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Autor: Jenkins, G. Kenneth

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#### G.KENNETH JENKINS

### COINS OF PUNIC SICILY

#### Part I \*

#### Contents

	Punic legends		3 Ršmlqrt-R'šmlqrt	
	Abbreviations	26	Catalogue	61
I	Motya I and Panormos	27	4 Thermai-Solus	70
	Motya II/III and Panormos	31	Catalogue	72
	Catalogue: Motya I/II/III		Minor issues and bronze	
	and Panormos didrachms	34	(Motya, Solus, Panormos, Eryx)	74
2	Panormos tetradrachms	40	Key to plates 1-22	76
	Catalogue	45		

#### Foreword

This article is designed as a first instalment to cover the major issues of Motya, Panormos and «Rashmelqart», together with related issues of Thermai and minor coins of other mints. It is hoped to complete the picture in further instalments dealing with the tetradrachm series of the Horse, Horse and palmtree and Horse's head types, which I refer to in the present article as the «Carthage» series and which, I believe represents the mint of Lilybaion (cf. p. 55). For the minor issues of the mints here treated, no attempt has been made to collect the full material, and these are given in summary form only, mainly on plates 23–24.

The initial collection of the material was made some years ago by E. S. G. Robinson, and my debt to him is immense, for without the work he had already done, it would hardly have been practicable to make a start. I have however been able to augment his material from further sources <sup>1</sup>. Dr. Robinson has also been kind enough to let me use his unpublished notes and to discuss many things with me, but of course I must take responsibility for the results, such as they are. I am also extremely grateful to Leo Mildenberg for the opportunity of publication in this form.

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#### Punic legends

mţv' p. 34 (nos. 26, 37–38, 43–45, 48, pl. 23, 4b) mţv p. 34 (no. 31) hmţv' p. 34 (nos. 39-41) s y s p. 38, 45 šb'l sys p. 38 (litra pl. 24, 12) ršmlqrt p. 61 (nos. 1, 2, 4, 5, 6, 8, 11, 21, 26, 31, 42, 48, 49, 54, 61, 65, 68) ršmlqrt (reversed) p. 61 (no. 62) p. 61 (nos. 12, 18, 23, 25, 69, 71) r'šmlgrt `g p. 73 (no. 73) k p. 73 (Solus? pl. 22) kfr' p. 73 (Solus pl. 23, 16-18) rk p. 73 (Eryx pl. 24, 24)

#### Abbreviations

AC Ars Classica

Annali Annali dell'Istituto Italiano di Numismatica

Arch. & Trav. Archaeologist and Traveller (Sotheby sale 20. 1. 1898)
Atti e Mem. Atti e Memorie dell'Istituto Italiano di Numismatica

A-V Armand-Valton (Paris)
BMQ British Museum Quarterly
Contessa Contessa hoard (Palermo)

Glend. Glendining

H de Hirsch (Brussels)

Hamb. Hamburger

Hirsch Jacob Hirsch sales (Munich)
Holm Holm, Geschichte Siziliens III

I-B Imhoof-Blumer, Zur Münzkunde Großgriechenlands, Siciliens, Kretas usw.

(in NZ 1886)

Jenkins-Lewis Carthaginian gold and electrum coins (London 1963)

JHS Journal of Hellenic Studies

Kokalos  $K\Omega KA\Lambda O\Sigma$  (studi pubblicati dall'Istituto di Storia Antica dell'Università di

Palermo

Lederer, Die Tetradrachmenprägung von Segesta (Munich 1910)

McClean (Cambridge)

Met. Metropolitan Museum (New York)
MMAG Münzen und Medaillen AG (Basel)

Nav. Naville

Noe Noe, Bibliography of Greek coin hoards

NSc Notizie degli Scavi

NZ Numismatische Zeitschrift

PCG Guide to the Principal Coins of the Greeks (British Museum)

Rizzo, Monete greche della Sicilia antica

RPK Richard Payne Knight collection (British Museum)

SC Sambon-Canessa

Soth. Sotheby

TRINC Transactions of the International Numismatic Congress (London 1936)

Weber L. Forrer, The Weber collection (London 1922)

WSM Newell, Western Seleucid Mints
ZfN Zeitschrift für Numismatik

## Motya I and Panormos

(Plates 1-2)

The early series of both mints are here collected as fully as possible apart from the small coins (for which see plates 23–24). There are close connexions between the didrachm series of the two mints, both of which show considerable dependance on Segesta. When the corpus of Segesta coins in preparation becomes available, surer conclusions should be possible regarding the related Punic coinages.

Motya I begins<sup>2</sup> with didrachms whose obverse is copied from those of Himera (Rizzo xxi 9) while the reverse is very close to the Segesta type Rizzo lxii 8; this reverse at Motya and Segesta depends on the Syracusan type Boehringer Reihe XXII (c. 440 by his chronology, but more probably c. 430) <sup>3</sup>, and may fairly be considered to begin in western Sicily c. 425. From Motya no. 14 the Himerean obverse is replaced by a Segestan type, a dog with small female head above, such as occurs in a large group of Segestan coins (Rizzo lxi 17, SNG II 1178, Luynes 1116–7, etc.), cf. Plate 2 A, B here; this Segestan group clearly precedes a later group of which samples are here illustrated on Plate 4 (A–F).

With the obverse of Segestan style (Motya no. 14 ff.) were used some reverses (rev. 6, 7, 8) which had already appeared in the series of Motya, and also two other dies R aa and R bb which have the inscription sys. R aa and R bb have heads of more or less current Segestan style, R aa being similar to Luynes 1116 (here Plate 2 B), while R bb seems to be modelled on the style of Segesta Rizzo lxi 17. Apparently, R bb was originally prepared for Segesta as traces of the Greek legend Segestazib remain alongside the Punic legend; I understand that this die has not, so far at least, been traced in its presumed original form. R bb is further used (at Z 3) with a different obverse die (obv. 9) which in turn is coupled with a purely Segestan reverse (Plate 2, A).

Coins Z<sub>I</sub> and Z<sub>3</sub> of the above series were known to Imhoof-Blumer when in 1886 he expressed his scepticism as to whether the sys legend really corresponded to the place name of Panormos. Imhoof drew the conclusion that Z<sub>I</sub>, being die-linked to Motya, must be of that mint, whereas Z<sub>3</sub> must for similar reasons be of the Segesta mint. This conclusion formed his prime argument against the sys-Panormos equivalence. But it is clear that the question must now be viewed in another light,

<sup>&</sup>lt;sup>2</sup> Unless some earlier coins of Segestan type, without legend, represent a previous Motyan coinage, as suggested by E. S. G. Robinson in *SNG* II 1131-2. The plant may perhaps be no more than a die-break?

<sup>&</sup>lt;sup>3</sup> On this adjustment of Syracusan chronology, cf. Jenkins, Gela, pp. 66 ff.

<sup>&</sup>lt;sup>4</sup> Zur Münzkunde Großgriechenlands, NZ 18, 1886, pp. 205–286.

since the discovery of Z<sub>2</sub> makes a direct link between Z<sub>1</sub> and Z<sub>3</sub> and thus forms an unbroken chain of die-linkages apparently beginning at Motya and ending at Segesta.

In order to explain even in principle how this can be so we are compelled to admit that somewhere along the line either one or more dies must have been transferred between the mints in question, or else that one mint was striking coins for the other. Both of these possibilities are well attested in the field of Greek coinage and some of the examples known were indeed mentioned by Imhoof himself in the article of 1886 - those of Hyria-Fensernia (Imhoof, taf. V, 7-8) and of the Campanians-Neapolis (ibid. taf. V, 16-17). We may cite also Rhegion-Messana (Robinson, JHS 1948, p. 20, no. 6 Rhegion and no. 32 Messana), Syracuse-Leontinoi (Boehringer Syrakus, taf. 30, A 3), Corinth-Ambracia (Ravel NNM 37, no. 8 and p. 83 ff.), Eleutherna-Hierapytna (Seltman, Greek Coins, pl. xxxvii, 9, 10; also mentioned by Imhoof, p. 283), Priansos-Phaistos (Milne, TRINC 1936, p. 90, no. 2). Other cases, from the Hellenistic period and later: Alexander, die-link between Sidon and Ake (Newell, Dated Alexander Coinage of Sidon and Ake, p. 53); the Seleucids, dietransfers between Abydus, Lampsacus, Ilium and Alexandria Troas (Newell WSM, p. 327 ff., esp. nos. 1548-9, 1555, 1557, 1560, 1563-4); a shared obverse between IIIc Alexanders of Priene and Miletus (Seyrig RN 1963, p. 37-38); Achaean league, die-link between Elis and Patrae (Thompson NNM 159, p. 101); and innumerable dies shared between coins of different cities in Roman Asia minor, attesting centralised mintages, the subject of an important forthcoming work by the late K. Kraft.

The possibility of die-transference thus shows that, for the series of Motya – \$y\$ – Segesta with which we are here concerned, it would be difficult to derive any decisive proof, from the evidence of the die-linkages alone, as to the place of mintage of the specimens Z 1, 2, 3. In fact the style, and the remains of the Segestan legend on R bb, are factors which would agree well enough with the hypothesis that these \$y\$ dies were made by a Segestan engraver. But if so, it hardly seems plausible to think that the coins with the Punic legend \$y\$ were made for use at Segesta, since it was not a Punic city. As for Motya, the other city involved in the series, we know that its Punic name mtv appeared shortly afterwards (in series II) so that it is most improbable that coins marked \$y\$ should have have been intended for Motya either. In brief, it seems to me that the die-links which we have between the coins of Motya and Segesta, with the \$y\$ specimens Z 1, 2, 3, do not after all in any way preclude the possibility that the latter were minted at or for Panormos and that \$y\$ can best be interpreted as the Punic name of that city.

The hypothesis that the word  $\S y \S$  is not a place-name is in any case quite gratuitous, especially as no other convincing explanation of it has been offered  $\S$ . We are left with the only positive evidence for the meaning of  $\S y \S$  in the shape of the small bilingual litrai bearing this Punic legend on the obverse and the Greek  $\Pi ANOPMO\Sigma$ 

<sup>&</sup>lt;sup>5</sup> A. H. Lloyd, NC 1925, 129 ff.

on the reverse (Plate 2 Y). From these, it seems to me beyond reasonable doubt that the Punic legend must be the equivalent of the Greek, in precisely the same way that we have Punic and Greek legends combined on coins of Solus (Plate 23, 18). It is also important to note that these bilingual litrai are by their epigraphy intimately connected with the didrachms Z 1, 2, 3: the rendering of the letter forms is almost identical on the didrachms and on the litrai Plate 2 X, Y; and moreover it is a rendering of \$y\$ which does not otherwise occur. From the table of legends (p. 38) it will be seen that only here does the letter sade have this shape, whether written in the normal direction or, as on the didrachm Z2, reversed. This epigraphic feature strongly reinforces not only the connexion between the didrachms and the litrai, which are thus presumably contemporary and quite probably by the same hand, but also strengthens the conclusion that both denominations must pertain to Panormos – irrespective of whether the didrachm dies were made by Segestan engravers as suggested above.

From the foregoing discussion of the die-linked series of the didrachms Z 1, 2, 3 and their connexions with the Motya I series and Segesta, and the perfectly feasible explanation that dies can have been transferred between mints, it will be seen that Imhoof-Blumer's main argument against the identification of \$y\$ as Panormos is invalidated. His other arguments are in any case less significant, being concerned with the possibility that certain other coins with the \$y\$ legend might belong to (a) Eryx and (b) to Solus or Thermai. For Eryx, it is merely a case of a stylistic similarity between some \$y\$ didrachms (our Panormos nos. 9–10) and didrachms of Eryx (of which Imhoof gives as example a specimen similar to SNG II 942, cf. Rizzo lxiv 8, 9) 6: in view of the many such similarities between the different mints of western Sicily, of which others will be noted below, this argument cannot be given very much weight, and the same kind of argument from the similarity of the Eryx litra (Plate 24, 24) to that of the \$y\$ mint (Plate 24, 12) would be no more cogent.

In the case of Solus or Thermai, to which Imhoof (p. 266 ff. and p. 246 respectively) suggests the attribution of the «cock» coins with \$y\$ (drachm, here Plate 6 A, bronze Plate 24, 18), I have tried to discuss the question elsewhere in connexion with the coinage of Himera. It turns on whether a specimen of the «cock» bronze could, as Imhoof suggested, be read kfra instead of \$y\$; the evidence cited by Imhoof (p. 248) from Landolina is not satisfactory, and so far as I know nothing has turned up to confirm it. Neither here nor in the case of Eryx can I see that there are any arguments which can stand up against the clear \$y\$ = Panormos equivalence already mentioned.

At this point it may be worth looking briefly at one other line of argument which has been adduced in the attempt to explain away sys = Panormos. This was the argument of Lloyd in NC 1925, 129 ff., based on the diversity of types, original to a

<sup>&</sup>lt;sup>6</sup> Cf. also SNG II 1183 – «perhaps Eryx or Motya» –; this should be Eryx, as the obv. die seems to be basically that of Rizzo lxiv 9 with some alterations especially of the corn ears.

<sup>&</sup>lt;sup>7</sup> La monetazione arcaica di Himera, Annali, 16-17 suppl. (Rome 1971), pp. 34 ff.

number of different Greek mints, which in fact occur in association with the sys legend. It is obvious that the sys tetradrachms (here Plates 7-14) comprise many types of Syracuse, although no one would try to assign them to that mint. Among the other sys coins we have recollections of Gela (the man-faced bull, Plate 24, 2, 8, 11-16), of Syracuse (female heads, Plate 24, 3, 4), of Messana and Akragas respectively (dolphin/eagle, Plate 24, 9), of Kamarina (Athena/swan, Plate 24, 10), possibly of Thermai (Hera/manfaced bull, Plate 24, 20, cf. Plate 22 A), and of Himera («cock» Plate 6 A and Plate 24, 17; goat-rider, Plate 24, 5, 6 = Plate 2 X, Y) 8. To believe, as Lloyd apparently did, that these sys coins were really minted at all the various cities in question, under Punic domination, would really be very difficult indeed – especially when we already know from sure examples that the explanation is very simple, that the Punic mints were very prone to imitate the types of the Greek mints, and indeed did so for most of their coins. Thus we have Greek-inscribed tetradrachms and didrachms of Panormos with types of Syracuse, Katana/Leontinoi, Segesta and Selinus (Plates 6–7); coins of Eryx using the types of Segesta, Selinus, Akragas and Himera 9; and coins of Motya using the types of Himera and Segesta (here Plates 1-4), Akragas and Syracuse (Plate 5), a small coin, similar to the sys Plate 24, 9, suggesting Messana and Akragas (here Plate 23, 1), while the Gorgon of Plate 23, 4, 5 8 may or may not owe something to the bronze coinage of Camarina.

At least it is clear that in numerous cases whose mints are determined there is a large repertoire of types culled from various Greek mints. Against this background it can hardly be argued that the diversity of types used with the sys legend can show anything, except that the sys mint too was very fond of such imitations. It certainly does not prove what Lloyd thought it did.

Finally, the etymology of the word sys in itself could hardly help to determine whether it is or is not a place name; it is generally admitted that the root of the word means «shining», but it seems – at least to a non-semitologist like myself – very far fetched indeed to extend the meaning to «shining metal» and so to «metal plate» and «mint». This last is exemplified by the explanation given by Honeyman <sup>10</sup> of the legend §b'l sys, which occurs on some small coins (here Plate 24, 13), and which he translates «masters of the mint». It seems clear that this legend must be analogous to those of similar form which are found at Tarsus (b'l trz), Gaziura (b'l gzwr),

<sup>8</sup> Cf. Holm, Geschichte Siziliens III, Beschreibung der Tafeln, p. 18 ff.

<sup>&</sup>lt;sup>9</sup> Cf. e.g. SNG II 934, 935, 941: and an Eryx litra (in BM) with the types of Selinus, SNG II 1218.

<sup>&</sup>lt;sup>10</sup> A. M. Honeyman, *AJPhil* 1947, p. 81 ff.; approved by Sola Solè, *Sefarad* 1967, p. 27; but cf. also H. D. McEwen, *NC* 1925, pp. 393–4.

<sup>-</sup> The equation between sys and the -zib termination of some Segestan legends, which has sometimes been suggested, was accepted by R. Arena in *Archivo Glottologico Italiano* xliv, 1959, 17 ff., esp. 25 ff., but firmly rejected by U. Schmoll, *Kokalos* 7, 1961, 71 ff. and X. Durante, do. 86 ff.

<sup>-</sup> It hardly needs to be added that in accepting sys as the ancient name of Palermo one is under no compulsion whatever to see any connexion with the medieval palace of La Ziza in that city.

Gades (mb'l 'gdr), Sexsi (mb'l sks), Lix (mb'l lkš), and Tingis (mb'l tyng')<sup>11</sup>. In all of these we have the place-name, and thus also in the legend šb'l şyṣ the element şyṣ must designate the name of the city.

Summarising this discussion, I would say that it seems to me that an entirely unnecessary amount of mystery has been allowed to surround the whole question of the sys legend. The only clear evidence we have equates it with Panormos, and I think that neither arguments derived from the die-linkages, nor from the types, nor from the etymology, are in the least convincing as indications to the contrary. It seems to me that the interpretation of sys as the Punic name of Panormos is eminently recommendable and should be accepted.

## Motya II-III and Panormos

(Plates 3-6)

The period covered by this section is probably 415/410-397 B.C. the latter terminus being provided by the destruction of Motya by Dionysios. The general influence of Segesta is still paramount for the didrachm coinage as both Segesta itself and the other mints move on to a new style. At Segesta there are the new types of the dog with stag's head (Plate 4 C, F), imitated at Motya, and the dog with corn ears (Plate 4 A, B, D, E) which however was not imitated at the Punic mints but only at Eryx.

The didrachms of Motya II go through two phases, a Greek issue (nos. 18–25) followed by a Punic issue (nos. 26–36). After these comes Motya III (Plate 5) consisting of Akragantine type tetradrachms, followed by a second series of tetradrachms and didrachms with Syracusan heads copied from Kimon's decadrachms and facing Arethusa; clearly this group must finish by 397 B.C. Working back from this it seems likely that Motya II should come before 405 and may thus be dated c. 415/410–405, leaving 405–397 for Motya III.

Motya didrachms of the Greek phase (nos. 18–25) show some close analogies with Segesta, e.g. no. 20 with the litra Plate 4 F and no. 22 with Plate 4 A. Then in the Punic phases at Motya we see the influence of the new Segestan prototype Plate 4 C, D, which with its very characteristic tall head, either with or without an ivy leaf in the field, remains dominant in Motya nos. 26–36.

<sup>&</sup>lt;sup>11</sup> E.g. Tarsus, BMC Lycaonia, etc., p. 167, no. 32; Gaziura, BMC Galatia, etc., p. 29, no. 1; Gades, Vives La Moneda Hispanica, pl. IX, 13; Sexsi, ibid. pl. LXXXIII, 2 ff.; Lix, SNG (Copenhagen), part 42, no. 692; Tingis, ibid., no. 720.

The date of the group of Segesta coins represented by Plate 4 A-F remains to be determined closely, but it is necessary for the moment to form at least some preliminary view. Much depends in any case on the date we assign to Plate 4 E, with the dog and corn-ears obverse and the reverse head in sphendone which is the same die used on a Segestan tetradrachm (Lederer 7). On Lederer's chronology this tetradrachm would be c. 416 B.C.; but by analogy with Syracusan styles the other tetradrachms linked with it (Lederer 5, 6) would be much more likely to be after 410 B.C. Also I can see no cogency in Lederer's argument that the Segesta mint must have closed in 409 12. It seems to me that these tetradrachms can well be placed in the final decade of the fifth century, so that the didrachm Plate 4 E should be of the same time, perhaps 405-400, a dating that is in any case necessary for this didrachm on account of the Pennisi specimen, itself overstruck on a didrachm of Camarina which is probably not long before 405 13. Naturally it is possible to envisage that the Segestan group represented here by Plate 4 A-F may extend from e.g. 415-400 B.C., but for the present purpose it is neither possible nor necessary to try to be more precise. For the Motya II didrachms, Greek and Punic, nos. 18-36, we can well suppose 415/410-c. 405, still leaving room for the succeeding Motya III issues at c. 405 (nos. 37-44) and c. 400 (nos. 45-50) respectively.

There are three varieties of the Punic legend; 'mtv (as no. 26), mtv' (as no. 33, etc.) and hmtv' (as no. 39). In the case of hmtv' at no. 39 the first letter is added in the die of no. 38 which has only mtv'. The variations are mentioned by Sola Sole in Seferad 27, 1967, pp. 19–20, note 25, and the parallel variations at Gades (hgdr/'gdr) are noted by him. The form of the legend at no. 44 is rather uncertain, depending on a single specimen of which I have not seen the original.

The Panormos didrachms of the present period are fewer in number than those of Motya and almost all have the Greek legend; the only exceptions being nos. 9–10. No. 1 stands rather apart from the rest, and seems to correspond to the previous stylistic phase of Segesta as Plate 2 B, though whether no. 1 is really before or after the \$\frac{1}{2}\$ y \$\frac{1}{2}\$ didrachms Z 1, 2, 3 which have been discussed above, is hard to determine. With no. 2 however we have a piece which is extremely close in style to Motya no. 20 and surely by the same hand — if indeed it is not really one and the same die with some small alterations, thought it is impossible to be sure of this. In any case Panormos no. 2 and Motya no. 20 must fall in the same period which can be roughly defined as c. 415–410. The engraver of both is likely enough to have been a Segestan, and the author of the Segesta litra Plate 4 F. Panormos no. 5 seems a weak imitation of this type. With regard to the crayfish behind the head, it would be impracticable to

<sup>12</sup> Lederer, Segesta, pp. 14–15. Segesta was the ally of Carthage then and remained loyal to Carthage at the time of Dionysios' expeditions in 397–396 B.C. It seems merely an assumption that Segesta lost her autonomy in 409.

<sup>13</sup> Rizzo, p. 287, fig. 90.

try to associate it with the similar symbol which appears below on tetradrachm no. 23 (Plate 9) which must be after 400 B.C.

Panormos no. 3 shows a head derived from the Segestan «tall head» (Plate 4 C–D), and no. 6 has the ivy leaf; but otherwise there is no great dependance on the new Segestan styles, and there is no copy here, as at Motya, of the dog with stag's head obverse type. Panormos no. 8 has on the obverse a shell above the dog which recurs on the Punic coin no. 9. No. 8 still has a Greek legend, but with it a swastika symbol which later is echoed on a tetradrachm, no. 70 (Plate 13) and a litra (Plate 24, 13).

It is difficult to be sure how precisely the Punic didrachms fit in with the tetra-drachm series, but presumably nos. 9, 10, 11 belong roughly to the 410–390 phase. We cannot, however, easily suggest any firm date for didrachms nos. 12, 13; clearly they must find some place alongside the \$y\$ tetradrachms series but neither the style nor the epigraphy (the precise letter forms are not clear enough to include in our drawings) give much help, and the free horse type has its analogy both in the «Carthage» series before c. 380 B.C. and in the bronze coins of Panormos in the late fourth century.

To sum up the development of the Panormos mint so far: one would except coins in Greek to come generally before those in Punic but this is not apparently the straightforward criterion after all. The first issue may be the «cock» type (Plate 6 A and Plate 24, 18) which as I have suggested elsewhere could be of c. 430 B.C. <sup>14</sup>. Then there are the didrachms Z 1, 2, 3 (Plate 1–2) which have been discussed above and which must be before 415 B.C. since they belong to that phase of Segestan style and are die-linked with Motya I, so that they must precede the Greek didrachms of Panormos (Plate 6, 1–8) which correspond to Motya II. No doubt the Greek didrachms of Panormos correspond also, to some extent, to the Greek phase of the Panormos tetradrachms (Plate 7, 1–9) and the final change to Punic legend was probably made, as suggested below for the tetradrachms, at about 405 B.C. (below, p. 40).

#### Note

In the catalogue sections, an asterisk \* marks the specimen illustrated; where there is more than one, they appear on the plate in the same sequence as listed.

On the plates, the die-numbers are given, for simplicity, as plain numbers without the prefix O and R respectively.

<sup>14</sup> La monetazione arcaica di Himera, Annali, 16-17 suppl. (Rome 1971) pp. 34 ff.

# Catalogue: Motya I, II, III and Panormos didrachms

## Motya – Legends

26	<b>1</b> 104	41	41077
31	704 <del>1</del>	43	4707
37	4704	44	4704
38	4704	45	4704
39	47077	48	<b>4104</b>
		Plate 23, 4 b	4404

## Plates 1-2

# MOTYA I didrachms nos. 1-17 / PANORMOS Z 1, 2, 3

Obv. Horseman (apobates);	6 O <sub>3</sub> Fish in ex.
legend MOTVAION	R 4
Rev. Female head with dolphins.	8.57 * London (Bank) =
т От	Rizzo lxv. 7
Rı	8.55 Nav. 5, 976
8.59 * Berlin	8.48 AC 16, 581
8.19 Brussels H 502	7 O 4
30. Table 10. Ta	R 5
2 O 1' Leaf added in ex.	8.23 * Hirsch 32,95 = Nav. 5,977
R 2	8 O <sub>4</sub>
<ul><li>- * Syracuse</li></ul>	R 6
	8.10 Hamb. 98, 20
3 O 1" added above ex. line	8.03 Hess-Leu 1962, 75
R 2	- * Priv. coll. Y
8.43 * Berlin	
	9 05
4 O 2 No legend	R 6
R 3	8.24 * Woodward 72
8.65 * Paris Luynes 1041	8.07 Hirsch 30, 378 =
5.6) 1 un 2uynes 1041	Bunbury 240
5 O 2	10 O 6 Pistrix in ex.
R 2	R 7 Swastika in front of neck
8.47 Copenhagen 478 =	8.67 Hess-Leu 1956, 129
Egger 46, 75	8.00 Berlin
- * Paris 861	8.30 * Palermo, NC 1931 pl. vi. 8

II	O 7		16	08	
	R 8	8.36 * Berlin		<b>R</b> 8	No dolphins; corn grain 8.57 * Copenhagen 480 = IB vii. 3
T.O.	0 7	0.50 Defini	17	08	6.57 Copenhagen 400 — ID vii. 3
12	O 7 R 7	8.51 * London Lloyd 1135 (rev. worn)	-7	R 9	No dolphins or corn grain. 8.60 * Egger 7. 1. 1908, 65
		8.02 Berlin (obv. worn)	Zı	08	
		<ul> <li>Landolina, IB vii. 1 =</li> <li>Rizzo lxv. 6</li> </ul>		Raa	Segestan type head with dolphins and Punic legend sys (p. 38)
		8.45 Walcher Molthein 482			8.49 * Berlin (Plate 1)
		8.42 Boston 299 = Warren 269			8.44 * Priv. coll. Y (Plate 2 above;
		8.36 Weber $1461 = AC 16.582$			enlargement of rev. below)
		8.60 Jameson 665			- * IB vii. 4 (Plate 2)
13	Ο 7		Z 2	O 8	
	R 4			Rbb	Similar head with dolphins and
		8.02 * Berlin			Punic legend (reading left to right)
					(p. 38) engraved over remains of Greek legend (Segesta) zib
Obv	. Dog s No le	standing r.; small female head above.			8.32 * Oxford 2139 = Hess-Leu 1964, 62
D			Z3	09	
Rev.	rema	e head r., with or without dolphins.		Rbb	
14	O 8 R 6	0 · . * T			8.41 * Paris Luynes 1076 = IB vii. 11
		8.23 * Egger 7. 1. 1908, 69	Plate	e 2 A	B Segesta, X-Y Panormos
15	O 8		A	09	
	<b>R</b> 7	O Double	A	Rcc	Segestan head with Greek legend
		8.12 Berlin 8.46 * Berlin = IB vii. 2		rece	* Berlin = IB vii. 10
		(rev. worn)	В		Segesta, Paris Luynes 1116
		8.37 Copenhagen 479	X		Panormos litra (BM) = Plate 24,5
		8.33 * SC 1907 Ciccio 233	Y		Panormos litra (Hunter) =
		(rev. much worn)			Plate 24, 6
		pl			

# Plates 3-4

# MOTYA II (didrachms nos. 18-36) / Segesta A-F

	Obv. Dog standing r. Rev. Female head r.			O 10 R 12	Head with topknot, crayfish behind,
18		Corn grain above Branch behind, legend MOTVAION 8.10 * Copenhagen 476			legend MOTVAION 8.10 Paris Luynes 1042 8.20 London Lloyd 1134 = Benson 241
19	O 10 R 11	Traces of legend?  8.40 * Copenhagen 477  8.54 AC 16, 609  8.02 Hirsch 15, 1104			8.08 Paris 859 8.20 Priv. coll. X 8.44 Hess-Leu 1962, 76 8.36 * Jameson 664

21		Plant below	29	raccord .	Similar, but no plant
	RII	8.20 * London Lloyd 1133 7.93 Berlin		K 18	No leaf or legend 8.26 London 8.58 Priv. coll. X
22	011	1.55			8.51 * ANS
	R 13	Legend MOTVAION			
	)	8.57 AC 16, 583	30	O 15	Military major
		8.72 * London BMC 4		<b>R</b> 19	
		7.98 Palermo NC 1931 vi, 9			8.13 * London BMC Segesta 40
23	011				8.41 New York Met., Ward 230
25	R 14	Cf. R 11, possibly recut from it.	31	O 16	Dog with stag's head
	4	Legend?	3-		Ivy leaf, Punic legend 'm t v
		8.02 * Cambridge McC 2461 =			8.26 * London BMC 3
		Egger 7. 1. 1908, 70			8.57 Oxford 1859 = Egger, 46,
		8.04 Berlin			74
24	0 11				8.42 Priv. coll. X
<b>-</b> 4	R 12				8.31 Weber 1451
	10.12	5.61 * Nav. 12, 787 (fourrée)			
		8.51 Berlin	32	O 16	C: 11 - P
		8.26 London BMC 3		R 21	
		7.36 Nav. 1, 500			8.33 * Egger 7. I. 1908, 50
25	Оп				8.55 AC 16, 614
	R 15	Crayfish, legend (retrograde)	33	O 17	Similar to O 16
		MOTVAION		R 22	Ivy leaf, no legend
		– * Pennisi			8.57 * Berlin
26	O 12	Dog standing, plant below	2.4	0	
	R 16	Street Watte Clinical Age Int. Section 1997	34	O 17	As R 22
		8.42 * London BMC 5		K 25	7.85 * Hirsch 33, 401
		8.55 Paris Luynes 1046			7.03
		8.60 Walcher Molthein 481	35	O 18	As O 16–17
		8.37 Jameson 666 = Hess-Leu		R 22	
		1956, 128			8.20 * SC 1907 Ciccio, 258
		8.56 Berlin	-6	0 -0	
27	O 13	Similar, but no plant	36	O 18	Similar
1/2/	R 16			R 24	8.42 * Hamburger 98, 290
		8.61 Oxford SNG 1858 =			6.42 Hamburger 98, 290
		SNG III $2503 = $ Nav. 5,			
		972 = AC 16,576			
		8.72 London (flaw on neck)			
		8.07 Paris 865	Pla	te 4 A–I	F, Segesta
		8.57 Leu Sicilia 68	Α	London	a Lloyd 1184
		8.31 Berlin	В		a BMC 37
		8.75 * MMAG 43, 1970, 38	С		1 BMC 41
28	O 14	Dog with plant below	D		BMC 39
	R 17	25 9529 Y250 EVIZ	E		BMC 38
		8.22 * Cambridge McC 2460	F		Lloyd 1196
		paneo (II)	U		1900 50

# Plate 5

# MOTYA III (nos. 37-50)

Tetra	adrachi	ns: obv. eagle; rev. crab	46	O 6 R 8	Head 1., three dolphins, no legend
37	O 1 R 1	Legend mţv'		Κō	16.38 London Lloyd 1138 =
		– * Palermo			Nav. 6, 415 = SC 1907 Ciccio 236
38	O 2	Legend mţv'			15.57 Hunter xv, 5
<u> </u>	R 2				16.74 Oxford $1861 = SNG III$
		17.11 * Paris			836 = Nav. 4, 281
		<ul><li>Priv. coll. Y</li></ul>			17.00 Hess-Leu 1956 130
39	O 2'	Legend hmţv' (h added in die)			16.10 Hess-Leu 1964 57 =
	R 3				Weber 1452
		17.16 * London BMC 1			16.57 AC 16, 577
		- Munich			16.62 * AC 14, 99
40	O 2'				16.41 Copenhagen 481
	R 4	17.04 * New York Met.,			<ul><li>Palermo = Rizzo lxv, 9</li><li>Munich</li></ul>
		Ward 356			- Munich 17.52 MMAG 43, 1970, 40
	_	– Cefalú		06	17.32 1411/10 43, 1970, 40
41	O 3		47	R 9	
	R 4	Tage * Tender Head Tree		K 9	16.32 Jameson 667
		17.20 * London Lloyd 1137  – Palermo, Contessa xvii, 16			- Egger 26. 11. 1909, 178
	0.	- Talefino, Contessa XVII, 10			15.99 AC 17, 171
42	O 3 R 5	Fish below			17.07 * London Montagu
	K 5	16.95 * Berlin = Holm viii. 8			17.12 Paris 865
		- Palermo, Contessa xvii,			- Palermo, Contessa xvii, 18
		15 = Rizzo lxv, 8			17.13 Berlin Löbbecke
		17.16 Hirsch-Ciccio			16.28 Berlin Imhoof-Blumer
43	04	Legend mţv'	Did	rachms	obv. facing Arethusa head, six dol-
	R 6	Fish below	phir	ıs; rev.	crab, fish above, legend mţv'
		17.18 * London BMC 2	48	Оі	
				Rг	
Didr	achm:	same types			7.32 * London Lloyd 1139 =
44	Оі	92			Weber 1453
	Rі	Legend mtv'			8.30 Paris Luynes 1044
		7.55 * 1907 Ciccio, 231			7.90 Palermo NC 1931 vi, 7  - Palermo = Rizzo lxv, 10
					7.83 Berlin
Tetr	adrachr	ns: obv. Syracusan head; rev. crab		0	7.03 <b>D</b> efini
		*	49	O 2 R 1	
45	O 5	Head r., copied from Kimon's		KI	8.13 Paris Luynes 1045
		decadrachms, no dolphins, legend mţv'			8.46 * London BMC 8
	<b>R</b> 7	regend in t	50	O 3	
	/	15.89 Paris Luynes 1043	50	Rı	
		- * Hirsch-Ciccio			- * Priv. coll. Y
		17.16 Paris 863			
		- Palermo, Contessa xvii, 17	Mot	ya, see	also plate 23, 1–14

Drachm, Plate 6 A	ドイド	Didrachm, 9	kwk
Didrachm, Z 1	MWM	Didrachm, 10	PAP
Didrachm, Z 2	mar	Didrachm, 11–12	中心下
Litra, Plate 2 X	MUM	Litra Plata a 4 12	kukhog m
Litra, Plate 2 Y	MnM	Litra, Plate 24, 12	Fulund A

	Plate 6				
		Panormos	didrach	ms	
A Z 2	(3,91 taf. V	hm: cock sys/Crab and dolphin g, Palermo = Imhoof-Blumer, II, 14) achm = Plate 2, Z 2	4	O 3 R 4	Head r., no legend 8.40 * London BMC 4 - Pennisi
			5	O 3 R 5	Head r., crayfish behind
Didi I	O 1 R 1	: obv. dog, rev. female head  Dog snuffling, r.  Head l., legend retrograde  IIANOPMITIKON  - Six cast  8.24 Priv. coll. X  - * Priv. coll. Y  - Pennisi = Rizzo lxiv, 23			8.30 * London Lloyd 1163 = SC 1907 Ciccio 249  Pennisi = Rizzo lxiv, 22  8.32 London BMC 3  8.67 Paris Luynes 1075  7.29 Jameson 688  8.50 AC 17, 180 = Hess-Leu 1964 60  8.26 Palermo NC 1931 vi, 4
2	O 2	Dog standing r., legend ΠΑΝΟΡΜΟΣ Head with topknot, r.; crayfish behind, no legend Cf. Motya 20 (same die altered?) 7.90 Weber 1474 = Locker- Lampson 81 8.28 * MMAG 43, 1970, 42	7	O 3 R 6	8.35 Strozzi 1350  Head r., ivy leaf in front 8.62 * Jameson 687 = MMAG 43, 1970, 43 8.24 Palermo NC 1931 vi, 6  Wheel above, legend ΠΑΝΟΡΜΟ
3	O 3 R 3	As O 2 Head l., no legend 8.51 Copenhagen 497 8.47 * London Lloyd 1162 7.96 Berlin = Hirmer 194 7.96 Oxford 1872 8.29 SC 1907 Ciccio 250	8	O 5 R 7	8.36 * Palermo NC 1931 vi, 5 Dog looks back, shell above Swastika behind, legend IIANOPMITIKON retrograde 8.52 London BMC 2 7.84 * Oxford 1872 a = Jameson 692

Obv. Horse prancing r.; above Punic legend sys 06 As O 5, but Punic legend sys R. 8 Rev. Male head r. with dolphins. 8.00 \* London BMC 18 = IB vi, Οı 12 2 (Eryx) Rі MMAG 43, 1970, 45 8.36 Jameson 693 8.32 7.65 Egger 45, 323 8.61 London Lloyd 1589 8.08 \* London BMC 20 Dog standing r., legend sys below 10 O 7 Nav. 13, 241 8.35 R 9 Nav. 13, 242 = Walcher 7.70 8.27 \* London BMC 19 = IB vi, Molthein 427 3 (Eryx) Nav. 4, 291 8.37 Οı 13 R 2 7.64 Cambridge McC 2489 11 O 7 8.12 Hamb. 29. 5. 1929 MMAG 43, 1970, 52 R 10 8.45 7.80 \* Hirsch 32, 97 8.77 \* Vienna

### Panormos tetradrachms

## 1-10 (Plate 7)

This first group has already been discussed by Kraay in *Schweizer Münzblätter* 51/54, 1964, 61 ff. <sup>15</sup>, and to his material there are two significant additions to make. First, no. 3, where the standing river-god of Selinuntine type is accompanied by a ram instead of a bull; the precise interpretation of this must remain speculative though it inevitably recalls the Zeus Ammon with ram on the gold coins of Cyrene <sup>16</sup>. A ram alone occurs on later bronzes of Panormos <sup>17</sup>. The female head of no. 4 is copied from Syracuse, apparently from the type of Boehringer Reihe XVIII; while that of a newly-discovered specimen no. 4 A (p. 44, fig,) is clearly modelled the Syracusan type with the sakkos Boehringer Reihe XX. Next come nos. 5–6 with an Apollo head of the Leontinoi-Katana type; and finally nos. 7–10 are copied from Syracusan coins by Eumenes, complete with the Syracusan legend and even the signature of the engraver. The addition of the Punic legend sys to obverse die 2 (no. 10) forms a further element in the evidence for this legend; the obverse die in question is also used with reverses inscribed *Panormitikon* (Plate 7, 5–6). So far as this goes, it tends to reinforce our previous discussion (p. 29–31 above).

Kraay places no. 10 at 410 B.C.; it may have to be a little later in view of the dating necessary for the following group (see below) which seems to continue closely from the Eumenes style of the present group.

In this group there are two obverse dies O<sub>3</sub> and O<sub>4</sub> linked by R<sub>13</sub>. The «Eumenes» style and the arrangement of dolphins as seen in R<sub>10</sub> (no. 11) forms a natural continuation to the reverse dies of the previous group. Important for the chronology are two reverses copied from Syracusan coins of the period after 412 B.C.: R<sub>13</sub> is based on a head by Eukleidas, Tudeer reverse 35 with sphendone and fivefold earring, and R<sub>14</sub> is clearly derived from Tudeer reverse 38 with the topknot. The last-mentioned Syracusan coin must be of c. 410–405, so that as the Punic imitation cannot be earlier it seems most feasible to start the present group at c. 405 at earliest; this may indicate that the previous group (nos. 1–10) should finish a little later than 410, where Kraay placed no. 10 with the first Punic legend. The remaining

<sup>15</sup> Kraay, nos. 1-2 = my nos. 1-2; Kraay, nos. 3-9 = my nos. 4-10.

<sup>16</sup> L. Naville, Monnaies d'or de la Cyrénaique, nos. 69–76. – The resemblance may perhaps go further, if it is conceivable that the new Panormos coin (no. 3) might be intended to represent Baal Hammon, who may, in turn, have been to some extent assimilated with Ammon (on which cf. Gsell, Histoire ancienne de l'Afrique du Nord, IV, pp. 281 f.).

<sup>&</sup>lt;sup>17</sup> Gabrici, Monetazione del bronzo, tav. VIII, 13 (II-Ic B.C.?).

reverses seem to show a further adaptation of the «Eumenes» style but without close Syracusan parallels. The direction of the sequence is indicated by the absence of the shell in the exergue of O<sub>4</sub> (no. 16) though it is present on O<sub>4</sub> (nos. 17–21). It is noteworthy that the dolphin above the head is replaced by a fish on R 17 and R 19 (nos. 19 and 21 respectively).

## 22-24 (Plate 9)

This short group contains only one obverse die O 5 which is I think basically the same at no. 22 and at nos. 23–24; though if so there are numerous alterations, the most important of which is the addition of the column suggested by the Catana die Rizzo xiv 6. The single surviving specimen of no. 22 does not permit any certainity as to whether the crayfish was already present in the exergue. The reverse of no. 22 links by its style to the reverses of the previous group. R 21 however (no. 23) is an original head not closely copied from any obvious Greek prototype, though the hair flowing out behind recalls the head by IM at Syracuse (Tudeer, rev. 45). The epigraphic form of the legend, nowhere completely preserved, is interesting and unusual. Most original is the way in which the dolphin looking out below the neck is for some reason transformed into a corn grain at no. 24; the addition of corn grains can be seen again at nos. 43 and 51, and often at the Ršmlqrt mint. A newly-discovered specimen. no. 24 A (p. 44, fig.) combining obverse O 5 with reverse R 22 (of no. 25) creates a direct link with the following group and satisfactorily confirms the sequence already adopted.

## 25-43 (Plates 9-10)

This group contains three obverses, of which O 6 is linked to O 7 by R 23, and O 7 to O 8 by R 27. O 6 has no legend, though this is supplied by the reverse, and instead of the normal exergual line there is a maeander pattern. R 22 (no. 25) is a clear copy from the late Eukleidas head with floating hair (Tudeer R 60, etc.), with the addition of a bunch of corn ears behind and the legend \$9.5 in front between the dolphins. The style of the next reverses, R 23–27, is interesting as apparently a free adaptation from the type of Kimon's decadrachms, with a triple-drop earring but without a hair net, and emphasising the characteristic curls on the top of the head. The result admittedly seems remote from Kimon, whereas the final reverses of this group, R 28–29 are in fact closely copied from the Kimonian types. On the obverses O 7 and O 8 the legend is accompanied by a hippocamp which does not come direct from any Greek prototype, though it could conceivably have been suggested by the ketos on the last Himera coin, Rizzo xxi 23, or by the earlier Syracuse ketos.

This group is well represented in the Contessa hoard, buried c. 390–380 B.C. and in the very similar Vito Superiore hoard of similar date <sup>18</sup>; this gives a satisfactory

<sup>18</sup> Contessa hoard, NSc, 1888, pp. 302 ff. – Vito Superiore hoard, G. Procopio, Rendiconti del-l'Academia di Archaeologia, Lettere e Belle Arti di Napoli 27, 1953, 3 ff.

terminus for the series so far examined. The Ognina hoard, buried perhaps a little earlier, apparently contained a specimen of no. 21 from the previous group (by the reference given in *Atti e Mem. 5*, 1925, p. 18, «Hill Sicily x, 10») but this cannot be confirmed <sup>19</sup>.

Here there are three obverses, of which the first two O 9 and O 10 are linked by R 30. O 11, the only die of this group on which the legend sys occurs, is not dielinked with the rest of the group, but the close resemblance between R 33 (no. 39) and R 34 (no. 40) seems to me to establish a sufficiently reliable connexion. O 9 and O 10 have no legend but symbols, ketos and swan respectively. On account of the swan, Lederer (ZfN 1924, 284) wished to assign this group of coins to the mint of Camarina. But O 9 and O 10 must nevertheless belong to a Punic mint, as is evident from the addition of a Tanit symbol to O 10 (no. 39), and as has been said the connexion with the sys coin (no. 40) seems adequately indicated. The style of the reverses in this group is extremely «Greek»; but as so often it is difficult to point to any precise model, though R 33 (no. 39) seems to me to recall strongly the style of Phrygillos at Syracuse (Tudeer, obv. 16) but without the sphendone which is however present on R 35 (no. 41). There is no direct indication of the chronology of this group as none of the specimens have appeared in any hoard. However there may well have been a gap after the previous group, and a reasonable date might be c. 370-360.

Here there are only two obverse dies of which the first, O12, is exceptional for depicting a standing or walking quadriga. It is linked to O13 by means of R37 and R39; and in fact both these obverses may have been in use at once, as the sequence contains some contradictory indications (see catalogue at no. 49). The dolphin in the exergue of O13 is picked up again by O14 of the next group. R36, to which a corn grain is added (no. 43), seems to be a distant derivative of the Kimon style, but perhaps we may also see some affinity to a style present in the Carthage series (e.g. McClean 3035) which should be of the mid-fourth century. R37 may be regarded as a rather strange copy from the late Eukleidas style already used more recognisably at no. 25 above, and it undergoes some peculiar alterations (see catalogue nos. 45, 46). R38, 39, 40 also seem to be remote descendants of the Kimonian style, also having some relation to a Carthage style (e.g. SNG II 1625) which may be rather after the mid-century. R40 has a prominent corn grain.

The resemblances to Carthage styles noted here should give us at least a rough indication for chronology, showing that this group belongs at about the middle or

<sup>19</sup> Another hoard, from Termini Imerese (Noe 1092, NSc 1900, 205 f.) contained specimens which appear to have been of my group nos. 11–21 and nos. 27–34; but as the burial was much later, probably c. 320 B.C., it gives no useful indications.

even third quarter of the fourth century. This is to some extent confirmed by the presence of two specimens of this group (nos. 43, 50) in the Megara Hyblaea hoard of 1949, probably buried, as Vallet-Villard rightly suggest, «vers la fin du 3e quart» <sup>20</sup>. The hoard specimen of no. 43 is quite worn however, and the coins of this group need not be quite so late as the hoard limit suggests. Perhaps c. 360–340 might be a reasonable approximation, though probably too wide a bracket.

The two obverses O 14 and O 15 are not directly linked but the homogeneous style of all the reverses attests that the group must be placed together. The dolphin of O 14 seems to link back to the dolphin of O 13 in the previous group. Little can be said of the style of the reverses; it has no very obvious derivation, and a certain likeness to such a Carthage style as that of e.g. SNG II 1638 may well be misleading, as the latter can hardly be before the last quarter of the century. A style similar to our R 41–45 continues into the next group at nos. 57–58.

## 57-68 (Plates 12-13)

In this group there are three obverses O 16-18. O 16 has at first two dolphins alone (no. 57) and then at no. 58 two dolphins with the legend sys added; it is linked to O17 by R49, in the latest of that die's transformations. Whether O17 is directly linked to O 18 depends on whether R 53 and R 54 are basically the same die or not. In this group the style of Euainetos first makes its appearance, as it does in the Carthage series only during the third quarter of the century. It is interesting to observe that one of the first dies of this style, R 49, is remodelled once to make a more plausible imitation of Euainetos (no. 61) and then remodelled again (no. 62). No. 63 however gives a very authentic and Greek version of the Euainetos decadrachm style (based in this case on the issue with the dot as Gallatin J III, etc.), and no. 68 another version based on the issue with the shell, Gallatin E I, etc. but with the shell transferred from behind the head to below the chin. This latter occurs also in the Carthage series e.g. MMAG 43, 1970, 23 (with the horse rev.) and SNG III 1051 (with horse's head rev.) at a point which should be c. 325-320. Probably then the present group of sys should be of comparable date, and we may suggest as the limits c. 340-320 B.C. 21. The regular style of the obverses O 17 and O 18 is equally due to the influence of the Euainetos prototype and leads on to that of the next groups 22.

<sup>20</sup> Kokalos 4, 1958, p. 105.

<sup>&</sup>lt;sup>21</sup> The only hoard specimens which I can trace are those from the Mineo hoard (Noe 697, NSc 1905, 438 f.); by the reference there given to Hill, Sicily pl. X, 11, the coins should be my no. 66 but the hoard is not indicative for the date as the burial must be of the early third century B.C.

<sup>&</sup>lt;sup>22</sup> Perhaps at about this same time should be placed the late Syracuse tetradrachm of the Euainetos style (Tudeer 106) together with the very similar coin of Morgantina (Rizzo lx, 6); on the latter, the pellet is transferred to between the dolphins in the same way as on the şy ş coins no. 63, 69.

## 69-74 (Plates 13-14)

This group comprises a single obverse die whose style is anticipated by that of the preceding dies. The star in the field above, which reappears on O 20, does not seem to be copied from any Greek prototype. Of the reverses, R 56 and 57 (nos. 69–70) are of the pure Euainetos style already found at nos. 63 and 68; R 56 with the pellet recalls R 50 (no. 63) and its Greek model, whereas R 57 has a swastika below the chin recalling earlier didrachms of Motya (no. 10) and Panormos (no. 8), as well as a \$y\$ litra (Plate 24, 13). The relative condition of O 19 seems to show that after these coins of pure Greek style there comes a group of dies in a later and harder style, R 58–61 (nos. 71–74). This style has some affinity, though distant, with such dies in the Carthage series as SNG II 1635, 1632, which should be of the last quarter of the century. A related style is found in some of the \$y\$ bronze as Plate 24, 19.

The two obverse dies of this group are not linked, but the reverses of the group are very homogeneous. O 20 has the same star above the quadriga as O 19 of the previous group; it also has the legend flanked by dolphins in the exergue, and this serves as a further connexion to O 21, which however lacks the star. The style of the reverses is clearly late as it recalls very intimately that of the quadriga with triskelis tetradrachms of Agathokles of Syracuse (e.g. Kraay-Hirmer 134). This comparison must serve as the only evidence for the date of this group, since none of the coins is represented in any hoard.

# 83 (Plate 14)

This single specimen is not easy to place accurately in the series, as some of the details are not clear. The style of the head resembles that of R 58 (no. 71), but the weight is low and it may be an irregular issue.









4 A

24 A

# Catalogue: Panormos tetradrachms

I	o (O 2")	F N F	52 (O 14)	ドッド
I	I (O 3)	ドベド	53 (O 15)	ドッド
I	5 (O <sub>4</sub> )	ゴケゴ	57 (O 16)	ドッド
2	3 (R 21) incomplete	p~	62 (O 17)	Jun 1
2	5 (R 22)	ror	67 (O 18)	div d
2	7 (O 7)	トシト	69 (O 19)	Awk
3	2 (O 8)	rar	75 (O 20)	عالدما
4	o (O 11)	141	77 (O 21)	יוה ין
4	2 (O 12)	Par	83 (O 22) indistinct	
4	9 (O 13)	12412		

# Plate 7

I	Оі	Galloping quadriga l., dolphin above; dog in ex.
	RI	River-god sacrificing at altar, as on coins of Selinus; behind, bull and palm-tree. Legend ΠΑΝΟΡΜΟΣ
		16.94 * Nav. 4, 285
2	Οı	
	R 2	Similar
		16.90 * Bordonaro = NC 1931
		vi, 1 = Rizzo lxiv, 25
3	Οı	
	R 3	Similar, but instead of bull, ram
		standing in 3/4 facing position.
		17.26 * Priv. coll. Y
4	Οı	
	R 4	Female head r. with hair in top-
		knot; four dolphins.
		$\Pi\Lambda$ NOPMITON
		16.53 Hirsch 18, 2262
		16.71 Palermo = Hirsch 19,
		216 = NC 1931 vi, 3
		16.10 * MMAG 43, 1970, 41

5	O 2	Walking quadriga r., Nike above
	R 5	Head of Apollo r., legend
		ΠΛΝΟRΜΙΤ
		17.14 * Paris Luynes 1074
_	0	1/.14 Falls Luylles 10/4
6	O 2	
	R 6	Same, but $\Pi ANORMITIKON$
		(retrograde)
		17.18 * London BMC 1
		17.10 Palermo = NC 1931 vi, 2
		16.71 Priv. coll. Y
		- Pennisi
7	O 2	
	R 7	Female head with rolled hair;
	C-40 3	dolphins; ΣΥΡΑΚΟΣΙΟΝ
		16.70 * Cambridge McC 2678
		16.14 Hamburger 98, 383
		16.72 Oxford 2136 = Hirsch 8,
		984 = Hirsch 14, 202 =
		Jameson 787 = Hess-Leu
		1957, 107; also = Tudeer
		108a = Boehringer Syra-
		kus, Taf. 29 B 13

- 8 O<sub>2</sub>
  - R 8 Similar, but  $O\Sigma I\Omega NM$  top 1. and EVMENOV below
    - 16.97 Hirsch 19, 252 = Tudeer
    - 16.53 \* Jameson 1913 = Hirsch 32, 298; also = Tudeer 107b = Boehringer Syrakus, Taf. 19 B, 12
- O 2' Same die somewhat recut
  - R 9 Similar, ampyx; OΣION? above 17.18 \* Nav. 4, 333
- O 2" Same die; grain added in ex., Punic legend ş y ş added above
  - R9
- 17.01 Cambridge McC 2481
- 17.21 \* London Lloyd 1579
- 16.91 Paris Luynes 1086

#### Plate 8

- O 3 Fast quadriga l., with Nike above; in ex. Punic legend sys
  - R 10 Head with ampyx, r., similar to R 9; no legend
    - 17.17 Egger 45, 322
    - 17.20 Hague
    - 16.66 \* Nav. 4, 287 = do. 10, 241 = Priv. coll. Y
    - Pennisi
    - 16.40 Reggio, Vito Superiore
- 12 O 3 R 11
- 16.88 Egger 7. 1. 1908, 61 = Glend. xii 1963, 136
- 17.15 Hess 18. 3. 1918, 186 = Helbing 1928, 124
- 17.15 \* Hess-Leu 1966, 174
- 17.21 Paris 947
- 13 O 3 R 12
- 16.50 Cambridge McC 2486
- 17.13 London BMC 7
- 16.83 \* London Lloyd 1581 = Nav. 6, 423
- 14 03
  - R 13 Female head with sphendone and pendant earring; dolphins
    - 16.90 Hague
    - Berlin
    - 17.20 \* Priv. coll. Y = Hess-Leu 1960, 103
- 15 O 4 Fresh state of die, but exergue off flan; therefore uncertain whether shell (cf. 17 below) present or not
  - R 13 \* Pennisi

- 16 O4 In ex. Punic legend sys; no shell
  - R 14 Head with topknot; dolphins 16.00 \* London Lloyd 1582
- 17 O 4' Die now completed by addition of shell in ex.
  - R 15 Similar to R 10, etc.

     \* Syracuse
- 18 O4'
  - R 16
- 16.90 Egger 7. 1. 1908, 59
- 16.96 Lewis = Hess-Leu 1962, 126
- 16.90 Lewis
- 17.00 \* Nav. 4, 286 = Hirsch 19, 217
- 17.23 MMAG 43, 1970, 44
- 19 04'
  - R 17 Fish above instead of dolphin
    - 17.16 \* Paris 948
    - 16.95 \* Nav. 10, 242
    - 17.15 London Lloyd 1580 = Egger 45, 321
    - 16.78 Priv. coll. X
- 20 04'
  - R 18 Head of fifth dolphin appears below neck
    - 17.31 \* New York Met., Ward 364
    - 17.10 London 1949 = Egger 7.1.1908, 60
    - 17.20 London 1938
    - 17.03 Boston 323
    - 17.71 Berlin
    - Berlin
    - Pennisi

21	O 4' R 19	Fish above instead of dolphin 17.66 Cambridge SNGIV 1117 17.57 Hirsch 33, 405 = Ciani	(21)		17.28	Rosenberg 72, 176 = Cahn 71, 206 = Cahn 80, III Lewis
		1929, 57			-	Ognina hoard, Atti e Mem.
		17.45 Paris Luynes 1081 17.42 * London BMC 6 = Hill Sicily x, 10			-	V, p. 18 «as BMC 6» Leu 1965
		. ,	'			
		Plat	te 9			
22	O 5	Quadriga r.; in ex.: uncertain (off flan), see 23	27	O 7	1000 Miles	ar., in ex. hippocamp and gend şyş
	R 20	900 30200		R 23		
	NA CANACAT (2007-2017)	17.54 * Hirsch 32, 96			16.98 *	Paris 936
23	0 5'	Altered die, column on r., added.				Berlin
-5	===	Crayfish in ex.			17.10	Jameson 689 = Egger
	R 21	Head with hair fluttering behind;				7. 1. 1908, 55
		dolphins, one of which appears			16.62	Cambridge SNG IV 1118
		below neck. Top r., Punic legend				
		ş y ş	28	O 7		
		16.90 * London BMC 5		R 24		
		17.20 Benson 249 = Sartiges			6	London BMC 8
		113 = MMAG 43, 1970,			17.07	Lewis
		46			17.52	Egger 7. 1. 1908, 56 =
		17.10 Hague				AC 17, 181
2.4	O 5'	16.84 Paris 2390			17.73	Reggio, Vito Superiore
24	R 21'	Altered die; corn grain replaces			16.76	MMAG 43, 1970, 48
	1021	dolphin below			10.70	111111111111111111111111111111111111111
		17.22 * Berlin	29	O 7		
25	06	Quadriga l.; maeander below		R 25		
-51	R 22	Head 1. with sphendone and flutter-		150	17.35 *	Oxford 2137 = SNG III
		ing hair above, spiral earring. Three				845
		dolphins in front, two corn ears			16.84	ANS
		behind. Top 1., Punic legend sys			17.53	New York Met., Ward
		- * Palermo, Contessa 69,				364a = Late collector 112
		pl. xviii, $33 = Rizzo lxv$ ,				= Hamburger 1894, 157
		14			17.44	Berlin
		17.24 * Egger 7. 1. 1908 = Sar-			-	Palermo Contessa 73,
		tiges $92 = MMAG 43$ ,			6 *	pl. xviii, 37 Hess-Leu 1964, 61 =
		1970, 47			17.50	Hirsch 33, 406
		17.44 Jameson 1902 = Hess- Leu 1957, 136			17.68	Hirsch 33, 407
		16.28 London Lloyd 1585 =			15.41	London 1939 = Nav. 4,
		Hirsch 33, 475				289 = Hess 15. 2. 1934,
26	06					163 = Ratto 24.6.29,
	R 23	Head l. with ampyx, triple-drop				140 = SC 1927, 1142
		earring; three dolphins			16.17	Reggio, Vito Superiore
		16.85 * Brussels				III

30	O 7 R 26	16.89 * London Lloyd 1583 = Egger 45, 319 = Nav. 6, 422	(30)		17.24 * 16.17	Naples 7761 Reggio, Vito Superiore 112
		Plat	e 10			
31	O 7 R 27	17.37 Hirsch 13, 356 = Collignon 149 17.25 Egger 45, 320 17.67 Hirsch 34, 173 = Nav. 4,	34	O 8 R 29	drachm,	pied from Kimon deca- second type; three dolphins Jameson 690 = Egger 7. 1. 1908, 54 = MMAG 43, 1970,49, from Giarre
		288 18.04 Egger 7. 1. 1908, 57 = Sartiges 114 17.49 * Brussels			_	Riposto Palermo, Contessa 71, pl. xviii, 35
	0.0	17.82 Hess-Leu 1958, 112	35	0 9 <b>R</b> 30		l.; in ex. ketos triple pendant earring;
32	O 8	Similar, but horses lower to ground line, ex. smaller. sys			four doly	
	R 27	17.23 Hirsch 15, 1083 = Arch. and Trav. 112  16.82 London BMC 9  17.22 Paris Luynes 1083  16.78 Cambridge McC 2488  16.96 * Brussels H 826  17.04 Bunbury 529  Palermo, Contessa 72, pl. xviii, 36 (5 specimens)	36	0.10	16.50 17.08 * 16.92 17.41	# 1 Table 1
33	O 8	pi. xviii, 30 (5 specimens)	30		wings	in cx. swan with mapping
	R 28	decadrachm; four dolphins 17.67 Berlin 17.07 Brussels H 825 16.97 Hirsch 19, 219		R 30	17.08 16.78 *	London BMC Syracuse 216 Woodward 52 = AC 15, 274
		16.89 Nav. 4, 290 16.60 * London Lloyd 1584 == Nav. 6, 421 = Weber 1475 - Palermo, Contessa 70,	37	O 10 R 31		head, but l.; three dolphins London 1963, BMQ 1965, pl. xxii, 6
		pl. xviii, 34 (2 specimens) 17.41 Paris Luynes 1084			-	Naples $5324 = Rizzo lxv$ , 13  MMAG 42, 1070, 51
		- Paris 938 17.21 Hess-Leu 1966, 173 =	38	O 10	17.01	MMAG 43, 1970, 51
				_		

R 32

16.56

17.05 \* Munich

 $Jameson \ 731 = MMAG$ 

43, 1970, 50

Ratto 4. 4. 1927, 385

Silla, Alicante, Spain (A.

Garcia y Bellido, Hispania

Graeca, 1948, p. 226, 9)

- O 10' Sign of Tanit added in front of 39 charioteer R 33 Head with ampyx r., single-drop earring 16.51 Jameson 730 = Hess-Leu 1956, 135 16.91 Benson 250 16.95 \* London = Weber 1476 Palermo 16.70 Berlin 17.16 Paris 961 Priv. coll. Y Llano de la Consolacion, Spain (J. Sanchez Jimenez
- in Cronica del IV Con-(39)greso arqueologico del sudeste español, Elche 1948, p. 261 ff.)
- O 11 Quadriga l., double ex. line; Punic 40 legend sys in ex.
  - R 34 Similar to R 33 17.10 Berlin 17.23 \* Copenhagen 499
  - OII R 35 Head r., with sphendone 16.60 \* Egger 7. 1. 1908, 58

#### Plate TT

41

- O 12 Walking quadriga l.; Nike crown-42 ing horses. In ex. Punic legend
  - R 36 Head I., four dolphins Berlin
    - \* Berlin
- O 12 43 R 36' Corn grain added below 17.30 \* Hague 16.10 Syracuse, Megara Hyblaea hoard 1949, 55854
- O 12 44 R 37 Head I. with ampyx, short fluttering hair above; three dolphins Priv. coll. Y = Hess-Leu17.23
  - 1957, 137 17.04 \* London = Weber 1478
- O 12 45 R 37' Die worn and altered as regards the hair, necklace and earring 16.46 \* Paris Vogué 658
- 012 46 R 37" Die now further altered, especially as regards the hair and nose; dolphins unchanged 16.66 \* London 1938 = Nav. 5, 987

- O 12 Die flaw below Nike 47 R 38 Head r., triple earring, four dolphins 16.54 \* Cambridge McC 3054
- O 12 Die flaw larger 48 Similar head r., triple earring, five R 39 dolphins
  - ANS Ratto 24. 6. 1929, 141 = 17.15 Baranowsky IV, 343 17.28 \* London 1908 = Sambon
  - 19. 12. 1907, 495
  - Hess-Leu 1956, 136 17.04 Pennisi
- O 13 Fast quadriga l., double ex. line; 49 in ex., dolphin and Punic legend
  - R 37 Original state of this die (n. b. the relative states of this die would indicate that O 13 precedes O 12; but the contrary indication is given by the relative states of R 39, with which O 13 is used later than O 12) 16.97 \* London 1938 = Helbing 1927, 1657
- Paris 945 50
  - O 13 Small alterations in the hair; viz. R 39 later state of die than with O 12 (48 above) Berlin 17.11 Boston add. 29

- (50)Vienna 17.20 O 13 51 16.83 \* London 1936 (found at R 40 Similar head r., uncertain number Sandbanks, Poole harbour, of dolphins; corn grain below \* Salton 1922) 16.15 Syracuse, Megara Hyblaea hoard 1949, 55855 16.91 \* Leu 1965 Plate 12 O 14 Quadriga l., double ex. line; in ex. O 16 Quadriga r., double ex. line; in ex. 52 dolphin and sys two dolphins (but no legend) R 41 Head 1., ampyx, triple earring; R 46 Similar head I., but no dolphins 17.00 \* SC 1927, 1144 three (?) dolphins 17.31 \* AC 16, 593 = Cahn 84, 183 58 O 16' Die completed by addition of legend 17.11 \* London 1938 şyş in ex. between dolphins Priv. coll. Y R 47 Similar head I., three dolphins Syracuse visible (one of which below neck) 17.01 \* London 1926 O 15 Similar, but ex. line more widely 53 spaced, and in ex. only legend sys Similar, no ampyx; four dolphins O 16' 59 16.78 \* ANS = Schulman 26. 1. R 48 Head I. with wreath and triple 1913, 2002 earring; behind, star and uncertain 16.10 Hague mark; two dolphins visible in front Luneau 224 17.00 \* Berlin London BMC 10 17.43 54 O 15 O 16' 60 R 43 Similar to R 42, four dolphins R 49
  - Similar head 1.; six dolphins (but not below neck) ANS = Walcher Molt-17.04 15.65 \* London 1938 = Nav. 5, hein 426 = Hess 27.10.872 = Glend. 28.6.1938,1902, 559 192 (obv. tooled) Berlin 17.16 O 15 17.39 \* London Lloyd 1588 == R 44 Head I., generally similar, with Nav. 6, 425 ampyx; three dolphins visible Pennisi 17.07 \* Priv. coll. Y = Hess-Leu
- 1957, 135

  O 15

  R 45 Similar; two dolphins visible in front, probably another behind

   \* Syracuse

  61 O 16'

  R 49' Same die with head much altered and enlarged throughout; dolphins unchanged!

  17.33 \* Boston 327

55

		Plate	e 13		
62		Quadriga 1.; double ex. line, legend sys in ex.  Same die further altered; head un-	(68)		good style; four dolphins, shell below chin 17.22 * Jameson 2421
	1 49	changed but dolphins fattened  16.51 * Oxford 2138 = Soth.  9. 3. 1936, 22  Berlin	69	O 19	Quadriga l., thick ex. line; star above horses; in ex., legend ş y ş Head l., similar to last, four dol- phins; in front, dot
63	O 17	– Priv. coll. Y			17.13 * Brussels  - Berlin
9	R 50	Larger head, of good style, with wreath and earring; three dolphins.  Dot in front		0.50	17.12 Hess-Leu 1966, 172 17.11 Merzbacher 2. 11. 1909, 2489 = White King 66
		17.10 * Berlin 16.87 Boston 325 17.22 MMAG 43, 1970, 54 16.23 * London Lloyd 1586 = Benson 54 253	70	O 19 R 57	Head l.; similar, four dolphins; below chin, swastika 16.94 * Boston 324 = Warren 425
64	O 17 R 51	Head l., smaller and inferior style; wreath and earring; three dolphins visible			- Berlin 16.07 London Lloyd 1587 = Hirsch 29, 101 16.78 Jameson 691
		17.22 * Berlin			16.86 MMAG 32, 1966, 68
65	O 17 R 52	Similar head l., wreath with cornear; triple earring; behind, star	71	O 19	- Paris 941 17.21 MMAG 43, 1970, 53
		and monogram (incomplete). Two dolphins visible  17.22 AC 16, 594  16.76 * London 1938 (BMQ  1938, xliv, 1) = Nav. 6,  424		R 58	Head 1. with wreath and earring, simpler style; four dolphins  16.76 ANS = Schulman 8.6.  1931, 54 = Hamb. 96,  44 = Schulman 7.6.  1937, 98  16.75 Berlin
.93		17.25 Hirsch 30, 380 - Pennisi			16.75 Berlin 17.00 Hirsch 19, 156 15.90 Van Vleuten, Lempertz
66	O 17 R 53	Head 1., smaller with normal wreath and earring; three dolphins. Dot in front 17.06 Cambridge McC 2484			Köln 1926 16.78 * London BMC 13 16.84 New York Met., Ward 365
		17.21 * London BMC 17 = Hill Sicily pl. x, 11			16.90 Paris Luynes 1085  - Priv. coll. Y  - Pennisi
67		Similar, but thick ex. line, horses lower. In ex. legend sys	72	O 19 R 59	Similar head; four dolphins
	R 54	Closely similar to R 53 and perhaps altered from it; if so, alterations include dolphins in front 17.26 * Leu Sicilia 143			17.00 Hirsch 32, 61 =  Hindamian 177  - ANS  16.53 Cambridge, SNG IV 1119
68	O 18 R 55	Head 1., wreath and earring normal,			16.62 do., 1120 17.37 * London BMC 16

# Plate 14

73	O 19	C: '1	(78)		-	Martinetti-Nervegna
	R 60	Similar				1907, 794 = Engel-Gros
		16.52 * London BMC 14				21
74	0 19		79	O 21	1201 100	
	R 61	Similar		R 66	Similar	
		16.92 * London BMC 15			16.16	Hess-Leu 1968 115
		17.02 Naples 4384			16.50 *	Paris Luynes 1082
75	O 20	Similar, but ex. line of two paral-	80	O 21		
		lel lines; star above; in ex., dolphins		R 67	Similar	
		flanking legend şyş			16.17	AC 16, 952 = Wotoch
	R 62	Head l. with normal wreath and				238 = Stiavelli 179 =
		earring; smooth and elaborate style;				C. Clark 91
		four dolphins			16.52	Lockett SNG III 846 =
		17.20 Berlin				Nav. 1, $513 = \text{Hirsch } 14$ ,
		16.72 * Paris A–V 272				174 = Nav. 5, 986
		16.83 Nav. 1, 514			16.63 *	London BMC 11
76	O 20		81	O 21		
	R 63	Similar		<b>R</b> 68	Similar	
		16.44 * Cambridge McC 2483 =			16.75 *	Cambridge McC 2482 =
		Hirsch 15, 1084				Benson 248
77	O 21	Similar to O 20, but no star above;	82	O 21		
		dolphins and legend in ex.		R 69	Similar	
	R 64	Similar			16.78	Hess-Leu 1956, 137
		16.38 * London BMC 12			16.39 *	Berlin
78	O 21				-	Syracuse
	R 65	Similar	83	O 22	Similar;	possibly star above;
		16.94 * Boston 326	10 to 2 world?		legend o	only in ex.
		16.91 Brussels H 824		<b>R</b> 70	Similar	to R 58-61
		16.99 Paris 944			14.60 *	Brussels

# Ršmlqrt - R'šmlqrt

The entire coinage of this mint seems to belong to the second half of the fourth century. This is indicated by the occurrence of early specimens (no. 18) in the Nissoria and Gibil Gabib hoards (see below, p. 56–57) and by the numerous specimens of the later groups buried in hoards during the time of Agathokles (below, p. 59); it seems unlikely that the coinage continued later than c. 305–300 however, as virtually all the coins are accounted for by the date of the Pachino hoard (cf. p. 59).

The question of where this mint was situated is a very difficult and indeed for the present insoluble problem. The main difficulty to be faced is, that the series consists of nothing but tetradrachms, and there are no smaller coins or bronze coins which might, from the evidence of local finds, help to locate the mint. The coins occur in a number of hoards from almost every part of Sicily though few are from the western part of the island; in any case there are no indications to be obtained from any local predominance in one area rather than another. The meaning of the name R§mlqrt = Cape of Melqart is not decisive as there are many possible capes, and different places associated with Melqart-Herakles; and little reason to prefer one to another. The favourite proposals have usually been either Kephaloidion (Cefalú) or Herakleia Minoa, but neither of these is convincing.

Cefalú has the merit of an excellent cape or headland, one of the most impressive and well known in Sicily. But it was a Sikel town and not Punic, though friendly with Carthage, and in 396 made a treaty with Himilco; after this it was captured by Dionysios and there is no evidence that it ever returned to the Carthaginian side. The fact that it was captured by Agathokles in 307 proves almost nothing about the situation there in the intervening period. It must be emphasised at once, that the presence of specimens in the Cefalú hoard published by Lloyd in NC 1925 is merely typical of the distribution in several other hoards of this period, and proves nothing about the location of the mint, as Lloyd thought; the coins are in fact equally represented in the 1957 hoard from Pachino.

The earlier phase of Cefalú is illustrated by the coins inscribed «Herakleiotan ek Kephaloidiou», which have been discussed by Consolo Langher in *Kokalos* 7–8, 1961–1962, 166 ff. That these coins are undoubtedly coins of Cefalú, and not, as has been supposed by others, of refugees from Cefalú settled at Herakleia Minoa, is I think amply demonstrated by Mrs. Langher. Her conclusion is further reinforced by the existence of an unpublished coin in the Pennisi collection <sup>23</sup>, inscribed «Kephaloiditan» (Plate 21 C). However the Pennisi coin seems to be appreciably later in style than the «Herakleiotan» coins, and I would think it likely that the «Kepha-

<sup>&</sup>lt;sup>23</sup> After a photo which the late Barone Agostino Pennisi gave me some years ago. Unfortunately I do not have any note of the weight. As reproduced here the photo is about twice natural size.

loiditan» coin should be of the second half of the fourth century, without attempting to suggest too precise a date. If this is correct, it would certainly diminish the possibility of Cefalú being under Punic control at the period when the Ršmlqrt tetradrachms were being minted.

The other current favourite for Ršmlqrt, Herakleia Minoa, is likewise not without difficulties. The earlier settlement seems to have been destroyed in 409 B.C. but was restored by Timoleon in 345. At this period it seems to have flourished, as is attested by the recent excavations and discoveries on the site – from all of which one would not get the impression that Herakleia – with its notable Greek theatre – was anything but a Greek city at the time. However as has been remarked above, the coins inscribed «Herakleiotan ek Kephaloidiou» must no longer be reckoned as part of the evidence. In other respects, however, it seems to me perfectly reasonable to follow the opinion of De Miro in Kokalos 4, 69–81, that Herakleia was in fact in the Greek zone, since it lies on the east side of the river Halykos which formed the boundary between Greek and Punic Sicily. The coins found at Herakleia are admittedly mostly Punic <sup>24</sup>, but this, it seems to me, is readily explained by the proximity of the city to the Punic zone, and such coins do form quite an element in the finds even from Greek sites much further east, such as Gela.

Of other possible sites for R\smlqrt, we must, I think rule out cities which, though within the Punic zone and having associations with Herakles, have other coinages already assigned to them - Solus, Thermai; Eryx too has some Punic coins of the period with the legen 'r k (e.g. Plate 24, 23-24). As for Trapani (Drepana), the harbour of Eryx, there seems little if any reason for thinking of an important mint there in the fourth century. But another place which was securely in the Punic zone, and also has the association with Herakles, is Selinus 25; the Greek city was destroyed in 409 B.C., but in the reconstruction which took place in the fourth century Punic elements seem to have assumed great importance 26. In this connexion it may be worth making the bare suggestion that Selinus could be considered as a possible site for the Ršmlqrt mint. It must be admitted that there is nothing in the copious finds of coins (mainly Punic) from the site 27 which could directly support this hypothesis (a single tetradrachm was included in a hoard from Selinunte in 1877, cf. Kokalos 7, tav. XX, 2), though this, for reasons already outlined above, namely the non-existence of bronze coins of the mint, will be a difficulty whatever site we choose. In the meantime, and merely by a process of elimination, Selinus seems to me to have a certain attraction and although the Akropolis of Selinunte may seem an insignificant feature of the landscape when compared with the mighty rock of Cefalú, it does nevertheless form a small promontory which could conceivably have attracted the name of Ršmlqrt.

<sup>24</sup> NSc 1958 and Annali 5/6, pp. 296 ff.

<sup>&</sup>lt;sup>25</sup> On Herakles at Selinus, cf. L. Lacroix, Monnaies et colonisation, pp. 34 ff.

<sup>&</sup>lt;sup>26</sup> A. di Vita, Archaeologia Classica V, pp. 39-47.

<sup>27</sup> Annali 5/6, pp. 306 ff.

It must be added that Lilybaion (Marsala) would have been a possible candidate for Rimlart except that it is, in my opinion at least, needed as the most probable site for the main Sicilian «Carthage» series. The fact that the earlier coins of that series are inscribed qrthdšt does not necessarily or even probably mean Carthage itself, or if so only by extension as implying the «Carthaginian state». In any case the «Carthage» series is of undoubted Sicilian mintage and as such seems to be most appropriate to the city which became, after the destruction of Motya, the chief Carthaginian base in the island. The legend qrthdst is accordingly susceptible of another shade of meaning, and «new city» may aptly be thought to refer to the new foundation at Lilybaion which replaced Motya. There is good analogy for such a usage, and from quite another context, that of Cyprus in the eighth to seventh century B.C., where in some inscriptions the expression grthdst refers to a city of Cyprus, probably Kition 28. Possibly the legend on the «Carthage» coins of Sicily may contain some degree of ambiguity and refer at once to the new city of Lilybaion as well as to the Carthaginian state. At all events, it seems to me that this was the likeliest mint for the «Carthage» series, thus ruling out any chance of putting R šmlqrt there.

# Ršmlqrt

## 1-4 (Plate 15)

This rather heterogeneous group is placed at the beginning of the series largely because there is no other obvious place for it. Nike does not appear on the obverses as she does everywhere else in the series, and the first die O I has instead a caduceus above in the field. The caduceus symbol occurs again at no. 23, and also in the «Carthage» series (e.g. SNG II 1620, McClean 3045), as one of the symbols associated with Tanit, by analogy with its occurrence on many Punic stelai (for which see Anna Maria Bisi, Le stele puniche, Rome 1967).

The most interesting coin of this first group is undoubtedly no. 1, where instead of the expected female head on the reverse there is a bearded head of Melqart, wearing a wreath and an earring (cf. Plate 21). The earring is paralleled by a coin of Solus (Plate 23, 21) and by the Siculo-Punic bronzes, SNG Cop. 94, also at Motya (Plate 23, 13). So far as I can trace, this coin with the Melqart head is unpublished although it has been in the B. M. since 1874. The other two reverses of this group are the usual female head with dolphins, and on R 2 (no. 3) a corn grain is added to the die, as in the case of Panormos no. 24, 43.

<sup>&</sup>lt;sup>28</sup> S. Moscati, World of the Phoenicians (London 1968), pp. 104–105 and references on pp. 259–260.

G. Cavallaro, Panormos pre-romana (Palermo 1950), p. 109 ff., however, equates qrthdšt with Panormos; if we accept the şyş coin series for Panormos, as I do, then this must surely exclude the possibility suggested by Cavallaro.

Three obverse dies O<sub>4</sub>-6 occur in this group, and each has the regular Nike above. O<sub>4</sub> is not linked, but O<sub>5</sub> and O<sub>6</sub> are linked by R<sub>6</sub>. The group has a certain homogeneity on account of the style of R<sub>4</sub>, 5, 8 (nos. 5, 6, 10 respectively) which all follow an identical prototype with sphendone and stars. However the treatment of R<sub>6</sub> (no. 7-8) is interesting, with the hair rendered in a knobbly pattern, which has a considerable affinity to certain dies of Thermai (Plate 22, 4, 5, 6): these must be contemporary with R<sub>6</sub> and thus give a date in the third quarter of the century (see below 70) <sup>29</sup>, No.9 (R<sub>7</sub>) has another hair rendering but the face is similar to that of R<sub>6</sub>. In the obverses of this group we see a style that is very typical for this mint, with its exaggerated upward surge of the horses, which is to be seen again at no. 21 (Plate 16) and no. 31 (Plate 17).

This group contains five obverses, four of which are linked in the manner indicated in the following diagram.

The obverses are of quite disparate character and only O 10 shows the really typical upward surge of the horses. On O 11 the caduceus symbol appears in front of the horses, as has been mentioned above (cf.O 1). The most typical style of reverse is that of R 9, 11, 13, a rather large and exuberant development of a basically Euainetan style, though without the wreath. There is no direct prototype or close parallel to be found in the «Carthage» series. The type of R 9 (no. 11) is adapted with a greater degree of stylisation when it comes to nos. 15–17, 21, 23–25. A corn grain appears on nos. 17, 23–25 replacing the dolphin behind the head. A quite different style is seen in R 10 (nos. 12, 20) and R 15 (no. 18), based on the model of Eukleidas' head with the five-fold earring (Tudeer rev. 35), a prototype which also seems to have pleased the engravers of the \$y\$\$ series (nos. 14–15, Plate 8) at a much earlier date.

This varied but closely-linked group is important for the chronology of the mint owing to the presence of specimens of no. 18 in two hoards, those of Nissoria and Gibil Gabib. The date of the Nissoria hoard has been set, on other grounds, at about

<sup>&</sup>lt;sup>29</sup> A specimen of no. 8 comes from the Mineo hoard (Noe <sup>2</sup> 697) whose burial date however should be early in the third century B.C., so that this is not indicative for the early part of the series.

330 B.C. <sup>30</sup>; that of Gibil Gabib (in Syracuse museum) must be the same, as it has the same latest coins, the N-series of Corinth and the «Carthage» series as far as the type represented by Jenkins-Lewis, pl. 26, 4. Thus the two hoards agree in essentials and give a good indication for the chronology of the R § mlqrt mint, which can only have begun to operate in the second half of the fourth century; and this is further in agreement with the indirect indication already derived from our comparison of R§mlqrt no. 7–8 (R 6) with Thermai nos. 3–5, specimens of which were also contained in the Gibil Gabib hoard.

In this short group a single obverse is coupled with four reverses. Of these, R 20–21 are of a rather hard and stylised aspect; noteworthy is the replacement in the die of the dolphin behind the head by a large fish, recalling another fish on \$y\$ nos. 19–20 31. R 22–23 are quite different and more like the regular Greek-Carthage style; here for the only time in this series is there a wreath with corn ears, so characteristic of «Carthage» as e.g. SNG III 1048, Jenkins-Lewis, pl. 26, 2–6.

This large group comprises almost all the rest of this mint's output, with no less than eleven obverse dies; of these, only one, O 17 (no. 48), has so far not appeared in a definite linkage of dies, but there is no doubt that it too is embedded in this group by the style of its reverse, and it is therefore provisionally placed next to no. 47 whose reverse is closely similar (Plate 19). The scheme of the linkages is as follows:

On the whole the obverse dies display the rather wildly upward-rearing horses so typical for this mint, though the style is far from even as between O 13, 15, 17, 18, 22, 23 (nos. 31, 41, 48, 49, 65, 68). As against these, O 14, 16 (nos. 35, 42) are more restrained and placid, as is O 20 (no. 61). O 19 (no. 54) is another variant, harking back to the early style of Eumenes at Syracuse; while O 21 (no. 62), with its sagging horses, is also remarkable for having the legend reversed (viz. reading from left to right).

<sup>30</sup> ANS Centennial Publication, pp. 372-374.

<sup>31</sup> The same or similar fish on the coins of Akragas (Rizzo i, 16) has been discussed by the late Prof. F. E. Zeuner in *Numismatic Circular* 1963, pp. 142–143, concluding that it is probably a species of the giant sea-perch known as the mero.

The reverses likewise offer a great variety of style and treatment. The predominant style of head, equipped with a wreath but without corn ears, derives ultimately from the Euainetos model, but only at some removes; in fact, the pure Euainetos style, which appears sometimes at Panormos (e.g. Plate 13, 69) and also at the «Carthage» mint, is never found at Ršmlqrt, for whose typical styles much closer parallels can be seen in some of the characteristically Punic styles of the «Carthage» mint.

Of the various stylistic groups represented here, we may first distinguish R 24, 26, 27 (nos. 31, 33, 34), slightly astringent and stylised, with which may be compared «Carthage» dies such as Jenkins-Lewis, plate 26, 5; reverses 28, 29 (nos. 37-38) have a somewhat gentler aspect, leading into R 31 (nos. 40, 45, 49); the latter in turn has further affinites with R 38, 39, 40, 43 (nos. 50, 51, 52, 56). Here there is a likeness to «Carthage» Jenkins-Lewis, plate 26, 7. Another grouping consists of R 32, 33, 34, 35, 36, 37 (nos. 41, 43, 44, 46, 47, 48) all of which have in one way or another much in common with «Carthage» dies exemplified by Jenkins-Lewis, plate 26, 7 and here Plate 21 B, both representing a rather bold and important development of the Euainetos type; the corkscrew curls on Jenkins-Lewis, plate 26, 7 are also an important element on R\smlqrt R 36, 37 (nos. 47, 48) and even R 51 (no. 67), and the rather stylised sweep of the back hair on R 33, 35 (nos. 43, 46) is close to that of «Carthage» Plate 21 B. A more compact style is shown at R 41, 42, 44, 46 (nos. 53, 55, 57, 59) for which it is difficult to cite any precise parallels; the presence of a corn ear on R 44 (no. 57) is to be remarked. Several other styles are represented, of which R 45, 48 (nos. 58, 63) have become so far removed from any Greek or even Punic prototype as to have an almost Celtic aspect 32. It is equally difficult to find any close analogy for R 47 (no. 60) or R 49 (no. 64). On the other hand R 50 (no. 66) goes back to a rare «Carthage» die here shown on Plate 21 A, which would be nearly contemporary with Jenkins-Lewis, plate 26, 5, 7, and these latter have already been mentioned as analogies for other dies of the Ršmlqrt group with which we are concerned.

Clearly, the discussion of the style of these coins cannot be taken any further for the moment and without having the complete series of «Carthage» coins for comparison; it is hoped to present the latter series in further articles. For the present it should be remarked only that the parallels from «Carthage» which have been cited here all come from the third and last quarters of the fourth century – that is, assuming that the group with Horse and palm (as e.g. Jenkins-Lewis, plate 26, 2–8) covers approximately 350–325 B.C. and the group with Horse's head (as Jenkins-Lewis, plate 26, 9) approximately 325–305. In any case it is clear that the Ršmlqrt mint seems to have depended largely – and to a greater extent than sys Panormos – on prototypes from the «Carthage» mint, though at the same time adding its own characteristic touches.

<sup>32</sup> SNG II 1641 could perhaps be cited in this connexion, but it is not close.

## 69-70 (Plate 21)

This small group, consisting of only a single obverse die and two reverses, poses something of a problem, for its place in the series is far from clear. Obviously it must be put either before or after the large group nos. 31–68. The style of the heads R 52, 53 is at first sight much more Greek than most of those in the preceding series, though this fact gives little indication of the true position. The obverse has a quadriga which is not so typical for this mint, and the wide exergual line recalls some of the later \$y\$\$ dies, e.g. O 18, 19 on Plate 13; for this reason, at least nos. 69–70 may plausibly be placed towards the end of the series. A rather fresh specimen in the Megara Hyblaia hoard 1967 might confirm this.

The occurrences of specimens of the last two groups (nos. 31–68, 69–70) in various hoards are reasonably frequent; the hoards in question are invariably from the period of Agathokles <sup>33</sup> and clearly confirm that the bulk of the Ršmlqrt coinage must belong to the last quarter of the fourth century. In fact the series seems to extend about as far as the «Carthage» Tanit/horse's head and the Agathokles quadriga types, both present in the Pachino hoard 1957. This hoard <sup>33a</sup> did not include the subsequent «Carthage» Melqart head/horse's head nor the Agathokles Nike with trophy types, and in fact seems to have buried about 305 B.C. It did contain specimens of the following numbers of the Ršmlqrt mint – 37, 41, 47, 48, 64. A similar but less well recorded hoard from Palermo 1936, of which some information is preserved in the B. M., likewise contained a specimen of no. 47.

The other hoards relevant for the mint represent a slightly later phase in the reign of Agathokles, containing both the Carthage Melqart head/horse's head type and also the Agathokles Nike with trophy type. The presence of these would indicate, I think, a date of burial early in the third century. The hoards in question are those of Cefalú, Megara Hyblaea 1967, Selinunte 1877 and Cammarata. The Cefalú hoard, published by Lloyd in NC 1925, included specimens of our nos. 17, 39, 48, 53, 64, 66. That of Megara Hyblaea 1967, not yet published but which I am grateful to the authorities of the Syracuse museum for allowing me to study, contained specimens of no. 53 and 69. The Selinunte 1877 hoard 34 contained a single specimen, of no. 39. Finally the Cammarata hoard 35 appears to have included the same main elements, among them some specimens of the R mlqrt mint, but we have no details.

Putting together the indications derived from the various hoards of the Agathoklean period for the lower end of the series and of the Nissoria and Gibil Gabib hoards for the earlier section, it seems justified to estimate the duration of the mint as covering roughly the second half of the fourth century (cf. above, p. 56–57).

<sup>33</sup> On hoards of the time of Agathokles, cf. Essays Robinson, p. 151.

<sup>33</sup>a A. Di Vita, Annali 5/6, 1958/59, 125 ff.

<sup>34</sup> Noe 2 946, NSc 1877, also Kokalos VII, tav. 20, 2.

<sup>35</sup> Noe 2 193.

# 71-73 (Plate 21)

This is a strange group which stands quite apart from the main series of the mint and cannot be accomodated within the regular sequence. It seems doubtful if it can be a regular issue of the mint, though it could be later than the regular series. Here, the head is transferred to the obverse and the quadriga placed on a deeply concave reverse. Both for this reason, and because of the style of the head O 25, we find a strong reminder of the Agathokles quadriga coins at Syracuse <sup>36</sup>; the latter had also influenced the style of the latest groups of the sys mint (cf. above, p. 44). It is noteworthy that the legend, here of course on the reverse R 54, takes the form r'smlqrt, and in this respect resembles that of O 8, 9, 11 and 24.

It is difficult to find any explanation for the linkage of the same quadriga R 54 with a quite different head O 26 (no. 72), a head which is further linked with a stepping horse and palm tree reverse (R 55) at no. 73, This unexpected linkage might at first sight be thought to afford some positive connexion with the «Carthage» series where the types of no. 73 occur, but in fact the head bears little resemblance to any of the other dies present in the regular «Carthage» series, and the same may be said of the reverse with its two Punic letters below the horse. Since no. 73 will not fit into the «Carthage» series, it seems inevitable to regard it as something quite irregular, and the apparent linkage between the types of R š m l q r t and «Carthage» cannot be looked on as significant either for dating or for place of mintage.

36 Cf. SNG II 1476-1480.

I	(O I)	7944449	31 f		<del>ከ</del>
2	(O 2)	T994449		O 13-15) (O 16)	198449
4	(O 3) incomplete	973449		(O 17)	/-994749
5	(O <sub>4</sub> )	4984449	49	(O 18) incomplete	9 9 4 44 9
6	(O <sub>5</sub> )	494449	54	(O 19)	to944449
8	(O 6)	7991 4 49		(O 20) incomplete	9 4 449
II	(O <sub>7</sub> ) incomplete	4 4 49	62	(O 21) incomplete	P + +) P P +
12	(O8)	49849449		(O 22)	h98441419
18	(O 9)	ተባዔ「ሣሣ부ባ	68	(O 23)	T9\$ 449
21	(O 10) incomplete	984449	69	(O 24)	19969749
23	(O 11) incomplete	9754449	71	(R 54)	1984444 1
25	(O 11) incomplete	99/4449	73	(R 55)	<b>1</b> 0
26	(O 12)	497449			

I O I Fast quadriga l.; double ex. line, legend in ex. Above, caduceus (but no Nike)

R I Head of Melqart bearded, r. with wreath and earring.

16.32 \* London 1874 (Castellani)

Enlarged x 2: plate 21

2 O 2 Similar, no Nike, nothing in field above; double ex. line and legend in ex.

R 2 Female head r., with single-drop earring; three (?) dolphins

16.31 \* Lockett SNG III 740 =

Priv. coll. Y

- O 2
   R 2' Same die with addition of corn grain behind head
   16.77 \* Leu 1965
   O 3 Similar to O 2
   R 3 Similar head, with ampyx, single-drop earring; at least four dolphins, possibly a fifth behind head
  - possibly a fifth behind head

     \* Uncertain sale cat.

    (no. 111)
- 5 O 4 Quadriga r. with rearing horses, Nike above. Legend in ex.

(5) R<sub>4</sub> Female head r. with sphendone ampyx, triple earring; three dolphins 16.77 \* Boston add. 24 = Hess-Leu 1959, 115 = Jameson 1903 6 05 Similar, but horses lower and charioteer more forward. Legend in ex. Similar to R 4, three dolphins R 5 17.01 \* ANS 05 7 Larger head r., with sphendone and R 6 ampyx, hair knobbly, triple earring; three dolphins 16.20 Paris Luynes 922 Luneau 220 16.76 \* London Lloyd 1598 = Nav. 6, 361 8 06 Similar, horses very large and charioteer very high. Legend in ex. O 7 Quadriga l., horses in close forma-ΙI tion; Nike above (?); double ex. line, legend in ex. R 9 Large head with waved hair, triple

17.05 \* Sambon 19.12.1906,494 Syracuse, Mineo hoard 25284 06 9 **R** 7 Large head r., slightly untidy hair, triple earring; two dolphins 16.97 \* Lockett SNG III 737 = Nav. 12, 708 16.61 London 1939 = Ciani 1929, 50 Pennisi 06 10 R 8 Head with sphendone and ampyx similar to R 4-5, triple earring; four dolphins 17.02 \* Cambridge McC 2487 = Hirsch 21, 592 Hess-Leu 1960, 102 17.24 16.72 Priv. coll. X Palermo

16.45 \* AC 14, 90 = Helbing

1930, 108 = Cahn 75,

228 = Glendining

31. 1. 1951, 58

Plate 16

(14)

(8) R 6

earring; two dolphins visible in front 16.82 \* Hirsch 19, 161 08 Similar, horses more level; single 12 ex. line. Legend in ex. R 10 Head with sphendone (decorated with stars) and ampyx, earring with five pendants; three dolphins 16.56 \* London 1929 17.01 Nav. 5, 873 16.90 Rosenberg 72, 175 08 13 R 11 Similar to R 9; two dolphins visible in front 16.87 \* London 1938 = Helbing 12. 4. 1927, 1658 16.75 Paris Luynes 924 Berlin Salton 14

0.8 15 R 12 Large head with rolled hair, ampyx, single-drop earring; two dolphins 17.15 \* Paris 946 16 08 R 13 Head similar to R 9, R 11, triple earring; three dolphins Nav. 5, 871 16.65 16.40 Egger 41, 121 16.97 Hunter xvi, 5 MMAG 1951, 219 16.52 London BMC 19 17.07 \* Pennisi 16.65 Hague 17.00 Berlin Salton 08 17 Similar to R 13, etc., but with

08 R 11' Same die, but worn and partly altered (nose, mouth and hair) ampyx, triple earring; two dolphins in front, corn grain behind 16.61 \* London Lloyd 1597, Cefalú hoard

(17)		16.56	Egger 26. 11. 1909, 1951	(20)
		16.90	Priv. coll. $Y = Lockett$	
			SNG III 739	
		17.00	Hirsch 30, 350 = Sam-	
			bon 19. 12. 1907, 500	
		17.32	Hess-Leu 1957 132	
		16.94	Berlin	
18	09	Quadriga	al., horses regular and low	
		to groun	dline; double ex. line,	
		legend r	'smlqrt	
	R 15	Head wi	th sphendone (decorated	
		with star	s) and ampyx, earring with	
			dants; three dolphins	21
		16.66	ANS = Nav. 5, 874 =	
		Luneau		
		16.47	Paris Luynes 927	
			Nav. 4, 283	
		16.90	Hague	
		17.02 *	London BMC 2	
		-	Syracuse, Nissoria 54542	
		17.00	Syracuse, Gibil Gabib	
			48296	
19	09			22
	<b>R</b> 16	Head r.	, triple earring; no dol-	
			n front, crescent?	
		16.88 *	London Lloyd 1596	
		( <del></del> )	Pennisi	
		-	Baranowsky 1929, 1554a	
20	09			
	Rio	Die mor	e worn	
			Jameson 596	
			Cambridge McC 3053	
			AC 16, 486	
			morteupperen (INDICATE) = 1000000001	

(20)		16.41	Oxford 2148 = Hirsch
			29, 83 = do. 19, 160 =
			Schulman 21. 10. 1912,
			19 = do. 7. 6. 1937, 96
		16.29	ANS = Münzh. Basel 4,
			561 = Cahn 71, 205 =
			Cahn 80, 113
		17.08 *	Priv. coll. Y = Lockett
			SNG III 738 = Nav. 4,
			232
		16.82	Hess-Leu 1958, 111
21	O 10		with horses very high
		similar t	o O 6
	R 12		
		16.75	, , ,
			16. 12. 1926, 111
		16.95	AC 16, 491
		16.68	Priv. coll. $Y = Jameson$
			600 = Egger 10. 12. 1906,
			87
		17.10 *	London BMC 20
22	0 10		
	R 17	Similar t	to R 12; two dolphins
	1(1)		Cambridge McC 3052 =
		-/3	Sambon 19. 12. 1907, 493
		16.60	Cahn 66, $145 = MM$
		10.00	AG 1951, 218
			110 1931, 210

O 11 Quadriga l., horses low and regu-23 lar, charioteer amidships, double ex. line, legend in ex. On l. caduceus R 14 16.71 O'Hagan 124 17.04 \* London BMC 21 16.90 Paris Luynes 923 24 OII R 18 Similar to R 14 16.99 \* AC 16, 492 16.65 SC 1927, 1148

7
25 O 11
R 19 Similar to R 18
17.25 \* Stiavelli 158 = Merz-bacher 1910, 218 =
Sotheby 21. 4. 1909, 85
17.14 ANS = Locker-Lampson
65 = Cahn 60, 188 =
Nav. 12, 709
26 O 12 Quadriga l. with horses low regular and compact, charioteer in normal position and leaning forward. Double ex. line. Legend in

Hess-Leu 1959, 114

16. 12. 1926, 110

Nav. 6, 366 = Platt 3. 4. 1933, 68 = Schulman

ANS

17.17 16.85

17.05

ex.

0 020		2011 TO 1008 TORK SE STO. SERV.				control with
(26)	R 20	Head I., hair wavy and neatly	(31)		17.30	Glend. 3. 12. 1929, 704
		rolled, triple earring; three dol-				= Rosenberg 8. 2. 1924,
		phins				84
		16.70 Hamb. 98, 226			_	Paris A-V 273
		– * ANS			16.53	Hirsch 21, 589
27	O 12				17.15	Hess 18. 3. 1918, 188 =
	R 21	Similar; three dolphins				Egger 28.11.1904, 197
		16.81 * London BMC 18				= Helbing 2. 3. 1928,
28	O 12	sease-septimization principality contribution of transportation of the section of				123 = Hirsch 20, 121
20		Same die, but dolphin behind head			-	Helbing 8. 11. 1928,
	16 2 1	changed into fish				3716
		16.55 Hirsch 34, 155 =			17.28	Oxford 2147 = Lockett
		Jameson 1895				SNG III $743 = \text{Nav. 1}$ ,
		16.69 * London RPK			2	426
		17.09 Hess-Leu 1957 = Priv.			16.82	Hague
		coll. Y	32	O 13		
		- Palermo	3-	R 25	Head 1	with leaf wreath, etc.;
		- I alcimo				phins visible in front
29	O 12					London 1919 = Weber
	R 22	Head 1. with corn ear wreath, triple			20.90	1477
		earring; three dolphins				-4//
		16.52 * London BMC 5	33	O 13		
		– ANS		R 26	Similar	to R 24
		16.60 Paris Delepierre			17.00	Hirsch 14, 172
30	O 12				17.06 *	Hirsch 16, 232
	R 23	Head r. with corn ear wreath, triple			17.04	Oxford 2149
		earring; two dolphins	34	O 13		
		16.75 Priv. coll. X	34	R 27	Similar	to R 24 and R 26
		16.91 Munich		102/	16.96	Hirsch 19, 158
		16.95 Berlin				Nav. 10, 193 = Nav. 4,
		17.23 * Nav. 6, 362			-/	231 = Merzbacher 2. 11.
31	O 13	Quadriga r., horses rearing up but				1909, 2490
<i>J</i> •	019	regular; single ex. line	×		16.72	Hirsch 34, 154
	R 24	Head r. with leaf wreath, triple			17.22	Hague
		earring; three dolphins			_	Proschowsky 362
		16.88 Egger 41, 120 = Hess			17.00	Nav. 12, $703 = \text{Hess}$
		28. 4. 1938, 523			-,	18. 3. 1918, 187 =
		17.30 * London Lloyd 1604				SC 1927, 1143
		-/.Je	l <sub>s</sub>			00 1/2/, 114/
		Dlas	0			
		Plat	; 18 			
35	O 14	Similar to O 13, but horses lower	37	O 14		
		and charioteer taller		R 28		milar, but hair more curly
	R 26				and wre	eath has extra leaves; three
		16.74 * Hague = Brandis,			dolphin	
		Canessa 1922, 389			16.77 *	London 1939 = Nav. 4,
36	O 14					230 = Soth. 17. 7. 1939,
	D 0-					76 - Wirech 20 60 -

16 = Hirsch 32, 60 =

Bourgey 5. 12. 1932, 70

Brussels

17.16

R 27

17.30 \* Hirsch 33, 342

Syracuse

(37)	E.	_	Feuardent 26. 5. 1914,	(39)	)	16.66	Cambridge SNG IV 972
			158	A900-ACC0001 00		-	Ciani 7. 5. 1955, 190
		16.40	Hartwig $682 = \text{Hamb}$ .			16.90	Hess 202, 2269
			98, 224			15.13	London 1928
		17.27	Hess-Leu 1968, 114			16.72 *	London Lloyd 1605,
		17.00	Hirsch 32, 59				Cefalú hoard
		17.04	Jameson 597			17.19	Paris Luynes 921
		17.08	Nav. 4, 229			16.90	Paris 2389
		17.22	Nav. 6, 363			16.90	Leu Sicilia 142 = Priv.
		17.36	Paris Luynes 920				coll. Y
		_	Pennisi			17.23	MMAG 43, 1970, 58
		17.20	Sambon 19. 12. 1907, 490				Palermo, Selinunte hoard
		17.18	Sartiges 453 = Sambon				1877 (Kokalos VII, tav. xx, 2)
			19. 12. 1907,489 = Hess 1954,50	40	O 14		(Rokaios VII, tav. XX, 2)
		17.21	Schulman 7. 6. 1937, 97	40	R 31	Head r	similar to R 28, R 29;
		16.94	Syracuse, Pachino 22		10 91	three dol	
		17.07	MMAG 43, 1970, 57				Hirsch 14, 173
38	O 14	-//	2,2,2,2,0,7			-	ANS
50	R 29	Similar	to R 28, but hair wavy in-				Feuardent 26. 5. 1914,
			curled; three dolphins				156
		17.58 *		41	O 15	Ouadriga	r., horses rearing up, cha-
		17.17	ANS = Bourgey 23.5.				eaning forward
			1910,30 = d0.7.6.1909,		R 32		similar; four dolphins
			133			17.16	Brussels H 822
		17.00	Cahn 65, 66 = Egger			17.23	Cambridge SNG IV 970
			28. 11. 1904, 221 = Hess				= Montagu I 101
			194, 132				London BMC 7
		17.16	Nav. 6, $364 = Cahn 84$ ,			16.76	Hess-Leu 1956, 87
			184 = Schulman 16. 12.			-	Priv. coll. Y
			1926, 107			17.16	Priv. coll. X
		_	Baranowsky 1934, 4647			17.10	Lewis
		17.20	Helbing 12.4.1927, 1656			17.17	Nav. 10, 195
		17.30	Hirsch 33, 344		o (	17.03	Syracuse, Pachino 21
		17.10	Hirsch 33, 343 London 1918	42	O 16	W. C.	horses more compact, cha-
		-	Paris 2388		D 20	rioteer ie	eaning forward
		=	Paris Vogué 656		R 32	17 12 *	London BMC 6
		17.08	Lewis = Hess-Leu 1956,			-	Paris A-V 274
		,	88			17.20	Paris Luynes 917
		17.04	Weber 1297 = Feuardent	43	O 16	-70	, /-,
			16. 11. 1937, 48	43	R 33	Similar:	earring larger, dolphin
		17.20	Rosenberg 64, 1391		33		ead turns inwards
		-	Soth. 6. 7. 1921, 201			16.75	Berlin
39	O 14					17.18	Boston = Warren 419
	R 30	Head 1.,	leaf wreath, triple earring;			16.95	Cambridge McC 3051 =
		three do	lphins				Carfrae 48
		17.18	Boston 270			16.96	Cambridge SNG IV 969
		-	Berlin			17.13	AC 17, 142
		17.07	Benson 189			16.94	Hague

(43)16.75 Hirsch 20, 120 016 45 R 31 16.87 Hirsch 26,72 17.04 \* Bompois, Holm Gesch. 17.08 Hess-Leu 1960, 101 Siz. III, viii, 9 16.75 \* Lockett SNG III 744 17.03 Paris Luynes 916 016 Paris 376 46 Priv. coll. Y R 35 Closely similar to R 34, but earring 17.17 more vertical 16.91 Hunter Syracuse 56 016 44 17.05 \* London BMC 12 R 34 Similar to R 33, but earring swings Berlin forward Glend. 13. 11. 1957, 29 ANS 17.34 16.68 Munich **ANS** 17.03 16.85 Nav. 5, 864 17.16 Cahn 68, 1153 = Schul-Nav. 5, 868 17.22 man 16. 12. 1926, 109 Nav. 5,865 = Glend.16.75 Glend.-Seaby II, 186 = 17.05 Seaby III, 1198 Münzh. Basel IV 562 Paris 375 17.10 \* Paris Vogué Sambon 26. 4. 1925, 157 Pennisi = do. 19. 12. 1907, 492 17.20 Ratto 26. 4. 1909, 1175 Palermo Rosenberg 72, 174 17.35 Weber 1296 17.10 16.52 SC 1927, 1145 Syracuse, Gagliardi 1002

#### Plate 19

016 O 17 Quadriga r., horses rearing up, cha-47 48 R 36 Similar to R 35 rioteer high and leaning far forward 17.26 Cahn 66, 146 Similar, larger head 17.23 Hess-Leu 1958, 89 R 37 \* Glasgow, Coats 2892 16.44 AC 16, 489 ANS 17.01 Berlin Hirsch 31, 158 = do. 15,Egger 46, 78 = Soth. 17.10 16.95 1008 6. 7. 1921, 202 Jameson 598 Hess-Leu 1957, 131 17.12 17.50 Lewis 16.36 London Lloyd 1599, 17.07 London Lloyd 1600 Cefalú hoard 17.15 Münzh. Basel 8, 184 Münzh. Basel 10, 146 17.09 17.05 17.06 \* Nav. 5, 863 = Hess 207, 16.64 Nav. 12, 705 134 = Merzbacher 1910, Glend. 1955 Laval, 227 Paris Luynes 919 216 = Hess-Leu 1958, 17.25 17.10 Sandeman 29 110 = Egger 28.11.Stockholm KMK = Nav.17.07 1904, 224 10, 194 O'Hagan 125 = Bourgey 17.04 Ryan 1495 29. 5. 1911, 40 Sambon 19. 12. 1907, 491 Priv. coll. Y 17.20 Palermo hoard 1936 Sartiges 97 Syracuse, Pachino 19 Syracuse Pachino 20 17.00 17.14 Syracuse, Gagliardi 1003 (Annali 5-6, tav. viii, 1)

49	O 18	Quadriga r., horses very large and	55	O 19	
		spread out, charioteer more up-		R 42	Head 1., compact; wreath earring
		right			dolphins normal
	R 31				16.80 AC 16, 487
		17.13 * London BMC 15			16.66 Hague
		– ANS			12.17 Hague
		<ul><li>Berlin</li></ul>			17.24 Hirsch 32, 58 = Hinda-
		<ul> <li>GlendSeaby II 1929,</li> </ul>			mian 176
		187			16.92 Hirsch 34, 152 = Bour-
50	O 18				gey 1913, 18 = Sambon
Rafes	R 38	Similar to R 31; dolphin behind			19. 12. 1907, $488 = \text{Hess}$
	-	head turns towards head			Vogel 1929, 131 = Hess
		16.82 * Hess-Leu 1962, 125			202, 2268 = Hess  209,
		17.23 Schulman 6. 6. 1930, 28			15 = Hess  7.3.1935,
		<ul> <li>Naples Santangelo 7750</li> </ul>			251
51	O 18				17.15 Lewis
<i>)</i> -		Similar to R 31, earring more for-			17.18 London BMC 16
	1000	ward			17.05 * Lockett SNG III 742
		16.90 London Lloyd 1603			16.85 MMAG 43, 1970, 60
		(rev. tooled; earring			17.04 Nav. 5, 870
		removed)			17.16 Nav. 12, 706
		17.23 * Leu 1965			17.00 Priv. coll. X
50	O 18	-13 -00 2707			<ul> <li>Polese, Canessa 719</li> </ul>
52	R 40	Similar to D an alightly larger			16.78 Schulman 31. 5. 1938,75
	<b>K</b> 40	Similar to R 39, slightly larger 16.71 * Boston 269			– Stiavelli 156
		128 SE-918			<ul><li>Syracuse</li></ul>
		17.35 * London 1918 16.96 Paris Delepierre	56	O 19	
		- Palermo		R 43	Similar to R 39, earring larger
		17.17 Munich			<ul><li>Berlin</li></ul>
		17.43 Münzh. Basel 4, 560			16.32 * AC 16, 488 = Headlam
	•	17.45 Wunzh. Daser 4, 500			180 = Ciani 14.6.1934,
53	O 18	0			13
	R 41	\$100 pt 10 p			16.87 Hess 208, 105
		16.50 SC 1927, 1146			17.17 Merzbacher 2. 1. 1909,
		17.00 * London Lloyd 1601,			2492 = Balmanno 42 ==
		Cefalú hoard			Soth. 6. 12. 1907, 30
		16.82 Priv. coll. X	57	O 19	
		- Syracuse, Megara		R 44	Similar to R 42; corn ear below
		Hyblaea 1967			16.69 New York Met., Ward
54	019	Quadriga l., horses in fan-like for-			359
		mation; double ex. line			16.95 * London 1968
	R 39				
		16.77 * ANS = Merzbacher			
		2. II. 1909, 2493	1		

58	O 19			(64)		16.88	London 1938
	R 45		rather stylised; triple			17.20	Paris Luynes 926
		20-20-20	three dolphins			16.62	Priv. coll. X Priv. coll. Y
			Priv. coll. Y Pennisi			16.78 16.80	Vienna
		_	Pennisi				Syracuse, Pachino 23
59	O 19					17.19	Palermo
	R 46		similar to R 42; four			_	Burel 106
		dolphins	1			_	Canessa-de Nicola 1950,
			London 1938				II2
		17.15	Cambridge SNG IV 973	65	O 22	Quadrig	a r., rearing horses, cha-
60	O 19			O)	0 22		nigh and leaning forward;
	R 47		peculiar shape, wreath				x. line, legend normal
			ing normal; four dolphins		R 49		,
		16.84 *	London BMC 14		12	16.79	Baranowsky 4, 319 =
		_	Berlin Feuardent 26. 5. 1914,				Ratto 24. 6. 1929, 108
		_	157			_ *	Leu 1965
		17.05	Nav. 5, 869	66	O 22		
61	O 20				R 50	Large he	ead r.; four dolphins
01	0 20	ex. line	r., very compact; double			17.27 *	Boston add. 23 = Hess-
	R 46	cx. IIIIc					Leu 1959, 113
	10 40	16.50 *	Lockett SNG III 741 =			16.27	London Lloyd 1602,
			Priv. coll. Y				Cefalú hoard
62	Oar	Our dele	CALLE CANADA CAN			17.33	London BMC 10
62	0 21		a r., long sagging horses; x. line; legend reversed			17.06	Nav. 5, 866
	R 45	double e.	x. IIIIe, legelid levelsed			17.10	AC 15, 284 = Ratto 26. 4. 1909, 1176 =
	47	17.23 *	Helbing 19. 11. 1912, 155				Cahn 60, 189 = Hirsch
63	O 21	, , ,					34, 153
	R 48	Head r	very stylised; three dol-			_	Paris 377
		phins	, 22, 23, 232, 232, 232, 232, 232, 232,			17.35	Walcher Molthein 420 =
		17.04 *	London BMC 13				Hirsch 29, 82 = MMAG
		15.10	Allotte de la Fuye 1925,				43, 1970, 59
			124	67	O 22		
		17.24	Nav. $6,365$ = Feuardent		R 51	Head r.,	similar to R 32; four
			9. 5. 1910, 245 = Schul-			dolphin	S
			man 21. 10. 1912, 18			16.65	London 1969
		_	Paris 2387			17.12 *	Nav. 10, 192 = Nav. 1,
64	O 21						425 = Egger 10; 12.
	R 49		wreath, triple earring;				1906, 86
		four dol	59X			-	Platt 3. 4. 1933, 67
		16.87	Hamb. 98, $225 = SC$	68	O 23		to O 22, but horses lower
			1927 1147 = Polese,				rioteer leans further for-
			Canessa 1928, 720		D	ward	
		-6.00	720		R 51		Tan lan DMC 0
		16.88	Hess-Leu 1966, 171			17.20 *	
		10.85 *	London Lloyd 1606,			17.16	Nav. 5, 867
			Cefalú hoard			17.50	Paris Luynes 918

69	O 24	Quadrigathick ex.	il., horses low on ground,	(70)		16.50 16.76	Hague Hirsch 32, 62 = Hinda-
	R 52 Head r., compact style, wreath and				10.70	mian 178	
	10,2		rring; three dolphins			16.61	Jameson 599
		15.60	Brussels H 821			16.77	Lewis
		-	London 1938 (BMQ			S 14 5	London BMC 3
		-,-,	1938, xlix, 2)				Lockett SNG III 745
		17.28	London BMC 4			*****	(rev. extensive break
		17.00	Nav. 12, 707				below the ear)
		16.82	Paris Luynes 925			16.75	Priv. coll. X
		16.62	Priv. coll. X			16.30	Priv. coll. Y
		16.44	Ratto 24. 6. 1929, 107	71	O 25	Head r.,	wreath and earring; three
		16.76	Stockholm $KMK = Nav$ .			dolphins	5
			10, 196 = Hirsch 21, 590		R 54	Quadrig	a r., double ex. line;
			= Luneau 221			legend r	'šmlqrt
		-	Martinetti Nervegna 793			15.55	Berlin
		16.85	Egger 26.11.1909, 149			-	Berlin
		16.91	Lewis = Glend. Hall			16.58 *	ANS = White King 55
			1950, 61				= Bourgey 29. 5. 1911,
		_	Palermo				39
		_	Priv. coll. Y	72	O 26	Head 1.;	two dolphins visible in
			Sambon-Canessa 22. 6.			front	
			1906, 175		R 54		
		_	Syracuse, Megara Hyblaea 1967			16.37 *	London BMC 17
			Hyblaea 1907	73	O 26		
70	O 24				R 55	Walking	g horse r., palmtree behind;
	R 53	Similar t	to R 52, earring larger			below le	etters 'ayin and gimel
		17.04	AC 16, 490			16.50 *	Copenhagen,
		16.95	Cambridge SNG IV 971				Thorwaldsen
			= Bunbury 527			_	Priv. coll. Y

## Thermai - Solus

Thermai

(Plate 22)

The inhabitants of the former Himera, after its destruction in 409 B.C., were allowed to go to settle at Thermai (modern Termini Imerese); it seems likely that the new settlement remained under Punic influence during the fourth century as is suggested by the Punic character of many of the coins <sup>37</sup>.

Nos. I-4 are typically Punic in style and general aspect. All have the altar symbol in the exergue, without any inscription; the attribution is however assured from the presence of the altar on nos. 5-6 where there is an inscription in Greek. The issue is a small and compact one which cannot have lasted for a very long time. The head on R 4 (no. 4) is of a type derived from Euainetos which might well occur in the «Carthage» series during the second half of the fourth century, and on this die there is a prow symbol. The other reverses are more remarkable for the very high degree of stylisation which is typical of Punic coins, and they have a close affinity to some of the earlier heads on the R š m l q rt series nos. 7-8 (Plate 15), whose head shows something of the same treatment of the hair on top as is found at Thermai in the hair in the net at the back. The dating of the Thermai coins is indicated by the presence of two specimens of no. I in the Gibil Gabib hoard, which as mentioned above (p. 56-57), must have the same burial date as the Nissoria hoard, c. 330 B.C. <sup>38</sup>.

With nos. 5–6, where the altar symbol is accompanied by a Greek inscription, it is very difficult to determine the date or even to be sure whether these coins really follow or precede the uninscribed ones. The head R 5 could well be the work of a Punic engraver, from its style, though there are no really close parallels to hand. The obverse of no. 6 however has three letters above the exergual line KAH which have been regarded, no doubt rightly, as the signature of an engraver, who must be Greek; the presence of such a signature could perhaps be used as an argument for an earlier date, but is in any case exceptional.

37 For the earlier coinage of Himera-Thermai, cf. SNG II (Lloyd) 1025, 1038, both of which Robinson suggests may be after 409. Connected with these, there seem to be a further series of bronzes in which the types of a boar, a standing nymph and a standing Herakles recur; e.g. Gabrici, tav. X, 42, 43, 45. Another small bronze piece probably belonging to this context has obverse female head r., legend I M; reverse standing Herakles (in BM, 1,16 g, apparently unpublished). Cf. also Imhoof-Blumer 1886, taf. VI, 7, 8.

In his unpublished notes Dr. Robinson has suggested that the charioteer on the Thermai tetradrachm no. 1, who wears a Phrygian helmet, may be Pelops, whose earlier appearance at the mint of Himera is known from SNG II 1016, e.g.

<sup>38</sup> A specimen of the Thermai issue was evidently also present in the hoard from Termini Imerese of 1900 (Noe <sup>2</sup> 1092, NSc 1900, p. 205 ff.); but even if it were determinable which variety this was, it would not be indicative for the dating since the Termini hoard should, from such data as are available, probably have been buried during the last quarter of the fourth century; the «Carthage» type with the Horse's head reverse was represented in it.

The problem of nos. 5–6 is not made any easier by the existence of another Greek issue, of didrachms and litrai only, which is of very good style though it seems difficult to deduce from it more than a general probability that the coins should belong to the middle or later fourth century <sup>39</sup>. The litra is of the same types, but has behind the head of Hera a monogram  $\mathcal{R}$  which <sup>40</sup> either by chance or otherwise recalls the monogram found on a tetradrachm of Morgantina <sup>41</sup>; this may suggest a comparatively late date. But there is no way of arriving at any certainty. There are some bronze coins (Pl. 22, A–C) related thematically to the silver which should belong to the same phase though their style is less fine; so far as that goes, these bronze coins might suggest that the Greek phases of Thermai (nos. 5–6) are late rather than early.

### Solus (?)

A further tetradrachm known only from two extant specimens (Plate 22 X) is of the same general type as the other issues collected here and its style is as close to Thermai (e.g. no. 4) as to anything else. The attribution is far from sure. In the exergue is a single Punic letter which could be either kaph or vav. If it were the former, it would clearly explicable as the initial of the Punic legend kfra which is the Punic name of Solus on the coins of that city (Plate 23, 16–24), though it is difficult to understand why the legend should be so drastically abbreviated. However the stylistic similarity to Thermai would suit Solus very well.

- <sup>39</sup> Close parallels are few; but cf. Argos (Kraay-Hirmer 518) of 370-350 B.C., and perhaps the facing Hera of Kroton, also of the middle fourth century (*PCG* III, C 2).
  - 40 Jameson 619; Paris Luynes 984; Weber 1364 (now BM).
- 41 ZfN 1935, pl. IX, 3; the date of this Morgantina tetradachm, as of the very similar Syracuse Tudeer 106, are among the most difficult to define, but I would think that there is little reason to put them very early in the fourth century. The Syracuse is an adaptation from the latest class of Euainetos decadrachms, and the thick exergual line with the ethnic below it are more in line with the practice of Agathokles' time; the thick exergual line also occures in a late phase of the şy ş series (nos. 62, etc.).

# Catalogue: Thermai

#### Plate 22

#### Tetradrachms

			letra
I	Оі	Quadriga	ı l., charioteer wearing
		Phrygian	helmet; in ex., altar; no
		legend	
	Rі	Female 1	head I., hair in net, three
		dolphins	; no legend
		17.28 *	London BMC, p. 254,
			no. I
		17.30	London Lloyd 1040 =
			Nav. 10, 214
		16.51	Cambridge McC 2310
		16.20	Helbing 24. 10. 1927,
			2722 = Ready 213
		17.00	Syracuse, Gibil Gabib
			48297
		17.65	Syracuse, Gibil Gabib
			48298
		_ *	Uncertain (cast in BM)
2	O 2	Similar t	оОі
	R 2	Similar t	o R 1, but larger
			ANS = Hirsch 31, 162
		16.91	
			19. 12. 1907, 179
		16.03	Priv. coll. $Y = Hess-Leu$
			1957, 134
		16.60	Vienna
3	O 2		
· <b>~</b> 2	R 3	Similar	
	······································	_ *	Uncertain (cast in BM)

4	O 2	
	R 4	Female head l., wreath only; four
		dolphins; behind, prow
		16.65 Hague
		17.00 * London NC 1913, p. 226
		fig. 3
		17.18 London Lloyd 1039 =
		Hirsch 34, $171 = Nav. 4$ ,
		282 = Sambon 19.12.
		1907, 238
		17.19 * Paris 585

Quadriga I., Nike above; in ex., O 3 altar Female head r., three dolphins; R 5 legend @EPMITAN Jameson 1896 = Hirsch 16.98 30, 359 17.28 \* Paris 586, NC 1910, p. 223

Similar, but in ex. legend

ΘΕΡΜΙΤΑΝ; above ex. line, engraver's signature KΛH R 5 16.95 \* Pennisi, ZfN 1935, taf. IX, 1 = Sambon 19.12.1907 178

MMAG 43, 55

16.82

#### Didrachms

6

 $O_4$ 

R 6	Herakles seated on rock, holding club; behind, bow and quiver, etc.
	Branza

8.38 \* London PCG, pl. 26, 28 (7) Paris Luynes 938 8.19 Berlin Regling MaK 733

### Bronze

Α	Obv. Head of Hera l., legend
	$\Theta$ EPMITAN
	Rev. Head of Herakles 1.
	<ul><li>Priv. coll.</li></ul>
В	Obv. Head of Hera r.
	Rev. Head of Herakles r., legend
	$\Theta$ EPMITAN

7 O 5 Head of Hera r., dolphin behind,

(B)	3.36 * London BMC 2
C	Obv. Female head with hair tied, crescent
	below chin  Rev. Head of Herakles r., legend
	©EPMITAN
	4 St * London Lloyd 1041

# Solus (?)

#### Plate 22

#### **Tetradrachms**

X O I Quadriga r., Nike above; in ex. Punic letter (kaph or vav)

R I Female head r., wreath, dolphins

17.17 \* London BMC, Siculo-Punic uncertain, p. 254, 1

Palermo

For other coins of Solus, see plate 23, 15–24. I have not however included there the bronze type given by Imhoof-Blumer 1886, p. 270, no. 13 (cf. BMC, p. 254, no. 1, Gabrici, p. 169, no. 38) with obverse helmeted head, reverse free horse and caduceus; the letters flanking the head seem difficult to be sure about.

Solus - Eryx Legends

Solus (?) tetradrachm, Plate 22 X I

Solus, Plate 23, 18 **X97Y** 

Solus, Plate 23, 16

4974

Eryx, Plate 24, 24

794

Solus, Plate 23, 17

ナイマナ

# Minor issues and bronze

# Plate 23

	Motya						
1	Eagle on capital / Dolphin, shell MOTVAION	AR	0,54 g (BMC 1)				
2	Female head, wreath border/Nymph standing before altar,		0,64 g (BM)				
_	shell in field; legend $m-?$ (cf. Luynes 1049)	1110	0,04 g (BH)				
3	River-god protome / Female head r., mtv' (cf. legend no. 37)	AR	0.34 g (BMC.7)				
4 a			0,66 g (SNG II 1140)				
4b	do., but mtv' reversed (see p. 34 above)		0,71 g (BMC 11)				
5	Gorgon / Palm branch mtv'		0,35 g (Paris, Luynes 1050)				
6	Facing head / Crab mtv' (cf. legend no. 37, p. 34)		0,71 g (SNG II 1144)				
7	Facing head/Corn grain and four pellets (? Motya)		0,25 g (Motya museum,				
45	, , , , , , , , , , , , , , , , , , ,		ittaker, <i>Motya</i> p. 349, no. 5)				
8	Gorgon, three pellets / Palm tree mtv' reversed		6,22 g (BMC 16)				
9	Horse protome / Palm tree mtv'		0,97 g (Berlin)				
10	Horse standing / Crab (? Motya)	ΑE	(Berlin)				
ΙI	Facing head / Crab (? mtv')	ΑE	1,05 g (BMC «Brettii» no. 114)				
12	Facing head / Male head		2,53 g (SNG II 1146)				
13	Young male head with earring / Crab	AE	1,83 g (SNG II 1145)				
14	Male head with beard and moustache / Crab	AE	2,19 g (BM)				
	Solus						
15	Didrachm, types of Selinus rev. ΣΟΛΟΝΤΙΝΟΝ	AR	(Berlin = Rizzo LXV, 2)				
16	Cock/Tunny kfr'	AR	0,65 g (Berlin)				
17	Seated Herakles (?) / Club, bow, quiver, kfr'		0,61 g (BM ex. Jameson 732)				
18	Herakles head / Crayfish, pellets kfr' (inverted)		7,51 g (BMC 2)				
19	Herakles head beardless / Hippocamp	ΑE	(Priv. coll.)				
20	Athena head facing/Warrior with bow kfr'	AE	(Priv. coll.)				
21	Bearded head with earring / Horse	AE	(ANS)				
22	Same head / Tunny	AE	(Priv. coll.)				
23	Herakles head beardless / Tunny	AE	(Priv. coll.)				
24	Female head with corn wreath / Bull, kfr' in ex.	ΑE	(Priv. coll. ex. Walcher				
		Mol	thein, pl. IV, 560)				
Plate 24							
	Panormos						
I	Female head r. / Prow IIAN	AE	1,04 g (McClean 2498)				
2	Male head r. IIANOPMO reversed / River god protome,						
	shell below						
3	Female head r., dolphin / Poseidon	AR	0,61 g (BM)				
4	Female head r., four dolphins / Poseidon (rev. die = no. 3)		0,62 g (BMC 2)				
5	Poseidon / Goat rider şy ş (= Plate 2 X)		0,73 g (BMC 1)				
6	Same, $sys/Same\ \Pi ANOPMO\Sigma\ (= Plate\ 2\ Y)$		0,75 g (Hunter 2)				
	D 1 11 1 (D 11 (2) ( xxxx1 1	4.0	(D 1: )				

AR 0,33 g (Berlin)

7 Bearded head (Poseidon (?) / Wheel sys

8	Female head r., swastika / River god protome, shell sys	AR 0,63 g (BMC 23)
9	Dolphin and shell, five pellets / Eagle on hare sys	AR 0,80 g (Berlin)
10	Female (?) head in elephant scalp / Swan on waves, letter	AR 0,76 g (SNG Copenhagen 172
	$\Pi$ (?) (Panormos?)	«Camarina»)
II	Athena head, corn grain / Swan on waves sys	AR 0,66 g (Berlin)
12	Young male head, swastika / River god šb'lsys	AR 0,49 g (BMC 31)
	(see p. 38 above)	
13	Young male head (with horn?) / River god protome sys	AR 0,67 g (BMC 24)
14	Young male head / River god sys	AR 0,54 g (BMC 27)
15	Young male head with wreath / River god walking sys	AR 0,69 g (BMC 26)
16	Female head / River god, shell in ex. sys	AR 1,67 g (BM)
17	Female head, long-haired / River god sys	AR 1,75 g (Paris, Luynes 1088)
18	Cock sys / Pellets	AE (Priv. coll.)
19	Free horse / River god protome sy s	AE (Priv. coll.)
20	Female head with wreath / Free horse, Helios above	AE 9,77–7,99 g (BM)
21	Hera head / River god, Helios above, şy ş in ex.	AE (Priv. coll.)
		(BMC 38, of this type, is overstruck
		on specimen of no. 20)
22	Apollo head / Pegasos șy ș	AE (Priv. coll.)
	Eryx	
23	Dog with corn ears IRVKAZIB / Female head	AR 8,68 g (BM)
24	Male head / River god 'r k	AR (Coll. Mini)
25	Pegasos 'r k /Athena head	AR 7,99 g (Oxford, SNG 1718)
-)		1727 6 (

### Addenda to small coins of Motya:

a) Eagle standing / Three dolphins in circle, within which small fish and letter mem
(G. Ugdulena, Monete Punico-sicule, Palermo 1857, tav. II. 11: cited from collezione Eleanora, Calatafimi)

b) Female riding on bull / Poseidon (?) seated 1., traces of legend (Berlin: classed under Motya)

# Key to Plates 1–22

Plate 1	Mot	ya		35	SC 1907
	I	Berlin		36	Hamb. 98
	2	Syracuse			
	3	Berlin		Sege	esta
	4	Paris		Α	London SNG II 1184
	5	Paris		В	London BMC 37
	6	London		C	London BMC 41
	7	Hirsch 32		D	London BMC 39
	8	Private collection Y		$\mathbf{E}$	London BMC 38
	9	Woodward		$\mathbf{F}$	London SNG II 1196
	10	Palermo			The same second
	ΙI	Berlin	Plate 5	Mot	va
	12	London	Time )	37	Palermo
	13	Berlin		38	Paris
	14	Egger		39	London
	550-000-00-0	Berlin		40	Ward
				41	London
Plate 2	Ζı	Private collection Y		42	Berlin
	15	Berlin		100	London
	16	Copenhagen		43 44	SC 1907
	17	Egger		44	Hirsch
		Imhoof-Blumer NZ 1887		46	AC 14
		Oxford		-	London
		Paris		47 48	London
	A	Berlin		23	London
	В	Paris		49 50	Private collection Y
		(x 2) Private collection Y		50	Titvate concetion 1
	X	London	Plate 6	Pan	ormos
	Y	Hunter	Trate 0	A	Palermo
				Z 2	
Plate 3	18	Copenhagen		I	Private collection Y
2 2000	19	Copenhagen		2	MMAG 43
	20	Jameson		3	London
	21	London		4	London
	22	London	ia.	5	London
	23	Cambridge		6	MMAG 43
	24	Nav. 12		7	Palermo
	25	Pennisi		8	Oxford
	26	London		9	London
	27	MMAG 43		10	London
	28	Cambridge		II	Hirsch 32
	29	London		12	London
	30	London		13	Vienna
	<b>J</b>			- 7	
Plate 4	31	London	Plate 7	Pan	ormos tetradrachms
	32	Egger		I	Nav. 4
	33	Berlin		2	Bordonaro
	34	Hirsch 33		3	Private collection Y

	4	MMAG 43		45	Paris
	5	Paris	100	46	London
	6	London	32	47	Cambridge
	7	Cambridge		48	London
	8	Jameson		49	London
	9	Nav. 4		50	London
	10	London		50	Leu
				51	Salton
Plate 8	II	Nav. 4			
	12	Hess-Leu 1966	Plate 12	52	AC 16
	13	London		52	London
	14	Private collection Y		53	ANS
	15	Pennisi		54	London
	16	London		55	Private collection Y
	17	Syracuse		56	Syracuse
	18	Nav. 4		57	SC 1927
	19	Paris		58	London
	19	Nav. 10		59	Berlin
	20	Ward		60	London
	21	London		61	Boston
			Plate 13	62	Oxford
Plate 9	22	Hirsch 32	Plate 13	63	Berlin
	23	London		63	London
	24	Berlin		64	Berlin
	25	Palermo		65	London
	25	Egger		66	London
	26	Brussels		67	Leu Sicilia
	27	Paris		68	Jameson
	28	London		69	Brussels
	29	Oxford	86	70	Boston
	29	Hess-Leu 1964		71	London
	30	London		72	London
	30	Naples		12	London
			Plate 14	73	London
Plate 10	31	Brussels	11410 14	74	London
	32	Brussels		75	Paris
	33	London		76	Cambridge
	34	Jameson		77	London
	35	Hague		78	Boston
	35	AC 16	1000	79	Paris
	36	Woodward		80	London
	37	London		81	Cambridge
	38	Munich		82	Berlin
	39	London		83	Brussels
	40	Copenhagen		- 2	
	41	Egger	Plate 15	Rš	mlqrt
				I	London
Plate 11	42	Berlin		2	Lockett
	43	Hague		3	Leu
	44	London		4	Uncertain
			Tr.		

	5	Boston		52	Boston
	6	ANS		52	London
	7	London		53	London
	8	Sambon 1906		54	ANS
	9	Lockett		55	Lockett
	10	Cambridge		56	AC 16
				57	London
Plate 16	ΙI	Hirsch 19			
	12	London	Plate 20	58	Private collection Y
	13	London		59	London
	14	AC 14		60	London
	15	Paris		61	Lockett
	16	Pennisi		62	Helbing
	17	London		63	London
	18	London			London
	19	London		65	Bank Leu
	20	Private collection Y		66	Boston
	21	London		67	Nav. 10
	22	Cambridge		68	London
	<del>-</del>			00	London
Plate 17	23	London	Plate 21	69	London
	24	AC 16		70	London
	25	Stiavelli		70	Lockett
	26	ANS		7I	ANS
	27	London		72	London
	28	London		73	Copenhagen Thorwaldsen
	29	London		100	(x 2), reverse of Ršmlqrt 1 –
	30	Nav. 6			London
	31	London		Α	Carthage – SC 24. 3. 1902, 15
	32	London		В	Carthage – Bourgey 23. 5. 1910,
	33	Hirsch 16		D	
	34	Nav. 10		C	37 (x 2) Kephaloidion – Pennisi
Plate 18	35	Hague			(, <b>I</b>
11410 10	36	Hirsch 33	Plate 22	The	rmai
	37	Brussels		I	London
		ANS		I	Uncertain
	38	London		2	ANS
	39	Hirsch 14		3	Uncertain
	40	State of the state		4	London
	41	London		4	Paris
	42	London		5	Paris
	43	Lockett		6	Pennisi
	44	Paris		7	London
	45	Bompois		Α	Private collection
	46	London		В	London
Plate 19		Glasgow		C	London
riale 19	47	Glasgow			
	48	Nav. 5		Solu	ıs (?)
	49	London		Хі	London
	50	Hess-Leu Leu	D1-4		
	51		F1ate 23-	24 5	see p. 74–75



Motya I Panormos (Z 1)



Motya I Panormos (Z 1–Z 3, X, Y) Segesta (A, B)



Motya II



Motya II Segesta (A–F)





Panormos





Panormos



















Ršmlqrt



Ršmlqrt







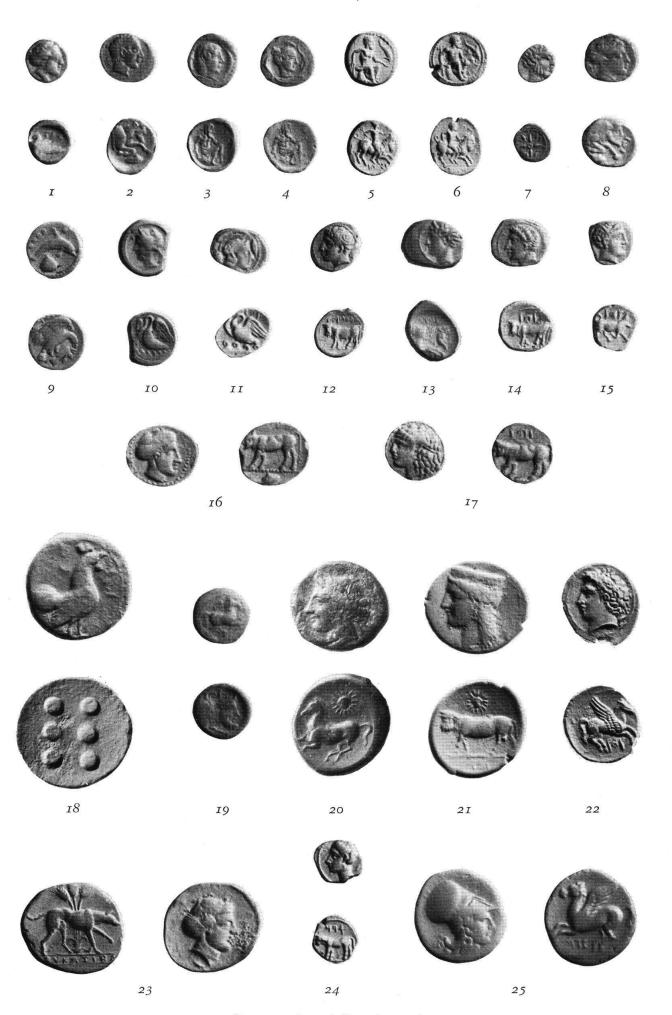
Ršmlqrt Lilybaion (A, B) Kephaloidion (C)



Thermai (1-7, A-C, Solus? (XI)



Motya (1-14), Solus (15-24)



Panormos (1-22), Eryx (23-25)