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COINS OF PUNIC SICILY

Part I *

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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 sources¹. 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 Robinson has also been kind enough to let me use his unpublished notes and to discuss many things with me, but of course I must take responsibility for the results, such as they are.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

m̄v'	p. 34 (nos. 26, 37–38, 43–45, 48, pl. 23, 4b)
'm̄v	p. 34 (no. 31)
h m̄v'	p. 34 (nos. 39–41)
sȳs	p. 38, 45
šb'1 sȳs	p. 38 (litra pl. 24, 12)
r̄šmlqrt	p. 61 (nos. 1, 2, 4, 5, 6, 8, 11, 21, 26, 31, 42, 48, 49, 54, 61, 65, 68)
r̄šmlqrt (reversed)	p. 61 (no. 62)
r̄'šmlqrt	p. 61 (nos. 12, 18, 23, 25, 69, 71)
'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. I. 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	ΚΩΚΑΛΟΣ (studi pubblicati dall'Istituto di Storia Antica dell'Università di Palermo)
Lederer	Lederer, Die Tetradrachmenprägung von Segesta (Munich 1910)
McC	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	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 begins² 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 Syracusean type Boehringer Reihe XXII (c. 440 by his chronology, but more probably c. 430)³, 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 šyš. 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 1 and Z 3 of the above series were known to Imhoof-Blumer when in 1886⁴ he expressed his scepticism as to whether the šyš legend really corresponded to the place name of Panormos. Imhoof drew the conclusion that Z 1, being die-linked to Motya, must be of that mint, whereas Z 3 must for similar reasons be of the Segesta mint. This conclusion formed his prime argument against the šyš-Panormos equivalence. But it is clear that the question must now be viewed in another light,

² 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?

³ On this adjustment of Syracusean chronology, cf. Jenkins, Gela, pp. 66 ff.

⁴ Zur Münzkunde Großgriechenlands, NZ 18, 1886, pp. 205-286.

since the discovery of Z₂ makes a direct link between Z₁ and Z₃ 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, die-transfers 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 – šyš – 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 Z₁, 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 šyš dies were made by a Segestan engraver. But if so, it hardly seems plausible to think that the coins with the Punic legend šyš 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 šyš should 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 šyš specimens Z₁, 2, 3, do not after all in any way preclude the possibility that the latter were minted at or for Panormos and that šyš can best be interpreted as the Punic name of that city.

The hypothesis that the word šyš is not a place-name is in any case quite gratuitous, especially as no other convincing explanation of it has been offered⁵. We are left with the only positive evidence for the meaning of šyš in the shape of the small bilingual litrai bearing this Punic legend on the obverse and the Greek ΠΑΝΟΡΜΟΣ

⁵ 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 ṣyṣ which does not otherwise occur. From the table of legends (p. 38) it will be seen that only here does the letter ṣade have this shape, whether written in the normal direction or, as on the didrachm Z 2, 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 ṣyṣ as Panormos is invalidated. His other arguments are in any case less significant, being concerned with the possibility that certain other coins with the ṣyṣ 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 ṣyṣ 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 ṣyṣ 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 ṣyṣ (drachm, here Plate 6 A, bronze Plate 24, 18), I have tried to discuss the question elsewhere⁷ in connexion with the coinage of Himera. It turns on whether a specimen of the «cock» bronze could, as Imhoof suggested, be read $k\text{f}\text{r}\text{a}$ instead of ṣyṣ ; 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 $\text{ṣyṣ} = \text{Panormos}$ 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 $\text{ṣyṣ} = \text{Panormos}$. This was the argument of Lloyd in NC 1925, 129 ff., based on the diversity of types, original to a

⁶ 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.

⁷ 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 *ṣyṣ* legend. It is obvious that the *ṣyṣ* tetradrachms (here Plates 7–14) comprise many types of Syracuse, although no one would try to assign them to that mint. Among the other *ṣyṣ* 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 *ṣyṣ* 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 Himera⁹; 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 *ṣyṣ* 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 *ṣyṣ* legend can show anything, except that the *ṣyṣ* mint too was very fond of such imitations. It certainly does not prove what Lloyd thought it did.

Finally, the etymology of the word *ṣyṣ* 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 Honeyman¹⁰ of the legend *ṣb'l ṣyṣ*, 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 gzw̄r*),

⁸ Cf. Holm, *Geschichte Siziliens* III, Beschreibung der Tafeln, p. 18 ff.

⁹ Cf. e.g. SNG II 934, 935, 941: and an Eryx litra (in BM) with the types of Selinus, SNG II 1218.

¹⁰ A. M. Honeyman, *AJPbil* 1947, p. 81 ff.; approved by Sola Solè, *Sefarad* 1967, p. 27; but cf. also H. D. McEwen, *NC* 1925, pp. 393–4.

– The equation between *ṣyṣ* 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.

– It hardly needs to be added that in accepting *ṣyṣ* 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'1'gdr), Sexsi (mb'1 sks), Lix (mb'1 1kš), and Tingis (mb'1 tyng')¹¹. In all of these we have the place-name, and thus also in the legend šb '1 šyš the element šyš 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 šyš 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 šyš 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 decadadrachms 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.

¹¹ 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 Syracusean 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 409¹². 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 405¹³. 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; 'm tv (as no. 26), m tv' (as no. 33, etc.) and h m tv' (as no. 39). In the case of h m tv' at no. 39 the first letter is added in the die of no. 38 which has only m tv'. The variations are mentioned by Sola Sole in *Seferad* 27, 1967, pp. 19–20, note 25, and the parallel variations at Gades (h g d r / 'g d r) 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 sys 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

¹² 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.

¹³ 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 tetradrachm 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 sys 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.¹⁴. 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.

¹⁴ 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	†ΓΩΨ
31	ΨΩΓ†
37	†ΨΩΨ
38	†ΨΩΨ
39	†ΨΩΨ†

41

43

44

45

48

†ΨΩΨ†
†ΨΩΨ
†ΨΩΨ
†ΨΩΨ
†ΨΩΨ
†ΨΩΨ
ΝΩΨ†

Plate 23, 4b

Plates 1-2

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

Obv. Horseman (apobates);
legend MOTVAION

Rev. Female head with dolphins.

1	O 1	
	R 1	
	8.59	* Berlin
	8.19	Brussels H 502

2	O 1'	Leaf added in ex.
	R 2	
	-	* Syracuse

3	O 1''	added above ex. line
	R 2	
	8.43	* Berlin

4	O 2	No legend
	R 3	
	8.65	* Paris Luynes 1041

5	O 2	
	R 2	
	8.47	Copenhagen 478 = Egger 46, 75
	-	* Paris 861

6	O 3	Fish in ex.
	R 4	
	8.57	* London (Bank) = Rizzo lxv. 7
	8.55	Nav. 5, 976
	8.48	AC 16, 581
7	O 4	
	R 5	
	8.23	* Hirsch 32, 95 = Nav. 5, 977
8	O 4	
	R 6	
	8.10	Hamb. 98, 20
	8.03	Hess-Leu 1962, 75
	-	* Priv. coll. Y
9	O 5	
	R 6	
	8.24	* Woodward 72
	8.07	Hirsch 30, 378 = Bunbury 240
10	O 6	Pistrix in ex.
	R 7	Swastika in front of neck
	8.67	Hess-Leu 1956, 129
	8.00	Berlin
	8.30	* Palermo, NC 1931 pl. vi. 8

11	O 7	
	R 8	
	8.36 *	Berlin
12	O 7	
	R 7	8.51 * London Lloyd 1135 (rev. worn)
	8.02	Berlin (obv. worn)
	-	Landolina, IB vii. 1 = Rizzo lxv. 6
	8.45	Walcher Molthein 482
	8.42	Boston 299 = Warren 269
	8.36	Weber 1461 = AC 16.582
	8.60	Jameson 665
13	O 7	
	R 4	
	8.02 *	Berlin

Obv. Dog standing r.; small female head above.
No legend

Rev. Female head r., with or without dolphins.

14 O 8
R 6
8.23 * Egger 7. 1. 1908, 69

15 O 8
R 7
8.12 Berlin
8.46 * Berlin = IB vii. 2
(rev. worn)
8.37 Copenhagen 479
8.33 * SC 1907 Ciccio 233
(rev. much worn)

16	O 8	
	R 8	No dolphins; corn grain 8.57 * Copenhagen 480 = IB vii. 3
17	O 8	
	R 9	No dolphins or corn grain. 8.60 * Egger 7. 1. 1908, 65
Z 1	O 8	
	Raa	Segestan type head with dolphins and Punic legend $\S\ \S$ (p. 38) 8.49 * Berlin (Plate 1) 8.44 * Priv. coll. Y (Plate 2 above; enlargement of rev. below) - * IB vii. 4 (Plate 2)
Z 2	O 8	
	Rbb	Similar head with dolphins and Punic legend (reading left to right) (p. 38) engraved over remains of Greek legend (Segesta) <i>zib</i> 8.32 * Oxford 2139 = Hess-Leu 1964, 62
Z 3	O 9	
	Rbb	8.41 * Paris Luynes 1076 = IB vii. 11

Plate 2 A-B Segesta, X-Y Panormos

A O 9
Rcc Segestan head with Greek legend
* Berlin = IB vii. 10

B Segesta, Paris Luynes 1116

X Panormos litra (BM) = Plate 24, 5

Y Panormos litra (Hunter) =
Plate 24, 6

Plates 3-4
MOTYA II (didrachms nos. 18-36) / Segesta A-F

Obv.	Dog standing r.
Rev.	Female head r.
18	O 10 Corn grain above R 10 Branch behind, legend MOTVAION 8.10 * Copenhagen 476
19	O 10 R 11 Traces of legend? 8.40 * Copenhagen 477 8.54 AC 16, 609 8.02 Hirsch 15, 1104

20	O 10	
	R 12	Head with topknot, crayfish behind, legend MOTVAION
	8.10	Paris Luynes 1042
	8.20	London Lloyd 1134 = Benson 241
	8.08	Paris 859
	8.20	Priv. coll. X
	8.44	Hess-Leu 1962, 76
	8.36 *	Jameson 664

21	O 11	Plant below	29	O 15	Similar, but no plant
	R 11			R 18	No leaf or legend
		8.20 * London Lloyd 1133		8.26	London
		7.93 Berlin		8.58	Priv. coll. X
22	O 11			8.51	* ANS
	R 13	Legend MOTVAION	30	O 15	
		8.57 AC 16, 583		R 19	Similar
		8.72 * London BMC 4		8.13	* London BMC Segesta 40
		7.98 Palermo NC 1931 vi, 9		8.41	New York Met., Ward 230
23	O 11		31	O 16	Dog with stag's head
	R 14	Cf. R 11, possibly recut from it. Legend?		R 20	Ivy leaf, Punic legend 'm t v
		8.02 * Cambridge McC 2461 = Egger 7. 1. 1908, 70		8.26	* London BMC 3
		8.04 Berlin		8.57	Oxford 1859 = Egger, 46, 74
24	O 11			8.42	Priv. coll. X
	R 12			8.31	Weber 1451
		5.61 * Nav. 12, 787 (fourrée)	32	O 16	
		8.51 Berlin		R 21	Similar to R 20
		8.26 London BMC 3		8.33	* Egger 7. 1. 1908, 50
		7.36 Nav. 1, 500		8.55	AC 16, 614
25	O 11		33	O 17	Similar to O 16
	R 15	Crayfish, legend (retrograde) MOTVAION		R 22	Ivy leaf, no legend
		— * Pennisi		8.57	* Berlin
26	O 12	Dog standing, plant below	34	O 17	
	R 16	Ivy leaf, Punic legend m t v,		R 23	As R 22
		8.42 * London BMC 5		7.85	* Hirsch 33, 401
		8.55 Paris Luynes 1046	35	O 18	As O 16-17
		8.60 Walcher Molthein 481		R 22	
		8.37 Jameson 666 = Hess-Leu 1956, 128		8.20	* SC 1907 Ciccio, 258
		8.56 Berlin	36	O 18	
27	O 13	Similar, but no plant		R 24	Similar
	R 16			8.42	* Hamburger 98, 290
		8.61 Oxford SNG 1858 = SNG III 2503 = Nav. 5, 972 = AC 16, 576	Plate 4 A-F, Segesta		
		8.72 London (flaw on neck)	A	London Lloyd 1184	
		8.07 Paris 865	B	London BMC 37	
		8.57 Leu Sicilia 68	C	London BMC 41	
		8.31 Berlin	D	London BMC 39	
		8.75 * MMAG 43, 1970, 38	E	London BMC 38	
28	O 14	Dog with plant below	F	London Lloyd 1196	
	R 17	Ivy leaf, no legend			
		8.22 * Cambridge McC 2460			

Plate 5

MOTYA III (nos. 37-50)

Tetradrachms: obv. eagle; rev. crab

37 O 1 Legend m̄v'

R 1

— * Palermo

38 O 2 Legend m̄v'

R 2

17.11 * Paris

— Priv. coll. Y

39 O 2' Legend hm̄v' (h added in die)

R 3

17.16 * London BMC 1

— Munich

40 O 2'

R 4 17.04 * New York Met.,

Ward 356

— Cefalù

41 O 3

R 4

17.20 * London Lloyd 1137

— Palermo, Contessa xvii, 16

42 O 3

R 5 Fish below

16.95 * Berlin = Holm viii. 8

— Palermo, Contessa xvii,

15 = Rizzo lxv, 8

17.16 Hirsch-Ciccio

43 O 4 Legend m̄v'

R 6 Fish below

17.18 * London BMC 2

Didrachm: same types

44 O 1

R 1 Legend m̄v'

7.55 * 1907 Ciccio, 231

Tetradrachms: obv. Syracusan head; rev. crab

45 O 5 Head r., copied from Kimon's

decadrachms, no dolphins,
legend m̄v'

R 7

15.89 Paris Luynes 1043

— * Hirsch-Ciccio

17.16 Paris 863

— Palermo, Contessa xvii, 17

46 O 6 Head l., three dolphins, no legend
R 8

16.38 London Lloyd 1138 =
Nav. 6, 415 = SC 1907
Ciccio 236

15.57 Hunter xv, 5

16.74 Oxford 1861 = SNG III
836 = Nav. 4, 281

17.00 Hess-Leu 1956 130

16.10 Hess-Leu 1964 57 =
Weber 1452

16.57 AC 16, 577

16.62 * AC 14, 99

16.41 Copenhagen 481

— Palermo = Rizzo lxv, 9

— Munich

17.52 MMA 43, 1970, 40

47 O 6

R 9

16.32 Jameson 667

— Egger 26. 11. 1909, 178

15.99 AC 17, 171

17.07 * London Montagu

17.12 Paris 865

— Palermo, Contessa xvii, 18

17.13 Berlin Löbbecke

16.28 Berlin Imhoof-Blumer

Didrachms: obv. facing Arethusa head, six dolphins; rev. crab, fish above, legend m̄v'

48 O 1

R 1

7.32 * London Lloyd 1139 =

Weber 1453

8.30 Paris Luynes 1044

7.90 Palermo NC 1931 vi, 7

— Palermo = Rizzo lxv, 10

7.83 Berlin

49 O 2

R 1

8.13 Paris Luynes 1045

8.46 * London BMC 8

50 O 3

R 1

— * Priv. coll. Y

Motya, see also plate 23, 1-14

Drachm, Plate 6 A		Didrachm, 9	
Didrachm, Z 1		Didrachm, 10	
Didrachm, Z 2		Didrachm, 11-12	
Litra, Plate 2 X		Litra, Plate 24, 12	
Litra, Plate 2 Y			

Plate 6

Panormos didrachms

A	Drachm: cock σ y σ / Crab and dolphin (3,91 g, Palermo = Imhoof-Blumer, taf. VII, 14)	
Z 2	Didrachm = Plate 2, Z 2	
	Didrachms: obv. dog, rev. female head	
1	O 1 Dog snuffling, r. R 1 Head l., legend retrograde ΠΙΑΝΟΡΠΙΤΙΚΟΝ – Six cast 8.24 Priv. coll. X – * Priv. coll. Y – Pennisi = Rizzo lxiv, 23	
2	O 2 Dog standing r., legend ΠΙΑΝΟΡΠΟΣ R 2 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	
3	O 3 As O 2 R 3 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	

4	O 3 R 4	Head r., no legend 8.40 * London BMC 4 – Pennisi
5	O 3 R 5	Head r., crayfish behind 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 8.35 Strozzi 1350
6	O 3 R 6	Head r., ivy leaf in front 8.62 * Jameson 687 = MMAG 43, 1970, 43 8.24 Palermo NC 1931 vi, 6
7	O 4 R 4	Wheel above, legend ΠΙΑΝΟΡΜΟ
8	O 5 R 7	8.36 * Palermo NC 1931 vi, 5 Dog looks back, shell above Swastika behind, legend ΠΙΑΝΟΡΠΙΤΙΚΟΝ retrograde 8.52 London BMC 2 7.84 * Oxford 1872 a = Jameson 692

9	O 6	As O 5, but Punic legend § y §		Obv. Horse prancing r.; above Punic legend § y §
	R 8			Rev. Male head r. with dolphins.
	8.00	* London BMC 18 = IB vi, 2 (Eryx)	12	O 1
	8.36	MMAG 43, 1970, 45		R 1
10	O 7	Dog standing r., legend § y § below	8.32	Jameson 693
	R 9		7.65	Egger 45, 323
	8.27	* London BMC 19 = IB vi, 3 (Eryx)	8.61	London Lloyd 1589
11	O 7		8.08	* London BMC 20
	R 10		8.35	Nav. 13, 241
	7.80	* Hirsch 32, 97	7.70	Nav. 13, 242 = Walcher Molthein 427
			8.37	Nav. 4, 291
			13	O 1
				R 2
			7.64	Cambridge McC 2489
			8.12	Hamb. 29. 5. 1929
			8.45	MMAG 43, 1970, 52
			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.¹⁵, 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 Cyrene¹⁶. A ram alone occurs on later bronzes of Panormos¹⁷. 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. 4A (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 $\text{sy}\text{ṣ}$ 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.

11-21 (Plate 8)

In this group there are two obverse dies O3 and O4 linked by R13. The «Eumenes» style and the arrangement of dolphins as seen in R10 (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.: R13 is based on a head by Eukleidas, Tudeer reverse 35 with sphendone and fivefold earring, and R14 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

¹⁵ Kraay, nos. 1-2 = my nos. 1-2; Kraay, nos. 3-9 = my nos. 4-10.

¹⁶ 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.).

¹⁷ Gabrici, *Monetazione del bronzo*, tav. VIII, 13 (II-1c 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 4 (no. 16) though it is present on O 4 (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 certainty 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 R̄šmlqrt 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 $\S\gamma\gamma$ 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 date¹⁸; this gives a satisfactory

¹⁸ Contessa hoard, *NSc*, 1888, pp. 302 ff. – Vito Superiore hoard, G. Procopio, *Rendiconti dell'Accademia 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 confirmed¹⁹.

35-41 (Plate 10)

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 $\$y\$$ occurs, is not die-linked 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 $\$y\$$ 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.

42-51 (Plate 11)

Here there are only two obverse dies of which the first, O 12, is exceptional for depicting a standing or walking quadriga. It is linked to O 13 by means of R 37 and R 39; 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 O 13 is picked up again by O 14 of the next group. R 36, 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. R 37 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). R 38, 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. R 40 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

¹⁹ 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 3^e quart»²⁰. 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.

52–56 (Plate 12)

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 $\S\ \mathbf{y}\ \S$ added; it is linked to O 17 by R 49, in the latest of that die's transformations. Whether O 17 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. MMA 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 $\S\ \mathbf{y}\ \S$ 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 groups²².

²⁰ *Kokalos* 4, 1958, p. 105.

²¹ 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.

²² 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 1x, 6); on the latter, the pellet is transferred to between the dolphins in the same way as on the $\S\ \mathbf{y}\ \S$ 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 \textsterling \textsterling 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 \textsterling bronze as Plate 24, 19.

75–82 (Plate 14)

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

10 (O 2")		52 (O 14)	
11 (O 3)		53 (O 15)	
15 (O 4)		57 (O 16)	
23 (R 21) incomplete		62 (O 17)	
25 (R 22)		67 (O 18)	
27 (O 7)		69 (O 19)	
32 (O 8)		75 (O 20)	
40 (O 11)		77 (O 21)	
42 (O 12)		83 (O 22) indistinct	
49 (O 13)			

Plate 7

1 O 1	Galloping quadriga l., dolphin above; dog in ex.	5 O 2	Walking quadriga r., Nike above
R 1	River-god sacrificing at altar, as on coins of Selinus; behind, bull and palm-tree. Legend ΠΑΝΟΡΜΟΣ 16.94 * Nav. 4, 285	R 5	Head of Apollo r., legend ΠΑΝΟΡΜΙΤ 17.14 * Paris Luynes 1074
2 O 1		6 O 2	Same, but ΠΑΝΟΡΜΙΤΙΚΟΝ (retrograde)
R 2	Similar 16.90 * Bordonaro = NC 1931 vi, 1 = Rizzo lxiv, 25	R 6	17.18 * London BMC 1 17.10 Palermo = NC 1931 vi, 2 16.71 Priv. coll. Y - Pennisi
3 O 1		7 O 2	
R 3	Similar, but instead of bull, ram standing in 3/4 facing position. 17.26 * Priv. coll. Y	R 7	Female head with rolled hair; dolphins; ΣΥΠΑΚΟΣΙΟΝ 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 Syrakus, Taf. 29 B 13
4 O 1			
R 4	Female head r. with hair in top-knot; four dolphins. ΠΑΝΟΡΜΙΤΟΝ 16.53 Hirsch 18, 2262 16.71 Palermo = Hirsch 19, 216 = NC 1931 vi, 3 16.10 * MMAG 43, 1970, 41		

8	O 2		9	O 2'	Same die somewhat recut
	R 8	Similar, but ΟΣΙΩΝΜ top l. and EVMENOV below		R 9	Similar, ampyx; ΟΣΙΟΝ? above
		16.97 Hirsch 19, 252 = Tudeer 107a			17.18 * Nav. 4, 333
		16.53 * Jameson 1913 = Hirsch 32, 298; also = Tudeer 107b = Boehringer Syrakus, Taf. 19 B, 12		10	O 2" Same die; grain added in ex., Punic legend § y § added above
				R 9	
					17.01 Cambridge McC 2481
					17.21 * London Lloyd 1579
					16.91 Paris Luynes 1086

Plate 8

11	O 3	Fast quadriga l., with Nike above; in ex. Punic legend § y §	16	O 4	In ex. Punic legend § y §; no shell
	R 10	Head with ampyx, r., similar to R 9; no legend		R 14	Head with topknot; dolphins
		17.17 Egger 45, 322			16.00 * London Lloyd 1582
		17.20 Hague		17	O 4' Die now completed by addition of shell in ex.
		16.66 * Nav. 4, 287 = do. 10, 241 = Priv. coll. Y		R 15	Similar to R 10, etc.
		— Pennisi			— * Syracuse
		16.40 Reggio, Vito Superiore		18	O 4'
		110		R 16	
	12	O 3			16.90 Egger 7. 1. 1908, 59
		R 11			16.96 Lewis = Hess-Leu 1962, 126
		16.88 Egger 7. 1. 1908, 61 = Glend. xii 1963, 136			16.90 Lewis
		17.15 Hess 18. 3. 1918, 186 = Helbing 1928, 124			17.00 * Nav. 4, 286 = Hirsch 19, 217
		17.15 * Hess-Leu 1966, 174			17.23 MMAG 43, 1970, 44
		17.21 Paris 947		19	O 4'
	13	O 3		R 17	Fish above instead of dolphin
		R 12			17.16 * Paris 948
		16.50 Cambridge McC 2486			16.95 * Nav. 10, 242
		17.13 London BMC 7			17.15 London Lloyd 1580 = Egger 45, 321
		16.83 * London Lloyd 1581 = Nav. 6, 423			16.78 Priv. coll. X
	14	O 3		20	O 4'
		R 13		R 18	Head of fifth dolphin appears below neck
		Female head with sphendone and pendant earring; dolphins			17.31 * New York Met., Ward 364
		16.90 Hague			17.10 London 1949 = Egger 7. 1. 1908, 60
		— Berlin			17.20 London 1938
		17.20 * Priv. coll. Y = Hess-Leu 1960, 103			17.03 Boston 323
	15	O 4	Fresh state of die, but exergue off flan; therefore uncertain whether shell (cf. 17 below) present or not		17.71 Berlin
		R 13	— * Pennisi		— Berlin
					— Pennisi

21 O 4'
 R 19 Fish above instead of dolphin
 17.66 Cambridge SNG IV 1117
 17.57 Hirsch 33, 405 = Ciani
 1929, 57
 17.45 Paris Luynes 1081
 17.42 * London BMC 6 = Hill
 Sicily x, 10

(21) 17.28 Rosenberg 72, 176 =
 Cahn 71, 206 = Cahn 80,
 111
 17.23 Lewis
 - Ognina hoard, Attie Mem.
 V, p. 18 «as BMC 6»
 - Leu 1965

Plate 9

22 O 5 Quadriga r.; in ex.: uncertain (off flan), see 23
 R 20 Similar to previous dies
 17.54 * Hirsch 32, 96
 23 O 5' Altered die, column on r., added. Crayfish in ex.
 R 21 Head with hair fluttering behind; dolphins, one of which appears below neck. Top r., Punic legend § y §
 16.90 * London BMC 5
 17.20 Benson 249 = Sartiges
 113 = MMAG 43, 1970,
 46
 17.10 Hague
 16.84 Paris 2390
 24 O 5'
 R 21' Altered die; corn grain replaces dolphin below
 17.22 * Berlin
 25 O 6 Quadriga l.; maeander below
 R 22 Head l. with sphendone and fluttering hair above, spiral earring. Three dolphins in front, two corn ears behind. Top l., Punic legend § y §
 - * Palermo, Contessa 69,
 pl. xviii, 33 = Rizzo lxv,
 14
 17.24 * Egger 7. 1. 1908 = Sartiges 92 = MMAG 43,
 1970, 47
 17.44 Jameson 1902 = Hess-
 Leu 1957, 136
 16.28 London Lloyd 1585 =
 Hirsch 33, 475
 26 O 6
 R 23 Head l. with ampyx, triple-drop earring; three dolphins
 16.85 * Brussels

27 O 7 Quadriga r., in ex. hippocamp and Punic legend § y §
 R 23
 16.98 * Paris 936
 - Berlin
 17.10 Jameson 689 = Egger
 7. 1. 1908, 55
 16.62 Cambridge SNG IV 1118
 28 O 7
 R 24
 17.16 * London BMC 8
 17.07 Lewis
 17.52 Egger 7. 1. 1908, 56 =
 AC 17, 181
 17.73 Reggio, Vito Superiore
 113
 16.76 MMAG 43, 1970, 48
 29 O 7
 R 25
 17.35 * Oxford 2137 = SNG III
 845
 16.84 ANS
 17.53 New York Met., Ward
 364a = Late collector 112
 = Hamburger 1894, 157
 17.44 Berlin
 - Palermo Contessa 73,
 pl. xviii, 37
 17.56 * Hess-Leu 1964, 61 =
 Hirsch 33, 406
 17.68 Hirsch 33, 407
 15.41 London 1939 = Nav. 4,
 289 = Hess 15. 2. 1934,
 163 = Ratto 24. 6. 29,
 140 = SC 1927, 1142
 16.17 Reggio, Vito Superiore
 111

30	O 7	
	R 26	
	16.89 *	London Lloyd 1583 = Egger 45, 319 = Nav. 6, 422

(30)	17.24 *	Naples 7761
	16.17	Reggio, Vito Superiore
		112

Plate 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, 288
	18.04	Egger 7. 1. 1908, 57 = Sartiges 114
	17.49 *	Brussels
	17.82	Hess-Leu 1958, 112
32	O 8	Similar, but horses lower to ground line, ex. smaller. § y §
	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)
33	O 8	
	R 28	Head copied from Kimon first decadrachm; four dolphins
	17.67	Berlin
	17.07	Brussels H 825
	16.97	Hirsch 19, 219
	16.89	Nav. 4, 290
	16.60 *	London Lloyd 1584 = Nav. 6, 421 = Weber 1475
	—	Palermo, Contessa 70, pl. xviii, 34 (2 specimens)
	17.41	Paris Luynes 1084
	—	Paris 938
	17.21	Hess-Leu 1966, 173 = Ratto 4. 4. 1927, 385
	—	Silla, Alicante, Spain (A. Garcia y Bellido, Hispania Graeca, 1948, p. 226, 9)

34	O 8	
	R 29	Head copied from Kimon deca- drachm, second type; three dolphins
	17.14 *	Jameson 690 = Egger 7. 1. 1908, 54 = MMAG 43, 1970, 49, from Giarre Riposto
	—	Palermo, Contessa 71, pl. xviii, 35
35	O 9	Quadriga l.; in ex. ketos
	R 30	Head r., triple pendant earring; four dolphins
	17.92 *	Hague
	16.50	AC 14, 103 = Nav. 12, 79
	17.08 *	AC 16, 595 = Nav. 5, 985 = SNG III 1031
	16.92	Cambridge McC 2485 = Benson 251
	17.41	London BMC Syracuse 215
36	O 10	Similar; in ex. swan with flapping wings
	R 30	
	17.08	London BMC Syracuse 216
	16.78 *	Woodward 52 = AC 15, 274
37	O 10	
	R 31	Similar head, but l.; three dolphins
	16.73 *	London 1963, BMQ 1965, pl. xxii, 6
	—	Naples 5324 = Rizzo lxv, 13
	17.01	MMAG 43, 1970, 51
38	O 10	
	R 32	
	16.56	Jameson 731 = MMAG 43, 1970, 50
	17.05 *	Munich

39	O 10'	Sign of Tanit added in front of charioteer	(39)	in Cronica del IV Congreso arqueologico del sudeste español, Elche 1948, p. 261 ff.)
	R 33	Head with ampyx r., single-drop earring		
	16.51	Jameson 730 = Hess-Leu 1956, 135	40	O 11 Quadriga l., double ex. line; Punic legend § y § in ex.
	16.91	Benson 250		R 34 Similar to R 33
	16.95 *	London = Weber 1476		17.10 Berlin
	-	Palermo		17.23 * Copenhagen 499
	16.70	Berlin	41	O 11
	17.16	Paris 961		R 35 Head r., with sphendone
	-	Priv. coll. Y		16.60 * Egger 7. 1. 1908, 58
	-	Llano de la Consolacion, Spain (J. Sanchez Jimenez		

Plate II

42	O 12	Walking quadriga l.; Nike crowning horses. In ex. Punic legend § y §	47	O 12 Die flaw below Nike
	R 36	Head l., four dolphins		R 38 Head r., triple earring, four dolphins
	-	Berlin		16.54 * Cambridge McC 3054
	-	* Berlin	48	O 12 Die flaw larger
43	O 12			R 39 Similar head r., triple earring, five dolphins
	R 36'	Corn grain added below		- ANS
		17.30 * Hague		17.15 Ratto 24. 6. 1929, 141 = Baranowsky IV, 343
		16.10 Syracuse, Megara		17.28 * London 1908 = Sambon 19. 12. 1907, 495
		Hyblaean hoard 1949, 55854		17.04 Hess-Leu 1956, 136
				- Pennisi
44	O 12		49	O 13 Fast quadriga l., double ex. line; in ex., dolphin and Punic legend § y §
	R 37	Head l. with ampyx, short fluttering hair above; three dolphins		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)
		17.23 Priv. coll. Y = Hess-Leu 1957, 137		16.97 * London 1938 = Helbing 1927, 1657
		17.04 * London = Weber 1478		- Paris 945
45	O 12		50	O 13
	R 37'	Die worn and altered as regards the hair, necklace and earring		R 39 Small alterations in the hair; viz. later state of die than with O 12 (48 above)
		16.46 * Paris Vogué 658		- Berlin
46	O 12			17.11 Boston add. 29
	R 37"	Die now further altered, especially as regards the hair and nose; dolphins unchanged		
		16.66 * London 1938 = Nav. 5, 987		

(50)	17.20 Vienna
	16.83 * London 1936 (found at Sandbanks, Poole harbour, 1922)
	16.15 Syracuse, Megara Hyblaea hoard 1949, 55855
	16.91 * Leu 1965

51	O 13
R 40	Similar head r., uncertain number of dolphins; corn grain below
-	* Salton

Plate 12

52	O 14	Quadriga l., double ex. line; in ex. dolphin and § y §
	R 41	Head l., ampyx, triple earring; three (?) dolphins
		17.31 * AC 16, 593 = Cahn 84, 183
		17.11 * London 1938
		- Priv. coll. Y
		- Syracuse
53	O 15	Similar, but ex. line more widely spaced, and in ex. only legend § y §
	R 42	Similar, no ampyx; four dolphins
		16.78 * ANS = Schulman 26. 1. 1913, 2002
		16.10 Hague
		- Luneau 224
		17.43 London BMC 10
54	O 15	
	R 43	Similar to R 42, four dolphins (but not below neck)
		15.65 * London 1938 = Nav. 5, 872 = Glend. 28.6.1938, 192 (obv. tooled)
55	O 15	
	R 44	Head l., generally similar, with ampyx; three dolphins visible
		17.07 * Priv. coll. Y = Hess-Leu 1957, 135
56	O 15	
	R 45	Similar; two dolphins visible in front, probably another behind
		- * Syracuse
	57	O 16 Quadriga r., double ex. line; in ex. two dolphins (but no legend)
	R 46	Similar head l., but no dolphins
		17.00 * SC 1927, 1144
	58	O 16' Die completed by addition of legend § y § in ex. between dolphins
	R 47	Similar head l., three dolphins visible (one of which below neck)
		17.01 * London 1926
	59	O 16'
	R 48	Head l. with wreath and triple earring; behind, star and uncertain mark; two dolphins visible in front
		17.00 * Berlin
	60	O 16'
	R 49	Similar head l.; six dolphins
		17.04 ANS = Walcher Molt-hein 426 = Hess 27. 10. 1902, 559
		17.16 Berlin
		17.39 * London Lloyd 1588 = Nav. 6, 425
		- Pennisi
	61	O 16'
	R 49'	Same die with head much altered and enlarged throughout; dolphins unchanged!
		17.33 * Boston 327

62	O 17	Quadriga l.; double ex. line, legend sylls in ex.	(68)	good style; four dolphins, shell below chin
	R 49"	Same die further altered; head unchanged but dolphins fattened	17.22	* Jameson 2421
		16.51 * Oxford 2138 = Soth.	69	O 19 Quadriga l., thick ex. line; star above horses; in ex., legend sylls
		9.3.1936, 22	R 56	Head l., similar to last, four dolphins; in front, dot
	-	Berlin	17.13	* Brussels
	-	Priv. coll. Y	-	Berlin
63	O 17		17.12	Hess-Leu 1966, 172
	R 50	Larger head, of good style, with wreath and earring; three dolphins. Dot in front	17.11	Merzbacher 2. 11. 1909, 2489 = White King 66
		17.10 * Berlin	70	O 19
		16.87 Boston 325	R 57	Head l.; similar, four dolphins; below chin, swastika
		17.22 MMAG 43, 1970, 54	16.94	* Boston 324 = Warren 425
		16.23 * London Lloyd 1586 = Benson 54 253	-	Berlin
64	O 17		16.07	London Lloyd 1587 = Hirsch 29, 101
	R 51	Head l., smaller and inferior style; wreath and earring; three dolphins visible	16.78	Jameson 691
		17.22 * Berlin	16.86	MMAG 32, 1966, 68
65	O 17		-	Paris 941
	R 52	Similar head l., wreath with corner; triple earring; behind, star and monogram (incomplete). Two dolphins visible	17.21	MMAG 43, 1970, 53
		17.22 AC 16, 594	71	O 19
		16.76 * London 1938 (BMQ 1938, xliv, 1) = Nav. 6, 424	R 58	Head l. with wreath and earring, simpler style; four dolphins
		17.25 Hirsch 30, 380	16.76	ANS = Schulman 8. 6. 1931, 54 = Hamb. 96, 44 = Schulman 7. 6. 1937, 98
	-	Pennisi	16.75	Berlin
66	O 17		17.00	Hirsch 19, 156
	R 53	Head l., smaller with normal wreath and earring; three dolphins. Dot in front	15.90	Van Vleuten, Lempertz Köln 1926
		17.06 Cambridge McC 2484	16.78	* London BMC 13
		17.21 * London BMC 17 = Hill Sicily pl. x, 11	16.84	New York Met., Ward 365
67	O 18	Similar, but thick ex. line, horses lower. In ex. legend sylls	16.90	Paris Luynes 1085
	R 54	Closely similar to R 53 and perhaps altered from it; if so, alterations include dolphins in front	-	Priv. coll. Y
		17.26 * Leu Sicilia 143	-	Pennisi
68	O 18		72	O 19
	R 55	Head l., wreath and earring normal,	R 59	Similar head; four dolphins
			17.00	Hirsch 32, 61 = Hindamian 177
			-	ANS
			16.53	Cambridge, SNG IV 1119
			16.62	do., 1120
			17.37	* London BMC 16

Plate 14

73	O 19		(78)	-	Martinetti-Nervegna
	R 60	Similar			1907, 794 = Engel-Gros
		16.52 * London BMC 14			21
74	O 19		79	O 21	
	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 parallel lines; star above; in ex., dolphins flanking legend § y §	80	O 21	
	R 62	Head l. with normal wreath and earring; smooth and elaborate style; four dolphins		R 67	Similar
		17.20 Berlin			16.17 AC 16, 952 = Wotoch
		16.72 * Paris A-V 272			238 = Stiavelli 179 =
		16.83 Nav. 1, 514			C. Clark 91
76	O 20				16.52 Lockett SNG III 846 =
	R 63	Similar			Nav. 1, 513 = Hirsch 14,
		16.44 * Cambridge McC 2483 =			174 = Nav. 5, 986
		Hirsch 15, 1084			16.63 * London BMC 11
77	O 21	Similar to O 20, but no star above; dolphins and legend in ex.	81	O 21	
	R 64	Similar		R 68	Similar
		16.38 * London BMC 12			16.75 * Cambridge McC 2482 =
78	O 21				Benson 248
	R 65	Similar	82	O 21	
		16.94 * Boston 326		R 69	Similar
		16.91 Brussels H 824			16.78 Hess-Leu 1956, 137
		16.99 Paris 944			16.39 * Berlin
					- Syracuse
			83	O 22	Similar; possibly star above; legend only in ex.
				R 70	Similar to R 58-61
					14.60 * Brussels

R✓sm̄lqrt – R✓sm̄lqrt

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 Nisoria 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✓sm̄lqrt = 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 collection²³, 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-

²³ 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 R̄sm̄lqr̄t tetradrachms were being minted.

The other current favourite for R̄sm̄lqr̄t, 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 Punic²⁴, 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 R̄sm̄lqr̄t, 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 legend 'rk (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 Selinus²⁵; 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 importance²⁶. In this connexion it may be worth making the bare suggestion that Selinus could be considered as a possible site for the R̄sm̄lqr̄t mint. It must be admitted that there is nothing in the copious finds of coins (mainly Punic) from the site²⁷ 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 R̄sm̄lqr̄t.

²⁴ *NSc* 1958 and *Annali* 5/6, pp. 296 ff.

²⁵ On Herakles at Selinus, cf. L. Lacroix, *Monnaies et colonisation*, pp. 34 ff.

²⁶ A. di Vita, *Archaeologia Classica* V, pp. 39–47.

²⁷ *Annali* 5/6, pp. 306 ff.

It must be added that Lilybaion (Marsala) would have been a possible candidate for R̄šmlqrt 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 qrthdšt 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 qrthdšt refers to a city of Cyprus, probably Kition²⁸. 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 R̄šmlqrt there.

R̄šmlqrt

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 1 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.

²⁸ S. Moscati, *World of the Phoenicians* (London 1968), pp. 104–105 and references on pp. 259–260.

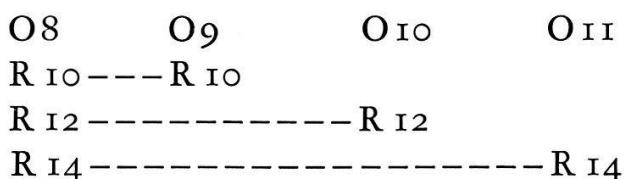
G. Cavallaro, *Panormos pre-romana* (Palermo 1950), p. 109 ff., however, equates qrthdšt with Panormos; if we accept the sys coin series for Panormos, as I do, then this must surely exclude the possibility suggested by Cavallaro.

5-10 (Plate 15)

Three obverse dies O 4-6 occur in this group, and each has the regular Nike above. O 4 is not linked, but O 5 and O 6 are linked by R 6. The group has a certain homogeneity on account of the style of R 4, 5, 8 (nos. 5, 6, 10 respectively) which all follow an identical prototype with sphendone and stars. However the treatment of R 6 (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 6 and thus give a date in the third quarter of the century (see below 70)²⁹, No. 9 (R 7) has another hair rendering but the face is similar to that of R 6. 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).

11-25 (Plates 16-17)

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 sys 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

²⁹ A specimen of no. 8 comes from the Mineo hoard (Noe 2 697) 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.³⁰; 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 R̄šmlqrt 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 R̄šmlqrt no. 7–8 (R 6) with Thermai nos. 3–5, specimens of which were also contained in the Gibil Gabib hoard.

26–30 (Plate 17)

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 šys nos. 19–20³¹. 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.

31–68 (Plates 17–21)

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:

O 13	O 14	O 15	O 16	O 18	O 19	O 20	O 21	O 22	O 23
R 26 -- R 26	R 32 -- R 32	R 39 -- R 39							
R 27 -- R 27				R 45 ----- R 45		R 51 -- R 51			
							R 46 -- R 46	R 49 -- R 49	

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).

³⁰ ANS *Centennial Publication*, pp. 372–374.

³¹ 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 R̄sm̄lq̄rt, 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 affinities 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 R̄sm̄lq̄rt 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 aspect³². 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 R̄sm̄lq̄rt 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 R̄sm̄lq̄rt mint seems to have depended largely – and to a greater extent than ḥyṣ Panormos – on prototypes from the «Carthage» mint, though at the same time adding its own characteristic touches.

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

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 $\delta\gamma\delta$ 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 Agathokles³³ and clearly confirm that the bulk of the R $\ddot{\gamma}$ m λ qr τ 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^{33a} 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 R $\ddot{\gamma}$ m λ qr τ 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 Cefalù, Megara Hyblaea 1967, Selinunte 1877 and Cammarata. The Cefalù 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 hoard³⁴ contained a single specimen, of no. 39. Finally the Cammarata hoard³⁵ appears to have included the same main elements, among them some specimens of the R $\ddot{\gamma}$ m λ qr τ 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).

³³ On hoards of the time of Agathokles, cf. *Essays* Robinson, p. 151.

^{33a} A. Di Vita, *Annali* 5/6, 1958/59, 125 ff.

³⁴ Noe² 946, *NSc* 1877, also *Kokalos* VII, tav. 20, 2.

³⁵ Noe² 193.

This is a strange group which stands quite apart from the main series of the mint and cannot be accommodated 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 Syracuse³⁶; the latter had also influenced the style of the latest groups of the *sy* 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 *smlqrt* and «Carthage» cannot be looked on as significant either for dating or for place of mintage.

³⁶ Cf. *SNG II* 1476-1480.

Catalogue: R̄sm̄lqrt Tetradrachms

1 (O 1)	ትኩቃኩሣኩ	31 ff. (O 13-15)	ትኩቃኩሣኩ
2 (O 2)	ትኩቃኩሣኩ	42 (O 16)	ትኩቃኩሣኩ
4 (O 3) incomplete	፩፩፩፩፩	48 (O 17)	ትኩቃኩሣኩ
5 (O 4)	ትኩቃኩሣኩ	49 (O 18) incomplete	፩፩፩፩
6 (O 5)	ትኩቃኩሣኩ	54 (O 19)	ትኩቃኩሣኩ
8 (O 6)	ትኩቃኩሣኩ	61 (O 20) incomplete	፩፩፩፩
11 (O 7) incomplete	፩፩፩፩	62 (O 21) incomplete	የኩቃኩሣኩ
12 (O 8)	ትኩቃኩሣኩ	65 (O 22)	ትኩቃኩሣኩ
18 (O 9)	ትኩቃኩሣኩ	68 (O 23)	ትኩቃኩሣኩ
21 (O 10) incomplete	፩፩፩፩	69 (O 24)	የኩቃኩሣኩ
23 (O 11) incomplete	፩፩፩፩	71 (R 54)	ትኩቃኩሣኩ
25 (O 11) incomplete	፩፩፩፩	73 (R 55)	ለ
26 (O 12)	ትኩቃኩሣኩ		

Plate 15

1 O 1	Fast quadriga l.; double ex. line, legend in ex. Above, caduceus (but no Nike)	3 O 2	R 2' Same die with addition of corn grain behind head 16.77 * Leu 1965
R 1	Head of Melqart bearded, r. with wreath and earring. 16.32 * London 1874 (Castellani) Enlarged x 2: plate 21	4 O 3	Similar to O 2 R 3 Similar head, with ampyx, single-drop earring; at least four dolphins, possibly a fifth behind head - * Uncertain sale cat. (no. 111)
2 O 2	Similar, no Nike, nothing in field above; double ex. line and legend in ex.	5 O 4	Quadriga r. with rearing horses, Nike above. Legend in ex.
R 2	Female head r., with single-drop earring; three (?) dolphins 16.31 * Lockett SNG III 740 = Priv. coll. Y		

(5)	R 4	Female head r. with sphendone ampyx, triple earring; three dolphins 16.77 * Boston add. 24 = Hess- Leu 1959, 115 = Jameson 1903
6	O 5	Similar, but horses lower and charioteer more forward. Legend in ex.
	R 5	Similar to R 4, three dolphins 17.01 * ANS
7	O 5	
	R 6	Larger head r., with sphendone and ampyx, hair knobbly, triple earring; three dolphins 16.20 Paris Luynes 922 - Luneau 220 16.76 * London Lloyd 1598 = Nav. 6, 361
8	O 6	Similar, horses very large and charioteer very high. Legend in ex.

(8)	R 6	17.05 * Sambon 19.12.1906, 494 - Syracuse, Mineo hoard 25284
9	O 6	
	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
10	O 6	
	R 8	Head with sphendone and ampyx similar to R 4-5, triple earring; four dolphins 17.02 * Cambridge McC 2487 = Hirsch 21, 592 17.24 Hess-Leu 1960, 102 16.72 Priv. coll. X - Palermo

Plate 16

11	O 7	Quadriga l., horses in close formation; Nike above (?); double ex. line, legend in ex.
	R 9	Large head with waved hair, triple earring; two dolphins visible in front 16.82 * Hirsch 19, 161
12	O 8	Similar, horses more level; single 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
13	O 8	
	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	O 8	
	R 11'	Same die, but worn and partly altered (nose, mouth and hair)

(14)		16.45 * AC 14, 90 = Helbing 1930, 108 = Cahn 75, 228 = Glendining 31.1.1951, 58
15	O 8	
	R 12	Large head with rolled hair, ampyx, single-drop earring; two dolphins 17.15 * Paris 946
16	O 8	
	R 13	Head similar to R 9, R 11, triple earring; three dolphins 16.65 Nav. 5, 871 16.40 Egger 41, 121 16.97 Hunter xvi, 5 16.52 MMAG 1951, 219 17.07 London BMC 19 - * Pennisi 16.65 Hague 17.00 Berlin - Salton
17	O 8	
	R 14	Similar to R 13, etc., but with 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)	16.41	Oxford 2148 = Hirsch 29, 83 = do. 19, 160 =
	16.90	Priv. coll. Y = Lockett			Schulman 21. 10. 1912,
		SNG III 739			19 = do. 7. 6. 1937, 96
	17.00	Hirsch 30, 350 = Sam- bon 19. 12. 1907, 500		16.29	ANS = Münzh. Basel 4, 561 = Cahn 71, 205 =
	17.32	Hess-Leu 1957 132			Cahn 80, 113
	16.94	Berlin		17.08 *	Priv. coll. Y = Lockett
18	O 9	Quadriga l., horses regular and low to groundline; double ex. line, legend r's m l q r t			SNG III 738 = Nav. 4, 232
	R 15	Head with sphendone (decorated with stars) and ampyx, earring with five pendants; three dolphins		16.82	Hess-Leu 1958, 111
		16.66 ANS = Nav. 5, 874 = Luneau 222	21	O 10	Quadriga with horses very high similar to O 6
		16.47 Paris Luynes 927		R 12	
		17.31 Nav. 4, 283		16.75	Nav. 6, 367 = Schulman 16. 12. 1926, 111
		16.90 Hague		16.95	AC 16, 491
		17.02 * London BMC 2		16.68	Priv. coll. Y = Jameson 600 = Egger 10. 12. 1906, 87
		- Syracuse, Nissoria 54542			17.10 * London BMC 20
		17.00 Syracuse, Gibil Gabib 48296	22	O 10	
19	O 9			R 17	Similar to R 12; two dolphins
	R 16	Head r., triple earring; no dol- phins; in front, crescent?			17.13 * Cambridge McC 3052 = Sambon 19. 12. 1907, 493
		16.88 * London Lloyd 1596			16.60 Cahn 66, 145 = MM AG 1951, 218
		- Pennisi			17.17 Hess-Leu 1959, 114
		- Baranowsky 1929, 1554a			16.85 ANS
20	O 9				17.05 Nav. 6, 366 = Platt 3. 4. 1933, 68 = Schulman 16. 12. 1926, 110
	R 10	Die more worn			
		16.81 Jameson 596			
		16.96 Cambridge McC 3053			
		16.32 AC 16, 486			

Plate 17

23	O 11	Quadriga l., horses low and regu- lar, charioteer amidships, double ex. line, legend in ex. On l. cadu- ceus	25	O 11	
	R 14			R 19	Similar to R 18
		16.71 O'Hagan 124			17.25 * Stiavelli 158 = Merz- bacher 1910, 218 = Sotheby 21. 4. 1909, 85
		17.04 * London BMC 21			17.14 ANS = Locker-Lampson 65 = Cahn 60, 188 = Nav. 12, 709
		16.90 Paris Luynes 923	26	O 12	Quadriga l. with horses low regu- lar and compact, charioteer in normal position and leaning for- ward. Double ex. line. Legend in ex.
24	O 11				
	R 18	Similar to R 14			
		16.99 * AC 16, 492			
		16.65 SC 1927, 1148			

(26)	R 20	Head l., hair wavy and neatly rolled, triple earring; three dolphins	(31)	17.30	Glend. 3. 12. 1929, 704 = Rosenberg 8. 2. 1924, 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 = Egger 28. 11. 1904, 197 = Helbing 2. 3. 1928, 123 = Hirsch 20, 121
	R 21	Similar; three dolphins		-	Helbing 8. 11. 1928, 3716
		16.81 * London BMC 18		17.28	Oxford 2147 = Lockett SNG III 743 = Nav. 1, 426
28	O 12			16.82	Hague
	R 21	Same die, but dolphin behind head changed into fish	32	O 13	
		16.55 Hirsch 34, 155 = Jameson 1895		R 25	Head l. with leaf wreath, etc.; two dolphins visible in front
		16.69 * London RPK		16.98 * London 1919 = Weber 1477	
		17.09 Hess-Leu 1957 = Priv. coll. Y	33	O 13	
		- Palermo		R 26	Similar to R 24
29	O 12			17.00	Hirsch 14, 172
	R 22	Head l. with corn ear wreath, triple earring; three dolphins		17.06 * Hirsch 16, 232	
		16.52 * London BMC 5		17.04	Oxford 2149
		- ANS	34	O 13	
		16.60 Paris Delepierre		R 27	Similar to R 24 and R 26
30	O 12			16.96	Hirsch 19, 158
	R 23	Head r. with corn ear wreath, triple earring; two dolphins		17.12 * Nav. 10, 193 = Nav. 4, 231 = Merzbacher 2. 11. 1909, 2490	
		16.75 Priv. coll. X		16.72	Hirsch 34, 154
		16.91 Munich		17.22	Hague
		16.95 Berlin		-	Proschowsky 362
		17.23 * Nav. 6, 362		17.00	Nav. 12, 703 = Hess 18. 3. 1918, 187 = SC 1927, 1143
31	O 13	Quadriga r., horses rearing up but regular; single ex. line			
	R 24	Head r. with leaf wreath, triple earring; three dolphins			
		16.88 Egger 41, 120 = Hess 28. 4. 1938, 523			
		17.30 * London Lloyd 1604			

Plate 18

35	O 14	Similar to O 13, but horses lower and charioteer taller	37	O 14	
	R 26			R 28	Head similar, but hair more curly and wreath has extra leaves; three dolphins
		16.74 * Hague = Brandis, Canessa 1922, 389			16.77 * London 1939 = Nav. 4, 230 = Soth. 17. 7. 1939, 16 = Hirsch 32, 60 = Bourgey 5. 12. 1932, 70 Brussels
36	O 14				
	R 27				
		17.30 * Hirsch 33, 342			
		- Syracuse			

(37)	-	Feuardent 26. 5. 1914, 158	(39)	16.66	Cambridge SNG IV 972
	16.40	Hartwig 682 = Hamb. 98, 224		-	Ciani 7. 5. 1955, 190
	17.27	Hess-Leu 1968, 114		16.90	Hess 202, 2269
	17.00	Hirsch 32, 59		15.13	London 1928
	17.04	Jameson 597		16.72 *	London Lloyd 1605, Cefalù hoard
	17.08	Nav. 4, 229		17.19	Paris Luynes 921
	17.22	Nav. 6, 363		16.90	Paris 2389
	17.36	Paris Luynes 920		16.90	Leu Sicilia 142 = Priv. coll. Y
	-	Pennisi		17.23	M MAG 43, 1970, 58
	17.20	Sambon 19. 12. 1907, 490		-	Palermo, Selinunte hoard 1877
	17.18	Sartiges 453 = Sambon 19. 12. 1907, 489 = Hess 1954, 50			(Kokalos VII, tav. xx, 2)
38	O 14		40	O 14	
	R 29	Similar to R 28, but hair wavy instead of curled; three dolphins		R 31	Head r., similar to R 28, R 29; three dolphins
	17.58 *	ANS		16.97 *	Hirsch 14, 173
	17.17	ANS = Bourgey 23. 5. 1910, 30 = do. 7. 6. 1909, 133		-	ANS
	17.00	Cahn 65, 66 = Egger 28. 11. 1904, 221 = Hess 194, 132		-	Feuardent 26. 5. 1914, 156
	17.16	Nav. 6, 364 = Cahn 84, 184 = Schulman 16. 12. 1926, 107	41	O 15	Quadriga r., horses rearing up, charioteer leaning forward
	-	Baranowsky 1934, 4647		R 32	Head r., similar; four dolphins
	17.20	Helbing 12. 4. 1927, 1656		17.16	Brussels H 822
	17.30	Hirsch 33, 344		17.23	Cambridge SNG IV 970 = Montagu I 101
	17.10	Hirsch 33, 343		17.24 *	London BMC 7
	16.63	London 1918		16.76	Hess-Leu 1956, 87
	-	Paris 2388		-	Priv. coll. Y
	-	Paris Vogué 656		17.16	Priv. coll. X
	17.08	Lewis = Hess-Leu 1956, 88		17.10	Lewis
	17.04	Weber 1297 = Feuardent 16. 11. 1937, 48		17.17	Nav. 10, 195
	17.20	Rosenberg 64, 1391		17.03	Syracuse, Pachino 21
	-	Soth. 6. 7. 1921, 201	42	O 16	Similar, horses more compact, charioteer leaning forward
39	O 14			R 32	
	R 30	Head l., leaf wreath, triple earring; three dolphins		17.13 *	London BMC 6
	17.18	Boston 270		-	Paris A-V 274
	-	Berlin		17.20	Paris Luynes 917
	17.07	Benson 189	43	O 16	
				R 33	Similar; earring larger, dolphin behind head turns inwards
				16.75	Berlin
				17.18	Boston = Warren 419
				16.95	Cambridge McC 3051 = Carfrae 48
				16.96	Cambridge SNG IV 969
				17.13	AC 17, 142
				16.94	Hague

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

Plate 19

47	O 16		48	O 17	Quadriga r., horses rearing up, charioteer high and leaning far forward
	R 36	Similar to R 35		R 37	Similar, larger head
	17.26	Cahn 66, 146		16.44	AC 16, 489
	17.23	Hess-Leu 1958, 89		17.01	Berlin
	- *	Glasgow, Coats 2892		16.95	Egger 46, 78 = Soth. 6. 7. 1921, 202
	-	ANS		17.50	Hess-Leu 1957, 131
	17.10	Hirsch 31, 158 = do. 15, 1008		16.36	London Lloyd 1599, Cefalú hoard
	17.12	Jameson 598		17.05	Münzh. Basel 10, 146
	17.07	Lewis		17.06 *	Nav. 5, 863 = Hess 207, 134 = Merzbacher 1910, 216 = Hess-Leu 1958, 110 = Egger 28. 11. 1904, 224
	17.15	London Lloyd 1600		17.04	O'Hagan 125 = Bourgey 29. 5. 1911, 40
	17.09	Münzh. Basel 8, 184		-	Priv. coll. Y
	16.64	Nav. 12, 705		-	Sartiges 97
	-	Glend. 1955 Laval, 227		17.14	Syracuse Pachino 20 (Annali 5-6, tav. viii, 1)
	17.25	Paris Luynes 919			
	17.10	Sandeman 29			
	17.07	Stockholm KMK = Nav. 10, 194			
	-	Ryan 1495			
	17.20	Sambon 19. 12. 1907, 491			
	-	Palermo hoard 1936			
	17.00	Syracuse, Pachino 19			
	-	Syracuse, Gagliardi 1003			

49	O 18	Quadriga r., horses very large and spread out, charioteer more upright	55	O 19	Head l., compact; wreath earring dolphins normal
	R 31			R 42	Head l., compact; wreath earring dolphins normal
	17.13	* London BMC 15	16.80	AC 16, 487	
	-	ANS	16.66	Hague	
	-	Berlin	12.17	Hague	
	-	Glend.-Seaby II 1929, 187	17.24	Hirsch 32, 58 = Hindamian 176	
50	O 18		16.92	Hirsch 34, 152 = Bourgey 1913, 18 = Sambon 19. 12. 1907, 488 = Hess-Vogel 1929, 131 = Hess 202, 2268 = Hess 209, 15 = Hess 7. 3. 1935, 251	
	R 38	Similar to R 31; dolphin behind head turns towards head	17.15	Lewis	
	16.82	* Hess-Leu 1962, 125	17.18	London BMC 16	
	17.23	Schulman 6. 6. 1930, 28	17.05	* Lockett SNG III 742	
	-	Naples Santangelo 7750	16.85	MMAG 43, 1970, 60	
51	O 18		17.04	Nav. 5, 870	
	R 39	Similar to R 31, earring more forward	17.16	Nav. 12, 706	
	16.90	London Lloyd 1603 (rev. tooled; earring removed)	17.00	Priv. coll. X	
	17.23	* Leu 1965	-	Polese, Canessa 719	
52	O 18		16.78	Schulman 31. 5. 1938, 75	
	R 40	Similar to R 39, slightly larger	-	Stiavelli 156	
	16.71	* Boston 269	-	Syracuse	
	17.35	* London 1918	56	O 19	
	16.96	Paris Delepierre	R 43	Similar to R 39, earring larger	
	-	Palermo	-	Berlin	
	17.17	Munich	16.32	* AC 16, 488 = Headlam 180 = Ciani 14. 6. 1934, 13	
	17.43	Münzh. Basel 4, 560	16.87	Hess 208, 105	
53	O 18		17.17	Merzbacher 2. 1. 1909, 2492 = Balmanno 42 == Soth. 6. 12. 1907, 30	
	R 41	Similar, more compact head	57	O 19	
	16.50	SC 1927, 1146	R 44	Similar to R 42; corn ear below	
	17.00	* London Lloyd 1601, Cefalú hoard	16.69	New York Met., Ward 359	
	16.82	Priv. coll. X	16.95	* London 1968	
	-	Syracuse, Megara			
		Hyblaea 1967			
54	O 19	Quadriga l., horses in fan-like formation; double ex. line			
	R 39				
	16.77	* ANS = Merzbacher 2. 11. 1909, 2493			

58	O 19		(64)	16.88	London 1938
	R 45	Head r., rather stylised; triple earring, three dolphins		17.20	Paris Luynes 926
	—	* Priv. coll. Y		16.62	Priv. coll. X
	—	Pennisi		16.78	Priv. coll. Y
				16.80	Vienna
59	O 19			17.19	Syracuse, Pachino 23
	R 46	Head l., similar to R 42; four dolphins		—	Palermo
		16.55 * London 1938		—	Burel 106
		17.15 Cambridge SNG IV 973		—	Canessa-de Nicola 1950, 112
60	O 19		65	O 22	Quadriga r., rearing horses, charioteer high and leaning forward; single ex. line, legend normal
	R 47	Head r., peculiar shape, wreath and earring normal; four dolphins		R 49	16.79 Baranowsky 4, 319 = Ratto 24. 6. 1929, 108
		16.84 * London BMC 14		—	* Leu 1965
		— Berlin			
		— Feuardent 26. 5. 1914, 157			
		17.05 Nav. 5, 869			
61	O 20	Quadriga r., very compact; double ex. line		66	O 22
	R 46	16.59 * Lockett SNG III 741 = Priv. coll. Y		R 50	Large head r.; four dolphins
62	O 21	Quadriga r., long sagging horses; double ex. line; legend reversed			17.27 * Boston add. 23 = Hess Leu 1959, 113
	R 45	17.23 * Helbing 19. 11. 1912, 155			16.27 London Lloyd 1602, Cefalú hoard
63	O 21				17.33 London BMC 10
	R 48	Head r., very stylised; three dolphins			17.06 Nav. 5, 866
		17.04 * London BMC 13			17.10 AC 15, 284 = Ratto 26. 4. 1909, 1176 = Cahn 60, 189 = Hirsch 34, 153
		15.10 Allotte de la Fuye 1925, 124			— Paris 377
		17.24 Nav. 6, 365 = Feuardent 9. 5. 1910, 245 = Schulman 21. 10. 1912, 18			17.35 Walcher Molthein 420 = Hirsch 29, 82 = MMAG 43, 1970, 59
		— Paris 2387			
64	O 21		67	O 22	Head r., similar to R 32; four dolphins
	R 49	Head l., wreath, triple earring; four dolphins		R 51	16.65 London 1969
		16.87 Hamb. 98, 225 = SC 1927 1147 = Polese, Canessa 1928, 720			17.12 * Nav. 10, 192 = Nav. 1, 425 = Egger 10; 12. 1906, 86
		720			— Platt 3. 4. 1933, 67
		16.88 Hess-Leu 1966, 171			
		16.85 * London Lloyd 1606, Cefalú hoard			
			68	O 23	Similar to O 22, but horses lower and charioteer leans further forward
				R 51	17.20 * London BMC 8
					17.16 Nav. 5, 867
					17.50 Paris Luynes 918

69	O 24	Quadriga l., horses low on ground, thick ex. line	(70)	16.50	Hague
	R 52	Head r., compact style, wreath and triple earring; three dolphins		16.76	Hirsch 32, 62 = Hindaman 178
	15.60	Brussels H 821		16.61	Jameson 599
	17.31	* London 1938 (BMQ 1938, xlix, 2)		16.77	Lewis
	17.28	London BMC 4		16.68	* London BMC 3
	17.00	Nav. 12, 707		15.56	* Lockett SNG III 745 (rev. extensive break 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 dolphins
	16.76	Stockholm KMK = Nav. 10, 196 = Hirsch 21, 590 = Luneau 221		R 54	Quadriga r., double ex. line; legend r'smlqrt
	-	Martinetti Nervegna 793		15.55	Berlin
	16.85	Egger 26. 11. 1909, 149		-	Berlin
	16.91	Lewis = Glend. Hall 1950, 61		16.58	* ANS = White King 55 = Bourgey 29. 5. 1911, 39
	-	Palermo	72	O 26	Head l.; two dolphins visible in front
	-	Priv. coll. Y		R 54	16.37 * London BMC 17
	-	Sambon-Canessa 22. 6. 1906, 175	73	O 26	
	-	Syracuse, Megara		R 55	Walking horse r., palmtree behind; below letters 'ayin and gimel
		Hyblaea 1967		16.50	* Copenhagen, Thorwaldsen
70	O 24			-	Priv. coll. Y
	R 53	Similar to R 52, earring larger			
	17.04	AC 16, 490			
	16.95	Cambridge SNG IV 971 = Bunbury 527			

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 coins³⁷.

Nos. 1–4 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 R̄sm̄lq̄rt 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. 1 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.³⁸.

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 ΚΛΗ 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.

³⁸ A specimen of the Thermai issue was evidently also present in the hoard from Termini Imerese of 1900 (Noe² 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 century³⁹. The litra is of the same types, but has behind the head of Hera a monogram  which⁴⁰ either by chance or otherwise recalls the monogram found on a tetradrachm of Morgantina⁴¹; 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 *k f r a* 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.

³⁹ 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 tetradrachm, 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 occurs in a late phase of the *sys* series (nos. 62, etc.).

Catalogue: Thermai

Plate 22

Tetradrachms

1	O 1	Quadriga l., charioteer wearing Phrygian helmet; in ex., altar; no legend	4	O 2	Female head l., wreath only; four dolphins; behind, prow
	R 1	Female head l., hair in net, three dolphins; no legend	16.65	Hague	16.65 Hague
		17.28 * London BMC, p. 254, no. 1	17.00	* London NC 1913, p. 226 fig. 3	17.00 * London NC 1913, p. 226 fig. 3
		17.30 London Lloyd 1040 = Nav. 10, 214	17.18	London Lloyd 1039 = Hirsch 34, 171 = Nav. 4, 282 = Samson 19. 12. 1907, 238	17.18 London Lloyd 1039 = Hirsch 34, 171 = Nav. 4, 282 = Samson 19. 12. 1907, 238
		16.51 Cambridge McC 2310	17.19	* Paris 585	17.19 * Paris 585
		16.20 Helbing 24. 10. 1927, 2722 = Ready 213	5	O 3	Quadriga l., Nike above; in ex., altar
		17.00 Syracuse, Gibil Gabib 48297	R 5	Female head r., three dolphins; legend ΘΕΡΜΙΤΑΝ	16.98 Jameson 1896 = Hirsch 30, 359
		17.65 Syracuse, Gibil Gabib 48298		17.28 * Paris 586, NC 1910, p. 223	17.28 * Paris 586, NC 1910, p. 223
		— * Uncertain (cast in BM)	6	O 4	Similar, but in ex. legend ΘΕΡΜΙΤΑΝ; above ex. line, engraver's signature ΚΛΗ
2	O 2	Similar to O 1	R 5		16.95 * Pennisi, ZfN 1935, taf. IX, 1 = Samson 19. 12. 1907 178
	R 2	Similar to R 1, but larger			16.82 MMAG 43, 55
		17.08 * ANS = Hirsch 31, 162			
		16.91 Jameson 618 = Samson 19. 12. 1907, 179			
		16.03 Priv. coll. Y = Hess-Leu 1957, 134			
		16.60 Vienna			
3	O 2				
	R 3	Similar			
		— * Uncertain (cast in BM)			

Didrachms

7	O 5	Head of Hera r., dolphin behind, legend ΘΕΡΜΙΤΑΝ	(7)	8.38 * London PCG, pl. 26, 28
	R 6	Herakles seated on rock, holding club; behind, bow and quiver, etc.		8.19 Paris Luyens 938

Bronze

A	Obv. Head of Hera l., legend ΘΕΡΜΙΤΑΝ	(B)	3.36 * London BMC 2
	Rev. Head of Herakles l. — * Priv. coll.	C	Obv. Female head with hair tied, crescent below chin
B	Obv. Head of Hera r.		Rev. Head of Herakles r., legend ΘΕΡΜΙΤΑΝ
	Rev. Head of Herakles r., legend ΘΕΡΜΙΤΑΝ		4.81 * London Lloyd 1041

Solus (?)

Plate 22

Tetradrachms

X	O 1	Quadriga r., Nike above; in ex. Punic letter (kaph or vav)	17.17	* London BMC, Sicul- Punic uncertain, p. 254, 1 Palermo
	R 1	Female head r., wreath, dolphins	-	

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 1



Solus, Plate 23, 18



Solus, Plate 23, 16



Eryx, Plate 24, 24



Solus, Plate 23, 17



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, shell in field; legend <i>m</i> - ? (cf. Luynes 1049)	AR 0,64 g (BM)
3	River-god protome / Female head r., m tv' (cf. legend no. 37)	AR 0,34 g (BMC 7)
4a	Gorgon / Palm tree m tv' (cf. legend no. 37)	AR 0,66 g (SNG II 1140)
4b	do., but m tv' reversed (see p. 34 above)	AR 0,71 g (BMC 11)
5	Gorgon / Palm branch m tv'	AR 0,35 g (Paris, Luynes 1050)
6	Facing head / Crab m tv' (cf. legend no. 37, p. 34)	AR 0,71 g (SNG II 1144)
7	Facing head / Corn grain and four pellets (? Motya)	AR 0,25 g (Motya museum, Whittaker, <i>Motya</i> p. 349, no. 5)
8	Gorgon, three pellets / Palm tree m tv' reversed	AE 6,22 g (BMC 16)
9	Horse protome / Palm tree m tv'	AE 0,97 g (Berlin)
10	Horse standing / Crab (? Motya)	AE (Berlin)
11	Facing head / Crab (? m tv')	AE 1,05 g (BMC «Brettii» no. 114)
12	Facing head / Male head	AE 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'	AR 0,61 g (BM ex. Jameson 732)
18	Herakles head / Crayfish, pellets kfr' (inverted)	AE 7,51 g (BMC 2)
19	Herakles head beardless / Hippocamp	AE (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.	AE (Priv. coll. ex. Walcher Molthein, pl. IV, 560)

Plate 24

Panormos

1	Female head r. / Prow ΠΑΝ	AE 1,04 g (McClean 2498)
2	Male head r. ΠΑΝΟΡΜΟ reversed / River god protome, shell below	AR 0,86 g (BMC 5)
3	Female head r., dolphin / Poseidon	AR 0,61 g (BM)
4	Female head r., four dolphins / Poseidon (rev. die = no. 3)	AR 0,62 g (BMC 2)
5	Poseidon / Goat rider § y § (= Plate 2 X)	AR 0,73 g (BMC 1)
6	Same, § y § / Same ΠΑΝΟΡΜΟΣ (= Plate 2 Y)	AR 0,75 g (Hunter 2)
7	Bearded head (Poseidon ?) / Wheel § y §	AR 0,33 g (Berlin)

8	Female head r., swastika / River god protome, shell § y §	AR 0,63 g (BMC 23)
9	Dolphin and shell, five pellets / Eagle on hare § y §	AR 0,80 g (Berlin)
10	Female (?) head in elephant scalp / Swan on waves, letter II (?) (Panormos?)	AR 0,76 g (SNG Copenhagen 172 «Camarina»)
11	Athena head, corn grain / Swan on waves § y §	AR 0,66 g (Berlin)
12	Young male head, swastika / River god § b 'l § y § (see p. 38 above)	AR 0,49 g (BMC 31)
13	Young male head (with horn?) / River god protome § y §	AR 0,67 g (BMC 24)
14	Young male head / River god § y §	AR 0,54 g (BMC 27)
15	Young male head with wreath / River god walking § y §	AR 0,69 g (BMC 26)
16	Female head / River god, shell in ex. § y §	AR 1,67 g (BM)
17	Female head, long-haired / River god § y §	AR 1,75 g (Paris, Luynes 1088)
18	Cock § y § / Pellets	AE (Priv. coll.)
19	Free horse / River god protome § y §	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, § y § in ex.	AE (Priv. coll.) (BMC 38, of this type, is overstruck on specimen of no. 20)
22	Apollo head / Pegasos § y §	AE (Priv. coll.)

Eryx

23	Dog with corn ears IRVKAZIB / Female head	AR 8,68 g (BM)
24	Male head / River god 'rk	AR (Coll. Mini)
25	Pegasos 'rk /Athena head	AR 7,99 g (Oxford, SNG 1718)

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

Key to Plates 1-22

Plate 1	Motya	35	SC 1907
	1 Berlin	36	Hamb. 98
	2 Syracuse		
	3 Berlin		Segesta
	4 Paris	A	London SNG II 1184
	5 Paris	B	London BMC 37
	6 London	C	London BMC 41
	7 Hirsch 32	D	London BMC 39
	8 Private collection Y	E	London BMC 38
	9 Woodward	F	London SNG II 1196
	10 Palermo		
	11 Berlin	Plate 5	Motya
	12 London	37	Palermo
	13 Berlin	38	Paris
	14 Egger	39	London
	Z 1 Berlin	40	Ward
Plate 2	Z 1 Private collection Y	41	London
	15 Berlin	42	Berlin
	16 Copenhagen	43	London
	17 Egger	44	SC 1907
	Z 1 Imhoof-Blumer NZ 1887	45	Hirsch
	Z 2 Oxford	46	AC 14
	Z 3 Paris	47	London
	A Berlin	48	London
	B Paris	49	London
	Z 1 (x 2) Private collection Y	50	Private collection Y
	X London		
	Y Hunter		
Plate 3	18 Copenhagen	Plate 6	Panormos
	19 Copenhagen	A	Palermo
	20 Jameson	Z 2	Oxford
	21 London	1	Private collection Y
	22 London	2	MMAG 43
	23 Cambridge	3	London
	24 Nav. 12	4	London
	25 Pennisi	5	London
	26 London	6	MMAG 43
	27 MMAG 43	7	Palermo
	28 Cambridge	8	Oxford
	29 London	9	London
	30 London	10	London
Plate 4	31 London	11	Hirsch 32
	32 Egger	12	London
	33 Berlin	13	Vienna
	34 Hirsch 33	Plate 7	Panormos tetradrachms
		1	Nav. 4
		2	Bordonaro
		3	Private collection Y

4	MMAG 43	45	Paris
5	Paris	46	London
6	London	47	Cambridge
7	Cambridge	48	London
8	Jameson	49	London
9	Nav. 4	50	London
10	London	50	Leu
11	Nav. 4	51	Salton
Plate 8	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 9	22 Hirsch 32	Plate 13	62 Oxford
23	London	63	Berlin
24	Berlin	63	London
25	Palermo	64	Berlin
25	Egger	65	London
26	Brussels	66	London
27	Paris	67	Leu Sicilia
28	London	68	Jameson
29	Oxford	69	Brussels
29	Hess-Leu 1964	70	Boston
30	London	71	London
30	Naples	72	London
Plate 10	31 Brussels	Plate 14	73 London
32	Brussels	74	London
33	London	75	Paris
34	Jameson	76	Cambridge
35	Hague	77	London
35	AC 16	78	Boston
36	Woodward	79	Paris
37	London	80	London
38	Munich	81	Cambridge
39	London	82	Berlin
40	Copenhagen	83	Brussels
41	Egger	Plate 15	R s m l q r t
Plate 11	42 Berlin	1	London
43	Hague	2	Lockett
44	London	3	Leu
		4	Uncertain

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	11 Hirsch 19	Plate 20	58 Private collection Y
	12 London		59 London
	13 London		60 London
	14 AC 14		61 Lockett
	15 Paris		62 Helbing
	16 Pennisi		63 London
	17 London		64 London
	18 London		65 Bank Leu
	19 London		66 Boston
	20 Private collection Y		67 Nav. 10
	21 London		68 London
	22 Cambridge		
Plate 17	23 London	Plate 21	69 London
	24 AC 16		70 London
	25 Stiavelli		70 Lockett
	26 ANS		71 ANS
	27 London		72 London
	28 London		73 Copenhagen Thorvaldsen
	29 London		R 1 (x 2), reverse of Ršmlqrt 1 –
	30 Nav. 6		London
	31 London		A Carthage – SC 24. 3. 1902, 15
	32 London		B Carthage – Bourgey 23. 5. 1910,
	33 Hirsch 16		37
	34 Nav. 10		C (x 2) Kephaloidion – Pennisi
Plate 18	35 Hague	Plate 22	Thermai
	36 Hirsch 33		1 London
	37 Brussels		1 Uncertain
	38 ANS		2 ANS
	39 London		3 Uncertain
	40 Hirsch 14		4 London
	41 London		4 Paris
	42 London		5 Paris
	43 Lockett		6 Pennisi
	44 Paris		7 London
	45 Bompouis		A Private collection
	46 London		B London
Plate 19	47 Glasgow		C London
	48 Nav. 5		
	49 London		Solus (?)
	50 Hess-Leu		X 1 London
	51 Leu	Plate 23–24	see p. 74–75

PLATE I

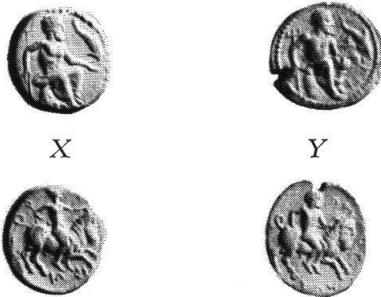


Motya I
Panormos (Z 1)

PLATE 2



Z 1
(*X 2*)



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

PLATE 3

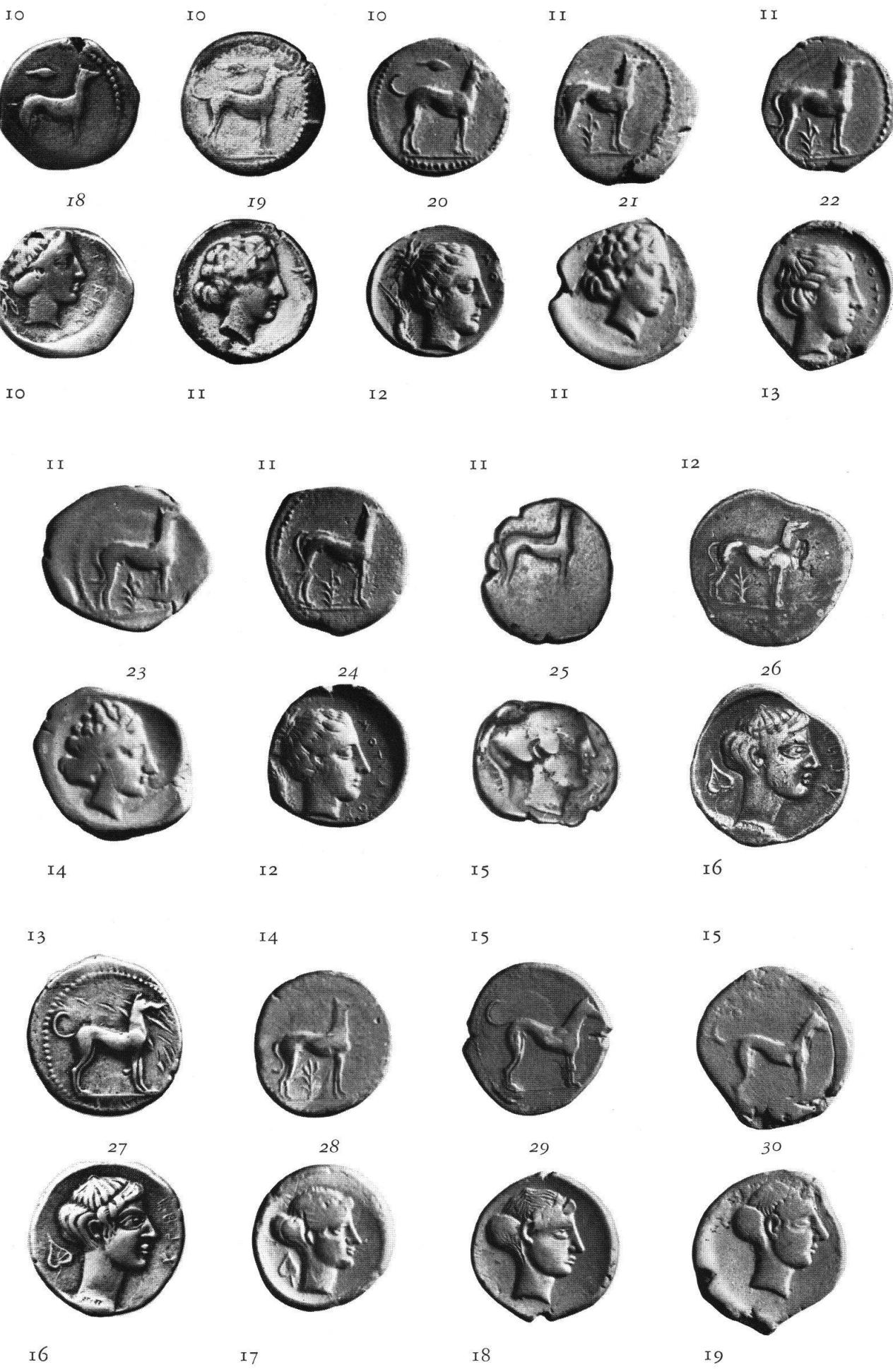


PLATE 4

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A

B



C

D

E

F



Motya II
Segesta (A-F)

PLATE 5



Motya III

PLATE 6



Panormos



PLATE 8

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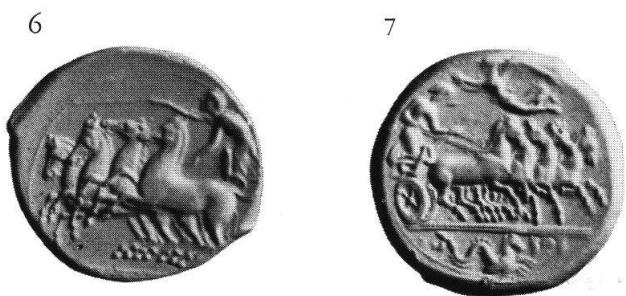


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PLATE II



Panormos

PLATE 12

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Panormos

PLATE 13

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49"



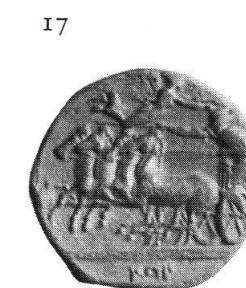
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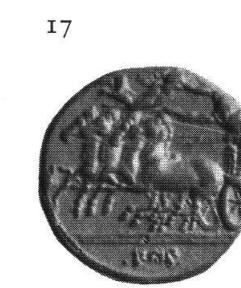
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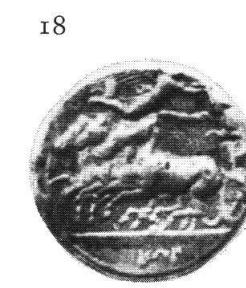
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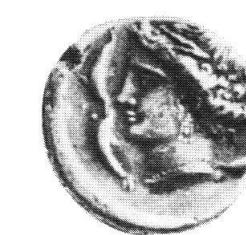
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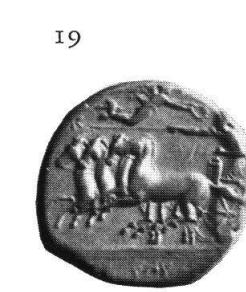
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PLATE 14

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PLATE 15



PLATE 16



II



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II



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II



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I2



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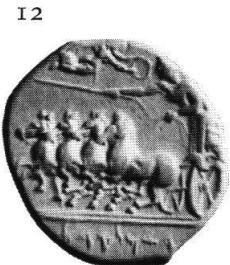
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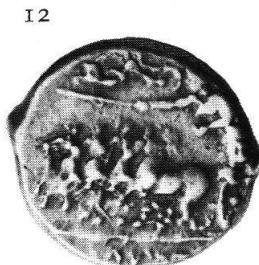
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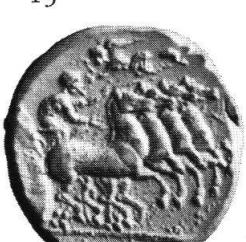
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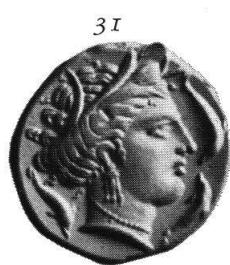
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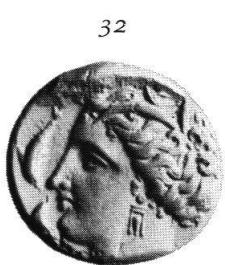
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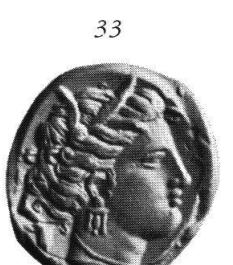
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PLATE 18

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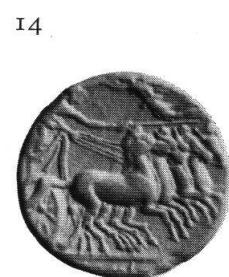
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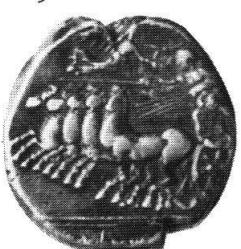
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PLATE 20

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R I ($\times 2$)

A



B

C ($\times 2$)Rsvmlqrt

Lilybaion (A, B)

Kephaloidion (C)

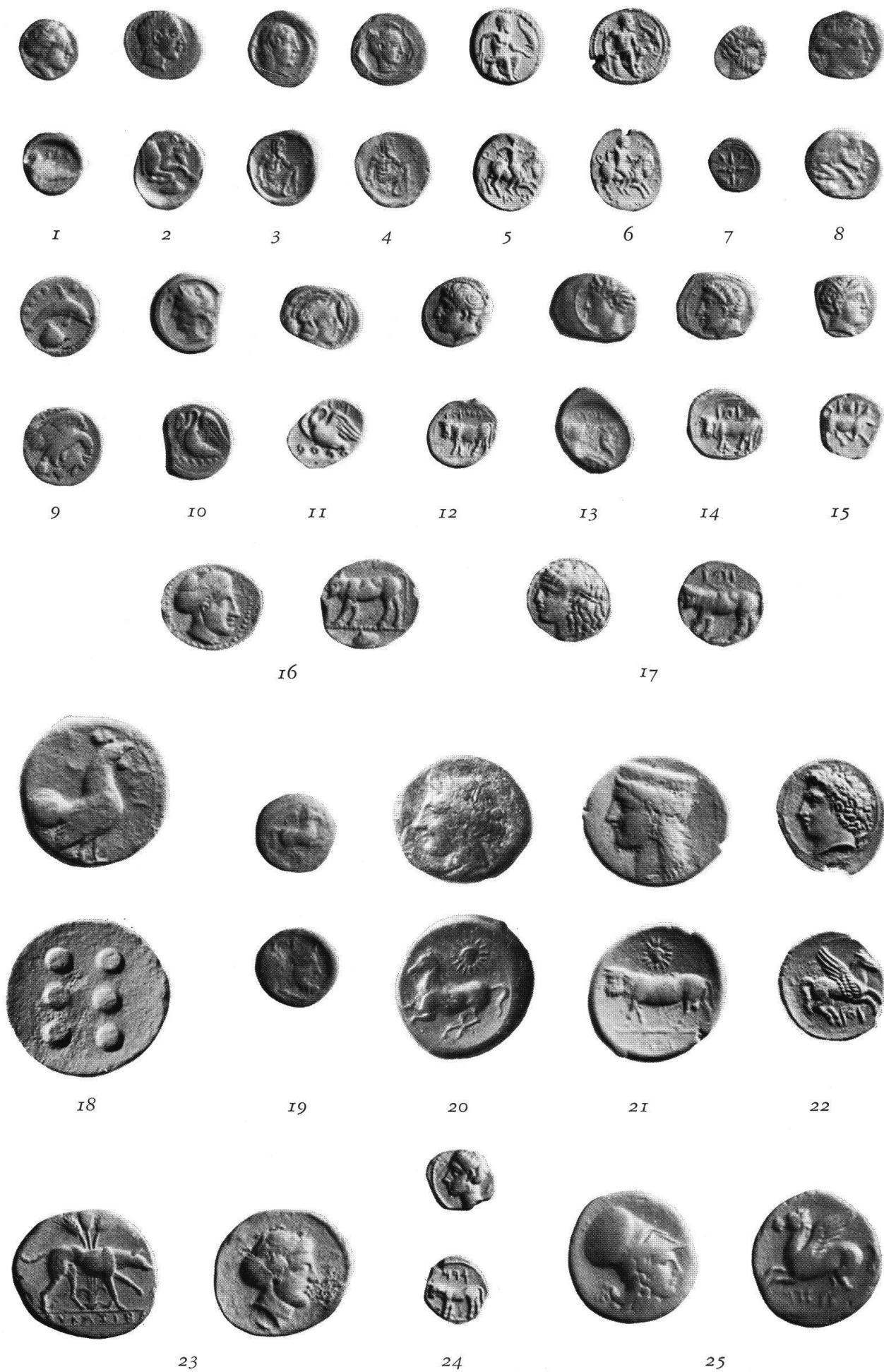
PLATE 22



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



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



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