
- 250 O 78
 R 212 Similar, slightly smaller and neater version of R 211, palm-tree much smaller; dotted border; legend M
 16.73 * Gustav VI Adolf King of Sweden SNG 45
 16.60 Hamburger 27. 5. 1929, 175
 16.95 Auctiones AG Basel 5, 243

- 251 O 78
R 213 Large head with very broad nose turned almost *en face*, slim palm-tree; legend M
17.27 * Naples 4796
16.17 Naville I, 3302
- 252 O 79 Head of formal and mediocre style; four dolphins; linear (?) border
R 211 Die of 249
17.11 * Berlin
- 253 O 79
R 214 Similar to R 210, smaller and truncation curving more downwards; linear border; legend M
16.78 * ANS
17.02 Lewis
- 254 O 79
R 215 Similar to last, truncation more level; legend M
– Burel 108
17.02 * London
– Paris Vogué 653
- 255 O 79
R 216 Similar style but head very small, truncation lightly concave, palm-tree compact and close; legend M
– Berlin
17.22 * London
17.05 SC 19. 12. 1907, 519
– Syracuse, Megara Hyblaia hoard 1967
- 256 O 79
R 210 Die of 248
16.90 Hague
16.82 Glasgow Hunter 5
17.12 Naville 5, 2995
16.60 Paris Luynes 1465
– * Private collection Y
– Syracuse, Megara Hyblaia hoard 1967
- 257 O 79
R 217 Similar but neater style, truncation in shallow curve; legend M
17.27 AC 17, 307
16.70 Ahlström 6, 1974, 87
– Berlin
17.39 Egger 26. 11. 1909, 433
16.89 * London
16.94 Naville 5, 2994
16.11 Palermo hoard 1936
– Paris Vogué 654
16.92 Private collection X
17.16 Schulman 31. 5. 1938, 110, Palermo hoard
16.40 Syracuse, Capo Soprano 1950 hoard 55889
- 258 O 79
R 218 Similar, topknot and palm-tree both smaller; legend M
– * ANS
– Berlin

Plate 21

- 259 O 79
R 219 Similar but straight truncation; legend M
– * Glendining-Seaby II 507 = Ciani 12. 12. 1921, 98
- 260 O 79
R 220 Similar to last, but horse's nose larger and held lower; legend M
– * Arethuse supplement 1, Florange/Ciani 1924, 983
- 261 O 80 Peculiar head, compact and stylised; three dolphins; dotted border
- R 219 Die of 259
17.15 * Private collection X
- 262 O 81 Large ugly head, roughly executed; four dolphins; linear (?) border
R 220 Die of 260
16.60 Cahn 60, 1227
16.72 London Lloyd SNG 1641, Cefalú hoard
16.91 MMAG list 326 1971, 12
16.83 Naples S 8075
16.64 * Private collection X

- 263 O 81
 R 219 Die of 259, 261
 – Baltimore
 16.85 Lewis
 17.32 London
 16.39 Naville 10, 359
 16.61 * Private collection X
 16.85 Ratto 9. 10. 1934, 261
 16.72 Schulman 7. 6. 1937, 151 =
 Ciani 20. 11. 1935, 266
- 264 O 81
 R 212 Die of 250
 16.30 Hirsch 32, 625
 16.58 MMAG 43, 32
 17.12 * Private collection X
 – Spink 1971
 17.05 Lanz 5 1975, 101
- 265 O 81
 R 211 Die of 249, 252
 – * Palermo hoard
 – Palermo hoard
 16.90 Vienna 6745
- 266 O 82 Ill-proportioned and roughly
 executed head; four dolphins; dotted
 border
 R 213 Die of 251
 – Berlin
 17.13 Egger 10. 12. 1906, 414
 16.83 Fuller 1966
 16.81 Lanz 5, 1975, 102
- 16.60 Paris Luynes 1470
 16.62 Private collection X
 – Sotheby 1. 5. 1929, 32
 16.84 * Vatican 934
- 267 O 82
 R 221 Horse head of peculiar style, shaggy
 palm-tree; linear border; legend M
 16.85 ANS
 16.98 Lewis
 16.62 * London
 – Syracuse, 25285 Mineo hoard
- 268 O 82
 R 222 Horse head of similar style to last
 but facing right, deep-curving
 truncation, palm-tree not touching;
 linear border; no legend
 – Berlin
 16.98 * London
- 269 O 82
 R 223 Similar to last but shallower
 truncation, palm-tree touching;
 linear border; no legend (some flaws
 below truncation)
 – Berlin
 17.10 * Hague
 17.13 Lewis
 16.74 * London
 17.22 Naples 4798
 17.16 Naville 5, 2991

Plate 22

- Series 4
 Female head wearing oriental tiara / Lion and
 palm-tree
- 270 O 83 Head of fine sensitive style, the tiara
 worn loosely and bound with a plain
 band tied above the forehead, the
 side flap revealing a mass of cork-
 screw curls, also protruding behind,
 the far-side flap also indicated;
 dotted border
 R 224 Lion walking with head erect and
 tail curled, reaching forward with
 forepaw; palm-tree similar to those
 of 134–141 above; double ex. line,
 linear border; legend Š'MMHNT
 17.09 Gulbenkian 376 = Naville
 10, 358
 – * Hoard X
 16.82 Jameson 911
 17.16 Lewis CCCC SNG 427
 17.06 Lloyd SNG 1628
 17.19 * London
 16.77 MMAG 43, 33
 16.94 Naples 4821 (Regling,
 Münze als Kunstwerk 837 /
 Rizzo lxvi. 6)
 17.20 Paris Luynes 1471

- 17.51 Pennisi (ZfN 1935,
pl. ix 12)
- 271 O 84 The tiara has a larger overfold on top and is held by a band decorated with palmettes; mass of curls on the forehead; the neck-flap of the tiara hangs vertically and curls appear from below it; one curl shown on farside of neck; a simple necklace seems to be indicated; dotted border
- R 225 The lion is shown in a stiffer pose, the head full-face, large paws; branches of palm-tree more spreading; single ex. line, dotted border; legend (in reversed letters but reading right to left) Š'MMHNT
– Berlin
17.27 * Num. Fine Arts II 1976, 80
17.17 * London PCG III. C. 41;
Rizzo lxvi. 7
– Paris 2350
17.02 Syracuse, Pachino hoard
1957 (di Vita 24)
- 272 O 85 Head to right; the tiara worn with side-flaps back to reveal the ear, long row of curls along the front edge; the tiara shown in stiff radiating pleats with a helmet-like visor in front and the neck-flap hanging below the truncation; simple earring, loose locks of hair visible behind the neck-flap; stand of hair and far-side flap of tiara shown in front of the neck; dotted border
- R 226 Lion and palm-tree to right; the lion's mane bristling and head held very low; palm-tree with radiating branches; wobbly ex. line, dotted border; legend Š'MMHNT
17.18 ANS (= Ravel, Falsifications pl. IV. 9; genuine coin)
– Berlin
17.34 Boston addenda 36 = Hess-Leu 1956, 235
17.30 * Brussels Hirsch 832
17.06 Brussels Hirsch 833
16.65 Hirsch 14, 594
– Hoffmann (cast in D. Akad. Wissenschaften)
17.21 Leu-Hess 1962, 133 = Leu-Hess 1958, 117
17.18 London
17.97 MMAG 43, 34
– Munich
17.35 Paris Luynes 1472
17.11 * Syracuse, Pachino hoard
1957 (di Vita 25)
– Syracuse = Rizzo
pl. LXVI. 8
17.50 Vienna 6735

Key to Plates

Plate 1	49	London	90 L	London	
	50	ANS	90 H	Hague	
	51	Naples			
	52 L	London	Plate 5	91	MMAG 43
	52 P	Paris		92	Lloyd
	53	London		93	Niggeler
	54	Copenhagen		94	London
	55	Allotte de la Fuye		95	Myers 1971
	56	Paris		96	Hague
	57	ANS		97	ANS
	58	Paris		98	Heu-Hess 1968
	59	Lewis		99 S	Stockholm
				99 Y	Private collection Y
Plate 2	60	Myers-Adams	100 LH	Leu-Hess 1962	
	61	Glasgow	100 L	London	
	62	Berlin			
	63	London	Plate 6	101	London
	64	Gulbenkian		102	London
	65	Private collection Y		103	Myers 1972
	66	London		104 LH	Leu-Hess 1956
	67	Berlin		104 Y	Private collection Y
	68	Lockett		105	Baltimore
	69	Berlin		106	Sotheby 1907
	70	London		107	Boston
	71	London		108	Lewis
				109	Brussels
Plate 3	72	Naville 6		110	MMAG 43
	73	Berlin		111	Ars Classica 15
	74	Palermo			
	75	Syracuse	Plate 7	112	Private collection Y
	76	Cambridge		113	London
	77 G	Gulbenkian		114	Leu-Hess 1956
	77 H	Hague		115	Cambridge
	78	Private collection Y		116	London
	79	Copenhagen		117	London (V. & A.)
	80	MMAG 43		118	London
	81	Hague		119	London
	82	Leu-Hess 1956		120 L	London
				120 X	Private collection X
Plate 4	83	ANS		121 S	Sambon 1907
	84	London		121 C	Cambridge
	85	Copenhagen			
	86	London	Plate 8	122	Cambridge
	87 S	Sambon-Canessa 1902		123	London
	87 C	Copenhagen		124	Ars Classica 16
	88 H	Hague		125	Ars Classica 15
	88 Y	Private collection Y		126	Gulbenkian
	89 X	Private collection X		127	Lockett
	89 G	Gulbenkian		128	MMAG 43

	129	London		170	Private collection Y
	130	Lockett		171	Private collection X
	131	Private collection Y		172	London
	132 C	Copenhagen		173	Brussels
	132 L	Lockett			
Plate 9	133 A	ANS	Plate 13	174	Sotheby 1910
	133 LH	Leu-Hess 1966		175	Num. Fine Arts 1975
	134 Y	Private collection Y		176	Private collection X
	134 H	Hague		177	Berlin
	135	London		178	London
	136	Cambridge		179	Uncertain
	137	Lewis		180	London
	138	Hague		181	Vatican
	139	MMAG 43		182	Paris
	140	Naville 5		183	London
	141	Private collection Y		184	MMAG 43
	142	London		185	London
Plate 10	143	London	Plate 14	186	Cumberland Clark
	144	Oxford		187	Stockholm
	145	Hirsch 15		188	Cahn 1950
	146	Sotheby 1925		189	Leu-Hess 1966
	147	Sotheby 1909		190	London
	148	London		191 B	Berlin
	149	Hirsch 29		191 S	Salton
	150	Münzh. Basel 4		192	Lockett
	151	Brussels		193 C	Copenhagen
	152	Schulman 1976		193 LH	Leu-Hess 1960
	153 G	Glasgow		194	Cahn 60
	153 Y	Private collection Y		195	Hague
Plate 11	154	Private collection X	Plate 15	196	Sotheby 1900
	155	London		197	London
	156	Boston		198	Headlam
	157	Copenhagen		199	Ars Classica 15
	158	Hamburger 1929		200	London
	159	London		201	Naples
	160	ANS		202	Private collection X
	161	Ars Classica 13		203	Uncertain
	162	Ars Classica 13		204	Private collection Y
	163 A	Aberdeen		205	Syracuse
	163 Y	Private collection Y		205 A	Paris
Plate 12	164 L	London	Plate 16	206	Hague
	164 N	Naville 6		207	Private collection Y (cast and original)
	165	Paris		208	Copenhagen
	166	Hirsch 12		209	Palermo hoard
	167	Berlin		210	Lewis
	168	Hague		211	Cancio
	169	Hirsch 30		212	Paris

	213	Ratto 1934		245	London
	214	London		246	Hirsch 30
	215	Leu-Hess 1959		247	Canessa
	216	London		248	Private collection Y
Plate 17	217	Private collection X	Plate 20	249 J	Jameson
	218	Stockholm		249 Y	Private collection Y
	219	London		250	Stockholm
	220	London		251	Naples
	221 X	Private collection X		252	Berlin
	221 L	London		253	ANS
	222	Cambridge		254	London
	223 L	London		255	London
	223 Y	Private collection Y		256	Private collection Y
	224	London		257 L	London
	225	Private collection Y		257 X	Private collection X
	226	Boston		258	ANS
Plate 18	227	London	Plate 21	259	Glendining-Seaby II
	228	MMAG 43		260	Aréthuse 1924
	229	London		261	Private collection X
	230	Palermo hoard		262	Private collection X
	231 C	Copenhagen		263	Private collection X
	231 X	Private collection X		264	Private collection X
	232	London		265	Palermo hoard
	233	Schweiz. Bankverein 1975		266	Vatican
	234	London		267	London
	235	Naples		268	London
	236	Private collection X		269 L	London
	237	Private collection Y		269 H	Hague
Plate 19	238	London	Plate 22	270 HX	Hoard X
	239	Hague		270 L	London
	240	Hamburger 1929		139 HX	Hoard X
	241	Paris		271 NF	Num. Fine Arts 1976
	242 X	Private collection X		271 L	London
	242 Y	Private collection Y		272 B	Brussels
	243	London		176 P	Paris
	244	Private collection Y		272 S	Syracuse (x 1.2)



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52 L



52 P



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PLATE 2



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PLATE 3



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PLATE 4



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87 S



87 C



88 H



88 Y



89 X



89 G



90 L



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PLATE 6



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104 LH



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PLATE 8



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205 A





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221 X



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257 X



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269 L



269 H





270 HX



270 L



139 HX



271 N



271 L



272 B



176 P



272 S

