



Durham E-Theses

Phrygillos, a die-engraver for Syracuse, and his association with certain South Italian mints

Wynn, G. D.

How to cite:

Wynn, G. D. (1967) *Phrygillos, a die-engraver for Syracuse, and his association with certain South Italian mints*, Durham theses, Durham University. Available at Durham E-Theses Online:
<http://etheses.dur.ac.uk/9654/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

Academic Support Office, Durham University, University Office, Old Elvet, Durham DH1 3HP
e-mail: e-theses.admin@dur.ac.uk Tel: +44 0191 334 6107
<http://etheses.dur.ac.uk>

Phrygillos, a die-engraver for Syracuse, and his association
with certain South Italian mints.

by G. D. WYNN, B.A.

Thesis submitted for the degree of M.A., 1967

*The copyright of this thesis rests with the author.
No quotation from it should be published without
his prior written consent and information derived
from it should be acknowledged.*

C O N T E N T S.

Introduction

Bibliography

Chapter I Phrygillos in Syracuse

Chapter II Phrygillos in the "Birds" of Aristophanes

Chapter III Phrygillos in Thurii

Chapter IV Phrygillos in Terina

Chapter V Miscellaneous Associations

Conclusion

Appendix A - The Gem

Appendix B - Smaller Denominations at Syracuse

The Catalogue.

Plates.

INTRODUCTION

The precise field of this numismatic study is that of authorship. Was Phrygillos, whom we know to have cut dies for Syracuse from the fact of his signature (once in full) upon those dies, also the engraver of numerous dies for certain other mints, especially Thurii and Terina where there are large groups of uniform style? It is always attractive to assign dies to a specific engraver whose name may or may not be known, if only to shed a little light on these people about whom we know very little. Earlier numismatic scholarship was quick to seize such opportunities, though because a good part of the evidence must always be that of style, granted some other more concrete link, such as in this case the letter ϕ , there was and still is disagreement. However, because there has never been a detailed study of the coinage of Thurii such as there is for Syracuse and Terina, numismatists have based their suppositions on the evidence of only a few dies. The collection of a larger number of coins of Thurii would have served to indicate or underline similarities and differences which were not heretofore obvious.

Although it is very probable that there are still more coins which may be collected in the case of Thurii, sufficient have been assembled here to make it possible to see very clear distinctions in the coinage of that city which is relevant

to this study. This sheds some light on the subject of Phrygillos as an engraver-errant, since the theory of his association with the Italian mints is based on a certain progression of links. First we have his name in full at Syracuse, and then in abbreviated form Θ PY; Θ PY appears at Thurii on some reverses and is linked with a single Φ on the obverse of the combinations, which in turn leads on to a very large number of dies at Thurii signed with a ϕ only and also to the various other mints, Terina, Velia, Heraclea and so on. What happens in the middle of the Thurii link, that is between the ϕ which is linked to the Θ PY and the coins which bear a ϕ only, might have a great effect on the subsequent links in the chain.

Following this basic progression I have dealt first with Syracuse and then, after examining Aristophanes' play, the 'Birds', to see if it is possible to glean from it any information on Phrygillos, I have turned to Thurii to discuss the dies there. Thence I have looked to Terina and the other mints with which Phrygillos has been associated. In dealing with Syracuse and Terina I have relied greatly on Tudeer and Regling respectively, and in the catalogue I have used their systems of numbering the dies. In the case of Syracuse I have included a list of specimens of each combination, having checked Tudeer's lists as far as possible, but with Terina I have omitted such lists, since full lists are not essential

for the purpose of this study and I have not been able to check Regling's lists in the time available to me. For lists of specimens of the Thurian di-staters (nos. 35 - 38 in the catalogue) I have used Noe's catalogue in N.N.M. 1935. In the bibliography I have included works and collections mentioned in Tudeer's and Noe's catalogues. In fact, I have not consulted all of these, but they are included for the sake of completeness. Those I have consulted, I have indicated with an asterisk. At the end of the section of the catalogue devoted to Thurii, I have included a summary of the main points of distinction between the four groups I have separated.

BIBLIOGRAPHY.ABBREVIATIONS; -

<u>A.J.P.</u>	American Journal of Philology
<u>B.M.C.</u>	British Museum Catalogue
<u>I.N.C.</u>	International Numismatic Congress
<u>J.H.S.</u>	Journal of Hellenic Studies
<u>J.I.A.N.</u>	Journal Internationale d'Archéologie Numismatique (Athens)
<u>N.C.</u>	Numismatic Chronicle
<u>N.N.M.</u>	Numismatic Notes and Monographs
<u>S.N.G.</u>	Sylloge Nummorum Graecorum
<u>Z.f.N.</u>	Zeitschrift für Numismatik

MONOGRAPHS AND GENERAL:-

- Benton, S. "Cattle egrets and bustards in Greek Art", J.H.S.
1961, pp.44-55
- Casson, S. "The technique of Greek coin dies", Transactions
of the I.N.C. 1936
- Croiset, M. Aristophanes and the political parties at Athens,
trans. Loeb, London, 1909
- Evans, A.J. "Horsemen of Tarentum", N.C. 1889
"Contributions to Sicilian Numismatics", N.C. 1896
"The artistic engravers of Terina and the
signature of Euainetos on its later didrachm dies"
N.C. 1912

- Forrer, L. Notes sur les signatures de graveurs sur les monnaies grecques, Brussels, 1906
- Fraser, J.G. The Golden Bough, part V - The Spirits of the born and of the Wild, vol. I, London, 1926.
- Furtwängler (Masterpieces) - Meisterwerke der griechischen Plastik, Leipsig - Berlin, 1893
- Gardner, P. The types of Greek Coins, Cambridge 1883
- Head, B.V. Historia Numorum, 2 ed., Oxford, 1911
- Jeffery, L. Local scripts of archaic Greece, Oxford, 1961
- Jørgensen, C.N. "On the earliest coins of Thurioi, Corolla Numismatica (in honour of B. V. Head), Oxford 1906
- Kraay, C.M. "The coinage of Sybaris after 510 B.C.", N.C. 1958
Greek Coins, London 1967
- Laistner, M.W.L. History of the Greek World 479-323 B.C. 3rd ed 1957
- Merry, W.W. Aristophanes, "Birds" Oxford, 1904
- Murray, G. Aristophanes, Oxford 1933
- Noe, S.P. "The Thurian Di-staters", N.N.M. 71, 1935-6
- Poole, R.S. "Athenian coin engravers in Italy", N.C. 1883
- Regling, K. Terina, Programm zum Winkelmannsfeste 66, Berlin, 1906
- Rogers, B.B. Aristophanes, "Birds", London 1930
- Rose, H.J. Handbook of Greek Mythology, 1928
Handbook of Greek Literature, 1934
- Rutherford, W.G. Scholia Aristophanica, vol. I, London 1896
- Schwabacher, W. Die Tetradrachmenprägung von Selinunt,
Mitteilungen der Bayerischen Numismatischen
Gesellschaft XLIII, Munich 1925
- Seltman, C.T. Greek Coins, London, 1955 ed.

- Seltman, C. T. Masterpieces of Greek Coinage, Oxford 1949
- Seltman, E.J. On some names, symbols and letters on Greek
Coins, J.I.A.N., 1913
- Sinclair, T.A. A history of classical Greek literature, 1934
- Tudeer, L.O. Die Tetradrachmen prägung von Syrakus in der
Periode der signierenden Künstler, Berlin 1913
- Weil, R. Die Künstlerinschriften der sizilischen Münzen,
Berlin 1884
- Williams, R.T. "The confederate coinage of the Arcadians in
the 5th century B.C." N.N.M. 1965

COLLECTIONS AND CATALOGUES:-

- *Ashmolean Museum, Oxford, S.N.G. V, part I (A), Etruria-
Lucania
- *Boston, Museum of Fine Arts, Catalogue of Greek Coins,
A. B. Brett, 1955. Warren coll. - Die griechischen
Münzen der Sammlung Warren, Regling 1906
- *Berlin, Munzkabinett, Staatliche Museen; Fox coll.,
Friedlander coll., Imhoof-Blümer coll., Lobbecke coll.,
Peytrignet coll., Prokesch-Östen coll.,
- Brussels, Bibliotheque Royale; Du Chastel coll.
*Hirsch coll. - Collection Lucien de Hirsch,
P. Naster, Brussels, 1959
- *Cambridge, Fitzwilliam Museum; Leake and General coll.,
part I, Spain-Italy, part II, Sicily-Thrace.

Catalogue of the McClean collection, S.W. Grose, vol. I.
Chandon de Briailles, see Paris.

*Copenhagen, S.N.G. The royal collection of coins and
medals, Danish National Museum. Also Thorvaldsen coll.
Dresden

Fiorelli, see Naples,

Fitzwilliam, see Cambridge.

Ginori, Marquis, coll.

*Glasgow, Hunter coll.;

Catalogue of Greek coins in the Hunter coll., G. McDonald,
vol. I.

Greene, H. A., coll.

Hirsch, see Brussels.

Hunter, see Glasgow.

*Jameson coll. (dispensed); coll. R. Jameson, Monnaies

grecques antiques, vol. I, Paris 1913, vol. IV, Paris 1932

*King coll., Bryn Mawr College, C. C. Vermeule, N.C. 1956

Leningrad Hermitage, National Coin Cabinet

*Lloyd coll. (now in B.M.) - Lloyd S.N.G. II

*Lockett coll. (dispensed) - Lockett S.N.G. III, parts I and II

*London, British Museum - including coins from Lloyd and
Mavrogordato colls.

de Luynes, see Paris.

McClean, see Cambridge

Munich, Staatliche Münzsammlung

Naples, Museo Nazionale; Santangelo coll.

Catalogo del Medagliere de Museo Nazionale del Napoli,
G. Fiorelli.

- *New York, Metropolitan Museum. Also E. T. Newell coll.
 New York, American Numismatic Society, Ward coll., catalogue
 by G. F. Hill, London 1902
- Newell, see New York, Metropolitan Museum.
- Palermo, Museo Nazionale
- *Paris, Bibliotheque Nationale, Cabinet des medailles.
 de Luynes coll. - catalogue J. Babelon, 1924 - 36.
 Chandon de Briailles coll. and Fonds général.
- Pennisi - coll. Barone Agostini Pennisi di Floristella,
 Acireale.
- Robinson, E. S. G., coll. Ashmolean, Oxford.
- Santangelo, see Naples.
- Tübingen.
- Vienna, Bundessammlung für Münzen und Medaillen
- Ward coll., see New York, American Numismatic Soc.
- Warren coll., see Boston
- *Weber coll. (dispersed); The Weber collection, L. Forrer,
 vol. I. 1922

SALE CATALOGUES:-

- *Ars Classica A.G., Lucerne, XIV, XVII
- *Egger Bros., Vienna, Dec. 1906
- *Glendining & Co., London, 1951, 1955
- *Hirsch, Munich, VIII, XV, XVI, XVIII, 1909, XXVI, XXX, XXXII
- *Naville, Geneva, IV, V, X, XII
- Niggeler, Basel, Dec. 1965
- Santamaria, Rome, 1934

Seaby, London, 1927

Sotheby & Co., London, June 1896, Feb. 1909, 1929.

WORKS MENTIONED IN THE CATALOGUE ONLY, AFTER TUDEER.

Du Chastel, A. - Syracuse, ses monnaies d'argent et d'or
au point de vue artistique, London 1898

Head, B.V., On the chronological sequence of the Coins of
Syracuse, N.C. 1874.

*Hill, G. F., Coins of Ancient Sicily, London 1903

Holm, A., Geschichte Siziliens in Altertum, I-III, Leipsig
1874-98

Müller, L., Description des monnaies antiques au Musée
Thorvaldsen, Copenhagen 1851

Sambon et Carnessa, Gemmes et médailles antiques, Paris 1902

Streber, F. Die syrakusanischen Stempelschneider Phrygillos,
Sosion und Eumelos (sic Tudeer), Abhandlungen der Kgl.
Bayr. Akademie der Wissenschaften I, vol. I, 1863.

Chapter I.PHRYGILLOS IN SYRACUSE.

That there was an engraver working in Syracuse whose name was Phrygillos is an undisputed fact, in as much as it is accepted that there is a period in the coinage of that city in the last quarter of the fifth century B.C., during which engravers placed their signatures upon the dies they cut. His name first occurs in full on the reverse of a tetradrachm (Tudeer rev.29), and in abbreviated form on the obverses of three subsequent tetradrachms. The reverse die mentioned above is die-linked to about the middle of a large group, the dies of which mostly carry a name, either in full or sometimes in abbreviated form, on one side or the other. Within the groups signed with any one name there is evident a stylistic coherence and consistency which strongly suggest that these names represent the signatures of the actual engravers of the dies, rather than of state monetary officials. Euainetos' signature, however, provides more conclusive evidence for supposing that these are artists' signatures, in so far as it occurs outside Syracuse in a style very similar to the dies he cut for that city. Exact parallels in this practice of an engraver regularly placing his signature upon the dies he has cut are hard to find. Elsewhere signatures

are sporadic, a fact which, together with noticeable inconsistencies in style perhaps, has led numismatists to group these signatures in some other cities with those which are more obviously official.¹ In fact, this practice of placing one's signature upon a die does not seem to have ^{been} common at all; but here it must be remembered that the engraving of Syracusan dies in this period was regularly of a somewhat higher standard than was to be found in many other Greek cities, whether in the East or West.

Granted then that an engraver named Phrygillos worked in the Syracusan mint at some time, I shall turn now to examine the style of this engraver and to see, by comparison with the dies signed ΦΡΥ, if all these dies are attributable to one hand, that of Phrygillos. The first die which he cut was a reverse (Tudeer rev. 29), to be used in combination with an obverse by Euth... (Tudeer obv.15) which had previously been employed with a reverse by Eumenes (Tudeer rev. 28). He followed the general design of this preceding reverse die in adopting certain attributes for the female head which had not appeared before the die by Eumenes. The previous reverse dies of the series had shown a female head surrounded by four dolphins. Eumenes, however, added to his head corn ears, a poppy head and an oak leaf, all of which were arranged neatly in the coiffure. Phrygillos

indeed took over these additions, but made no attempt to produce an exact copy of Eumenes' head. The hair on Phrygillos' die is arranged similarly to the majority of reverse dies in the larger group of those which carry signatures, being taken up in a roll at the back, and also at the forehead and temples. The roll takes up rather less of the total area of hair than on Eumenes' reverse, so that a larger area around the crown has only its natural thickness of hair. The free locks of hair at the ear and at the back of the neck are kept to a minimum, making it possible to distinguish much more of the ear. The hair itself is represented by sets of three or four parallel or converging lines as on all the preceding dies. The nose-brow line differs from Eumenes' reverse die in that it is neither straight nor very slightly concave, but is definitely offset at the bridge of the nose. The high brow is not vertical but curves away towards the hair, giving the cranium a more dome-shaped appearance. The lips are full, the lower being considerably larger than the upper, and the chin is strong and rounded, with the profile of the jaw continued towards the ear. The neck is unusually long and slender. The eye lies deep, making the nose very large. There is apparently no indication of an iris, either moulded or linear, a feature which had appeared on a very large proportion of the previous dies in the group of "signed engravers."² The ear is vertical and reminiscent of earlier

dies, and is adorned with an ear-ring in the shape of a hook, similar to its predecessors in the group. The dolphins are too plump to resemble accurately their live counterparts, but together with a neat ethnic more or less evenly distributed around their inside perimeter, they form a well-balanced surround to the head. The general effect of the whole is one of simplicity, suggesting to a certain extent an archaic style.

Of the four subsequent dies attributed to him, I shall deal first with those three which have the signature Φ PY on the ampyx (Tudeer obverses 16, 18 and 19). Tudeer is quite certain that the head is now transferred to the obverse of the coin, specifically from the shape of two flans (nos. 54a and 56b), supported by the fact that much larger numbers of "chariot" dies are used in combination with the "head" dies with which I am concerned here. The general design of the head proper has changed. The relationship of height to width is more natural here, and similarly the dolphins are more dolphin-like. The facial details, however, are very similar, but the eye clearly has a moulded iris and the lower lid is more obviously disproportionately short. The nose-brow line has become straighter but still off-set slightly at the bridge of the nose where the eye is set far back, as before. The main alteration is in the arrangement of the hair. Following the example of just a few of

the preceding dies of the group, the hair is held in at the front by an ampyx to which is attached a sphendone at the back (e.g. Tudeer revs. 20, 23, 24, 26, 27). Apart from affecting the balance generally, the new arrangement conceals part of the ear. Possibly to accommodate this change, the ear is represented a little differently, although it is still vertical. There is also a new type of ear-ring, in the form of three graduated pearls.³ The distribution of the ethnic, the dolphins and the design of the sphendone vary with the three dies, but the interior detail of the face is quite consistent and clearly from the same hand. There is, however, on obverses 18 and 19 an attempt perhaps to represent the eyelash. On all the dies so far dealt with, the dolphins or the combination of dolphins and ethnic provide a surround that is intentionally very close to the shape of the circular die.

The one remaining tetradrachm die associated with Phrygillos (Tudeer no. 17) does not bear his signature and is known in one example only. In some respects, it differs greatly from the other four dies. Firstly the head is a different shape; the accent is more horizontal, the distance between chin and ampyx being shorter, and the area of hair about the crown being decreased vertically from the ampyx-sphendone line to the crown but extended slightly from the brow to the back of the head. The

profile of the chin, sloping down towards the neck, and the shorter neck itself both add to this effect. The design of the ampyx and sphendone in that they form a straight line from front to rear, and the shape of the sphendone proper, which is not gathered in behind the ear, are unlike the consistent design employed in the three Φ PY obverses. The complex mass of curls forward of the ear also is alien to the Phrygillian tendency to simplicity. The nose-brow is straighter and the wings of the nostrils are less open. The lips are larger, tapering towards the inside. Even allowing for the deterioration of the die about the chin and neck, the profile of the jaw does not compare with the other four dies. It is difficult to discern much about the eye; the lower lid is very short but both lids may be thicker than on any of the Phrygillian dies. The ear apparently has no interior detail (i.e. an helix only) and the ear-rings, while they compare in design to Tudeer rev. 29, are considerably smaller than on that die. There are only three dolphins visible but there must surely have been a fourth which is off the flan. However, it does not seem to have been beneath the truncation, since if it was off the flan at this point, it would be at least partially outside the circumference of the linear circle which encloses the design. If it were above the head, it is difficult to see how both the fish and the ethnic were fitted in, assuming that it was of comparable dimensions with the other dolphins.

Further, although it appears from the outline of the sphendone at the back that this flan was double-struck, this is insufficient to explain certain pellets at the brow, in front of the neck, and hanging from the forward edge of the truncation. Tudeer declares that he cannot reject entirely the possibility of an overstrike, his contention being that the pellets certainly do not appear to belong to this die and that the pellet adjacent to the truncation could well be the dorsal fin of a dolphin. Indeed it has too regular an outline to suggest a flaw, which might possibly be the case with the pellet just above the ampyx. In this latter case it seems unlikely that it is a knot having to do with the ampyx, as on Tudeer reverses 35 and 47, since here the ampyx is not gathered in at all at the knot. However, Seltman illustrates a coin from a die by Euainetos where there is no gather in of the ampyx at the knot(s). Whatever the solution to these mysteries is, it affects this die only in its own right. The fact still remains that there are major differences apparent on this die, which is placed by die links to the middle of a group of three dies all of which display consistency in general design and specific detail alike. It seems unlikely, therefore, that this die should be ascribed to Phrygillos at all.

Phrygillos had a strongly characteristic style which stands out in the sequence of dies in this particular group. He was influenced by his predecessors, but he always impressed his own stylistic tendencies. On his first die he took over the corn ears, the poppy head and the oak leaf directly from Eumenes' die, but he did not copy the style of the actual head. This is much more reminiscent of some of the dies in the Sosion- Eumenos group.⁶ The more or less symmetrical arrangement of the dolphins and ethnic, however, is indicative perhaps of a somewhat later stage of development in the overall group of those dies with engravers' signatures. There is a noticeable contrast between a certain heaviness, and at the same time a delicacy and fineness.⁷ The other three dies he produced indicate this delicacy very well, looking rather to dies by Eucleidas and Euainetos as prototypes (see Tudeer reverses 20, 23 and 24). Once he had adopted the basic design of the head, he executed variations on the positions of the dolphins and ethnic (reverses 18 and 19). Always he is neat, tending to simple rather than complex designs. There is little true originality of design, except in his introduction of a different type of ear-ring (see note 3), but the facial characteristics are distinctive and especially so is the long straight line of the back of the neck, a feature of all Phrygillos' dies as compared with the rest of the series.

The difference in the style of the dies produced by Phrygillos as compared with the work of other engravers at Syracuse during this period is not sufficient in itself to suggest that he was a foreigner who came to Syracuse from elsewhere or that he had been subject to foreign influences.⁸ But two pieces of evidence present themselves to those who would support this view. Firstly, there is the seeming difficulty of the engraver to cope with the spelling of the city's ethnic. On his first die (Tudeer reverse 29) he spells it ΣΥΠΑΚΟΣΙΟΝ despite the fact that the 'omega' had already been in use on dies by Eumenes and Euainetos.⁹ Since the 'omega' had come in from the East^{9a} it seems a little irrational that an engraver who as it is supposed by some (e.g. Seltman) came from that part of the world did not use that form, even if he was using much older dies as prototypes, in view of the fact that it had been used before at Syracuse. When he makes a second attempt (Tudeer obverse 16),, he uses an 'omega', but alas in the wrong place - ΣΥΠΑΚΩΣΙΟΝ. After this calamitous error, he reverts to using ~~just~~ the 'omikron', but here again Tudeer obverse 18 affords a further proof of incompetency in this sphere. Here it is quite clear from those examples on which the whole of the ethnic is visible that it was first written incorrectly ΣΥΠΚΑ, and then corrected to its proper spelling. The obvious conclusion that the engraver was illiterate may not-

be so far from the truth, although pure carelessness cannot be entirely ruled out.¹⁰ After Phrygillos, in almost all cases, the 'omega' is used (except, for instance, Parme...). Indeed throughout this whole period when signatures occur, there are no other instances of mistakes in the actual spelling of the ethnic.¹¹ So the 'omega' is suspect evidence as to conjectures upon the country of origin of the engraver, but, if anything, suggests a Western origin on the basis of unfamiliarity with that letter.

The second point which Tudeer adduces to show that Phrygillos was under foreign influence is that the second die which he cut (Tudeer obverse 16), which, of course, carried the type of the female head surrounded by the ethnic and four dolphins and which had previously without exception been the type of the reverse die, was now used to produce the obverse of the coin. This unprecedented deviation from the normal practice in Syracuse, even perhaps in Sicily generally, requires some explanation. The technical answer lies in the fact that the obverse die was set directly on to the anvil and was therefore more resistant and more suited to impressing on a flan a complex and high relief. In addition, it was less likely to produce double-strikes. Certainly this was the reason for placing the frontal head of the Arethosa tetradrachm

by Kimon on the obverse,¹³ having learnt from the effect of wear and tear on Eucleidas' previous frontal head which formed the reverse type and so had a lower relief.¹⁴ But this was specifically in the case of a frontal head. Does the profile head here justify similar treatment, in view of the fact that, as Tudeer points out,¹⁵ the chariot dies were of extremely fine workmanship with a complex design and comparatively high relief? Phrygillos must surely have had great influence in the mint to have been allowed to make this change, whether for purely technical and artistic reasons or because he was strongly influenced by the practice of Italian cities, for instance, where it was quite usual to have the female head as an obverse type. The last possibility, however, is that it was Syracusan policy to transfer the female head, surrounded by dolphins, to the obverse. Indeed, this type could be said to be more distinctively Syracusan than the chariot dies which were more generally Sicilian in character. Perhaps the city wanted a clearly Syracusan type to boost the citizens' sense of pride, possibly at the time of the Athenian expedition or just after, or at least it sanctioned a change in the emphasis of the types for whatever reason. It is worthy of note here that the chariot dies at this point in the sequence seem to reassert their Sicilianism, but equally the reverse by Eumenes (Tudeer rev.28) copied by Phrygillos, seems also to proclaim for Sicily, whilst

still retaining the Syracusan basis. This suggestion, however, is a little improbable in view of the fact that the ordinary man would scarcely be aware of this change, any more than we should today in our own coinage. The possibility that it was carelessness on the part of the engraver hardly merits consideration; the difference in shape and size of the actual dies mean that he intentionally produced an obverse die. It would seem impossible that he was not aware that the chariot dies had always been the obverse dies in the past, especially as he had already produced a reverse die to be used in combination with an existing obverse die (Tudeer obv.15).

To sum up, had it been a lesser engraver than Phrygillos, a change for technical reasons or at his own whim would hardly deserve consideration. However, he does produce a fine head which might possibly justify this move, but the ultimate decision as to why there should be this deviation from traditional practice, repeated only by Kimon, who had a very definite reason for so doing, must remain one of personal choice. It can only serve to enhance Phrygillos' reputation as an engraver.

THE DATING

It is important to establish a date for the striking of

these coins, if only approximate or tentative, for comparison later with issues of the other cities with which this study is concerned. It may, in addition, help in the interpretation of the types, which was dealt with above.

There are no fixed dates for the Syracusan issues of the last quarter of the fifth century; in fact, the Euth die (Tudeer obv 15) which was used in combination with Phrygillos' first die, and the design initiated by Eumenes (Tudeer rev.28) are the only signposts, separated as they are from the consistency of the rest of the series, together with the date of the Kimonian and Euainetan decadrachms which come later in the series. Such knowledge as we have of the history of Syracuse during this period is very scanty owing to meagre documentation, so it will be as well to examine first the types themselves, and then to try to link them with such historical dates as are available either directly, or indirectly through the medium of another city.

I shall consider first the reverse by Phrygillos. Previously, a standard type had been employed, that of a female head facing left, which is generally taken to represent Arethosa, who had special connections with Syracuse and its harbour (Kimon, in fact, puts "Arethosa" on his famous

tetradrachm - Tudeer obverses 28 and 29). In this instance, however, there are certain additional attributes to the head design which suggest that the female represented here may not be Arethosa at all. A corn ear and a poppy head are fitted into the arrangement of the hair, both of which are closely associated with Demeter and Persephone. Fraser in "The Golden Bough" cites Theocritus' description of a "smiling image of Demeter standing by a heap of yellow grain on a threshing-floor and grasping sheaves of barley and poppies in both her hands".¹⁶ He goes on to say that corn and poppies either singly or together were frequent attributes of the goddess both in literature and art, providing a quite natural combination as exemplified in many a cornfield. The conclusion that this is in fact Demeter on Phrygillos' die is further enhanced by a change in the design of the chariot dies from Euarchidas' hand which were coupled with the three later dies of Phrygillos. Here the charioteer is female and holds a torch in one hand. Fraser cites Diodorus Siculus V,4, who says: "mythologists relate that Demeter lit torches at the crater of Etna and roamed over many parts of the world (to search for her daughter). Those people who received her best, she rewarded by giving them in return the fruit of the wheat".¹⁷ The author of the Homeric Hymn to Demeter (ll.47 ff.), however, he says, mentions the fact that Demeter searched for her lost daughter for nine days with burning torches, but does not allude specifically to

Etna.¹⁸ Thus since also Sicily was one of the places supposedly favoured with the gift of corn (i.e. the Sicilians associated themselves with Demeter on the basis of the geographical suitability of the land for corn-growing, and the legends grew up and were adapted to that assertion), the female charioteer here would seem also to represent Demeter with supporting evidence in the subsidiary type of the exergue, an ear of corn.

The obverse die by Euth (Tudeer obverse 15) was also a departure from the normal types of Syracuse. The subsidiary type of the exergue, which is large in proportion to the main type and indeed as compared with those of both preceding and subsequent dies, is a skylla, a mythical creature of the sea which together with Charybdis had its natural habitat roughly in the seas which form the part of the Mediterranean about the toe of Italy and Sicily. Its size relative to the whole die may perhaps be indicative of its importance, for the engraver was quite competent to execute a much smaller nike. But to what does the skylla refer? It is unlikely to be no more than an apposite mythological reference. A specific naval victory perhaps, or an overall defeat of Athenian naval supremacy in Sicilian waters, which after all was tantamount to a general Athenian defeat. Certainly the allusion will have some sort of nautical context. J. H. Jongkees is certain that it must

refer to the battle in the harbour, a suggestion borne out by his identification of the object in the nike's left hand as an "aphlaston", which has very definite nautical connections.¹⁹ He cites support in this identification from Mrs. Baldwin Brett and Prof. Rizzo.²⁰ From the material available to me, I am unable to form a clear opinion but whatever it is here, it is very similar to objects carried by nikes on some much earlier chariot dies of this signed group (e.g. Tudeer obverse 7).

The precise value of linking the skylla with a similar type in Acragas is small. There it occurs also on a tetradrachm in a similar form, and apparently on an even earlier tetradrachm.²¹ The later of these two dies comes a little before the termination of the coinage in 406 B.C. when the city was destroyed by the Carthaginians.²² The influence, as Tudeer has it, must surely have come from Syracuse rather than vice versa, thus providing a "terminus ante quem" for the Syracusan die.²³ In this connection, Tudeer points out that to see any further similarities, as does Forrer mistakenly,²⁴ in the arrangement of the horse and so on, is highly suspect. In the light of this, Weil's suggestion that the engraver left Acragas to work in Syracuse at the approach of the Carthaginians, in support of his theory of a West Sicilian origin for the type, must be ~~re~~jected.²⁵ There is then, a

"terminus ante quem" of a kind - it is too vague to be of much use - which tallies with and lends support to a similar link with Selinus.

The charioteer on this Syracusan die is naked and winged, another departure from the general scheme of things in this mint. It cannot be a second nike, because, in accordance with previous tradition, the charioteer here is male. The only suggestion as to his identity is put in the form of a question by Jongkees who asks "is it Assinaros?"²⁶ Impossible as it may be to find a solution for this particular problem, the charioteer of this die, like the skylla, is a prototype for the engraver of another Sicilian city, this time Selinus.²⁷ In fact, not only is there a connection between the charioteers of these dies of Syracuse and Selinus but there is also a striking resemblance in the arrangement of the horses and chariots. There is a further connection by way of the ear of corn which is in the exergue, as opposed to the grain of corn of the older tetradrachms of Selinus.²⁸ Since this die²⁹ produced the last coins of the Selinuntine series which was terminated in 409 B.C. when the Carthaginians took the city,³⁰ there is a second, more definite "terminus ante quem". Again Tudeer is certain that the influence comes from Syracuse rather than vice versa³¹; in fact it is difficult to imagine that the Euth. die for Syracuse should be dated after 409 B.C.,

whether Kimon's decadrachm dies are associated with the Asinaros or, as Kraay more recently,³² with Dionysius' victory over the Carthaginians in 405 B.C. Thus, on this basis, it would seem that a date not after 412-410 B.C., and quite possibly earlier, is likely for the Syracusan die.

How then does this date fit in with the significance of the types themselves? The suggestion that the skylla on the Euth. die was a reference to some specific engagement in the harbour, or perhaps a reference of a more general type, was mentioned above. Indeed a connection with the Athenian expedition is quite acceptable as far as concerns the dating, but what of Demeter? Her association with crops might suggest a food shortage, but quite apart from the fact that there is no historical evidence of a major food shortage as the result of an effective blockade, why should they appeal to Demeter in this way? Rather, the continued use of the type of the female charioteer holding a torch long after the Phrygillan series and the use of the ear of corn in the exergue long after that suggest that another explanation must be found. The more general connections which Demeter had with Sicily have already been established; indeed the corn ear occurs many times in one form or another on the coins of many Sicilian cities. Thus Syracuse may well have adopted these types (including the skylla) as Sicilian and therefore anti-

Athenian types. To suggest that this was a confederate type for Sicily as a whole would be nonsense, since there was no standardisation of type and by no means all of Sicily was involved, and of those cities which were, not all were on the Syracusan side. But Syracuse could have seen herself for whatever reasons as fighting for Sicily against the Athenians who clearly had visions of the possibility of acquiring a Western empire. Further, there seems to be no reason for the adoption of such a type before the Sicilian expedition, that is in the years after the conference of Gela in 424 B.C., and in any event this would cause the Euth. die to be uncomfortably far removed from the Selinuntine issue.

The conclusions at which this consideration of the Syracusan dies has arrived are these. Phrygillos was an engraver who worked for the Syracusan mint probably about 413 B.C. His style was distinctive although his designs were, far from being original, drawing greatly on the previous issues of Syracuse. Suggestions as to his nationality based on the fact of the change of the head type to the obverse of the coin, on the difficulty he had in executing a correctly spelled ethnic and on his tendency to look to earlier types for a basis for his designs, have little or no foundation. Any support for, or dismissal of, such theories as the result

of the acceptance or otherwise of the possibility of certain allusions in "The Birds" of Aristophanes is dealt with in the next chapter.

NOTES

1. Compare the later coins of Thurii.
2. Tudeer p.149, but see remarks on subsequent dies by Phrygillos.
3. Tudeer p.236. Apparently this type of ear-ring is not new, but has its origin in some of the various types of the older tetradrachms of Syracuse.
4. p.150
5. Masterpieces, p.85, 36b.
6. cf. Forrer p.145
7. As Tudeer remarks p.224
8. This suggestion is discussed in chapter II, with regard to the evidence of "The Birds".
9. See Tudeer pl.II reverse 24-28. But N.B. Sosion signed ~~ΣΟΣΙΩΝ~~ (Tudeer reverse 2) but the ethnic has an "omikron".
- 9a. Jeffery pp. 37-38.
10. See Tudeer p.149
11. Eucleidas sometimes and Euainetos once, employ a variant form
12. Tudeer p.227
13. Tudeer obverses 28, 29
14. Tudeer reverses 36, 37. The facial details, especially the nose, become distorted by wear.
15. Tudeer p.148
16. Fraser p.43, after Theocritus Idyll VII, 155 ff. See also p.43, note 3.
17. Fraser p.57

18. Fraser p.57, note 2.
19. Kimonian Dekadrachms p.45 and note 3.
20. Brett - Victory Issues N.N.M., 75,2
21. Tudeer p.229. Illustrated Seltman Coins pl. XXVI, 10;
pl. XXVI, 11 it may be noted, seems to have a winged
charioteer.
22. Laistner p.266
23. Tudeer pp. 256-7.
24. Forrer p.246
25. Weil, Kunstlerinschriften p.9 etc.
26. Kimonian Dekadrachms, p.45, note 1
27. Schwabacher, Q14a, Q14b.
28. cf. Brett, Boston Cat. 321.
29. Lloyd S.N.G. 1240: Seltman, Coins pl. XXVI, 10
30. Laistner pp. 266-7.
31. Tudeer p.262
32. Kraay, Greek Coins, p.288

Chapter II.PHRYGILLOS IN THE "BIRDS" OF ARISTOPHANES.

C.T. Seltman¹ has suggested that there might be in Aristophanes' play, The "Birds", specific references to two die-engravers who worked in Sicilian mints, namely Phrygillos for Syracuse and Exakestidas for Camarina. He points out later, however, that it may be no more than coincidence that the names of two men who had placed their signatures on some Sicilian coins should also occur together in a play by Aristophanes. But the question has been raised, are these the same two men in both instances, or not? Miss Benton² takes the suggestion further when she attempts to identify the species of bird on the coins of Thurii, with which I am concerned in this study, and to associate it, as a punning signature, with Phrygillos of Syracuse. The play is of great importance as supporting evidence for such a proposition, since it provides the only known instances of the word φρυγιλλος and here in a context where the ornithological knowledge of the poet is attested by his employment of the names of a very large number of different birds. The precise value of linking the two engravers with the two names in the play is this; although it cannot help in the dating of the Syracusan issues (for all one could deduce from such a connection is

that these engravers were known in Athens just prior to the production of the play: whether the men in the play had recently arrived at Athens from the East or, for that matter, from the West, or whether they left Athens at about that time, is never stated directly and so is a subject for guesswork), a definite link might be established between the Syracusan engraver and a bird, of whatever species, thus giving more credence to the suggestion that the bird which appears on the coins of Thurii especially was intended as a canting badge.³ Obviously, if it can be shown that φρυγίλος was the real name of a genuine bird, the possibility of such a connection at least would be incontestable. The reference to Exakestidas would serve to make the proposition of a specific reference to Phrygillos more credible, and that much less likely to be attributable to coincidence.

First, it will be relevant to consider the date of the play. The production was staged at the festival of the Great Dionysia of 414 B.C. and took second prize after the "Revellers" of Ameipsias which is known to us by name only.⁴ The "Birds" indicates an extensive knowledge of ornithology on the part of its author, and this together with the fact that it is by far the longest of all Aristophanes' extant comedies might suggest that it was a long time in preparation.⁵ This may in turn

indicate that the names of Phrygillos and Exakestidas must have been familiar to the Athenian public rather before 414, but equally they could have been inserted at a late stage in the preparation to achieve a certain degree of topicality. Of course, my whole argument here is based on the assumption that the references are of the topical jibe type in the usual Aristophanic tradition.

The ornithological knowledge which is evident in the play would suggest that Aristophanes employed the names of birds with intentional care, a point to be remembered in the treatment of φρυγιλος in its own right. This bird appears in two places only⁶:

εἰ δὲ τυγχάνει τις ὦν φρὺξ μηδὲν ἦττον Σπινθάρου
φρυγιλος ὄρνις ἐνθάδ' ἔσται, τοῦ Φιλήμονος γένους
(11.762-3)

καὶ φρυγιλω Σαβαζίω
καὶ στρουθῷ μεγάλῃ,
μητρὶ θεῶν καὶ ἀνθρώπων- (11. 873-5 ed. Rogers).

The first reference (1.763) comes in the epirrhema of ^{the} parabasis where the chorus is inviting any mortal who would like to enjoy a pleasant life in the future to come and join the birds. Here they indicate appropriate bird names for various types of individual who might seek to join the new community. In the second reference (1.873), Peisthetairos and Euelpides have now

donned their wings and are putting in order the affairs of the newly built Cloudcuckooland. They command the priest to sacrifice to the new gods, who are generally the Olympian gods with the addition of some others, all of whom have undergone a metamorphosis by being given the names or qualities of birds. These lines are a part of the priest's invocation. In both cases the name is found among birds which are identifiable, although the φρυγιλος itself is otherwise unknown. Rogers⁷ states that φρυγιλος is the reading in "R.,V.,U., and apparently all the mss." We cannot therefore make an exact equation between the man and the bird owing to the slight difference in spelling between the two (that is to say the word must be here the name of a bird but not of a man); rather, if there is a connection, it must be in the form of a pun. But equally, of course, there may be no pun intended. Then what of the bird? The scholiast has little to offer on the first passage, viz. "the name of a bird".⁸ Rogers, in the introduction to his edition claims definite identification for all but 6 of the 79 birds mentioned, and of those 6, not all are as obscure as φρυγιλος. It would seem unlikely, therefore, that after such careful attention had been given to the employment of the majority of these birds, this should prove to be an invention on the part of Aristophanes to provide a pun upon Φρυξ, based on such genuine names as ὄρχιλος, τροχιλος etc

Miss Benton says⁹ "Aristophanes suggests that the word should be derived from Φρυξ", but I can see no reason why there should be any more than a similarity of root, which was ideally suited to the purpose of the poet, as Merry expresses it in his note on the line, "to make a jingle with Φρυξ ". There is indeed much play upon Phrygians, e.g. at l.873 where Sabazios is accorded the bird-name φρυγιλος - he is a Phrygian god just as Cybele is a Phrygian goddess;¹⁰ and at l.1244 Peisthetairos asks Iris if she thinks she is trying to frighten a Lydian or a Phrygian. But this last reference introduces a different point. Here it seems to be a jibe at the proverbial cowardice of the Phrygians (cf. under Φρυξ in Liddell & Scott - δειλοτερος λαγω Φρυγος - proverb quoted by Strabo 1,2,30.), whereas before the remark was aimed more at foreigners in general who somehow, apparently to the resentment of the poet managed to insinuate their names into the lists of Athenians or who at least posed as Athenian citizens (e.g. Exekestides, a Carian, l.11 and Acestor, a Scythian, are attacked in addition to Spintharos and Philemon whom the scholiast says were Phrygians and barbarians.¹¹ From this evidence then it seems almost certain that φρυγιλος is the name of a real bird, which provides a convenient pun on Φρυξ, making it possible to poke fun at Phrygians in a feasible bird context.

Another point to be gleaned from the connection with Phrygians is that, as Miss Benton observes, "the joke would lose most of its point if φρυγιλος was just a resident, native finch",¹² a fact which is important to her specific identification of the bird. Furthermore this explanation of φρυγιλος although it does ^{not} preclude any reference to Phrygillos, tends to make the possibility of such a reference appear somewhat remote. In fact, were it not for the other name which occurs in the play and which is associated with Phrygillos in an entirely different context, any suggestion of a reference to that engraver would surely be regarded as reading into the lines of the play something that was never intended.

The possibility of such a reference may be remote, but it certainly cannot be entirely dismissed on the evidence so far presented. Because the name of the man does not occur in the play, but only the bird-name, I shall leave a consideration of the actual man until I deal with Exekestides who does comply with the former requirement, and turn first to an examination of the play in its historical context. The Sicilian expedition had sailed in the summer previous to the production of the play and, as yet, (the Great Dionysia being held in the spring) Athens had no inkling of the disasters which were soon to befall

her enterprise. But to see a connection ^{between} a Phrygillos in Syracuse (having recently left Athens for Sicily) and the name in the play, based on the assumption that the play is an indictment of the expedition, or simply that Sicilian matters in general¹³ must surely have been in the public mind, would be ill-judged. The fact is that commentators do not agree on the first point, although it is impossible to deny the second. Rose¹⁴ considers that the poet "Guardedly alludes to the Sicilian Expedition, in the form of a fantastic satire on all far-reaching projects such as that was." Sinclair¹⁵ would allow us to infer that Aristophanes had had enough of life and politics at Athens, but no more than that; he makes the point that Aristophanes does not attack the venture directly nor does he warn his audience of the dangers he saw in it. Murray¹⁶ feels that it is a "play of escape", a journey to Utopia, implying that the poet can no longer endure the thought of war, even to the extent of being unable to ask for peace as he had before, and so just gives rein to his imagination. A discussion on the alleged decree of Syracosios, which, the scholiast states,¹⁷ forbade personal attacks by name in such plays as this, need not concern us here since comedies of about this time (i.e. 414 B.C.) "abound in proper names and satirical allusions to individuals".¹⁸ Opinion then is divided as to how far the play reflects the poet's views on the Sicilian Expedition, but the currency

and importance of the enterprise to the Athenian public make the possibility of the odd allusion to the Expedition far from improbable.

The greatest support, however, for connecting Phrygillos with the name in the play comes from the occurrence in this same play, three times altogether, of the name Exekestides, (1.11, 1.764, 1.1527). In all three places, the jibe is aimed at a foreigner who either pretended that he had (when in fact he did not) or who forced his way into, the full rights of Athenian citizenship.¹⁹ Further, at 1.764 it is stated that he was a slave and Carian. The scholiast has this to say on 1.11:- "he (the poet) attacks this man as a foreigner and a wanderer; for wanderers know their way about better". On 1.764 he says:- "he is also the target for jibes in many other plays, but here because he is a Carian".²⁰ Merry in his note on 1.11 states that "Exekestides was a harp player." The only other reference I have been able to find is in Liddell & Scott, under 'Εξηκεστιδαλκιδαι, where Hesychius is cited as saying these were κίθαρῳδοι (lyre players called after Exekestides and Alkidas. Perhaps this has some connection with Merry's note. So we have a man who was certainly a foreigner, apparently a target for ridicule in other comedies of the time and who may possibly have been a

harp player (this assertion clearly has a weaker foundation than the others).

In Sicily the signature appears at Camarina on three, possibly four dies in the form Exakestidas.²¹ Like the case of Phrygillos there is not exact similarity, but here it can be explained as the same name which undergoes a slight change when written in a different dialect of Greek, i.e. Doric. There is no problem here since Caria from where the Exekestides in the play had come was largely Doric speaking; the fact that there was an overlap with Ionic on the northern border of Caria can assist in explaining the use of the Ionic form in the play. But if the reference was to the engraver and the Doric form of the name was the correct one, why not use that in the play to give more force to the jibe against a foreigner, a Carian? After all the Triballos in the play is made to speak gibberish for this very same reason. Unfortunately there is no precise dating at Camarina which can help in reaching a decision as to whether this is the same in both instances, but since it would not be disputed that he came in the last quarter of the fifth century B.C., the possibility is quite open in this respect.

The man referred to in the play must probably have been in Athens at least until just before the production of the play in 414 B.C. otherwise the allusion would have lost most

of its force. No mention is made in the play of a stay in Sicily prior to that date after which he returned to Athens and tried, possibly for a second time, to enroll as an Athenian citizen; this suggestion would require a somewhat earlier date for Syracuse, which would not be consistent with my arguments in the previous chapter. Certainly, the theory of a return to Athens from Sicily after the commencement of hostilities is attractive in explaining why they should find themselves public "Aunt Sallies" in Athens. But apart from the dating, the return theory necessitates some mention at least of their previous sojourn in Sicily, especially in the context of the events of the time. Further, since the return theory must assume a previous stay in Athens before going to Sicily, it is strange that there is no reference at all to their profession which would most likely have been familiar to the public. The alternative suggestion that the two engravers should leave Athens for Sicily about or after the beginning of hostilities would also seem unlikely. One would have to assume that they renounced any ties with Athens and were accepted by the "other side", perhaps as a result of popular ill-feeling against them as witnessed by the jibes in the "Birds". Of course, the jibes could have started after the event, arising out of their "desertion to the enemy" for perhaps purely financial reasons. But again this

possibility seems unlikely, in view of what must have been the Syracusan attitude to anyone associated with Athens and their treatment later of the Athenian prisoners.

The association of Phrygillos with φρυγιλος needs the certainty of reference in the play to Exakestidas the engraver to make it credible. Similarly, the suggestion that Exakestidas is one and the same man in both places loses much of its credibility if Phrygillos is not there to make it appear something more than coincidence. In other words, they are to a great extent inter-dependent, although Exakestidas is the mainstay. Also the references in the play are not really connected with each other significantly, that is they do not suggest a connection between the two names, one of which is not a proper name at all in the play - φρυγιλος, simply by virtue of their independence.

A critical judgement based on the evidence presented still leaves the final decision open, although I feel that what evidence there is points eastward of mainland Greece for a satisfactory explanation (i.e. it is to be found simply in Phrygia and Caria and their "barbarian" associations). But there still remains a nagging doubt that to explain it away as pure coincidence is too easy. Yet apart from the occurrence

of Exakestidas' signature at Camarina, the only evidence for finding the solution in the West is negative, or based on conjecture. However, this does not obscure the fact that φρυγιλος has been seen to be the name of some genuine bird (most likely a cattle egret, after Miss Benton), which would provide Phrygillos with a perfect punning signature, if he wanted.

NOTES

1. Masterpieces, p.16
2. "Cattle Egrets and Bustards in Greek Art", J.H.S. 1961
pp.44-45
3. A bird also occurs on some coins of Terina with a
4. Murray, Aristophanes, p.265
5. This is not to say that he did not write any other plays
between 421 and 414 B.C. See Rogers, intro. p.i for connections
with the "Peace".
6. Trans:- "And if one happens to be a Phrygian no less than
Spintharos here, he shall be a Phrygian finch, of the progeny
of Philemon" (ll.763-5). Finch is not intended to be accurate
but rather to put across the pun; all that matters here is that
this is a bird.
"And to Sabazios the Phrygian finch,
and to the great ostrich,
mother of gods and men." (ll.873-5)
7. Rogers, appendix, p.278
8. Schol. Aristophanica, vol.I, p.488
9. J.H.S., 1961, p.46
10. See Schol. Aristophanica, vol.I, p.501
11. Rogers, note on l.762
12. J.H.S., 1961, p.46
13. Eg. the general excitement about the expedition, the dreams
of empire etc., and finally the mutilation of the Hermae.

14. Handbook of Greek Literature, p.235
15. Like Rogers, he would attach no importance to the suggestion that Peisthetairos intended to represent Alcibiades, see History of Classical Greek Literature p.302
16. See Murray p.137 and p.139, note 1.
17. Inferred from a fragment of Phryrichus; see Croiset p.118
18. Croiset p.119
19. For a full explanation of the significance of l.1527, see the editions of Rogers and Merry..
20. Schol. Aristophanica, vol.I, p.427 and p.488
21. Forrer p.74. Eg. Cambridge, Fitzwilliam, S.N.G. 944-17.08g. Also Lockett SNG, 725-16.88g. These are from the same dies.

Chapter III.PHRYGILLOS IN THURII.

In the past many scholars¹ have sought to connect certain coins of Thurii with the work of Phrygillos in Syracuse. Their theories were based mainly on the convenient and obvious link of one coin (see my catalogue, Thurii no.6 O.3/R.4) which bore the letter ϕ on the obverse and $\Phi\Pi$ on the reverse. From there it was a short step to bring in yet more coins of Thurii also having a ϕ and, in addition, a bird between the legs of the bull, which was interpreted after the suggestion of A. Sambon^{1a} as being a punning signature of the engraver Phrygillos. Such a connection, from which sprang yet further connections with other Italian cities which had produced, at one time or another, a coin or coins bearing a ϕ in the field, is obviously attractive. Most authorities, however, who propounded these theories were concerned with studies of a more general nature which dealt with the possible link with Thurii only in passing, and although Jørgensen's work was a specific study of the early coinage of Thurii,² he barely scratches the surface of this particular problem.

Previously, when comparison has been made with Syracuse or elsewhere, only a small number of dies, sometimes of vastly different styles, has been involved, the differences in style being explained as a development of the same hand after a gap of some years (while the engraver was engaged on work for another mint). Here I have assembled a sufficient number of dies to be able to distinguish four stylistically separate groups; those associated with Φ PY ; those associated with a ϕ and a bird; those which are close in style to the second group but which have only a ϕ , and some other letters; lastly those which have either a ϕ or a bird but which vary in style considerably and are clearly not from any of the previous hands.

Group A, like all the dies with which I am concerned, has the same basic types which had been in use since the beginning of the Thurian coinage, a helmeted head of Athena to the right on the obverse, and on the reverse a bull, the ethnic and a fish in the exergue.³ The group consists of 4 obverse dies, and 4 reverse dies, die-linked in 6 combinations. The helmet is of a type that was common among the early issues of this city, with a single crest ridge and a more or less rectilinear neck-piece. The wreath which extends right across the helmet bowl has only four pairs of leaves as opposed to five or six more often both before and

after. The tail of the crest passes beneath the truncation to round off the design. Although the shape of the head changes slightly from O.1 to O.3, the interior detail of the face is clearly from the same hand. The nose-brow line is straighter, however, on O.2 and the forelocks are arranged differently. Also O.3 is rather less natural and lifelike than the previous two and the eye, in particular, is more prominent. All three of these obverses have a ϕ in the forward angle of the crest. Combined with them are four reverses, of which two carry the legend Φ PY, distributed between the legs of the bull (Thurii, R.1 & R.4). In all cases, the bull faces right, the exergue line is single and the fish also faces right. The bulls of R.1, R.3 and R.4 are very similar (except that R.3 is walking as opposed to trotting), having very nearly frontal heads and their tails whisked up in a hoop. R.2 has a smaller animal (as also the fish) which is walking as on R.3: the tail, however, hangs down straight. Further, the bull seems not to have any horns as are apparent on the other bulls of this group, and its head is less frontal. The musculature, however, does correspond, and this die would seem probably to have been cut by the same engraver who produced the other dies. The letter forms employed in the ethnic are uniform in type (see catalogue) but vary somewhat in the neatness and form of their arrangement

The second group (Group B) is much larger than the first, comprising 12 obverse dies and 23 reverse dies in 25 combinations, and shows a greater degree of consistency in style and in the design of the dies, both obverse and reverse. There are, of course, changes in the design, some large, some small, but throughout it is quite evident that they must all be the work of one man (in fact, we cannot be sure that one engraver produced both the obverse and reverse despite the ϕ on both sides, but it seems likely, especially in view of the fact that the consistent style of the obverse is combined with similarly consistent reverse type stylistically, but is not used with a reverse die outside this consistent group, and vice versa). The obverse type, as before, is a helmeted head of Athena facing right. However, the ridge of the crest is always represented by two parallel lines and the neck-piece is more curvilinear in design, varying in shape according as to how far it reaches down the neck and how far towards the ear. The wreath on the helmet bowl, where it is a single branch, has six pairs of leaves, but there are variations on this design in the cases of O.11 and O.12. O.13, however, introduces a major change in the design; here the helmet bowl is decorated with a skylla which remains exactly consistent in style on the last two obverses of this group, O.14 and O.15, the only real differences being in the

position of the tail fins. On every obverse of this group, the hair protruding from beneath the neck-piece is tied, not loose as in A, and there are three small locks and one large lock of hair outside the helmet at the temples and brow. Eye (no iris), ear, nose and lips are entirely consistent throughout the group. The eye is simpler and smaller than in Group A, and the ear has a less regular profile and is generally more squat. The mouth is larger and the gap between the lips curves down towards the jaw. The chin does show variations in shape but there is no example quite identical with those of Group A. The neck is fairly short and gives the impression of being thick, possibly owing to the arrangement of the hair at the back. It is sometimes adorned with a necklace. On all dies there is a ϕ tucked in the forward angle of the crest, which on this group comes nearer to the front rim of the helmet.⁴ As was stated above, the same consistency is apparent among the reverses and distinguishes these from the other groups. All carry a bull facing left, usually walking, but in the case of R.17 butting, a bird beneath the bull's belly also facing left, a double exergue line and a fish in the exergue, again facing left. The bulls vary in build and in attitude but have a distinctive musculature which remains the same, particularly the profile of the left foreleg and the almost triangular reduction in

the plane of the body forward of the haunch. The tails of all but the animal on R.17 hang down straight; there it is whisked back to fall over the near flank. It is noteworthy that where the head is profile, the left legs are placed forward in all but two cases, R.8 and R.12 (both quite early in the group), and that where it is semi-frontal the right legs are placed forward. In three instances only, R.12, R.19 and R.22, is the opposite hind leg advanced (correctly). Out of a total of 23 dies, 18 have a ϕ on the haunch (or, at least, traces of a ϕ), and on the rest it may well have been worn off owing to its vulnerable position. The letters of the ethnic display a consistent neatness and uniformity and are more or less in a straight line, the first letter or two sometimes dipping with the downward curve of the bull's neck. The letter forms differ from Group A in that they are of an older type (see catalogue).^{4a}

Group C comprises another set of dies, 4 obverses and 7 reverses in 7 combinations close to Group B and probably struck immediately after^{4b}, which have a ϕ on the obverse but sometimes other letters on the reverse, and no bird. Of these three combinations are staters and four are distaters. The style, while it is close to Group B, is more developed. The basic type is the same as before in^{the} latter part of Group B,

a helmeted head of Athena facing to the right with a skylla on the helmet bowl. On the distaters there is also a griffin on the neckflap. The skylla is more full-bodied and thicker-set, generally, and wears a necklace. The crest does not come as near to the front of the helmet as in Group B; it is closer, in fact, to Group A. At the brow and temples the hair is the same as in Group B, but at the back of the neck, after O.16, it is left untied. The lips are full and short, the nose smaller, the ear larger than Group B. The eye has a linear iris and a pupil represented, and the upper lid is not as straight as was evident in Group B. The reverse shows a butting bull facing right. The animals are similar to those of Group B but have no horns. Indeed they do not have quite the same musculature which was characteristic of Group B, and their tails are whisked up in a hoop to fall across the rear flank. The exergue line is double and the ethnic neat but employing the later type of letter form (see catalogue). There are various additional legends with which I shall deal later. These bulls are of a style compatible with the obverses of this group, but there are two combined with O.16 and O.17 respectively, namely R.30 and R.32, which are of a very inferior style. The animals are stylized and less realistic but are clearly based on the types of R.28, R.29 and R.31. Hence they may well be imitations from an inferior hand. The

exergue line is single, however, and the letters of the ethnic have no claim to neatness or uniformity of size.

Lastly Group D which is a miscellaneous group containing dies which are loosely connected with those in Groups A and B. In the past some of these have been associated directly with Group A or B via their immediately connections of a ϕ or bird, but the consistency evident within the two groups A and B in contrast to the wide variety of styles apparent here suggests that these dies should be kept separate for this reason alone. Although I have kept this group until last, I do not mean to suggest that it is chronologically later than the other groups, or, for that matter, that the dies were struck in this sequence. The group is formed simply on the grounds of a connection via a ϕ or a bird. It serves to underline the internal consistency of the previous groups about which much has been said before, and may help to shed some light on the significance of the ϕ or the bird. The reverse R.35 is extremely close to R.16 in Group B and the lettering of the ethnic corresponds with the letter forms found in that group. The ϕ is on the haunch and the bird is in evidence too, except that it is placed above the ethnic in flight, instead of beneath the bull's belly. If the engraver who cut the dies of Group B was also responsible for

this die, why did he change the type which he had used for every one of the other dies he cut? The fact that it is combined with an obverse from another hand might suggest that it was a very good imitation, although this same fact might equally suggest the possible explanation for the engraver of Group B to make a slight change in the type. Thus it may or may not be attributable to the engraver of Group B, and as such must now be left out of the discussion, despite the powerful impression of its many similarities to that group. O.21 seems to be an obvious copy of O.11, while the reverse with which it is combined (R.36), although it is not copied from either of the two reverses used with O.11, seems to be related to Group B generally. The bird, however, has been omitted, but the ϕ on the haunch retained. Of the remaining combinations in this group, only one (R.37) displays a ϕ , but all have a bird between the legs of the bull. Does this ϕ on the haunch (on R.37) represent the initial of the same man, in whatever capacity, as those 'phis' of my Group B, or is this die, and therefore also the 'phi', a direct copy of a Group B die? Apart from R.35 and R.36, which are rather special cases, this is the only instance where there is a ϕ on the haunch outside Group B. If the obverse also had a ϕ , and if there were further instances, some significance might be attached to the letter occurring in this particular instance.

but as it stands, the solution of a copy is more attractive. With regard to the bird in this group, there was no direct imitation, rather the idea of the bird as part of the type was taken over. That the origin for the bird is to be sought in Group B rather than D seems likely, especially if R.37 is regarded as a copy, since the remainder have birds which are similar in type to that die.

I have now established, therefore, that the coinage of Thurii relevant to this study may be considered to be divided into four distinct groups, of which the first two provide the basic links with Phrygillos. There have been various views expressed by numismatists as to whether or not Groups A and B, and possibly also C, were the work of one engraver. Some⁵ in their efforts to see a positive connection with Phrygillos, with which obviously the problem of how many engravers were responsible for cutting the dies in question is intrinsically bound up, would claim that one engraver was responsible for all the dies, explaining the differences of style as a development of the same hand. The contrary view is expressed by Jörgensen⁶ who considers that Φ PY on R.1 and R.4 represents the signature of a different engraver from the ϕ of my Group B, owing to what seemed to him to be an obvious difference in styles. Each of my groups, A, B and C, is

consistent within itself stylistically and, at the same time, quite distinct from the other two. This strongly suggests that there were three engravers, despite the more obvious, superficial links of the ϕ and the bird (as a punning signature of ϕ PY). The difference in styles, in fact, presents a stronger case than the internal consistency, although they are of course very closely bound up with one another. Group A seems to me to have been influenced, at least as far as the obverse type is concerned, by earlier coins of Thurii. O.1 recalls those issues of Thurii with an A in the forward angle of the crest,⁷ which Dr. Kraay would place near the beginning of the coinage of this foundation,⁸ while O.2 has certain similarities with one of the last issues of Sybaris.⁹ Groups B and C, however, reflect a more classical style which sets them apart from the other issues of Thurii. This may indeed indicate the introduction of engravers who had received their training and so formed their styles in Greece proper, especially in view of the fact that Thurii had close ties with Athens as a result of her foundation from that city.¹⁰ They would have come presumably before Thurii became cold, if not hostile towards Athens (assuming that there was a change in her relationship with the mother city¹¹). Whether or not this affects the relative chronology of the groups is another matter.

Previously, Evans¹² evolved a scheme of development for the bull from walking to butting, but some of the coins of the alphabetical series, which Dr. Kraay would place among the first issues of the Thurian mint, have a butting bull.¹³ Indeed there is one lone butting bull which appears at about the middle of Group B (R.17). Since the change in the obverse type comes within Group B,¹⁴ a change which to judge from all subsequent issues was permanent, Group A should come before Group B chronologically, or at least before the change in the obverse type. The fact that Group A uses a later form of some letters than Group B is of little importance since these developed forms were in use on many Thurian issues which are definitely earlier (following Kraay's arrangement of the first issues). However a more complete study of all the issues with a wreath on the helmet would be necessary before Group A could be dated relative to Group B with any accuracy.

Stylistically then there is ample evidence for separating the various groups, but what of the links which still remain, the letters and the bird? In Group A, two of the three obverses have a ϕ in the forward angle of the crest. O.1 may also have one but it is impossible to tell, owing to the fact that, on all three specimens I have, the impression from this part of the die is just off the edge of the flan. Of

the reverses, two (R.1 and R.4) have the letters Φ PY above the exergue line and between the legs of the bull. Regling and Evans¹⁵ consider that the size of the letters on R.4 is indicative of some sort of official signature. On R.1, however, which I place before R.4, the letters are much less conspicuous. The solution that R.4 is a copy might be acceptable, were it not for the excellent execution of the bull. If indeed this is an example of an official signature, there should be others outside this group to corroborate it; the inclusion of an official's initial or signature in the type is not likely to occur in one isolated instance only. In the earlier issues of *Thurii*,¹⁶ Dr. Kraay has established what appears to be an alphabetical sequence of dies, linked by single letters on the obverse and reverse. But this does not include all the letters to be found on the dies which have a wreath on the helmet, and even within the sequence he regards E as something of an anomaly. It is often tucked away behind the helmet and on the rump of the bull, and suggests by its inconspicuousness that it should be placed in another category (i.e. that of an engraver's signature). Thus there is an alphabetical sequence, and the possibility of an artist's signature, but nothing so far of the nature of an official signature. Group B does not help to throw much light on the problem. Here every obverse has a ϕ in

the forward angle of the crest and it would seem fairly reasonable to suppose that every reverse too carried a ϕ on the bull's haunch. I have stated above that I regard the two groups, A and B, as stylistically separate, and so most likely the work of two different engravers; how does this affect the ϕ on the obverse? Either it is a coincidence and both engravers have a name beginning with ϕ , or the ϕ has some other significance, such as perhaps the initial of the owner or master of the workshop which produced the dies, a practice for which there might be found a rough parallel in vase painting.^{16a}

As far as the reverses are concerned, the ϕ on the haunch does not occur, at least not to any significant extent, outside Group B.¹⁷ It is therefore tempting to think in terms of an engraver's signature. At this point, Group C can provide some hints. O.16 and O.17 both have a ϕ on the obverse. On one of the reverses combined with O.17 (R.31) and on the reverses (R.33 and R.34) of two closely related obverses (O.18 and O.19), which have no ϕ , there is the monogram VE on the haunch of the bull, which inclines one to think that the ϕ on the haunch of Group B may not represent the same person as that on the obverse. Further on the obverses of some staters which are closely related in style to the distaters mentioned above,¹⁸ there is an E in the forward angle of the crest, and the same letter also appears on

the reverse of one.¹⁹ In addition, on the exergue line of R.33 there is the legend ΙΣΤΟΡΟΣ, and on the bowl of the helmet of one of the staters with E in the forward angle of the crest ΙΣ²⁰. Lloyd, followed by Robinson,²¹ identified the latter as an abbreviated form of ΙΣΤΟΡΟΣ and concluded that to regard Histor as the artist involved the acceptance of E and VE as the initials of a single individual who must be a mint official. He concludes further that, since the E in the angle of the crest did not indicate an engraver, neither does the φ on O.16 and O.17 and that the distater (he is not concerned with the stater, O.16) is also the work of Histor. Noe²² rejects the idea that this conclusion is inevitable, especially when O.17 is compared to O.18. Indeed there are differences between these two dies, and perhaps even more so between O.18 and the coins with an E in the angle of the crest (see note 18) which the basic similarities tend to conceal. Noe goes on to point out that, in the case of a group of later dies which bear the name Molossos in full, as well as many others which have just an M, which some (e.g. Regling, Robinson) assume to be an artist's signature, the lack of uniformity causes one to doubt whether one man could possibly be responsible for all of them. If Noe is right, the monogram VE still requires explanation. If Histor is an engraver, VE is official (even though tucked away on the rump) but need not necessarily be regarded in the same light as E, since they do not occur together on a die or in a die combination, and there

are slight differences in style between the dies on which they appear. This leaves open the possibility that the ϕ of 0.16 and 0.17 could also be an engraver's signature, exact consistency in this practice being waived aside. This notion of a lack of consistency must obviously be applied to Groups A and B, but the fact that two different signatures, though not more, occur on the same die should also be born in mind.

As regards Group A, I am inclined to think that the ϕ PY might be an engraver's signature, especially since it is attached to the two superior reverse dies only (R.1 and R.4). In Group B, one at least of the ϕ 's (i.e. that on the obverse or the reverse) stands a fair chance of being an engraver's signature, and more likely the letter on the haunch of the bull. As far as the letters on the obverses are concerned, the length of time covered by the combinations of all the groups would be rather too long for one artist, or for one official to hold his position, but here we could feasibly have a spate of names beginning with the same letter, as those (of artists) which begin with EY at Syracuse.

McClellan's theory, as expressed in his article "The true meaning of ϕ in the coinage of Magna Graecia",²³ that there is a connection with a Sicilian gold standard introduced by Dionysius of Syracuse, is ingenious but impracticable in the light of the approximate dating of the Thurian groups (see below p64). He

would interpret ϕ to signify 500 units which was connected with a letter E at Naples signifying 5 units. This was to apply to various other South Italian mints, such as Metapontum and Tarentum. The idea is suspect and to be rejected, having as it does no real basis outside the imagination of its author.

Very closely linked with the interpretation of the letters on these dies, is the problem of the bird, which occurs on every reverse of Group B and on most of the miscellaneous dies which comprise Group D. Miss Benton has shown good reason to suppose that the bird should be identified as a cattle egret,²⁴ which would combine quite naturally with the bull. This clearly must have a direct bearing on the theory that here is a punning signature on the name, Phrygillos, since it is possible to explain the presence of the bird (i.e. by looking to nature) without recourse to the signature theory. The bird occurs also on coins of Group D, as was stated above, but it is possible that here it is simply an imitation of the type of Group B. Thus it cannot be used to interpret the latter, unless it can be shown definitely that these coins precede those of Group B chronologically, a task which is not within the scope of this particular study. However, the bird occurs again on a small group of much later coins²⁵ without any letters on the obverse or reverse, and also on some later distaters.²⁶ That these were intended as signatures is unlikely, and there is the possibility that the idea could have been copied from the coins of Group B. This

evidence, however, is of little value in deciding one way, or the other. If there are any other instances of a similar type of signature at Thurii, the possibility that this also is a punning signature must be strong. Certain other objects do occur, namely a pilos,²⁷ a one-handled cup, and a leaf (all on what are assumed to be earlier or roughly contemporary coins). The cup and the leaf do not appear to have been employed in conjunction with a letter, but where the pilos occurs there is a E behind the neckflap on the obverse, which Dr. Kraay considered might be an engraver's signature.²⁸ Thus the cup and the leaf are not at all conclusive and the pilos, since it does appear on some other dies close in style to that referred to above, does not provide a definite lead. To incline, therefore, to the explanation offered by the combination in nature of the bull and a particular species of bird is tempting, although, of course, this does not by any means preclude the possibility of a punning signature as well. However, when the idea of a punning signature was first conceived, it was generally assumed that there was a direct link between φ, @PY and Phrygillos who had in turn to be linked with φρυγίλος in the "Birds", and also, in the eyes of some, with "fringilla" meaning finch.²⁹ My separation of the various groups invalidates to a considerable extent the logical sequence, Phrygillos - @PY - φ - bird, which is necessary to establish a definite case for a punning signature. Thus, although I hesitate to come down on one side or the other, I view the possibility of a punning signature with a certain amount of suspicion.

The dating of the issues of Thurii is still very vague, for the only fixed date is the refoundation of Sybaris in 446 B.C.³⁰ From this phase Thurii sprang some two years later. The style of the coins of my groups is sufficient to show that they were not among the first issues of the mint, granted also the arrangement of the first dies by Kraay.^{30a} To this may be added the evidence of the change from wreath to skylla in the obverse type within Group B. Noe³¹ is at pains to point out that such a change must have some special significance for the city whose type it was, especially since it continued in use for so long. In fact, until very many years after the change to the skylla on the helmet bowl, there was only one other variant type employed by Thurii, that of a hippokamp, which occurs only in a few instances and which is related by the general style of the dies to those which have a wreath on the helmet bowl. The change itself, he observes, was a change from the type which had been adopted under Athenian influence (i.e. the foundation); though, of course, the head of Athena still remains, it is only the decoration of the helmet which is altered. Noe cites Thucydides³² to show that the initial Thurian assistance for the Athenian expedition was not entirely of their own volition and that, despite their refusal to join with Gylippos, they were not pro-Athenian. It was at Thurii that Alcibiades escaped from the escort of the Salaminia³³ and it was here that Demosthenes and Eurymedon called on their way to Syracuse.³⁴ Noe quotes Thucydides as saying that the Athenian

faction had been expelled, but he states that Thucydides does not say whether the Thurians contributed at all to the Athenian force. If they did, then the triumph of the anti-Athenians afterwards would, as Noe says, have been much easier. In fact, however, Thucydides³⁵ does state quite plainly that they did contribute to the Athenian force, so this point is quite valid. Lastly Thucydides states³⁶ that ~~ten~~ Thurian ships sailed with Hippocrates the Lacedaemonian in the winter of 412-411 B.C., so they had apparently changed their affiliation by this time. This evidence, coupled with the appearance of a similar type (i.e. the skylla) first in Syracuse and then Acragas and its possible anti-Athenian connotation, points very strongly to a date, a little after the final Athenian defeat in 413 B.C., for the change in type at Thurii. The other groups might then be dated relative to this, that is Group A rather before this time and Group C shortly after.

It remains therefore to consider if the engraver of Group A or of Group B could have been Phrygillos of Syracuse - Group C is excluded because of the style of the dies which was different again, and because of the other signatures which occur whether official or otherwise. Enough has been said already about the differences between the two groups which lead me to believe that they cannot be the work of one man. Since I place Group A before Group B chronologically, on the basis of style and the change in the type, Group A would come before the work in

Syracuse, and Group B, if this was the work of Phrygillos, would have to be set on either side of the Syracusan dies. Of course, to be sure of such a connection, something more than mere similarity of style is required, unless the dies are so close as to be unmistakably from the same hand, for which purpose the types also would have to bear some resemblance to one another. In the case of Thurii, Group A the "something more" was the Φ PY of R.1 and R.4. Thus as far as Group B is concerned there is only a ϕ , with the possibility, however remote, of a punning signature in the form of a bird to connect it with Syracuse, apart, that is, from any similarity of style. But in Group B, the detail of the face, the only real common ground, does not correspond with that of the Syracusan dies as regards the eye, lips, chin and ear, and also the letter forms, all of which are represented in a consistent manner in both sets of coins respectively. The truncation is a further point of difference; on the Group B coins the neck gives the impression of being much thicker, certainly not the characteristic of the Syracusan issues. The profile of the front of the face is less vertical in Group B at Thurii. Thus I am not in favour of associating this group with Phrygillos. Group A, however, has a stronger case. Apart from the Φ PY, which after all does not rank among the more common first parts of Greek names, the dies correspond more to the style exemplified in Syracuse.

The eye shows the same moulding of the iris, with a shorter lower lid; the lips, chin and perhaps also the ear are close; the neck is thinner and the letter form of the "nu", if not the "omega", is similar. With regard to the "omega", however, why should he use an "omega" consistently at Thurii, but only one^e at Syracuse and then in the wrong place (on the other dies, he uses an "omikron")? To obviate this difficulty, one has only to fall back on the theory of illiteracy or perhaps just carelessness, as shown by his attempt at the ethnic on Syracuse, Tudeer obverse 18. Thus the association³⁷ or equation of Phrygillos of Syracuse with the engraver of my Group A at Thurii is quite feasible, perhaps even probable. In both cases there is distinct evidence of the engraver looking back to older types for a model. Groups B, C and D, however, show an independent style, but one which is not totally unrelated to that of Group A and of Syracuse.³⁸ Any categorical statement, however, on the equation of the various engravers cannot be forthcoming on the basis of the available evidence.

E. J. Seltman in J.I.A.N. 1913, "On some names symbols and letters on coins", introduces another coin which carries the letters @PY below the bull, (B.M.C., 96-7.9g). This is clearly a much later die (on the basis of style alone), which can be linked with another die having a nike above the bull, as B.M.C. 96, but no @PY (Lockett, SNG, 524), and also with some triobols (Ashmolean, SNG, 1030-1). Thus it is in no way connected, except by virtue of the @PY, with the coins of Thurii with which this study is concerned.

NOTES

1. Sambon, Cat. Maddalena p.409. See also my chapter II.
2. Jörgensen, On the earliest coins of Thurioi, Corolla Numismatica, 1906
3. For a more detailed comparison of the groups at Thurii see summary of differences appended to Thurii section of the catalogue.
4. See summary of points of difference, obverse, section 4.
- 4a. Jeffery p.38 ("omega") and p.248 ("nu")
- 4b. The fact that they have a skylla puts them after Group B in which the change occurred.
5. Gardner, Jongkees. Seltman assumes this.
6. Corolla Numismatica p.174. As also R. S. Poole in N.C. 1883
7. Corolla Numismatica pl. VIII, 11.
8. Kraay, the Coinage of Sybaris after 510 B.C., N.C. 1958
9. N.C. 1958, pl. IV, 15.
10. R. S. Poole first went into this at length in N.C. 1883, but he was mainly concerned with later coins of Terina. Also Furtwängler, Masterpieces p.143. For Athenian contribution to refoundation see Ehrenberg, A.J.P. (lxix) 1948.
11. See later in the discussion of the dating of the Thurian groups.
12. Evans. Contributions to Sicilian Numismatics, N.C. 1896
13. N.C. 1958 p.28 etc.
14. O.13 is the first die to have a skylla on the helmet bowl

15. Regling, Terina note 9; Evans N.C. 1912 p.36
16. N.C. 1958 p.28.
- 16a. The parallel is neither definite nor exact, but masters like Euphronios seem to have supervised workshops and perhaps to have attached their signatures to products of the workshop in this capacity rather than that of painter or actual potter.
17. On R.35, R.36?, R.37 only.
18. Ashmolean S.N.G. 930, 931.
19. Ashmolean S.N.G. 930
20. Ashmolean S.N.G. 931
21. Lloyd N.C. 1924 p.135 ff; Robinson N.C. 1927 p.299 ff.
22. Noe N.N.M. 1935 p.12
23. McClean N.C. 1907 p.107 ff.
24. J.H.S. 1961 p.44 ff.
25. Fitzwilliam S.N.G. 607; Lockett S.N.G. 501; Lloyd S.N.G. 485
(same dies as Lockett).
26. Noe N.N.M. 1935 pl. VI, H.28, H.30
27. Pilos - Lockett S.N.G. 474; cup - Ashmolean S.N.G. 904;
leaf-Lockett 3493, Glendining Oct, 1955, 361.
28. See N.C. 1958.
29. A. Sambon was the first to comment on this in Cat. Maddalena p.409.
30. Kraay N.C. 1958 p.25 - he cites Ehrenberg A.J.P. 1948 p.149
- 30a N.C. 1958 p.28
31. Noe N.N.M. 1935 p.6 ff.

32. Thuc. VII, 57 - the final enumeration of the forces.
33. Thuc. VI, 61.
34. Thuc. VII, 33, 5.
35. Thuc. VII, 35.
36. Thuc. VIII, 35.
37. Of previous scholarly opinion, Jongkees and Seltman equate both Group A and Group B at Thurii with Phrygillos. Tudeer and Gardner were also of this opinion but with some reservation. Regling would not commit himself to following Gardner, and Evans, N.C. 1912, felt that a connection with Phrygillos was "not improbable." Poole saw a connection between Philistion at Velia who was an antecedent of the engraver of the same name whose name appears on later coins of that city and Group B.
38. Especially if it is considered that certain strictures may have been placed upon the engravers at Thurii, in that they had perhaps to produce a copy of some cult image. It seems to me, however, that Group B represents a very definite new style.

Chapter IV.ASSOCIATIONS WITH TERINA.

There is a group of coins of Terina which some authorities, on account of the ϕ on the obverse and sometimes also on the reverse, have associated with the engraver of my Group A or Group B at Thurii, while others have proceeded further to see a connection with Phrygillos of Syracuse, and in some cases, with other Italian mints.

The dies under scrutiny are placed by Regling to about the middle of the Terinaean series, that is between 425 and 420 B.C.¹; they show a considerable development of style from the earlier issues of the mint. There are two obverse dies in this group, both of which have the usual type of a head of a nymph, here facing right. On the first die (Regling R) the hair is tied on top, whereas on Regling S it is gathered in a roll about the ampyx, which causes less of the ear to be visible. The detail of the face is exactly similar, having a long, straight nose, an especially full lower lip curving sharply down towards the jaw, a rounded chin and a long, delicate neck. The eye has a linear iris (in the form of a semicircle) and a pupil. Both dies have a small ϕ behind the neck. There is a difference, however, in the surround; Regling R is enclosed by the ethnic and a linear circle, while S is enclosed by an

olive wreath, reminiscent, for example, of the series Regling F to L. Both dies are, as Regling maintains, from the same hand.

Nine reverses are used in combination with the two obverses, of which three ($\alpha\alpha$, $\beta\beta'$, $\gamma\gamma$) are employed in conjunction with both obverse dies. All portray a nike, either seated or standing and, in all cases except $\gamma\gamma$, facing left. But $\gamma\gamma$ is a vital link here. It exemplifies best the great advance in style made by this engraver. This die combines the perfect proportions of the body, the fine representation of the chiton, the natural movement of the extended limbs, the use of the wing to act as a background to the head, as if it were a halo, together with a hitherto unachieved mastery (in Terina) of perspective. But most important for the argument here, the head of the nymph is so close to that on obverse S (despite its miniature size) that we may be sure that the obverse and reverse dies of this group are from the hand of one engraver. This provides a basis from which account may be taken of the ϕ and bird where they occur on the reverse dies, which otherwise offer little comparison with either Thurii or Syracuse owing to the difference in types. If the reverse dies had not come from the same hand, the possibility of finding a connection between the bird and ϕ at Thurii or Phrygillos of Syracuse could be dismissed immediately. Since, however, the reverse dies are from the same

hand as the obverses, something may be learnt from their general style. Previously in Terina, the hard, straight lines had caused the nikes to appear wooden, but here the proportions are more satisfactory and the bodies somewhat less stick-like. The breasts seen through the diaphanous dress are less exaggerated and the creasing of the dress in gentler curves more natural. There is a slight change in style with $\delta\delta$ and the dies which followed (e.g. the head is smaller) but the inferior style of $\epsilon\epsilon$ is, as Regling points out,² clearly due to the fact that it was cut as a replacement for $\alpha\alpha$ (although the position of the wings is different and there is no φ), the restriction thereby imposed upon the originality of the engraver (i.e. because he was copying) being responsible for this slightly inferior product. Thus, whereas the obverses were, as Regling says,³ the result of a gradual development of style, the reverses show a considerable jump forward in the development of the type. That is to say, the engraver who cut them may well have been under the influence of a different tradition,^{3a} a fact to be remembered when comparison is made with Thurii and Syracuse.

The basic link with Thurii is the φ which appears on both obverses and three of the reverses combined with them.⁴ Not many other letters appear in the Terinaean series, in fact only Θ and Δ (apart from π which comes after the φ group), of which Regling⁵ considers the Θ to be official because of its large

size but holds open the possibility of an engraver's signature for the Δ , since it is generally less conspicuous. The similarity of style, therefore, within the group of coins under consideration, the smallness of the letter ϕ , and the fact that there is no evidence of a significant number of official signatures, suggest that this letter should be considered the initial of the engraver of the dies. Support for this theory is to be found in the fact that the ϕ does not occur outside this group, and also from the Π which seems to be the signature of another engraver whose work follows on immediately after that of ϕ , but most especially because one die combination (Regling no. 35) shows a coin with an obverse signed ϕ and a reverse signed Π .

On two reverse dies (Regling $\delta\delta$ and $\gamma\gamma$) there is a bird, the significance of which is yet another debatable point. Those who identified the bird at Thurii as a punning signature of Phrygillos were quick to see the same engraver at work in Terina, on the basis of the ϕ with added support from the bird. Regling⁶ notes the similar position of the bird on $\delta\delta$ to those at Thurii (i.e. between the legs of a stool, and at Thurii of a bull), and suggests that they are close to one another in appearance. Significance, I feel, could only be attached to this latter suggestion if the actual birds were very similar in appearance, which is doubtful. In fact, I cannot accept that $\gamma\gamma$ admits of comparison at all - it is an entirely

different shape, partially perhaps as a result of being in a different attitude - and in any event it is not clearly separated from the main type. At Thurii, the bird may be regarded more as a subsidiary type, personal or otherwise, owing to its disproportionate size relative to the bull and to the fact that totally unrelated things occur in the same position on other dies. In the case of ♂♂, the bird is in a very similar attitude to those at Thurii, but still does not compare exactly with any of them in shape, although here it must be remembered that there is a degree of variety in the shape of the birds at Thurii. The bird occurs elsewhere in the Terinaean series in two main groups, βββ - εεε and οοο - φφφ, and here, as a rule, it has a larger body. For an explanation, Regling⁷ offers "most call it a dove", but, as he shows later,⁸ there is no reason to see any connection between a dove and Nike or Eirene in classical antiquity. Thus there is no evidence for regarding a bird as particularly and meaningfully connected with Nike, as the kerykeion might be, but on the other hand, no especial significance can be attached to the two balls with which she is juggling on αα.⁹ Hence the use of a bird may be no more than a casual variety on the more usual attributes of the nike, and have no significance beyond that (i.e. as a signature). Further, the bird occurs on only two of the dies in this group as opposed to every one of the reverse dies of Group B at Thurii. If it was a signature why does it not appear on the other dies? The

obvious answer to this is that it could not always be fitted into the design. The coincidence that a bird should occur in conjunction with a ϕ is insufficient on its own to indicate a direct link with Thurii, and the ultimate decision on the question of a connection must rest on some other basis (i.e. the style of the obverses).

At this point, it will be convenient to notice the additional legend on the cippus of $\zeta\zeta$ which reads A7H. The fact that it is tucked away in a fairly inconspicuous position naturally suggested the possibility of an engraver's signature, which would, of course, affect the interpretation of the ϕ . Evans¹⁰ who treated the question at length, rejected Millingen's¹¹ suggestion of a connection with Ares which he found to be based on a wrong interpretation of a passage of Lycophron, in favour of ^LDenormant's suggestion that here is the name of a place, to be equated possibly with AQUAE ANGAE which was on the site of the apparently famous sulphur springs of Bagni di ^mSabiase.¹² Indeed, as Evans observes, there is little difference in size between this legend and the ethnic, which also has one letter, the "rho" retrograde. Thus it may perhaps be treated on the same basis. Further, the unusually elaborate and complex design might well indicate, as Evans thought, the representation of a genuine, existing bathing station.

What then of the association of this engraver with the Syracusan engraver, Phrygillos? Unfortunately there are no definite specific dates for any coin of Terina, by means of which it would be possible to place the group with which I am concerned here on one side or other chronologically, of the Syracusan issues. Rather, we are dependent upon Regling's synoptic view of the whole Terinaean series which puts them between 425 and 420 B.C. But in this respect at least, the feasibility of such a connection between Terina and Syracuse cannot be questioned. Previously, however, the link with Phrygillos of Syracuse came via Thurii, but clearly, as a result of what has been said above about the plurality of Φ at Thurii, this link is at least weakened.

Note 13 ?

The style of the Terinaean pieces is clearly very different from those of Group A at Thurii (most noticeably with regard to the eye and lips but also from the point of view of the overall artistic skill apparent from the coins). As far as the head dies are concerned, the Terinaean dies are superior artistically to such an extent that to regard them as a later development of the same engraver's work is, to my mind, unreasonable. If, as was assumed by numismatists previously, the Terinaean coins could be associated with Group A at Thurii via Group B of that same city (this might fill a considerable gap in a theory of the development of one hand), the suggestion of such a connection with Group A would be

more feasible.¹⁴ But the separation of these two groups at Thurii renders this approach impossible. Nevertheless Group B at Thurii remains to be considered for the possibility of a connection with Terina quite independently of Group A.

Of course, there are basic differences in the two designs (Terina and Thurii 'B'), but is it possible to reconcile the styles where there is a similarity of type, in the eye, nostrils and chin, leaving aside the more vertical profile of the face on the Terinaean dies? Perhaps, but I feel that it is difficult to relate the skill ⁱⁿ perspective and design which is apparent from most of the Terinaean reverses to some, at least, of the work at Thurii. There is, however, certainly one feature which they share in common; both show a new influence and forward progress stylistically in their respective mints. Poole and Evans especially¹⁵ consider the Terinaean types of ϕ to be essentially pictorial in nature, and Evans sees a possible influence from Zeuxis of Kroton. But this alone is hardly sufficient evidence to regard the Terinaean issues and those of Group B at Thurii as the work of one man. Further, if it is supposed that both groups are attributable to one hand, some difficulty arises with the dating, following Regling for Terina and my own suggestions for Thurii, which would necessitate some re-thinking. I base this argument on general considerations of style, which suggest that the Thurian coins should be placed before those of Terina,

but more specifically on the development of the eye. The suggestion that the Thurian head die is perhaps a copy of an archaistic cult statue which thus does not permit of a true comparison with Terinaean heads, I do not find positive or convincing, especially in view of the more refined eye of Group C at Thurii. The Thurian issues, therefore, would have to be put back to a date before 425-420 B.C. (Regling's dates for the relevant Terinaean pieces), or alternatively Regling's date would have to be brought down. The evidence we have does not seem to justify this and so, since the stylistic links are weak and the dating of the two series is incompatible as it stands, a connection between Terina and Thurii, Group B, I consider to be very improbable.

As regards the Syracusan tetradrachms by Phrygillos, Regling¹⁶ considers that they must be later than the Terinaean coins. If this is so, again one would expect they would have at least as sophisticated a representation of the eye as those of Terina, especially since he was working with much larger dies at Syracuse. In fact, however, apart from the general similarity of type, there is little which compares; the wings, of the nostrils, lips, chin and eye are very different from Syracuse. Indeed it seems that, in view of the reduced size of the dies with which he was working, the engraver of Terina was a little more skillful than Phrygillos of Syracuse.¹⁷ Thus in the absence of any positive evidence for a connection

and in view of a similar incompatibility of dates as with Thurii, at least in so far as I have accepted and suggested these in previous chapters, I find myself wholly unable to support those who see the Terinaean issues and those of Phrygillos of Syracuse as the work of one man.

Another possible expansion of ϕ , with regard to the issues of Terina, was proposed by Poole,¹⁸ supported by vonLermann, and by Evans initially, to the effect that it was the initial of Philistion, who, it was suggested, might be the grandfather of the Philistion who signed his name on the coins of Velia. The coin which provided this clue¹⁹ had $\Phi\text{I}\text{A}\text{I}\Sigma\text{T}\text{I}$ (the T, in fact, inverted) vertically in letters larger even than those of the ethnic. For this reason and also because he considers the coin to be associated with the third manner of Π , and therefore very much later, Regling rejects the idea completely. Indeed it fades anyway in the light of the alternative association with Phrygillos of Syracuse and is only worth mentioning for the sake of completeness.

To summarise, I do not believe that there is sufficient evidence to suggest the possibility that dies of Thurii under examination or those of Syracuse produced by Phrygillos are from the same hand as this small group from Terina. In fact, such evidence as there is speaks against such a connection.

NOTES

1. Regling has evolved a complete sequence for Terina dated from c.480 to c.350 B.C.
2. Regling p.40
3. Regling p.39
- 3a. Perhaps Athenian - cf. comparison with the balustrade reliefs - (Evans N.C. 1912)
4. Regling does not mention a ϕ on ω .
5. Regling p.41
6. Regling p.43.
7. Regling p.43.
8. Regling p.75, note 39.
9. And as a domestic animal and plaything in the hands of a girl and child it is known from literature and from the history of art - Regling p.43.
10. Evans N.C. 1912.
11. Ancient Coins of Greek Cities, p.43 ff. I am relying here on Evans' article in N.C. 1912
12. Evans cites Barrius, De Antiquitate et Situ Calabriae, Rome 1571, p.137; Frankfurt ed., 1600, p.1060.
13. This is not quite parallel with previous comparison re the 'omega' between Thurii and Syracuse, since at Syracuse apparently there was confusion about the 'omega'. The fact that in Terina the 'omega' is not used in the ethnic until much later, whereas at Thurii it had been in use from the beginning of the coinage of this foundation is not of

chronological significance since most likely it reflects mint policy.

14. Several scholars originally linked the Terinaean coins with those of my Group B, among Gardner Types p.121 and Furtwängler Masterpieces p.145 and note 2.
15. Poole N.C. 1883; Evans N.C. 1912
16. Regling p.71 note 10.
17. Evans N.C. 1912 p.42 ff. His discovery of a signature at Terina (on the ampyx of a nike on a reverse die) which he, with the support of others, considers to be that of Euainetos, carries little or no weight in this particular matter.
18. Evans Horsemen of Tarentum p.110 and N.C. 1896 p.139 von Lermann, Athenatypen p.47. Both are mentioned by Regling p.42.
19. B.M.C. 30; Hess Cat. Oct. 1902, 455; Revue Belge p.117.

Chapter V.MISCELLANEOUS ASSOCIATIONS.

In addition to the association of Phrygillos with the two Italian mints already treated, there have been suggestions, some tentative, some more definite, that the same engraver was also responsible for certain other dies in various other mints. The basis for this linkage is generally the presence of the letter Φ on either the obverse or the reverse die, as before with Thurii and Terina, combined, of course, with a presupposed overall similarity of style. The Φ is not sufficient evidence in itself, on the basis of what has been said before, but it provides the essential initial link. Sometimes the type bears some similarity to those at Syracuse, Thurii and Terina, making comparison more feasible, but this is not always the case. In dealing with the various mints I have used as a basis Seltman's section on Phrygillos in Masterpieces of Greek Coinage, with the addition of one or two other issues from different mints again. Most of these mints are in the S. Italy - Sicily area, so their geographical proximity makes the suggestion of an engraver moving around these cities feasible. Those outside this general area are for the same reason rather less feasible perhaps.

Velia or Hyele is the first city with which I am concerned. Here only one die¹ is generally attributed to the hand of Phrygillos, despite the fact that the initial letter of his name does occur several times elsewhere in the coinage of this city. The reverse die of the combination under scrutiny carries a female head facing right, with a vine tendril to the right of the head and a ϕ beneath the chin. The style of the head does not correspond with any of the groups at Thurii, the eye and eyebrow particularly, and the nose and lips, bearing little resemblance to their counterparts on the Thurian dies. However it must be remembered that there was a possibility that the Thurian types may have been intentionally archaistic in style, so absolute comparison is difficult. The truncation, though, certainly has no parallel in the coins assembled for this study. There is indeed a greater overall similarity with the Phrygillan dies of Syracuse, but comparison of facial detail again lacks any positive suggestion of a connection.

The obverse of the combination is of no use for making a direct comparison of style, bearing a lion as the main type with an owl in the exergue. Further, this is the second combination in which this die was used; previously it was combined with a reverse which bore a head of very much more archaic style.² Whether or not the two reverses are by the same hand, the dating of the combination with which I am specifically concerned is likely to be affected. It must come

fairly early on in the series, which might be taken to reduce still more the likelihood of a connection with Thurii or Syracuse from a chronological point of view.³

Another point which may or may not have relevance is the fact that frequently on later coins of Velia two letters or a letter and monogram occur together on the same die, which suggests that, in these instances at least, they are unlikely to be engravers' signatures.⁴ Of course, this does not alter the fact that on this particular die one letter only occurs and that the style of this die is very different to many of the later dies mentioned above. Whilst I am by no means convinced that this die could have been produced by Phrygillos, let alone was, it does seem the most likely competitor from among those which have still to be mentioned in this chapter.

Leontini is the next city with which Seltman would associate Phrygillos.⁵ The obverse die carries a head of Apollo facing right with an ivy tendril to the left in which some see a ϕ ; the reverse die shows a lion's head facing right, surrounded by three corn grains and a fish.⁶ Whether or not one sees a ϕ tucked away in the ivy tendril (and some do not) which is of paramount importance to those who would associate this die with the work of Phrygillos, there are two points which cannot be overlooked. The style of the piece is very fine; Seltman is right to point out the godlike quality of the

head, audacious or not. The style is superior to any of the other dies mentioned in this study. Such a remark is clearly open to disagreement on account of its subjectivity, but it does incorporate some degree of objectivity in so far as it is indicative of a very great difference in style, a difference which, if it is to be reconciled with the other dies reviewed in this study, must represent the culmination of a lengthy development on the part of the engraver. But the coinage of Leontini ended in 422 B.C. when that city became a dependent of Syracuse.⁷ In view of the dating tentatively proposed for Syracuse and Thurii, the suggestion of a possible connection hardly merits further consideration. But before passing on, mention must be made of Seltman's further link, that of the fish beneath the lion's head on the reverse, which he says "points to Phrygillos as author of the die almost as clearly as does the ϕ behind Apollo's head..."⁸ Firstly, this reverse was issued in combination with another obverse before⁹ which has no indication of a ϕ at all (indeed it seems to be from a different hand) and secondly it is surely doubtful that an engraver would make such a major change in the city's type at his own whim. Further, the obverse attributed to Phrygillos is very close in style to the last in the series¹⁰ which has no indication of a signature at all.

Pandosia is another city which, towards the end of its coinage c.400 B.C.,¹¹ produced a coin which had a ϕ on the

reverse.¹² The obverse shows a head of Hera facing three-quarters right, wearing a polos decorated with a design of palmettes and griffins. According to Brett,¹³ this type was copied from Kroton, a suggestion which is supported by the historical linkage of the two cities. However, the nature of the type (i.e. three-quarters facing) makes it virtually impossible to compare it with the profile heads of Thurii and Syracuse. Likewise the reverse, showing a naked Pan seated on rocks with a hound beside him and an ithyphallic herm to the left, to which is attached a caduceus, defies real comparison with any of the other types except perhaps the nikes of Terina. Pan, in fact, seems to be more naturally rendered; the body has more natural proportions than some at least of the Terinaean nikes, although, as Jongkees points out,¹⁴ hands and arms, as on the Terinaean reverses, are rather big. The three-quarter view of Pan and the perspective rival Regling $\gamma\gamma$, and are superior to the other reverse dies at Terina. Also the significance of the ϕ which provides the basic link is affected by the legend which is inscribed vertically on the herm. Unfortunately specimens of this issue are rare and none so far have been able to offer a clear reading of the first letter. It could be a "theta" or a "phi", giving either $\Theta\Lambda\Lambda\Lambda\Omega\text{N}$ or $\Phi\Lambda\Lambda\Lambda\Omega\text{N}$. The latter, of course, would provide a nice pun in the context of the herm, and might or might not have a connection with the ϕ in the field. In any event, the possibility of the letter in the field representing an engraver's

signature while there is a further, more concealed legend on the herm, although not ruled out completely, must be dubious. No definite or even tentative association with either Syracuse or Thurii is possible on the basis of what evidence there is.

Seltman also suggests that Phrygillos cut a die for Heraclea.¹⁵ It is a reverse die (the obverse bears a different signature, Σ) which shows Heracles wrestling with the Nemean lion, with a bow and club to the left and a φ between Heracles' legs. Here there is the same difficulty as with Pandosia; the type bears no resemblance to any other in this study. But it may be said that Heracles' powerful, muscular body and also that of the lion are perhaps represented better than might be expected on the basis of what can be surmised from the coins of Syracuse, Thurii or Terina. Further, the type is very close to other³ which have no letter or different letters or various objects between Heracles' legs¹⁶ which takes away some of the force of the presence of a φ , the sole reason for its inclusion among the works of Phrygillos. Here perhaps more than in the previous cases there is a total lack of evidence one way or the other, and opinion for the present must be entirely subjective on the basis of consistency of style, so far as stylistic comparison with Syracuse or Thurii is possible at all.¹⁷

When Seltman introduces a coin of Sinope¹⁸ ^{associations} to associate with Phrygillos either as the engraver or the teacher of the engraver, he does so without even the support of a ϕ to suggest the possibility of a connection. The style of the female head is different from any of the coins considered so far and shows little or no comparison with Phrygillos' work except perhaps in the chin. However, it is possible that the engraver who cut this die used as a model one of the Phrygillan head dies of Syracuse, though the difference between this and being a pupil of the master is considerable. Indeed Seltman's suggestion is more than a little fanciful, lacking any real evidence, even stylistic to back it.

A much more striking similarity is apparent elsewhere. R. T. Williams has categorised two Arcadian dies as "Phrygillan"¹⁹. Certainly there is an almost incredible resemblance between the female head of R.205 and Regling S at Terina.²⁰ It is possible that the same engraver cut both dies, but in this case, one might expect to find a ϕ there. However there is none. Thus more probably this is a direct copy of the Terinaean issue, which to some might prove a more acceptable explanation even if there were a ϕ in evidence.

Finally, there is one other Italian mint which must be mentioned in this chapter, Naples. Here the type is exactly similar to Thurii, showing a helmeted head of Athena facing

right. There are three dies²¹ which are very close to the Thurii Group B style, one of which has a ϕ in front of the nose (not the usual position of the Thurian dies). There are, however, points of difference evident in the detail, for instance the lips where there is no downward curve, the eyelids which are generally larger and the wreath which, apart from a different arrangement of the leaves, has its leaves represented in a rather less delicate outline only without the mid-rib of the leaf being shown. The ear too is a little different. But despite these differences of representation coupled with a difference in artistic attainment, there is a remarkable similarity, the most obvious explanation for which is that these dies were copies of coins of Thurii Group B and that in one case the ϕ was transported as well. The reverses of these dies which carry a man-headed bull do not compare at all with any of the groups at Thurii.

NOTES

1. Fitzwilliam S.N.G. 651 - 7.60 gr.
Lloyd S.N.G. 513 - 7.66 gr. (illustrated Seltman,
Masterpieces, 28a).
2. Fitzwilliam S.N.G. 650 - 7.61 gr.
3. Seltman, Masterpieces p.70, suggests 425 B.C. but this is a
guess. The obverse may perhaps have been used long after its
initial employment, as a substitute die, but this is pure
surmise and could only be established by the formal arrange-
ment of the coinage of Velia.
4. See Fitzwilliam S.N.G. 655; Hunter I, pl.VIII,8; Boston,
Brett, 156. Poole, N.C. 1883, wanted to attribute this die
and those of Thurii and Terina to a Philistion who was
the grandfather of the engraver who signed thus on later dies
of Velia.
5. Seltman, Masterpieces, p.71
6. Boston, Brett, 283 - 17.40 gr.
7. Laistner, p.127
8. Masterpieces p.73
9. Boston, Brett, 282 - 17.31 gr.
10. Boston, Brett, 284
11. Head, Historia Numorum p.106
12. Seltman, Masterpieces 32a. Boston, Brett, 196 - 7.78 gr;
197 - 7.10 gr.
13. Boston, Brett p.28

14. Kimonian 10 dr. p.77
15. Seltman, Masterpieces 33b. Ashmolean S.N.G. 613- 7.93 gr.
16. cf. Ashmolean S.N.G. 614 and 615
17. In fact an unsigned obverse (Kraay, Greek Coins 257) provides the most striking similarity with coins of Thurii Group B. The detail of the face is similar (eyes, nose, lips, chin, ear, angle of the truncation) as is also the helmet, except for the griffin replacing the skylla and the single ridge of the crest. The hair is tied in a knot at the neck but the plume is not carried round it as at Thurii. Perhaps the explanation is that the design was copied from a Thurii Group B coin, if they are not attributable to the same hand.
18. Masterpieces 34a.
19. Williams, R.202, R.205
20. Williams, pl.XIII and pl. XIV, O
21. (i) B.M.C. Italy, Naples no. 1 - 7.45 gr.
 (ii) Ashmolean S.N.G. 80 - 7.59 gr.
 (iii) Ashmolean S.N.G. 81 - 7.48 gr.; Hunter I, pl.II,
 12 - 7.30 gr.

CONCLUSION.

The broad conclusion of this study is that we know less about Phrygillos than was once thought. Most likely Aristophanes is not referring to the engraver at all when he speaks of ἀφρυγιλος . Further the sheer quantity of the dies which Phrygillos is supposed to have produced on the basis of previous theories is very large for us to ascribe to the work of one man, at least as compared with the work of other known engravers, (there would be over 90 dies in all, of which there are 19 obverses and about 30 reverses for Thurii alone).

The fact that it has been possible to distinguish quite separate stylistic groups at Thurii has, as I have indicated before, a considerable effect on theories which would associate Phrygillos with Thurii and also the various other mints which have been mentioned. If Phrygillos did cut any of these dies, the most feasible candidates (and I hesitate to make the connection stronger) are those of Group A at Thurii; the other dies of that mint I would attribute to different hands. As far as Terina is concerned, there is little possibility of a connection at all, the obverses, if they do compare, showing similarities with different groups in different aspects.

Most of the dies display a good degree of artistic

ability on the part of the engravers and it is possible that some similarity might derive from having a model in common or one being copied at least in some respects from another, though clearly this is pure conjecture. But this does illustrate a point with which I have been much concerned. To associate definitely any dies with the work of a known engraver, there has to be concrete evidence over and above basic similarity of style, which can easily be coincidental. A negative conclusion which allows that a connection is not impossible I do not consider sufficient; a positive conclusion is required which for the most part I have been unable to offer, though here as in everything else there are degrees. The association of Phrygillos with Group A at Thurii I consider to have more evidence to support it than any of the other possibilities. There may be of course, coins in existence which I have not had under scrutiny and which may shed further light on the problem.

However, disregarding the Syracusan dies, there is one undisputable point of contact between the rest, namely the letter ϕ . With perhaps the exclusion of Group A at Thurii, the remainder are examples of a new style in their respective mints or at least are of a high artistic standard. The suggestion that the connection is more than just a coincidental ϕ , that in fact the ϕ is indicative of perhaps a group of engravers combined together in one workshop which undertook

contracts for various mints, is very attractive. It might well account for the basic or general similarity in the resultant coins which has prompted some to attribute them all to one hand. Further study of the letters which occur on the coins of many mints may help to elucidate this and to differentiate between the official type of signature, sequence letters and engravers' signatures, but at present it can be little more than a tentative suggestion, for which there can be little support outside one's imagination.

APPENDIX A.The Gem.

Furtwängler, Antiken Gemmen pl. XIV,6, illustrates a gem (ex Blacas coll., present location unknown; see my plate VII) which carries the legend Phrygillos. It is obviously attractive to see a connection between this Phrygillos and the die-engraver of the same name. Although there is a very definite distinction between the two arts, "there is little doubt that the artist who could make metal dies would be more competent at cutting gems (and vice versa) than any other artist we know of" (S. Casson, Transactions of the I.N.C., 1936, p.42). There is, however, insufficient evidence, he continues, to know whether or not in some cases die-cutters and gem-cutters were identical.

Unfortunately the difference between the subject of the gem, a winged Eros supporting his reclining body on one arm, and the coin types of Syracuse is such as to defy profitable comparison, except perhaps with respect to the wings which may be compared with the nikes of Terina. But, since I am not prepared to associate the coins of Terina mentioned in chapter 4 with the hand of Phrygillos of Syracuse, then I would not expect the gem which is naturally to be associated with that engraver necessarily to compare with them. The

wings are divided into four sections or layers of feathers in both cases, but the proportions of each of the sections and the general shape of the wings differ immensely. It would be true to say, however, that the gem displays a degree of accomplishment which is entirely in keeping with the high quality of artistry as exhibited by the coin dies, perhaps it is superior. There is also the question of the inscription - does it indicate the name of the artist or simply of the possessor? Again, there is no positive evidence upon which to base a theory. The suggestion of Furtwängler (Antiken Gemmen, p.126) and Evans (N.C. 1891, pp.321-2) that Euainetos may have produced a "public seal" for Syracuse based on the design of the gold 100 litra piece, has apparently been rendered suspect by Rossbach (Tudeer p.228), so supporting evidence in the form of a roughly parallel instance is not, after all, forthcoming. It is dangerous to deduce too much from the actual letter forms of the inscription here and on the reverse die of Syracuse signed Phrygillos (Tudeer rev. 29), but they do appear to be exactly similar.

Certainly, it is impossible to reach any definite conclusions, but one point of connection, the name Phrygillos, must have some degree of persuasive force, in view of the fact that its occurrence is far from common - I have not in the process of this study found any other definite instances

outside the coins of Syracuse and this gem.

(The object to the left of Eros seems to be some sort of shell, from which, probably, he was born. According to the Orphic cosmology, in the beginning there were Chaos, Night and Erebus; Night laid an egg from which sprang Eros - Rose, Handbook of Greek Mythology p.19. Furtwängler classifies it as a scallop shell, presumably because it appears to be hinged. There is, however, no reason why he should be connected with the sea, since in fact he was only associated with Aphrodite in late cult - Rose p.123.)

APPENDIX B.SMALLER DENOMINATIONS AT SYRACUSE.

This study has not embraced any denominations smaller than tetradrachms at Syracuse or staters at the other mints. The reason for this is that either I have not discovered any in the course of this research or that those which are in evidence do not contribute to my main purpose. However, for the sake of completeness I shall mention briefly some which would seem to have clear links with Phrygillos. They are Syracusan dies, the best known of which is probably a hemidrachm mentioned by Evans N.C. 1890 p.306 (pl. XVIII, 8) and by Forrer p.366. The obverse carries the head of a girl to left, the hair arranged in a sphendone decorated with stars. Under the chin there is a ϕ . The reverse seems to be an exact miniature of a Euarchidas chariot die, with an ear of barley in the exergue and the letters EY to the left. There is nothing to suggest that the obverse should not be attributed to Phrygillos, and in the light of the reverse, attribution of the die to him seems quite acceptable.

There are other dies which carry a fuller legend, namely ϕ PY. For example, a silver litra with ϕ PY on the sphendone cited by Forrer after Imhoof-Blumer, Monnaies grecques p.29, or bronze coins such as de Luyne 1257, with ϕ PY on the ampyx.

In these instances the reverses are not of the chariot type; the litra has a cuttlefish and the bronze issue a wheel, into the 4 compartments of which is fitted the ethnic (in 2 parts $\Sigma Y/PA$) and 2 dolphins. Here it is difficult to compare the obverses exactly with Phrygillos' known works, but they are by no means incompatible. Further, the signature must have considerable force, since it is not as common as, for instance, ΣY (being the first letters of a number of names of known engravers at Syracuse). Thus very probably some at least of the smaller denominations which cataloguers have proposed to associate with Phrygillos are attributable to his hand.

THE CATALOGUE

SYRACUSE.1. Tudeer obv. 15

(Plate I, 1)

A four-horse chariot to right. A nike flies to left to crown winged charioteer who holds the reins in both hands. The nike carries an olive branch in her left hand and a wreath in her right. In the exergue a skylla to right, with right arm outstretched, in front of which there is a fish also to right. Above this, the signature EY@. To the left of the skylla, another fish (possibly a dolphin) which follows the curve of the skylla's body. The type is enclosed by a beaded circle.

Tudeer rev. 29

EY/PAK/OE/1/ON

A female head to left, surrounded by the ethnic and 4 dolphins. The corn ears, poppy-head and oak leaf suggest this may be Demeter rather than the usual Artemis Arethosa (these features being taken over from the preceding reverse die by Eumenes, Tudeer rev. 28). The hair radiates from the crown and is separated into several divisions of 2, 3 or 4 strands. It is taken up in a roll at the back, and at the temples and forehead 4 sets of strands are whisked back roughly perpendicular to the roll. Loose strands hang down in front of the ear and at the back of the neck. The nose-brow line is straight up to the bridge of the nose, where the forehead protrudes to produce a slight undulation. The eye is set far back causing the nose to appear large. The upper lip is full and short, and the lower similar but longer. The chin is rounded but shallow, and the profile of the jaw carried towards the ear. There are 2 horizontal creases in the neck which is long and delicate. Below the creases there is a neckband with a pendant at the front; it is tied in a knot behind. The truncation is convex to the head and protrudes forward. The eye has thin lids which are tapered on their outside edges. The lower lid is shorter than the upper. There is no linear definition of the iris, but there is definite moulding. The eyebrow, above an intermediate fold of skin is thicker than the lids and curves gently. The ear has a helix and antihelix. The helix narrows at the top of the ear and where it approaches the lobe. The ear has a backward tilt. There is an ear-ring in the form of a large hook. The dolphins are in the usual style for Syracuse, their tail fins pointing outwards. They are plump, however, and the fish behind the neck is of much larger proportions than the rest. Although it balances the other dolphins, it tends to detract from the overall balance of the design. The dolphins to the left of the head are opposed. The letters of the ethnic

are distributed around the head with the perimeter of the dolphins. They are neat and set vertically relative to the centre of the die. The signature beneath the truncation, $\Phi\PY\Gamma\Lambda/\Omega$, is not as neat. The curve of the signature is perhaps intended to harmonize with the dolphins

- (a) Sotheby Feb. 1909, 328 = Sotheby June 1896, 452 - 17.30 gr.
- (b) Berlin, 201/1885; von Sallet Z.f.N. 14, I, 1; Weil I, 6 & 9 - 17.20 gr.
- * (c) Berlin, LÖbbecke; Holm V, 2 (rev.); Imhoof-Blumer J.I.A.N. 11, IV, 4 (rev); Forrer p.365 (rev. - the signature has been touched up in the illustration); Seltman, Coins pl.22, 11; Kraay, Coins pl. 37, 107; Regling, Terina p.71; Tudeer pl. II, 29 - 17.07 gr.
- (d) Brussels, Du Chastel coll.
- (e) Brussels, Du Chastel coll.
- (f) Dresden
- (g) Once Giesecke; Hirsch VIII, 988, Forrer p.130
- (h) Hirsch XXVI, 95; formerly Prokesch; Osten - 17.15 gr.
- (i) Hirsch XXXII, 329 - 17.25 gr.
- (j) Jameson 801; Du Chastel VI, 70; Burlington Exhibition C11, 123 - 17.27 gr.
- (k) London, B.M.C. 156; Head, Syracuse pl.III, 14; Hill Sicily pl.III, 14 (rev.); Forrer IV, III, 4 (rev.) - 16.58 gr.
- (l) London, B.M.C. 157 - 17.10 gr.
- (m) Munich - 17.02 gr.
- (n) New York; ex Ward, Hill, pl. VII, 281; Sotheby Jan. 1898, 86 - 17.04 gr.
- (o) Paris, de Luynes 1214; Seltman illustrates this or Masterpieces, 30b - 17.15 gr.
- (p) Paris, de Luynes 1215 - 17.05 gr.
- (q) Weber 1603 - 17.13 gr.

Additional to Tudeer:

- (r) Brussels, Hirsch 603 - 17.31 gr.
- (s) London, B.M.; Lloyd S.N.G. 1382; Naville IV, 338 - 16.74 gr.
- (t) Lockett, S.N.G. 969; Seltman, Masterpieces, 30a; Chittenden & Seltman, Greek Art (Burlington Cat. 1946) pl. 70, 206 - 16.58 gr.

2. Tudeer obv. 16

$\xi/\Upsilon/\rho/\alpha/\kappa\Omega/\xi\iota/\omega\text{N}$

(Plate I, 2)

A head of Artemis to left, surrounded by the ethnic and 4 dolphins. The corn ear, poppy and leaf of the previous die are omitted. The head is larger than rev. 29, and the

is a little higher, probably due to the transfer to the obverse of the coin. The hair radiates from the crown of the head as before in 7 separate divisions of 3 or 4 strands, but here a broad ampyx (to which is attached a sphendone) confines the hair above the forehead. The hair protrudes from beneath the lower edge of the ampyx, while at the temples, long whisps are taken back over the ampyx above the ear. At the back there are 3 loose strands of hair above the sphendone; below are feint spirals which I take to represent hair also. The hem of the sphendone is shown by 2 thin parallel lines; there is a crease which extends to the rear limit, and 4 others above, where it is gathered to connect with the ampyx. The bag of the sphendone is decorated with 4 stars. The nose-brow line is almost a smooth, concave curve, not straight as on rev. 29. The wings of the nostrils are similar, but the lips rather more delicate. The chin is stronger; its profile is more square. The cheeks have the appearance of being more fleshy, although there is no creasing of the neck. The neckband is similar to rev. 29, but there is no indication of a pendant or of a knot at the back. The truncation is concave. The eye is similar to rev. 29. The iris seems to be the same size, though the other parts are larger (there is definitely a moulded iris). The lids are not as close to the iris; the upper lid is straighter, the lower is very short. The eyebrow is similar to that rev. 29, with the bulbous fold of skin between the upper lid and the eyebrow. The eye as a whole is inset deeply, and has more of a frontal representation than on rev. 29. Less of the ear is visible on this die owing to the different arrangement of the hair., but helix and antihelix are discernible. The ear-ring is in the form of 3 pendant pearls in decreasing sizes. The dolphins have a more natural form than on rev. 29 and are employed more artistically to reflect the curves about the head, especially that of the sphendone. On the ampyx there is the signature OPY;

Tudeer rev. 30

A four-horse chariot to left. The horses are dwarfed by the gigantic charioteer who holds a torch in her right hand. A nike flies to right, with a branch in her left hand and a wreath in her right. In the exergue, an ear of corn to left. The design is enclosed by a beaded circle. Unsigned.

- *(a) Berlin, Imhoof-Blumer - 1705 gr.
- (b) Boston, Brett 409; ex Warren, Regling 386 - 17.23 gr.
- (c) Hirsch 1909; cast in Berlin
- (d) Hirsch XXXII, 348 - 16.50 gr.
- (e) Jameson; = Sotheby, Feb. 1909, 330 = Sotheby June 1896, 454; Tudeer pl. III, 16 - 16.98 gr.

- (f) London, B.M.C. 159; Evans N.C. 1890, pl. XVIII, 6b (obv.); Du Chastel VII, 82 - 16.57 gr.
- (g) Location unknown; from the Santa Maria di Licodia find; Evans N.C. 1890, pl. XVIII, 6a (obv.)

Additional to Tudeer:

- (h) London, B.M.; ex Lloyd S.N.G. 1383; Ars Classica XIV, 122 - 17.02 gr.

3. Tudeer obv. 17

(Plate I, 3)

A head of Artemis to left surrounded by dolphins. Only 3 are in evidence, but there must have been a 4th which is off the flan. The hair radiates from the crown in divisions of 3 or 4 strands and is held in over the temples by an ampyx, to which is attached a sphendone. The upper hem of the ampyx which continues as the hem of the sphendone forms an unbroken double line from the forehead to the back of the head. There is an elliptical object above the ampyx, next to the dolphin's tail fin - this may have to do with the ampyx (i.e. a knot) or may be a flaw. The lower hem of the sphendone is similar to that on obv. 18, but with pendants of the same type as the ear-ring. Strands of hair protrude from under the ampyx at the temples and are intertwined in a complex pattern above and in front of the ear. These may be loose strands of hair at the back, but this is not clear as a result of double-striking. There appears to be a loose strand hanging over the edge of the sphendone or it may be a flaw. The nose-brow line shows a slight undulation at the bridge of the nose. Less of the forehead is visible owing to the greater width of the ampyx. The wings of the nostrils appear different from rev. 29 and obv. 16 in that none of the inside of the nose is visible. The lips display the greatest difference; instead of being full and short as on the other dies in this section, they are taken farther back into the cheek. The chin is shallow sloping down towards the neck. The neck is short, more thick-set and generally less delicate. There is a pellet in front of the neck next to the dolphin's tail fin, which may be connected with a neckband, but more probably is a flaw. The truncation is concave to the head, and hanging from its forward edge another unexplained object. The eye is inset deeply. The lids are thicker than on the other dies of Syracuse and the upper lid in particular is more curved; the lower lid is unnaturally short as on obv. 16 and obv. 18. It is not possible to discern any detail of an iris. The ear has only a helix; no other interior detail is evident. The ear-ring is not of the pendant type, but rather 2 large rings. The dolphins are large, the 2

to the left of the head opposed. The fish to the right reflects the curve of the sphendone. There may be faint traces of the ethnic above the head, but it is hard to see how both that and a 4th dolphin could be fitted in within the linear circle which encloses the design. Generally there is more of a horizontal accent in the type. No signature.

Tudeer rev. 30

Same die.

*(a) Egger, Dec. 1906, 193 - 16.78 gr.

4. Tudeer obv. 18

ΣΥΡΑΚΟΣΙΩΝ

A head of Artemis to left surrounded by 4 dolphins. The actual head is somewhat smaller than obv. 16, though larger than rev. 29. The general treatment of the hair is the same as on obv. 16, but there is a slight difference in the whisps which are taken back over the ampyx. There are no loose strands above the sphendone, but there are the same faint spirals below. The hem of the sphendone is shown as 2 thin, parallel lines, but there is not the same elaborate creasing as on obv. 16 or even obv. 19. The sphendone itself is much smaller than on obv. 16 and shows no sign of decoration. The nose-brow line is similar to that on rev. 29 or obv. 17. A flaw develops at the bridge of the nose. The wings of the nostrils are as usual, revealing a little of the interior. The chin is close to obv. 16. The neck is long and slender, and shows bulging before the truncation, which ends in a concave curve. The long vertical outline of the back of the neck (as also to a lesser extent on obv. 16) creates a somewhat different accent in the face as compared with rev. 29. The iris and eyebrow are of the same type as on rev. 29 and obv. 16, but the eyelids are different. There is an addition to the main section both at the bridge (on the upper lid) and at the side (on the lower lid). The nose is similar to obv. 16. There is less distance between the lower boundary of the eye and the wings of the nostrils than on either rev. 29 or obv. 16. Even less of the ear is visible (owing to the arrangement of the hair, but both it and the ear-ring are as on obv. 16. The dolphins and the ethnic are disposed differently from the preceding dies. It is evident that the ethnic has been recut owing to incorrect spelling. The signature @PY on the ampyx. The design is enclosed by a linear circle.

Tudeer rev. 30

Same die.

- (a) London, B.M.C. 160 - 17.13 gr.
- (b) Paris, de Luynes 1216 - 17.30 gr.
- (c) Pennisi coll.
- (d) Weber 1604; Tudeer pl. III, 30 (rev.) - 16.82 gr.

Additional to Tudeer:

- (e) Cambridge, Fitzwilliam (Leake & General) S.N.G. 1246; Sotheby, June 1896, 455 - 16.92 gr.

5. Tudeer obv. 18

Same die.

Tudeer rev. 31

A four-horse chariot to left, with female charioteer holding a torch. A nike, somewhat larger than before, flies to right carrying a palm branch and olive wreath. In the exergue an ear of corn to left. Between the exergue line and the corn ear the die is signed EY/APXIAA. The design is set within a beaded circle.

- (a) Palermo; Salinas, Notizie degli Scavi 1888, pl. XVII, 25; Evans N.C. 1890, pl. XVIII, 7; Du Chastel VII, 84; Forrer, 122, 366.
- (b) Paris, de Luynes 1217; Tudeer pl. III, 31 (rev.) - 17.22 gr.

6. Tudeer obv. 18

(Plate I, 6)

Same die.

Tudeer rev. 32.

A four-horse chariot to left. The female charioteer is larger and has a frontal head (previously it has been in three-quarter view). She holds a torch. A nike flies to right holding a palm branch and an olive wreath. In the exergue an ear of corn. Within a beaded circle.

- * (a) Berlin, Fox; Tudeer pl. III, 18 (obv.) - 17.22 gr.
- (b) Brussels, Hirsch 607; Tudeer pl. III, 32 (rev.) - 17.08 gr.
- (c) Copenhagen, Thorvaldsen; Müller 1299
- (d) Pennisi coll.
- (e) Leningrad

Additional to Tudeer:

- (f) Bryn Mawr College, King coll.; *Ars Classica* XVII, 219; Vermeule N.C. 1956, pl. VI, 57 - 16.91 gr.

7. Tudeer obv. 18

(Plate I, 7)

Same die.

Tudeer rev. 33

A four-horse chariot to left, with female charioteer holding torch. A nike flies to right; she is smaller than rev. 30 or rev. 32. In the exergue an ear of corn. Between the exergue line and the horses' forelegs, EY/APXIAA. Within a beaded circle.

- (a) Berlin 198/1885; Weil pl. I, 11 & 12; Forrer p.141 (rev.) - 16.72 gr.
 (b) Munich: Streber pl. I, 2; Tudeer pl. III, 33 - 17.15 gr.
 (c) Pennisi coll.

8. Tudeer obv. 19

ΣΥΡΑ / ΚΟΣΙ / ΟΝ

A head of Artemis to left, surrounded by the ethnic and 4 dolphins. The hair radiates from the crown of the head and is held by an ampyx and sphendone; it is arranged as on the previous dies. There are the usual side curls, but apparently no loose strands either above or below the sphendone. There is an extra parallel line along the top edge of the sphendone. There is creasing but not as much as on obv. 16. The nose-brow line has a slight undulation as on obv. 18. The wings of the nostrils and the lips are as before, though the lips are a little inferior to obv. 16 and obv. 18. The chin is shallower and more pointed than obv. 16 or obv. 18 and resembles closely rev. 29. The neck is not as long as obv. 18, but the creasing is clearly visible. The truncation is a concave curve. The profile of the back of the neck and the sphendone is closer to obv. 16 than obv. 18. The eye has the same iris, lids and eyebrow as on obv. 16. The lower lid, however, is longer. The ear is much the same as on obv. 16. From it hangs a 3 stone ear-ring. The dolphins are roughly uniform in size, their tail fins pointing outwards as before. The 2 to the left of the head are opposed as on rev. 29. The signature is on the ampyx OPY. The overall size of the die is larger.

Tudeer rev. 33

Same die.

- (a) Pennisi Coll.; Kraay, Greek Coins, pl. 38, 108
 (b) Sambon et Cannessa, 517, pl. VI, 2.

Additional To Tudeer:

- (c) Lockett S.N.G. 970; Ars Classica XIV, 123;
 Seltman Masterpieces 31a (obv.) - 17.30 gr.

9. Tudeer obv. 19

(Plate I, 9)

Same die.

Tudeer rev. 34

A four-horse chariot to left, with very tall female charioteer holding a torch. The horse's legs are more obviously parallel and stylized here. A small nike flies to right, holding a wreath. In the exergue an ear of corn. Within a beaded circle.

- * (a) Berlin, Löbbecke - 17.10 gr.
 (b) London, B.M.C. 158; Weil pl. I 10; Du Chastel VII, 83, Hill, Sicily pl. III, 13; Tudeer pl. III, 19 & 34. (obv. & rev.) - 17.07 gr.
 (c) Paris, de Luynes 1218; Seltman, Masterpieces 31b (rev.) - 17.05 gr.

THURII.

Staters unless otherwise specified.

GROUP A (@PY)1. O.1.

(Plate II, 1)

A head of Athena to right, the helmet decorated with an olive wreath. The wreath is simple having 4 pairs of leaves only. The ridge of the crest is a single line parallel to the helmet bowl. There are 2 breaks in the crest. The neckflap is angular and described by 2 thin parallel lines. Hair protrudes at the temples and brow (1 large lock and 3 smaller ones) and at the back of the neck beneath the neckflap where it passes round the truncation; it is untied. The nose-brow line is straight but off-set sharply at the bridge of the nose, the lips full and short. The chin is shallow and slightly pointed. There is modelling of the neck. The eye has a moulded iris, enclosed by 2 lids, straight on their inside edges but tapered on the outside. The eyebrow has an angle above the forward end of the upper lid. The ear has a simple helix and antihelix which do not taper out, at least not to the extent of the following group. On all 3 specimens the edge of the flan makes it impossible to determine whether or not there was a letter in the angle of the crest above the forward edge of the helmet rim, but (a) shows the possible tail of a letter.

R.1.

ΘΟΥΡΙΩΝ

A trotting bull to right, with lowered three-quarter frontal head, and right foreleg in front of left. The tail is whisked up to form a hoop. There is creasing of the skin at the neck and behind the forelegs. The relief of the body is shown in detail, as also the relief and contours of the legs. The exergue line is single and linear, and in the exergue a large fish to right. Above interspersed between the legs of the bull, the letters @PY. The letters of the ethnic are of different sizes.

- * (a) Berlin 21340 - 7.76 gr.
- (b) New York - 6.15 gr. (clipped, possibly).
- (c) New York - 7.81 gr.

Obverse: there are flaws which develop at the ear, nose, and in the angle of the crest.

Reverse: (a) has slight flaws along the back and next to the "upsilon". These deteriorate on (b) and (c), and a further major flaw appears at the back of the

2. O.2

(Plate II, 2)

Similar type to O.1, but smaller. The detail of the helmet and face are as on O.1, though the ear may be a little more squat. The bottom part of the crest is brought round beneath the truncation. The nose is similar to O.1. There is a ϕ in the forward angle of the crest, in which the vertical stroke is very thin and beneath the circle.

R.1

Same die.

- *(a) New York - 7.60 gr.
 (b) Vienna, Lipona 4724; Jörgensen pl. IX, 27

Obverse: small pellet flaws on crest ridge near topmost leaf of wreath. Also flaw at the ear.

Reverse: the flaws along the bull's back have become worse, as also on the left foreleg.

3. O.2

(Plate II, 3)

Same die.

R.2

ΘΟΥΜΑΝ

A walking bull to right with lowered, semi-frontal head and right foreleg in front of left. The musculature is similar to R.1, but the tail hangs down straight. Generally the bull is slightly smaller than R.1. The exergue line is single and linear, and in the exergue a somewhat smaller fish to right. Letter forms of the ethnic differ slightly from R.1.

- *(a) Ashmolean S.N.G. 898 - 7.82 gr.

Obverse: there is the same flaw to the left of the topmost leaf of the wreath, adjacent to the ridge of the crest. The flaw beneath the ear is worse, and a new one has appeared where the neck flap meets the helmet bowl.

4. O.2

(Plate II, 4)

Same die.

R.3

ΘΟΥΡΙΩΝ

A walking bull to right, head lowered, three-quarter frontal, with right foreleg in front of left. "In the manner of ΘPY, but without signature," Jörgensen p.174 33. The tail is whisked up in the same way as R.1. The ethnic, however, curves very sharply with the edge of the die after the "rho".

- * (a) Berlin, Imhoof-Blumer; Regling Terina pl.III, 3 - 77.7 gr.
 (b) Tübingen; Jörgensen pl. IX, 28 - 7.85 gr.
 (c) Paris, de Luynes 567; Jörgensen p.174 - 7.81 gr.

Jörgensen equates (b) and (c), but there are obvious differences in the obverse of (c). The crest ridge is double, the eye has a definite line iris and a pupil, and the lips are different. There is a large flaw at the base of the ear, however as before. Apparently there is no ϕ. Probably O.2 has been recut, and then used at some time after it was used in combination with R.4.

Obverse: further deterioration of flaws already mentioned.

5. O.2

(Plate II, 5)

Same die

R.4

ΘΟΥΡΙΩΝ

A trotting bull to right with head lowered and semi-frontal and right foreleg in front of left. The left foreleg is not raised as high as on R.1. The musculature in general is very close to R.1, and the tail is in the same position. The letters ΘPY are larger and placed differently from R.1. The ethnic is small and neat and slopes away to the right. The exergue line and fish are as usual.

- * (a) Niggeler, Basel, Dec. 1965 part I, no. 64; Jameson III, 1875 - 7.39 gr.

Obverse: there may be further deterioration about the /

6. O.3

(Plate II, 6)

A head of Athena to right. The general design of the helmet, wreath and face are as on O.1 and O.2, but larger than both. The nose, lips, chin and ear are exactly similar. The eye, however, differs slightly in that an eyelash is represented as opposed to just the lid. Between

the lid and the eyebrow there is an extra ridge, which must be intended to represent the area of loose skin sometimes found there. There is a necklace just above the truncation, and a ϕ in the angle of the crest.

R.4

Same die.

- * (a) London, B.M.C. 3 - 7.90 gr.
- (b) Ashmolean S.N.G. 903 - 7.91 gr.

Reverse: apparently no sign of deterioration.

GROUP B (ϕ - BIRD)7. O.4

(Plate II, 7)

A head of Athena to right, the helmet decorated with a slightly curving wreath of 6 pairs of leaves. The ridge of the crest is shown by 2 thin parallel lines, of which the inner is a little thicker. The outer line seems to be worked by thin lines perpendicular to the inner line. The crest has 2 breaks and begins nearer to the front edge of the helmet. The neckflap is smaller than in Group A, and curvilinear in shape on its outside edges; where it joins the helmet bowl behind the ear, it follows the contour of that member. There are locks of hair protruding at the temples and brow (1 large and 3 small) and also at the back of the neck from beneath the neckflap. Here the hair is tied in a knot. The nose is offset from the brow, but not to the extent of Group A, almost giving the appearance of a gentle curve. The lips are delicate, curving down towards the jaw, and there is no reduction in the plane of the cheek around them. The chin is strong and rounded. The eye has no iris, and is enclosed by lids which are straight on their inside edges but tapering on the outside edges. The ear has a helix and antihelix; the helix is tapered and carried right round at the front. There is a small indentation before the lobe. The edge of the flan makes it impossible to know whether or not there was a letter in the angle of the crest, the style is identical with that of O.7.

R.5

OOPYION

A bull walking to left, with lowered profile head, and left foreleg in front of right. There is creasing of the skin at the neck and between the forelegs. The tail hangs down straight. The musculature of the foreleg is distinctive (the representation of the shoulder) and characteristic of all this group. The left (near) side hooves are shown as cloven. The exergue line is double (linear), of which the lower is thinner, and in the exergue a fish to left. There is a bird with wings outstretched between the bull's legs. There does not appear to be any trace of a ϕ on the haunch, but it is in a vulnerable position as regards wear. The ethnic has different letter forms (especially "omega" and "nu") from Group A.

* (a) New York - 7.47 gr.

(b) Glendining, Jan. 1951; Woodward 30 - 7.74 gr.

Obverse: there is a flaw immediately in front of the nose on (b).

8. O.5

(Plate II, 8)

A helmeted head of Athena to right. Similar type. The leaves of the wreath are in a slightly different position from O.4; the 3rd from the left on the upper set is pinched over. The neckflap is larger and comes further forward than on O.4. The detail of the face is exactly as O.4, but the chin differs slightly in shape. In the angle of the crest there is a ϕ sloping backwards, its circle flatter than those of Group A - the vertical stroke seems to be over the circle.

R.6

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. The head is not as near to the exergue line as on R.5. The details of musculature, bird, exergue etc. are as on R.5. There is no ϕ evident but the die is in poor condition.

*(a) Ashmolean S.N.G. 900 - 7.51 gr.

Obverse: there is a flaw on the helmet bowl at the base of the ridge.

9. O.5

(Plate II, 9)

Same die.

R.7

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head, and left legs in front of right. The detail of the bull, bird, exergue and fish are as the previous dies of this group. There may be faint traces of a ϕ on the haunch. The ethnic curves with edge of the die.

*(a) New York - 7.47 gr.

Obverse: the flaw on the helmet bowl has increased in size.

10. O.5

(Plate VI)

Same die.

R.8

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head, but with right legs in front of left. The bull is the type as before

as also the bird, exergue line and fish. Impossible to tell whether there is a letter on the haunch.

* (a) Copenhagen S.N.G. 1425 - 7.34 gr.

This specimen is badly worn. Jörgensen considers the obverse to be the same as O.7 (see p. 172, note 1), but the flaw on the helmet bowl and certain other peculiarities on the neckflap are against this.

11. O.6

(Plate II, 11)

A helmeted head of Athena to right. Similar type. The 3rd leaf from the end is again pinched over, but the 2 leaves on the left end are in a very slightly different position from O.5. The neckflap is a little smaller. Except for the eyeball which is smaller, the detail of the face is as before. There is a ϕ in the angle of the crest, fractionally farther away than O.5.

R.9

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head, and left legs in front of right. Detail as usual. The wings of the bird are extended more vertically than on the previous dies. There is a ϕ on the haunch.

* (a) Ashmolean S.N.G. 901 - 7.90 gr. (reverse double struck)
(b) New York - 7.33 gr.

12. O.6

(Plate II, 12)

Same die.

R.10

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. Similar type. The bird is as on R.5 - R.8. ϕ on the haunch. In the ethnic, the "omega" is tall and narrow.

* (a) Lockett S.N.G. 477 = Glendining Oct. 1955, 353 - 784gr

Obverse: there were no real flaws on no. 11, but some are evident here on the helmet bowl beneath the crest.

13. O.7 (Plate III, 13)

A helmeted head of Athena to right. The leaves of the wreath (6 pairs) are curved as before. The neckflap differs in shape again. The detail of the face is similar, with small differences, e.g. the curve down of the lips is not the same. There is a ϕ in the angle of the crest.

R.11

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. Similar type. In particular, the distance of the tail from the buttocks and the size of the letters of the ethnic distinguish it. ϕ on the haunch.

*(a) Brussels, Hirsch 179 - 7.44 gr.

Obverse: there is a flaw on the neckflap which develops with subsequent combinations.

14. O.7 (Plate III, 14)

Same die.

R.12

ΘΟΥΡΙΩΝ

A bull walking to left with profile head. The right foreleg is in front of the left, but the left hind leg is in front of the right (cf. with R.8 for position of forelegs, and with R.19 and R.22 for hind legs). ϕ on the haunch. The ethnic is spaced out more.

*(a) Berlin, Peytrignet - 7.99 gr.

15. O.7 (Plate III, 15)

Same die.

R.13

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. The musculature, bird, exergue, etc. as usual. ϕ on the haunch. The ethnic is neater than R.11.

*(a) Paris, Fonds general 1407; Jørgensen pl. IX,22 - 7.94

Obverse: further flaws appear in the angle of the crest and at the base of the crest.

16. O.8

(Plate III, 16)

A helmeted head of Athena to right. Similar type. The wreath is straight, and the interior detail of the leaves clear. The neckflap is short but extends a long way forward. The detail of the face is as usual but the width (i.e. the distance from the back of the head to the nose) is greater, giving a different accent to the design. There is a ϕ in the angle of the crest.

R.14

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. The bull is of a heavier build than those on previous dies of this group. Bird, exergue and ethnic as usual. No ϕ in evidence.

*(a) Cambridge, Fitzwilliam S.N.G. 590 - 7.77 gr.

17. O.8

(Plate III, 17)

Same die.

R.15

ΘΟΥΡΙΩΝ

A bull walking to left with lowered facing head and right legs in front of left. The build of the bull is exactly similar to R.14. The bird is typical, and the exergue line double as before. The fish follows the curve of the die. A clear ϕ on the haunch. Ethnic as usual.

*(a) London B.M.; Hill, Guide, pl. XIII, 12; Seltman, Masterpieces no. 26, pp. 66 and 69 - 7.72 gr.

Reverse: There is a flaw at the base of the second vertical of the "nu".

18. O.9

(Plate III, 18)

A helmeted head of Athena to right. Similar type. The position of the leaves on the extreme right of the wreath may be different. The shape of the neckflap is not quite as on O.8, and there is less hair visible at the back of the neck, i.e. the termination of the neckflap is nearer to the truncation. There is a ϕ in the angle of the crest.

R.15

Same die.

* (a) Lockett S.N.G. 478 = Glendining Oct. 1955, 354 - 7.69gr.

Reverse: the flaw on the "nu" is worse, and there is another between the tail and the buttocks.

19. O.10

(Plate III, 19)

A helmeted head of Athena to right. Similar type, close to O.9. Main points of difference are the neckflap and the amount of hair that is visible and the position of the ϕ in the angle of the crest in relation to the helmet. There is a beaded necklace just above the truncation.

R.15

Same die.

* (a) Berlin, Lobbecke - 7.83 gr.

Reverse: deterioration about the legs and ethnic. Possibly the ethnic and tail have been re-cut.

20. O.11

(Plate III, 20)

A helmeted head of Athena to right. The wreath has a subsidiary branch, and berries are clearly represented between the leaves. The head is a little different in shape. The detail of the face is as usual. There is a beaded necklace just above the truncation. The ϕ is small and neat, tucked away into the angle of the crest.

R.16

ΘΟΥΡΙΩΝ

A bull walking to left with lowered head, partly facing, and right legs in front of left. The front legs are closer together than on previous dies of this group. The animal is of a heavier build even than R.14 and R.15. The bird is as usual and the exergue line double, but the lower is beaded. On the haunch ϕ .

(a) Munich; Jörgensen pl. IX, 24.

* (b) London B.M.; Lloyd S.N.G. 469 - 7.90 gr.

Obverse: there is a flaw on top of the helmet crest at the front, which is worse on (b). (b) is beginning to deteriorate at the back of the neckflap.

21. O.11 (Plate III, 21)

Same die.

R.17

ΘΟΥΡΙΩΝ

A bull butting to left, with lowered three-quarter frontal head and right legs in front of left. The left foreleg is flexed and the hoof near to the belly. The bull is a heavy type similar to R.16. The tail whisked back over the haunch so that the end hangs down the rear flank. Bird, exergue (similar to dies preceding R.15) and fish as usual. There is a φ on the haunch.

* (a) Berlin 665/1872; Jørgensen pl. IX, 25; Regling, Terina pl. III 2-7.75 gr.

(b) Glasgow, Hunter; Macdonald I, pl. VII, 15 - 7.87 gr.

Obverse: there are flaws around the lips and chin, and at the necklace.

22. O.12 (Plate III, 22)

A helmeted head of Athena to right. The wreath is further developed, having 2 subsidiary branches at its base and a more complicated arrangement of the leaves. It fills much more of the bowl than on any previous die. The facial characteristics are as before. The φ in the angle of the crest is larger than before, having a very flat circle.

R.18

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. The type is exactly similar to R.5 in general style, bird, exergue and ethnic.

* (a) New York - 7.86 gr.

Obverse: flaw behind the neckflap which develops on subsequent combinations.

23. O.12 (Plate III, 23)

Same die.

R.19

ΘΟΥΡΙΩΝ

A bull walking to left with lowered near-frontal head. The right foreleg is in front of left but the left hind leg in

front of right (cf. with R.12 and R.22). The bull is small compared to most preceding dies, but otherwise similar to last. On the haunch ϕ .

* (a) Berlin, Lobbecke 1 7.59 gr.

24. O.12

(Plate III, 24)

Same die.

R.20

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. Similar type. The bird, exergue, ethnic and fish as usual. On the haunch ϕ . The spacing of the letters of the ethnic distinguishes it from R.18.

* (a) Ashmolean S.N.G. 899 - 7.86 gr.

(b) Paris, de Luynes 569; Jørgensen pl. IX, 23; Kraay, Coins 251 - 7.95 gr.

(c) Jameson 355 - 7.84 gr.

25. O.12

(Plate IV, 25)

Same die

R.21

ΘΟΥΡΙΩΝ

A bull walking to left with very low, profile head and left legs in front of right. The body of the bull is thin and the hind legs very long. The detail of the bird and fish is very clear. There is a ϕ on the haunch. The letters of the ethnic are smaller than on some.

* (a) London, B.M.C. 15 - 7.97 gr.

Obverse: there has been considerable deterioration since combination no. 22.

26. O.13

(Plate IV, 26)

A helmeted head of Athena to right. The wreath is replaced by a skylla as the helmet decoration. The lower part of its body is that of a fish or sea serpent, while the upper part is female, with two dogs growing out of its thighs. The proportions of the body remain constant throughout the sequence in this group, as does the position of the right arm (around a dog) and the left hand shielding the eyes. The position of the tail fins varies from die to die. The detail of the rest of the helmet, the face and the hair are exactly as on the previous dies of this group. There is a beaded necklace just above the truncation and a ϕ in the angle of the crest.

R.22

ΘΥΡΙΑΝ

A bull walking to left with lowered near-frontal head. The right foreleg is in front of left, but the left hind leg is advanced (cf. with R.12 and R.19). The bird, exergue and ethnic are as usual. There is a ϕ on the haunch.

*(a) London, B.M.C. 50 - 7.77 gr.

Obverse: there is a flaw behind the head of the skylla which is worse on combination no. 27.

27. O.13

(Plate IV, 27)

Same die.

R.23

. ΘΥΡΙΑΝ

A bull walking to left with lowered profile head and left legs in front of right. The bird, exergue, ethnic and as usual. Similar to R.21.

*(a) London B.M. ex Mavrogordato 113.

Obverse: the die seems worse here, but much may be due to a poor specimen.

28. O.14

(Plate IV, 28)

A helmeted head of Athena to right. Similar type to O.13. The position of the tail fins distinguishes it, otherwise very close to O.13. The necklace as on O.13 and a ϕ in the angle of the crest.

R.24

ΘΟΥΡΙΩΝ

A bull walking to left with lowered near-frontal head and right legs in front of left. The bull is similar in build to R.16 and R.17. The bird, exergue and ethnic as usual. There is a ϕ on the haunch.

- * (a) New York - 7.86 gr.
- (b) Lockett 3491 2 Glendining Oct. 1955 356
- (c) Ashmolean S.N.G. 928 -
- (d) Berlin 9148 - 7.74 gr.

29. O.14

(Plate IV, 29)

Same die.

R.25

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. Another large animal as R.24. The bird and fish as usual. The exergue has its lower line beaded. The letters of the ethnic are a little taller, but in the same forms. There is a ϕ on the haunch.

- (a) Lockett S.N.G. 479 = Glendining Oct. 1955, 355 - 7.89 gr.
- * (b) New York - 7.80 gr.

Obverse: there is flaving on the crest and beneath the tail of the skylla.

Reverse: (b) has a large flaw on the fish's tail and on the "theta"

30. O.15

(Plate IV, 30)

A helmeted head of Athena to right. Similar type to O.13 and O.14. The position of the tail fins distinguishes it. The detail of the face and necklace exactly as before. There is a ϕ in the angle of the crest.

R.26

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. Again similar in build to R.23 and R.24. The bird, exergue, fish and ethnic as usual. On the haunch φ .

*(a) New York - 7.58 gr.

Obverse: there is a flaw between the ear and the skylla.

31. O.15

(Plate IV, 31)

Same die.

R.27

ΘΟΥΡΙΩΝ

A bull walking to left with lowered profile head and left legs in front of right. Similar type to R.23, R.24, R.25 and R.26. The size of the fish distinguishes it from R.26 and also its distance from the exergue line, of which the lower part is thicker than R.26. Ethnic as usual and φ on the haunch.

*(a) London B.M.C. 49 - 7.45 gr.

Obverse: the flaw between the ear and the skylla is larger and another flaw has developed at the ear itself.

GROUP C (skylla)32. O.16

(Plate IV, 32)

A helmeted head of Athena to right. The helmet bowl is decorated with a skylla which is more fleshy, more strongly built than those of Group B. The breasts are represented more fully and she wears a necklace. The tail fin is folded behind the lower part of the torso, so that only part of it is visible. The lines which represent the base of the helmet crest are much the same as in Group B, but more symmetrical. The crest does not come as near to the front of the helmet as in Group B. The neckflap is larger than Group B and is more curved on its bottom edge. Less hair, therefore, is visible but it is arranged similarly (i.e. tied). The profile of the front of the face is more vertical, and the lips are fuller but shorter than Group B. The eye is very different. The upper lid curves and there is a linear iris. The ear is generally similar to Group B. There is a necklace just above the truncation. The ϕ in the angle of the crest is nearer to the helmet, with its long vertical stroke parallel to the rim of the helmet.

R.28

OOYPIAN

A bull butting to right, with lowered near-frontal head and left legs in front of right. The tail is whisked up to fall over the right flank. The musculature differs slightly from the uniform Group B, both in the shape and manner of representing some parts of the body. The bull appears not to have any horns. The exergue line is double and in the exergue a fish to right. The ethnic has different letter forms for the "omega" and "nu". No ϕ or bird.

*(a) Lockett 3492 = Glendining Oct. 1955, 357.

33. O.16

(Plate IV, 33)

Same die.

R.29

OOYr...

A bull butting to right with lowered near-frontal head and left legs in front of right. The head is less horizontal than R.28, but in all other respects it is similar. The lower line of the exergue is beaded. The

fish is somewhat larger. Little of the ethnic is visible on this specimen, but the letters seem to be larger than R.28.

*(a) Ashmolean S.N.G. 1053

Obverse: the die has worn at the ear and neckflap

34. O.16 (Plate IV, 34)

Same die.

R.30

ἄουπλιν.

A bull butting to right with lowered three-quarter frontal head and left legs in front of right. The bull is very stylized, the lines of its body too straight. It does not compare with R.28 and R.29. The exergue line is single, and in the exergue a fish to right. The ethnic slopes away to the right, the "upsilon", "rho" and "iota" very large.

*(a) New York - 7.90 gr.

35. O.17 (Noe B2 - distater) (Plate IV, 35)

A helmeted head of Athena to right. The helmet bowl has a skylla and the neckflap a griffin with raised forepaws. The skylla wears a necklace and is in the same style as O.16. The position of the dogs and of the tail fin is different from O.16. The facial details are the same as on O.16 but the hair hangs loose from beneath the neckflap; it is not tied. Necklace as O.16. The ϕ in the angle of the crest is in a similar position to O.16.

R.31

ἄουπλιν

A bull butting to right with lowered near-frontal head and left legs in front of right. The bull is closely similar to R.28 and R.29. The exergue line is double the lower beaded. The ethnic is similar to R.28. On the bull's haunch κ in tiny letters.

- (a) London B.M.C. 26 (imperfect) - 15.82 gr.
- (b) Berlin, Fox - 16.00 gr.
- (c) Cambridge, McClean 1254, pl.40,
11 ex Hirsch XV, 668 - 15.70 gr.
- (d) Cambridge, McClean 1255, pl.40,
12 ex Hirsch XVI, 130 - 15.72 gr.

(e)	Dresden	- 16.00 gr.
(f)	Boston, Brett 139;	
(g)	Naples, Fiorelli 2780	- 15.10 gr.
(h)	Naples, Santangelo 4731	- 15.30 gr.
(i)	Naples, Santangelo 4735	- 15.80 gr.
(j)	E.T. Newell, ex Hirsch XVIII, 2211	- 15.64 gr.
(k)	Paris, Chandon de Briailles	- 15.55 gr.
(l)	Hirsch XXX, 227	- 15.10 gr.
(m)	Naville XII, 227	- 15.07 gr.
(n)	Seaby 1927, 536	- 13.68 gr.
(o)	Santamaria 1934; Prezzi Signati 54-	15.51 gr.

Additional to Noe:

(p)	New York	- 15.12 gr.
-----	----------	-------------

36. O.17 (Noe B4 - di-stater) (Plate IV, 36)

Same die.

R.32

00YPIA

A butting bull to right with lowered frontal head and left legs in front of right. The bull is in less naturalistic and more stylized. The kind legs are shorter than on the preceding dies and the body generally is nearer the ground. The ethnic curves downwards, the "epsilon" being far larger than the other letters. Compare with R.30.

- (a) Berlin - 14.83 gr.
- (b) Naples, Santangelo 4734 - 15.70 gr.
- (c) H. A. Greene - 15.30 gr.

37. O.18 (Noe B6 - di-stater) (Plate IV, 37)

A helmeted head of Athena to right. The skylla is the same well-built type as on O.17. In all respects very similar to O.17, except that the griffin is different and there is no ϕ .

R.33

00YPIA

A bull butting to right with lowered head in three-quarter view and left legs in front of right. Very similar to R.31. In minute letters on the exergual line $\text{I}\Sigma\text{T}\text{O}\text{P}\text{O}\Sigma$ and on the bull's flank to the left of the tail K . The ethnic as on R.31.

- (a) Naville V, 551; Sotheby 1929,6 - 15.69 gr.
- (b) Paris, de Loynes 587 - 15.65 gr.
- (c) Marquis Ginroi; N.C. 1927, p.299, pl. XIII, 4 - 14.10 gr.

38. O.19 (Noe B8 - di-stater)

(Plate V, 38)

A helmeted head of Athena to right. Very close to O.17 but the hair protruding from the neckflap is different. There is no ϕ .

R.34

ΘΟΥΡΙΩΝ

A bull butting to right with lowered head in three-quarter view and left legs in front of right. In the same style as R.31 and R.33. The hoop of the tail is smaller than R.33. No inscription on the exergue line. ∇ on the haunch of the bull to the left of the tail.

- (a) E. S. G. Robinson - 15.40 gr.
- * (b) Jameson 358 - 15.75 gr.
- (c) Naville X, 100 - 15.68 gr.
- (d) Hirsch XVIII, 2210; ex Ashburnham 1885, 16; ex Northwick 114 - 15.74 gr.

GROUP D39. O.20

(Plate V, 39)

A helmeted head of Athena to right. The helmet is decorated with a wreath. The style is very different to Group B, e.g. the base of the crest is a single line only; the neckflap is of a more angular type; the hair at the back of the neck appears to hang loose; the ear and chin do not conform to the consistent shapes of Group B. There is a Λ in the angle of the crest.

R.35

00YPIΩA

A bull walking to left with near-frontal head and right legs in front of left. The bull is close in style to R.16, having the same general musculature as Group B. The exergue line appears to be wavy, although there is faint evidence of beading, and the whole effect may be due to flawing. (The Jameson catalogue states that it is intentionally undulated to represent the waves or ripples of a stream). In the exergue a fish to left. The ethnic has letter forms which are close to Group B. Above the ethnic a bird flies to left. On the haunch of the bull ϕ .

* (a) Jameson 356 - 7.85 gr.

40. O.21

(Plate V, 40)

A helmeted head of Athena to right. The general design of the helmet, the wreath, the hair at the back of the neck (which is tied) and at the temples and brow show great similarity with Group B. The detail of the face, however, indicates another hand, particularly the mouth, chin, eye and ear. The wreath, in fact, suggests a copy of O.11, for which there is further confirmation in the shape of the small, neat ϕ , tucked into the angle of the crest.

R.36

00YPIAN

A bull walking to left with lowered profile head and left legs in front of right. It seems to be a lifeless copy of the Group B type, having a similar musculature and the same reduction in plane forward of the haunch. The exergue line is double and in the exergue a very thin fish to left. There is no bird. The ethnic has different letter forms from Group B. There appears to be a large ϕ on the haunch.

*(a) Berlin, Friedlander - 6.37 gr. (the weight is low for a die of normal size).

41. O.22

(Plate V, 41)

A helmeted head of Athena to right. The wreath and hair tied at the back are comparable to Group B, but the shape and design of the helmet, and the detail of the face are quite different. There is no ϕ .

R.37

ΘΟΥΡΙΩΝ

A bull walking to left with lowered near-frontal head and left legs in front of right. The bull has no horns, and although the musculature has certain similarities with Group B, it clearly does not belong to that group. There is a bird beneath its belly, but represented quite differently from those in Group B. The exergue line is double. The ethnic has different letter forms again. There is a ϕ on the haunch but here it slopes to the right, contrary to general practice on the preceding dies.

*(a) Berlin, Imhoof-Blumer - 7.81 gr.

42. O.23

(Plate V, 42)

A helmeted head of Athena to right, with wreath. The style is not at all comparable. The crest is different, as also the line which marks the base of the crest. Ear, eye (there is an extra fold of skin between the eyebrow and the eyelid) nose, lips, chin, are not similar to any of the previous groups. There is no ϕ .

R.38

.ΟΥΡΙΩΝ

A bull walking to left with near-frontal head, but left legs in front of right. The bull generally is very close to R.37. The exergue line is single, and the bird similar but larger than on R.37, with its wings in a more vertical position. The ethnic is similar also. Apparently no ϕ , but the specimen is in poor condition here.

*(a) Ashmolean S.N.G. 1045

43. O.24

(Plate V, 43)

A helmeted head of Athena to right. Single line for the ridge of the crest. The hair in front of the ear is arranged differently from the previous dies. The eye is inset deeply and the nose slightly aquiline. There is a square accent in the face generally. The ear is not the usual shape for Group B, and slopes back more.

R.39

.. VPIΩN

A bull walking to left, probably with profile head. The legs look awkward. The bird is similar to R.38, though its body is not as large. The exergue line is double, and in the exergue a long straight fish to left. The ethnic has the same letter forms as R.38 and R.39. There is no φ.

(a) Ashmolean S.N.G 1046

44. O.25

(Plate V, 44)

A helmeted head of Athena to right. It has the same square accent as O.24, but the crest is not as large and the wreath not in a smooth curve. The neckflap, nose and ear are not as on O.24.

R.40

ΘΟΥΡΙΑ.

A walking bull to right with near-frontal head and right legs in front of left. The bull has very long legs. The exergue line is double and in the exergue a large fish to right. There is no φ.

*(a) New York - 7.79 gr.

(b) Niggeler, Dec. 1965, 63; ex Jameson I, 351 - 7.88 gr.

45. O.26

(Plate V, 45)

A helmeted head of Athena to right. Not at all comparable in style to any previous die. In the angle of the Crest A.

R.41

ΘΟΥΡΙΑΝ

A bull walking to left, with near-frontal head and left legs in front of right. The bull, bird and fish are in a very inferior style.

*(a) New York - 8.19 gr.

SUMMARY OF POINTS OF DIFFERENCE BETWEEN GROUPS A, B, and C
AT THURII.

OBVERSE:

1) The helmet. The overall shape varies from group to group. The ridge of the crest is represented by only one line in Group A, but by two parallel lines in B and C, of which C generally has more neatly executed lines. The wreath of Group A is primitive and stylized compared with that of B, and similarly the skyllas of Group C are represented with greater skill than those of Group B (Group C skyllas wear a necklace.) The neckflap is rectilinear in outline in Group A, but curvilinear in Group B; Group C is also curvilinear but tends to a slightly different shape (deeper) and has more curves. In Group A the crest is carried round beneath the truncation, a feature which does not occur in either of the other two groups.

2) The hair. Group A has one large and three small locks of hair at the brow on O.1 and then one large and four small locks on the remaining dies of that group. Group B maintains a consistent one large and three small locks, as also does Group C. The hair which protrudes from the neckflap is left untied in Group A, is always tied in Group B, and varies in Group C.

3) The face. The nose is straight generally, but larger in Group B. The lips are full in all groups, but shorter in A and C. The division between the lips is carried further in Group B, and curved down towards the jaw. The chin is shallow and with the hint of a point in Group A, but stronger and more rounded in B and C. The angle at which the neck slopes away from the jaw is more obtuse in Group B than in A (i.e. the neck is more vertical relative to the face generally in Group A). The eye has a more obviously moulded iris in A, and in C there is a linear iris and a pupil. The whole eye is perhaps a little larger in Group A and the lids longer. In Group C the upper lid is curved. The eyebrow is more curved in Groups B and C, than in A. The ear in Group A has a smoother outline than Group B, and, generally, the ear is more squat (certainly in comparison with Group C). In Group B, the lines of the helix seem to be carried further towards the centre of the ear at their termination.

4) Lettering. All groups have a ϕ in the angle of the crest. On O.2 of Group A, the vertical stroke is underneath the circle, while the opposite seems to be the case throughout Group B.

REVERSE:

1) The Bull. In Groups A and C the bulls face to right, whereas in Group B they face to left without exception. The position of the legs is important. In Group A the head is in three-quarter view and the right legs in front of left, but in Group B the right foreleg is always forward when combined with a semi-frontal head (remembering that the bulls face in the opposite direction). When there is a profile head in Group B the left legs are always forward except in two cases, R.8 and R.12, of which the latter has the opposite hind leg advanced. (In two instances, where bulls of Group B have semi-frontal heads and right forelegs forward, the opposite hind leg is advanced - R.19 and R.23). Each of the three groups has a distinctive musculature. Group A has long creases of skin and an almost circular moulded area of the body between the front and hind legs. Group B has a consistently clear and uniform representation of the outline of the rear foreleg at the shoulder, and a large area where there is a reduction in the plane of the body just forward of the rear haunch. In Group A the tails are whisked up in a hoop except on R.2, while in Group B the tails hang straight on all dies except R.17 where it is brought back to fall across the flank. Group C tails are similar to Group A. The bulls of Groups A and B are shown as having horns, while those of Group C apparently do not.

2) The exergue. The exergue line is single and linear in Group A but double, one of which is sometimes beaded, in Groups B and C (except the inferior die R.30 in Group C, where it is single). In all groups the fish faces the same way as the bull.

3) Lettering and bird. The letter forms and general neatness of the ethnic are different in the various groups. Consistent neatness distinguishes Group B particularly. The most obvious differences in letter forms are α and Λ in Groups A and C, but α and Λ in Group B. All dies in Group B have a bird beneath the bull and most, probably all, have a Φ on the haunch; the other Groups A and C do not show either of these. Group A has $\phi\pi\gamma$ beneath the bull on two reverses, while Group C shows Ψ on the bull's haunch on three dies and ΙΣΤΟΡΟΣ on the exergual line of one.

TERINA1. Regling R ~

TEPIN/AION (Rev. Plate V)

A head of a nymph to right, within a linear circle. The hair is gathered into a top-knot and held in over the brow with an ampyx. The hair itself is represented by sets of 4 thin, parallel lines; there are some loose strands on either side of the top-knot. Hair is also swept back over the ampyx in front of the ear. At the back of the head, behind the ear, there appear to be 2 bands of the ampyx, one above the other. The nose is straight, and slightly off-set in relation to the brow. The eyebrow has a smooth curve. The eye proper has lids similar to those at Thurii, but more delicate. The iris is linear and the pupil a dot in the centre. The wings of the nostrils are similar to those on the Syracusan and Thurian dies, but the nose is less pointed than the Syracusan dies. The nose is closer to the mouth than at Thurii. The lips, more delicate than on the Thurian dies, curve more sharply downwards and further toward the jaw. The chin is comparable to some at Thurii but not as square as most. The neck is thin and long. Above the slightly concave truncation there is a beaded necklace. The ear is close to those at Thurii in overall shape and representation of interior detail (i.e. helix, antihelix and lobe). The ethnic is disposed about the head within the linear circle. Behind the neck, there is a small ϕ sloping backwards.

Regling ψ

A winged nike to left, seated on a stone cippus. There is a fully frontal view of the wings, while the rest of the body is in three-quarter view. The hair is arranged similarly to that on the obverse. The detail of the face, nose, eye, lips, chin and ear, is all represented and shows a remarkable similarity with that on the obverse type, despite the much reduced size. She wears a chiton and himation which are diaphanous, the breasts especially being visible. The legs are uncrossed. There is apparently nothing on her feet, which rest on the base of the cippus. She holds an olive wreath in her left hand which hangs down beside the cippus, and a caduceus, handle forwards, in her right.

*London, B.M.; Lloyd S.N.G. 732 = Weber 1147 - 7.53 gr.

2. Regling R

Same die.

Regling ω

A winged nike facing left, seated on a stone cippus. The wings, facial details, hair and body generally are as on the preceding reverse, but here she wears a sleeved chiton and himation. The feet are placed further apart, and, as before the legs are not crossed. There is nothing in the large left hand which is placed on the cippus, thumb on top and fingers down the side. In her right hand she holds a caduceus, pointing forwards. On the Hirsch specimen, there seems to be a φ on the base of the cippus.

3. Regling R.

(Plate V)

Same die.

Regling αα

TEPINAION

A winged nike facing left, seated on a four-legged stool, on a base. The wings are more profile than on the 2 previous reverses; all that is visible of the right wing is the shoulder protruding from behind the head. The chiton here is sleeveless. The legs are not crossed, but the left foot is forward and the right back, concealed in the folds of the dress which fill the gap between the legs of the stool. The left hand rests on the side of the stool, while the right is extended, palm downwards, and is juggling 2 balls. There is a φ in the field to the right of the stool. The ethnic curves with the die.

*London B.M.C. 13 - 7.65 gr.

4. Regling R

Same die

Regling ββ

TEPINAION

A winged nike facing left, seated on a stool as on The right wing is concealed by the left. The chiton is sleeveless and the himation as usual. The right hand holds a caduceus, handle forwards. The outline of the right leg is visible from thigh to foot, protruding from behind the forward edge of the left leg. There is a φ in the field, higher up than on αα. The ethnic again curves with the die.

5. Regling R.

Same die.

'Regling ββ'

TEP/INAION

A winged nike facing left, standing with right foot on a rock. The shoulder of the right wing is just visible to the left of the head. She wears a sleeved chiton; the himation as usual. The right elbow rests on the knee, in the right hand a caduceus. The left arm hangs down at the side.

6. Regling R.

Same die.

Regling γγ.

TEPINAION/N

A winged nike facing right, seated on a hydria in three-quarter view. The left wing is at a different angle to the right, its shoulder forming a smooth curve which protrudes to the right of the face. The dress is a sleeveless chiton, and a himation. Perched on the left hand a bird with wings spread, and in the right a caduceus. The point in which the general treatment of the nike differs from the preceding dies is the arrangement of the hair, which follows obverse S rather than R.

7. Regling S

(Plate VII)

A head of a nymph to right, surrounded by an olive wreath. The hair is arranged differently from R. An ampyx decorated with palmettes holds in the hair over the forehead, and at the side and back the hair is taken up around the ampyx in a roll. As a result, less of the ear is visible, concealed by hair. In the detail of the face, there is exact correspondence with R. There is a beaded necklace just above the truncation. Behind the neck a small φ sloping backwards.

Regling γγ

Same die.

*London B.M.C. 10; Seltman, Masterpieces p.67, 27 - 7.74 gr.

8. Regling S.

Same die.

Regling δδ

TEPINAION

A winged nike facing left, seated on a stool. The right wing is not visible. She wears a sleeveless chiton, and himation. The right arm is outstretched, and beneath the hand an animal's head. Between the legs of the stool there is a bird to left. The position of the legs is similar to αα. The lettering of the ethnic is smaller than on previous dies.

9. Regling S

Same die.

Regling αα

Same die.

10. Regling S.

(Plate V)

Same die

Regling εε

TEPINAION

A winged nike facing left, seated on a stool. The right wing is not visible, but is concealed behind the left. The left hand rests on the side of the stool, and above the right, palm downwards, there is a ball. There is no second ball as there was on αα. The ethnic curves with the edge of the die.

*London, B.M.: Lloyd S.N.G., 736 - 7.40 gr.

11. Regling S.

Same die.

Regling ζζ

TEPINA

A winged nike facing left, seated on a stone cippus which has the legend ΑΤΗ. The shoulder of the right wing is more pointed than on preceding dies and protrudes even

further to the left. She wears a sleeveless chiton, and himation. On her right thigh, she supports a large amphora which catches the water from a lion's head water spout, set into a wall of large, square blocks of stone. Beneath a swan swims to left in the basin of the fountain.

12. Regling S

Same die.

Regling ββ'

Same die.

13. Regling S is then combined with reverse ηη which is signed by Π.

THE PLATES

SYRACUSE



1.



2.



193

3.



6.



7.



9.

THURII

1.



2.



3.



4.



5.



6.



7.



8.



9.



10. SEE PLATE VI.

THIS WAS THE ONLY PHOTOGRAPH AVAILABLE TO ME.

11.



12.



13.



14.



15.



16.



17.



18.



19.



20.



21.



22.



23.



24.



25.



26.



27.



28.



29.



30.



31.



32.



33.



34.



35.



36.



37.



PLATE V

38.



39.



40.



41.



42.



43.



44.



45.



REGLING R.



REGLING S.



REGLING XX.



REGLING EE.

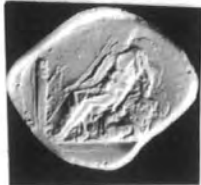


REGLING Ψ .





VEKIA.



PANDOSIA.



HERACLEA.



LEONTINI



THURII No. 10 (x4).



REGLING S/YY (x3).



TUDEEK REV. 29 (x2). TUDEEK OBV. 16 (x2).



THE GEM (x2).