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Autor: Kraay, Colin M.

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#### COLIN M. KRAAY

## TWO LATE FIFTH CENTURY B.C. HOARDS FROM SOUTH ITALY

Although the first of the hoards here described was found long ago and dispersed immediately after discovery, it still seems possible to extract from the surviving account more detailed information about its contents than has yet been done. The second hoard, also dispersed, is a much more recent discovery, and some account is here given of it for the first time. Since the two hoards appear to have been buried within a few years of each other in the late fifth century, though in widely separated areas, the account of their contents will be followed by a brief assessment of the light they throw on the late fifth century coinages of South Italy.

# I. The Paestum Hoard of 1858

In her recent admirable survey of coin hoards from Paestum <sup>1</sup>, Dr. Pozzi has performed an especially valuable service in rescuing from oblivion L. Sambon's earliest and most detailed account of the great hoard of more than 1000 silver coins <sup>2</sup> found near Paestum in January, 1858 <sup>3</sup>. This rare pamphlet seems quickly to have been lost sight of, for later students have relied on Sambon's subsequent and more summary record <sup>4</sup>. Though even the earliest account is infuriatingly inadequate, it does enable a number of issues to be identified with some precision (as Dr. Pozzi has duly done), but the date of burial remains nevertheless uncertain. Dr. Pozzi has observed what both Evans and Noe seem to have overlooked, that Sambon's accounts of the hoard refer to the inclusion in it of «a certain number» of coins in uncirculated condition with a female head upon obverse and a horseman with TA on reverse; she rightly concludes that the presence of these so-called Campano-Tarentine didrachms would require a date of burial in the general neighbourhood of 300 B. C. rather than 400 B. C. proposed by Sambon and Evans <sup>5</sup>. Sambon, however, was so entirely convinced (as we shall see, rightly) of the late fifth century context of the hoard, that he

<sup>1</sup> Annali 9-11, 75 ff. and especially 147 ff.

<sup>&</sup>lt;sup>2</sup> See below p. 64.

<sup>&</sup>lt;sup>3</sup> L. Sambon, Sur un dépôt de monnaies grecques trouvé dans une terre de l'ancienne Lucanie, Naples 1858. I am particularly grateful to Dr. Pozzi for providing me with a photostat when I was unable to find a copy in this country.

<sup>4</sup> Both Evans (NC 1889. 39 ff.) and Noe (Bibliography<sup>2</sup>, no. 782) refer only to Sambon's Recherches sur les monnaies de la presqu'île italique (1870), 30 ff.

<sup>5</sup> Annali 9-11, 155 ff.

was prepared against his better judgment to up-date the Campano-Tarentine issues from the third to the fifth century on the basis of their inclusion in this hoard <sup>6</sup>.

Before examining the contents of the hoard Sambon's somewhat idiosyncratic system of presenting evidence must be explained. Though he nowhere mentions the circumstances under which he examined the hoard, he gives the impression that the whole of it was available to him. The only conspectus of the entire material is a table in which the coins are divided into three categories according to preservation (1. à fleur de coin; 2. effleurées par la circulation; 3. frustes); within these categories types are described in the most general way, and to each type is attached a footnote listing the varieties of ethnic found with it (including variant letter forms); a letter gives the number of specimens of each type in each state of preservation according to the following code: A = une seule pièce; B = deux pièces; C = quelques-unes; M = un certain nombre; Q = une grande quantité. In the text are mentioned letters (other than ethnics) which occur at each mint; Sambon appears to have conscientiously recorded all such occurrences so that it may be safely assumed that those which he does not mention were not seen by him in the hoard. This principle cannot, however, be applied to symbols or adjuncts, for of many which must certainly have been present, he makes no mention at all.

The following paragraphs are not intended to offer a full account of the hoard, most of which can be obtained from Dr. Pozzi's work, of which I have made much use; their main purpose is to try to define more precisely the latest issues of each mint which were represented.

#### **CAULONIA**

Of this mint only «quelques-unes pièces» were in uncirculated condition. The following additional details are supplied:

- 1. a single coin had  $\Phi$  below the stag on the obverse;
- 2. two coins bore the letters  $\Theta E$ ;
- 3. legends in the forms KAY $\Lambda\Omega$ , KAY $\Lambda\Omega$ N ATA $\Sigma$  and KAY $\Lambda\Omega$ NIATA $\Sigma$  are quoted.

No. I can refer only to the obverse die common to Noe 143–146 or to that of Noe 147. On Noe 143–146 the form of the obverse ethnic is actually KAY $\Lambda$ ON 5ATAM but the final letter is awkwardly confined between the head of Apollo and the border, and is often off the flan; Sambon's reading could well correspond to this die. Noe 146 has the reading KAY $\Lambda$  $\Omega$  in large clear letters on the reverse, so that this one variety would account for two out of the three ethnics as well as the letter  $\Phi$ .

<sup>6</sup> Recherches 251.

<sup>&</sup>lt;sup>7</sup> S. P. Noe, The coinage of Caulonia (Numismatic Studies 9).

No. 2 can refer only to Noe 152–158 on which  $\Theta E$  is present sometimes on obverse, sometimes on reverse; the legend on this group is normally either absent or only very partially preserved.

There remains the ethnic KAYAQNIATA $\Sigma$  with Ionic forms throughout, which occurs on a number of varieties, several of which can, however, be excluded for various reasons: Noe 170–175, because all bear additional letters, A,  $\Theta$ , or E, not recorded by Sambon; Noe 176–181, a late issue, perhaps the final issue of Caulonia, unlikely to have been present in the absence of Noe 170–175; Noe 140, another late issue which can be safely excluded. This leaves only the reverse die common to Noe 122, 124 and 125  $^8$  or the obverse die common to Noe 131–133; both these dies belong to Noe's Group H.

Following my revision of Noe's sequence 9 the following results are obtained:

- 1. two coins of group  $H^1$  or  $I^1$  (Noe 152–158 with  $\Theta$ E) were present (pl. 9, 4);
- 2. one coin of group I<sup>1</sup> (with  $\Phi$ , probably Noe 146) was present (pl. 9, 3);
- 3. a coin or coins of J1 (with Ionic ethnic) were present (pl. 9, 5);
- 4. the final issues of Caulonia, Noe 170–181 were not present.

Caulonia was destroyed by Dionysius I in 389 B.C. so that the absence of the final issues is consistent with a terminal date in the last decade of the fifth century for the issues represented in the Paestum hoard.

### **CROTON**

Among the issues à fleur de coin were a few (C) with incuse tripod on reverse (legends OPO and OPO) (pl. 9, 6); a larger number (M) had tripod in relief on both sides, and of these a majority had OPO in the exergue (legends OPO OPO (pl. 9, 8). Finally, there was a single specimen of the issue with seated Heracles and OPC had an incomplete of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a single specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the issue with seated Heracles and OPC had a specimen of the i

I have argued elsewhere <sup>10</sup> that the final phase of the incuse coinage of Croton continued until the middle of the century or later, after which follow the not very numerous varieties with tripod in relief on both faces (440–430 B. C.?); the issue with the seated Heracles may perhaps be dated ca. 420 B. C., since the retention of the archaic letter forms in the obverse legend argues against a much later date.

### **HERACLEA**

The hoard contained two staters only, but a fair number (M) of diobols, all of which were à fleur de coin. One of the staters, described as «effleurée», was from Heraclea's earliest issue of staters with Athena's unhelmeted head on obverse and

<sup>8</sup> The reverse link between 122 and 124 was not recorded by Noe.

<sup>9</sup> NC 1960, 56.

<sup>10</sup> NC 1960, 62.

seated Heracles on reverse (Work 1–2 pl. 9, 10) 11; the second stater, à fleur de coin, despite the apparently exact details provided by Sambon is less easy to identify precisely.

Sambon gives three items of information:

- I. he quotes for this coin Carelli, pl. CLX, II, the only stater of Heraclea with Athena head to *left*; this variety corresponds approximately to Work 24, which has, however, A in the field of both obverse and reverse, a feature not noted by Sambon. The legend given by Carelli is  $\text{HPAK}\Lambda\text{EI}\Omega\text{N}$  which should be emended to  $\text{HPAK}\Lambda\text{HI}\Omega\text{N}$  (Work 24).
- 2. the letters  $\Pi O$  «paraissaient à peine» below the bust of Athena. This seems to correspond to the  $\Gamma O$  of Work 6, which has a normal head to right, no A in field, and legend HPAK $\Lambda EI\Omega N$ .
- 3. the legend is given as HPAKΛEIΩN, which corresponds to the reference given to Carelli, but not to the legend of Work 6. Sambon correctly omits the aspirate from the legend of Work 1–2, so that its inclusion here would seem to be deliberate.

It seems impossible to be sure whether Work 6 or Work 24 was included in the hoard. Was Sambon deliberately calling attention to the rare variant with head of Athena to left? If so, why did he record the doubtful ΠΟ (which didn't in fact exist), but omit the A on both faces? If ΠΟ (or ΓΟ) was really present, and the variety therefore Work 6, why did he add the non-existent aspirate? Probably Dr. Pozzi <sup>12</sup>, followed by Dr. Stazio <sup>13</sup>, is right in opting for Work 6. This is the earlier variety, in fact one of the first staters with helmeted Athena; had the somewhat later variety been present, it would perhaps have been surprising that so many diobols, but only so few staters, should have travelled from Heraclea to Poseidonia. Another possibility is that the variety seen by Sambon was not known to Work.

Apart from the two staters, two types of diobols were present in fair quantity: 1. head of Heracles/lion, and 2. helmeted head of Athena/Heracles fighting lion; no details of legends are given. Dr. Stazio has recently argued, especially on the evidence of hoards, that no diobols were minted early in Heraclea's history 14, but the present hoard is evidence that some at least of both types were in circulation before 400 B. C. 15. In any case it seems likely that nearly all the Heracles/lion diobols are early (even though they still appear in late hoards), for nearly all have an early form

<sup>11</sup> E. Work, «The earlier staters of Heraclea Lucaniae», NNM 91.

<sup>12</sup> Annali 9-11, 150, n. 90.

<sup>13</sup> Annali 12-14, 60.

<sup>14</sup> Annali 12-14, 69 ff.

<sup>&</sup>lt;sup>15</sup> Dr. Stazio of course accepts Dr. Pozzi's late date for the Paestum hoard based on the inclusion of Campano-Tarentine coins. If they are right, these diobols of Heraclea will be the only coins in the hoard to fall in the century between the terminus of the bulk of the hoard and the Campano-Tarentine didrachms.

of legend (HE), which never occurs on staters <sup>16</sup>. The contents of Paestum 1858 strongly suggest that the Heracles/lion diobols with HE were the earliest issues of Heraclea, and that they had been superseded by both staters and diobols with Athena/Heracles and lion only shortly before the terminus of the hoard. The relation to this sequence of the issue with Athena and aegis/Heracles seated remains doubtful. The condition of the specimen in the Paestum hoard (effleurée) shows that it must be at least some years older than the uncirculated Athena/Heracles and lion stater. It has sometimes been thought to be a foundation issue of 432 B. C., but might be ten or fifteen years later; it can hardly be as late as the early fourth century issues of Croton (Hera facing/seated Heracles) with which Dr. Stazio wishes to associate it <sup>17</sup>.

### **METAPONTUM**

Apart from incuse issues the following types in relief on both faces were included:

<ol> <li>Barley ear/Apollo standing</li> </ol>	ı ex.	Noe 314–319 18
2. Barley ear/barley ear	2 ex.	Noe 321
3. Head of Zeus Ammon 19/barley ear	2 ex.	Noe 334-344 (pl. 9, 14)
4. Head of Heracles/barley ear	I ex.	Noe 428–430 (pl. 9, 11)
5. Female head/barley ear	«un certain nombre»	Noe ?

All the above except no. I (effleurée) are described as à fleur de coin. In connection with no. 5 Sambon amplifies to the effect that there were «différentes têtes de femme d'un style semi-archaique», from which it may be deduced that at least two varieties of head were present. Which were they? The simple answer would seem to be that if Noe 428–430 (no. 4) was the latest issue in the hoard, then any or all of the varieties listed by Noe as preceding could have been in the hoard. There are, however, reasons for thinking that Noe placed the Heracles head too late in his sequence, and that it was in fact the first Metapontine issue to have the head of a deity upon the obverse:

- 1. a hoard of obols of Metapontum which is to be dated soon after the transition from the incuse to the double relief fabric includes as the only head of a deity present a number of obols with a head of Heracles (a variety not known to Noe)<sup>20</sup>;
- 2. there exists a reverse die-link between the Heracles obverse and the remarkable type of the seated Apollo (Noe 430-431). The latter is better grouped with other

<sup>&</sup>lt;sup>16</sup> The earlier didrachms (as far as Work 20) nearly all read HPA ---- (except nos. 9 and 16); thereafter HPA ---- tends to become dominant.

<sup>17</sup> Annali, 12-14, 73 ff.

<sup>18</sup> S. P. Noe, «The coinage of Metapontum II», NNM 47.

<sup>19</sup> Otherwise described as Apollo Karneios; F. Chamoux now proposes Hermes Parammon, cf. G. le Rider, Monnaies Crétoises 10, n. 3.

<sup>20</sup> C. M. Kraay, Schw. Münzbl. 1957, 73 ff.

full-length figures of Apollo, Achelous and Heracles (Noe 311–320) than at Noe's comparatively advanced point in the series, where there is no parallel at all for such a full-length type. Such a transposition would again make Heracles the first in the series of divine heads;

3. the Oecist hoard, treated in the second part of this paper appears to be slightly earlier than the Paestum hoard. It contained only the following issues with divine heads:

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1. Heracles 2 ex. Noe 430
2. Kore 1 ex. Noe 366–389
3. Demeter 1 ex. Noe 398
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This list strongly suggests that the Heracles head was among the very first of the divine heads to be placed on Metapontine obverses.

4. A final argument can be derived from the form M employed in the ethnic of the Heracles staters, which suggests an earlier date than the M of many issues which precede the Heracles issue in Noe's sequence (Noe 322-344).

Since the Paestum hoard will be shown to be later than the Oecist hoard we can assume that the former probably included at least those female heads which were present in the latter, namely Kore (Noe 366–389) and Demeter (395–399), both of which employ the form M in the ethnic. Since the unidentified head of Noe 390–394 also employs M, it too was probably included. Sambon, however, in his foot-note to the issues with female heads specifies that issues with M were also present; these are probably to be sought in the types Noe 322–323, 324, 325–330 die linked to 331–332. The types Noe 405–427 were presumably not present, since several of the deities are identified by name, and other dies bear letters or signatures none of which are mentioned by Sambon.

The following table represents not only a reconstruction of the later Metapontine issues in the Paestum hoard, but also a suggested revision of the sequence of these issues:

	Noe	Type	١,	or M	Oec	ist Hoard	Pa	estum Hoard
I	431	Apollo seated		^		_	-	die-linked
2	428-430	Heracles head	1	^		X	$\mathbf{x}$	) die-miked
		(pl. 9, 11)						
3	390-394	«Demeter» head	1	M	8	x (398)	X	
	395-399	(pl. 9, 12)						
4	366–389,	«Kore» head						
	400-401	(pl. 9, 13)	1	^ (M401	)	x	x	
5	334-344	«Zeus Ammon» head						
		(pl. 9, 14)	٨	٨		<b>—</b>	X	
6	322-323	Demeter head						
		(pl. 10, 15)	٨	٨		_	X	some
7	324-330,	Uncertain female head	S	*				or all 21
	331-332		٨	٨		_	X	) or an
8	405-427	Various heads	٨	Λ			_	
		(including Hygieia,						
		Homonoia, Demeter)						

As to the chronology of the above issues, I have argued that the final phase of the incuse fabric at Metapontum probably lasted until after the middle of the century <sup>22</sup>, and here it is significant that a number of the incuse issues in the Paestum hoard are described as à fleur de coin. If something over a decade were allowed for early double relief issues (Noe 310–321, mainly standing deities), the Heracles head might follow about 430 B. C. with the terminus of the Paestum hoard in the last decade of the century.

### **POSEIDONIA**

That a hoard found near Paestum should contain «une grande quantité» of local coins in uncirculated condition is not surprising. Fortunately Sambon enables us to identify accurately most of the latest issues in the hoard by recording the presence – in the field or the exergue of some coins – of the letters B,  $\Gamma$ ,  $\Delta$ , E, H, M,  $\Theta$ , and Z (pl. 10, 16–17), sometimes repeated on both obverse and reverse. Apart from A, the whole range of the die-linked sequence studied by Noe (which runs from alpha to theta) was thus certainly included in the hoard <sup>23</sup>; with the latter part of this

<sup>21</sup> The ethnic recorded by Sambon as •T3M may represent a variety such as Noe 327-328.

<sup>22</sup> NC 1960, 61 f.

<sup>&</sup>lt;sup>23</sup> Museum Notes V, 9 ff., further discussed by Kraay, Atti e Mem. Soc. M. Grecia 1967, 113 ft. The coin marked M is not strictly part of the alphabetical sequence, but belongs to a related and perhaps parallel issue: see Kraay, op. cit. 115.

sequence corresponds the legend  $\PiO\Sigma EI\Delta A$  duly recorded by Sambon. But he also records another form  $\PiO\Sigma EI\Delta ANI$  which requires some discussion. This form occurs on one die only in Noe's sequence, the reverse of no. 24, which appears to be the final die combination of his alphabetical sequence, since the obverse die marked  $\Theta$  (the last letter) is here in its most worn state (pl. 10, 17) <sup>24</sup>. But the life of the reverse die of Noe's no. 24 did not end at this point, for the same reappears again, with a dolphin added in the exergue, combined with a magnificent young Poseidon on obverse with a dolphin in the field (pl. 10, 18) <sup>25</sup>. Sambon's account affords no way of determining whether both stages of this reverse were represented in the hoard, but further evidence suggests that they were.

In collecting material for a catalogue of the later staters of Poseidonia <sup>26</sup>, it became apparent that die combination no. 2 (employing the altered reverse die of Noe 24) survived in an unusually large number of examples <sup>27</sup>, nearly all of which were in a remarkably fine state of preservation. The idea that nearly all might have been derived from the Paestum 1858 hoard received some support from the circumstances that the British Museum acquired its example (BMC 40) from a dealer in 1859, and that Leake acquired his specimen (SNG IV, 552) too late to be included in Numismata Hellenica published in 1856, but in time to find a place in the Supplement published in 1859 <sup>28</sup>. In general few coins from the second part of Noe's alphabetical sequence (with Ionic letter forms) can be traced earlier than 1850 <sup>29</sup>, which suggests that nearly all surviving specimens in fine condition derive from the present hoard.

As regards absolute chronology I need only repeat the conclusion which I reached elsewhere that Noe's sequence should be attributed to ca. 420–410 B.C. <sup>30</sup>; the Paestum hoard will have terminated shortly after the end of this period.

<sup>24</sup> On Noe 25 the obverse die is in a fresher state than on no. 24.

<sup>&</sup>lt;sup>25</sup> This is no. 2 in the catalogue of later staters of Poseidonia in Kraay, op. cit. (n. 23 above), 119. When that catalogue was compiled, I had not observed that the reverse of no. 2 was an older die, which had been altered. This observation suggests that the sequence of nos. 1 and 2 should be reversed.

<sup>26</sup> See preceding note.

<sup>&</sup>lt;sup>27</sup> I was able to trace 13 published examples as against the next highest total of 8 for any other die combination.

<sup>28</sup> Supplement to Numismata Hellenica 143.

<sup>&</sup>lt;sup>29</sup> There are none in the Hunter Collection, nor in the BM 1814 Catalogue, nor in the Payne Knight Catalogue (1830), nor in the Leake Collection (1856–9). Mionnet (1819) knows only the obverse with Z (clearly a worn coin).

<sup>30</sup> Kraay, op. cit. (n. 23 above), 133.

#### **SYBARIS**

Apart from a few incuse staters in worn condition, there were also a few «dioboles» (more probably triobols) of Sybaris with Poseidoniate types à fleur de coin. The presence of these latter in such condition serves to strengthen their attribution to Sybaris V on the River Traeis <sup>31</sup>.

### **TARAS**

All the coins with seated oecist on reverse, as well as some of the «horsemen» are classified by Sambon as showing some wear; «un certain nombre» of the latter, however, were à fleur de coin. The somewhat worn group of «horsemen», with adjectival legends (TAPANTINΩN etc.), broadly corresponds with Evans' Period I, as extended by Vlasto (pl. 10, 19) 32. For the horsemen à fleur de coin the legends TAPA $\Sigma$  and PAT are quoted by Sambon. The latter is perhaps accounted for by Vlasto Cat. 295, which is treated by Vlasto as one of the last issues of Period I; the form TAPAΣ occurs on nearly all varieties of Period II, the great majority of which cannot have been included in the Paestum hoard, because they nearly all bear in addition letters not mentioned by Sambon. He records only that a single coin of Taras bore the letters  $\Lambda A$  in exergue, which together with his reference to Carelli pl.CIX, 109, enables it to be identified with Vlasto Cat. nos. 320 or 321 (pl. 10, 20). In Period II the obverse is sometimes occupied by the dolphin rider following the practice of the oecist issues and of the «horsemen» of Period I; on the later issues of Period II the horseman is always on obverse, as was the invariable usage in future issues. On Vlasto Cat. nos. 320 and 321 the horseman is already on obverse.

It may be concluded that the earlier phase only of Period II was present in the Paestum hoard, and in uncirculated condition. If Evans was right in proposing 420–380 B. C. as the duration of Period II, Vlasto Cat. 320–321 can hardly be dated much later than 415/10 B. C.

### **TERINA**

Like Taras, Terina was represented by a fair number of specimens (M), some of which were à fleur de coin, though few varieties can be identified. Sambon records  $\Delta$  on the obverse of one coin, which must be Regling 24 (pl. 10, 22) <sup>33</sup>; but if he recorded  $\Delta$ , we must assume from his silence that the extensive subsequent issues signed  $\Phi$  (Regling 25–35) and  $\Pi$  (Regling 35–65, 68, 73–74) were absent. Among forms of legend noted TEPINAIQN is the reverse legend of Regling 24; TEPINAION occurs throughout up to Regling 71; TE, TEPI and other legends quoted by Sambon are probably defective readings of which the remainder was off the flan.

On Regling's chronology no. 24 is to be dated no later than 425 B. C.

<sup>31</sup> NC 1958, 29.

<sup>32</sup> NNM 15, 201 f.; Vlasto Cat. 258-292 illustrates the range of Period I.

<sup>33</sup> K. Regling, Terina.

#### THURIUM

Apart from Poseidonia, Thurium was the only other mint represented by *«une grande quantité»* of staters, all of which were reported as being à fleur de coin; there were also an unspecified number of «dioboles», more probably triobols or hemidrachms. Since the ethnic of Thurium was invariable, and since Sambon did not record variations in type, we are restricted to his observation that *«diverses Thurium portaient les lettres* EY,  $\Gamma$ ,  $\Delta$ , E,  $\Theta$  ou encore une espèce de coin au dessous du bœuf»; this phrase appears to imply that there were also present many coins which did not carry these subsidiary letters.  $\Gamma$ ,  $\Delta$ , E and  $\Theta$  are drawn from that alphabetical sequence which seems to have begun soon after the foundation of the city, and throughout which Athena's helmet was invariably wreathed <sup>34</sup>; EY which is found either with the two letters both together below the bull's belly, or separated at either end of the ground-line, belongs to the same phase, in which Athena's helmet is still wreathed and the bull normally walking <sup>35</sup>.

Sambon's «espèce de coin» is almost the only occasion on which he records a symbol; it is in fact not a conical die, but a helmet, as can be seen from the chin-strap which is visible on some specimens <sup>36</sup>. It can occur in combination with several varieties of obverse, which must all have been in use at about the same time:

- a) SNG V, 893/4; helmet with olive wreath (pl. 10, 24);
- b) SNG V, 895; helmet with ivy wreath (pl. 10, 25);
- c) SNG V, 896/7; helmet ornamented with hippocamp (pl. 10, 26) 37.

Though there is no means of determining which of these three varieties was actually included in the hoard, the presence in this group of the variety with hippocamp is of some interest, because a very similar variety occurs – presumably at the same time – among the earlier staters of Heraclea (Work 3–5). As has been noted above, the hoard included only a single stater of Heraclea with helmeted Athena (and that probably one of the earliest types), so that there is some reason for thinking that the Paestum hoard terminated at similar points in the sequences of both Thurium and Heraclea. We cannot be absolutely certain that there were no early Thurian Athena heads with Scylla on helmet in the hoard, though most are marked with  $\Phi$  on obverse (though often off flan), and this Sambon does not mention. But we can safely suppose that the Thurian sequence in the hoard terminated just before or just after the moment when Scylla was added to Athena's helmet. No very precise absolute date can be deduced, but given the number and variety of issues with wreathed helmet, a date very late in the century would seem reasonable.

<sup>&</sup>lt;sup>34</sup> Kraay, NC 1958, 26 ff.; the missing letters A, B, Z, H are perhaps less common than those recorded as being present in the hoard.

<sup>35</sup> SNG V, 1051-2.

<sup>36</sup> The same object is shown on a larger scale at about the same date on the reverse of a stater of Melos, Babelon, *Traité* pl. ccxlii, 19. The presence of this variety in the Paestum hoard is not noted by Dr. Pozzi, *Annali* 9–11, 152.

<sup>37</sup> Most, and perhaps all, examples have a minute **\( \xi**\) behind the neck guard on obverse.

#### **VELIA**

Of the earlier type of stater with lion on obverse and female head on reverse, there were in the hoard only two specimens, both showing some wear; those with head of Athena on obverse and lion attacking stag on reverse were present in some number (M) in uncirculated condition. A single example had  $\Lambda$  below the stag on reverse, which enables it to be identified as SNG V, IIII (pl. 10, 27). This early variety of Athena head, with wreathed helmet, may be compared with the head of «Kore» at Metapontum (Noe 366–389), which was certainly represented in the hoard <sup>38</sup>; a date ca. 420 B. C. might be suggested.

On the evidence available it is not possible to be certain that the only identifiable stater was in fact the latest to be represented, but most subsequent issues either have a letter on obverse or have reverse legend YE $\Lambda$ HTE $\Omega$ N, neither of which are recorded by Sambon. A number of drachms of Velia with owl on reverse were present à fleur de coin, some of which bore the letters A,  $\Omega$ , E or  $\Pi$  on obverse; these are presumably contemporary with the later staters in the hoard.

The following terminal dates have now been proposed above for each mint:

Caulonia	410/400	Taras	415/410
Croton	ca. 420	Terina	ca. 425
Heraclea	late 5th century	Thurium	late 5th century
Metapontum	410/400	Velia	ca. 420 or later
Poseidonia	ca. 410		

It should not be concealed that the consistency of these results may be deceptive, for many of the dates are little better than informed guesses; some, however, are more reliable. The absence from the hoard of only the final issues of Caulonia, destroyed in 389 B. C., goes far to confirm the date suggested above; likewise that proposed for Metapontum depends ultimately upon an overstrike on Syracuse which confirms the survival of the incuse fabric until at least the middle of the century, together with time allowed for the subsequent double relief issues <sup>39</sup>. The date for Poseidonia, too, depends upon arguments, presented elsewhere <sup>40</sup>, in which South Italian chronology is again linked, via overstrikes, to the securer chronology of

<sup>38</sup> See above p. 52.

<sup>&</sup>lt;sup>39</sup> For the overstrike see NC 1960, 61 f. and pl. IV, 11 und 12. At that time I adopted the then current chronology of Syracuse dependent on the decadrachm firmly dated 480/79 B. C. Since then I have come to believe that this date is about fifteen years too early (C. M. Kraay, Greek Coins and History, Ch. II), and this view has received important confirmation from C. Boehringer (JNG 1968, 67 ff.), though he argues for a shorter reduction. In either case the date of Boehringer 497, overstruck at Metapontum by dumpy incuse dies, must come down into the fifties, so that the overstriking can hardly have taken place much before 450 at the earliest.

<sup>40</sup> NC 1958, 18 ff. and Atti e Mem. Soc. M. Grecia 1967, 130 ff.

Sicily. We are justified in supposing that all the indications converge upon a late fifth century date for the terminus of the hoard.

But let us suppose for a moment that our implicit reliance upon Sambon has been misplaced, and that his record of letters in the field was inaccurate and arbitrary, so that the hoard might have contained other letters on issues of later date which were not noticed by him. Could a later terminal date be conceivable on this assumption? No doubt a slightly later date would be possible, but at any advanced date within the fourth century major new types would have been present, which Sambon could not have failed to record: eagle/tripod types at Croton; distinctive deities at Metapontum; helmeted Athena/lion at Velia. We are thus left with the dilemma with which we started that with a hoard terminating not later than 400 B.C. Sambon believed that there were associated a number of Campano-Tarentine coins of at least a century later with no trace of any issues from the intervening period; yet he was convinced of the fifth century date of the bulk of the hoard, and was prepared to up-date the Campano-Tarentine issues to conform with it. There appear to be only two possible explanations: either we must suppose that the association is genuine, in which case, improbable as it may seem, a late fifth century hoard remained accessible, though without increment, for a century or more until a number of Campano-Tarentine staters were added; or we must believe that the association is not valid, and that the Campano-Tarentine coins were derived from one of the other hoards which Sambon says had previously been found in the same area. In either case, however, we appear to be justified in accepting the bulk of the Paestum 1858 hoard as giving a cross-section of coinage in South Italy at the end of the fifth century. Its validity can be tested against the more detailed record of the Oecist hoard buried at much the same time.

## II. The Oecist hoard

This hoard is reported to have been found about 1948 in the country-side some distance from Taranto, and is thought to have contained originally about 800 coins, all staters from South Italian mints. The following account is based on the cumulative evidence of several groups of coins, amounting in all to 452, which are believed to have included specimens of every variety represented in the hoard. In the sample here recorded the local mint of Taras provided the largest number of coins, of which more than half showed the seated figure of the oecist on reverse; since many of these were superb examples of a series which has not generally survived in very fine condition, it has seemed appropriate to refer to this find as the Oecist hoard. The information here presented was noted by a competent observer at a time when substantial portions of the hoard were still undispersed and in his judgment the hoard was unlikely to have contained any substantial varieties not recorded below; the original lists and estimates of condition are reproduced verbatim, except in cases such as that

of Caulonia, in which the subsequent publication of a monograph has enabled the descriptions to be abbreviated; mints are represented as follows:

Caulonia	43	Sybaris	9
Croton	109	Taras	143
Heraclea	I	Terina	9
Laos	2	Thurium	64
Metapontum	58	Velia	2
Poseidonia	12	Total	452

Condition is described as follows: W = worn; M = moderately worn; F = fine; VF = very fine; FDC = uncirculated.

# CAULONIA (43)

1. Noe 41 1–58: spread incuse	9	(4 W-M, 2 M, 3 M-F)
2. Noe 59-61: smaller incuse	I	$(\mathbf{M})$
3. Noe 62–77: early double relief	ΙI	(2 W-M, 7 M-F, 2 F)
4. Noe 78–79: (symbol, bay-leaf)	I	(W-M)
5. Noe 80–99: (symbol, branch)	7	(1 W, 1 M, 1 M-F, 4 F)
6. Noe 105–106: (symbol, owl)	I	( <b>F</b> )
7. Noe 108–109: (symbol, bucranium in branches)	4	(1 M, 1 F, 1 VF, 1 FDC)
8. Noe 102, 106, 110–114): (rev. galloping stag)	4	(2 F, 1 VF, 1 FDC)
9. Noe 115: (symbol, heron)	I	( <b>F</b> )
10. Noe 127: (symbol, cicada; rev. ΔΕ: pl. 9, 1)	2	(2 FDC)
11. Noe 150–154: (symbol, ivy leaf and $\Phi$ : pl. 9, 2)	2	(IF, IVF)

Noe's Group G (nos. 6–9) is well represented, but the only later coins are four from Group I<sup>1</sup> (nos. 10–11), which suggests that the sequence of H<sup>1</sup> and I<sup>1</sup> should be reversed <sup>42</sup>. The end of Group G should be about 425, so that the terminal date of the Oecist hoard will be no later than 420.

### CROTON (109)

12. Spread incuse, no symbol	II	(3  W, 1  W-M, 5  M, 2  F)
13. Spread incuse, symbol, obv. crab	4	(2  W,  1 M,  1 F)
14. Spread incuse, symbol obv. heron	6	(2  W, 1  W-M, 1  M, 2  F)
15. Medium incuse, no symbol	I	(M-F)
16. Medium incuse, symbol obv. crab	3	(I W, I M, I F)
17. Medium incuse, symbols, obv. crab, rev. lyre	3	(IM, 2F)

<sup>41</sup> References to S. P. Noe, *The Coinage of Caulonia* imply only that the general type or symbol was represented, not that all die varieties quoted were present.

<sup>42</sup> Noe's groups are redefined as H1 etc. in NC 1960, 53 ff.

18. Medium incuse, symbols, obv. crab, rev. dolphin	I	(VF)
19. Medium incuse, symbol, obv. heron	4	(2 W, 1 M–W, 1 M)
20. Dumpy incuse, no symbol	9	(2 M, 2 F, 5 VF)
21. Dumpy incuse, symbol, obv. heron (pl. 9, 6)	61	(12 M, 1 M–F, 25 F,
		14 VF, 9 FDC)
22. Dumpy incuse, symbols, obv. heron and bow	I	(VF)
23. Medium incuse, rev. incuse eagle	2	(2 VF)
24. Rev. tripod in relief (pl. 9, 7)	3	(2 F, 1 VF)

The coins listed under no. 24 with tripod in relief on both faces were all engraved in a rather rough style struck on thick flans (as SNG III, 611). Their conditions was such as to suggest that they should not necessarily be dated solely on grounds of fabric later than the last dumpy incuse issue which was the only one to include uncirculated coins. The issue with tripods on both faces and  $\Pi$  in the exergue, as found in the Paestum hoard (pl. 9, 8), was not present in this find.

### HERACLEA (1)

25. Work <sup>42a</sup> 1–2: obv. head of Athena on aegis, 1 (FDC) rev. Heracles seated (pl. 9, 10)

The wear which the similar specimen in the Paestum hoard is reported to have undergone suggests that the Oecist hoard may have been buried somewhat earlier.

## LAUS (2)

26. Obv. man-faced bull, head reverted; above, ΛΑ 2 (I W, I M) Rev. man-faced bull; above, ΛΑ 4 (retrograde)

### METAPONTUM (58)

27. Noe 1–47, spread incuse	7 48
28. Noe 54–154, spread incuse	II
29. Noe 155–218, medium incuse	5
30. Dumpy incuse	24
31. Noe 258–261, dumpy incuse, symbol, cicada	2
32. Noe 221–226, dumpy incuse, symbol, ram's head	3
33.44 Noe 313, rev. standing Heracles	I
34. Noe 319, rev. standing Apollo	I
35. Noe 430, obv. head of Heracles (pl. 9, 11)	2
36. Noe 366–389, obv. head of Kore (pl. 9, 13)	I
37. Noe 398, obv. head of Demeter (pl. 9, 12)	I

<sup>42</sup>a Op. cit. in no. 11 above.

<sup>43</sup> Condition of the coins of Metapontum was not noted.

<sup>44</sup> For the sequence of nos. 33-37, see above p. 51 ff.

If no. 35 is to be dated ca. 430, as suggested above (p. 53), then the sequence represented in the Oecist hoard will end no later than 425/20 B. C.

## POSEIDONIA (12)

38. Obv. Poseidon. Rev. bull. Dumpy fabric
4 (2 W, 2 M)
39. Obv. Poseidon. Rev. bull. Larger flans, finer style
4 (1 M–F, 1 F, 5 VF)
40. Obv. Poseidon; in field, A. Rev. Bull; in ex.,
A (Noe 1: pl. 10, 16)

The most recent coin is no. 40, the first of the series studied by Noe 45; on the chronology adopted above (p. 53 f.) it should be dated ca. 420.

### SYBARIS (9)

# 41. Obv. Bull. Rev. Bull incuse

9 (6 W, 1 M, 2 M-F)

One example of late style, from the same dies as NC 1958, pl. III, 3, was included.

# **TARAS** (143)

42. Vlasto Cat. 62–69 (rev. incuse dolphin-rider)	3	
43. Cf. Vlasto Cat. 125 (rev. hippocamp, earlier issues)	II	(6  W, 3  M, 2  F)
44. Cf. Vlasto Cat. 73-96 (rev. wheel)	10	$(6 \mathrm{W}, 4 \mathrm{M})$
45. Cf. Vlasto Cat. 133 (rev. hippocamp, later issues)	4	(2 M, 2 F)
46. Cf. Vlasto Cat. 141 (rev. head)	2	(I W)
47. Vlasto, TO 46 1	I	(W-M)
48. Vlasto, TO 6	I	(W-F)
49. Vlasto, TO 7	4	(3  W,  I M)
50. Vlasto, TO 14	7	(1  W, 3  M, 2  M-F, 1  VF)
51. Vlasto, TO 15	I	$(\mathbf{W})$
52. Vlasto, TO 16	2	(2 F)
53. Vlasto, TO 17	2	(22  M-F)
54. Vlasto, TO 20	4	(2 M, 1 M–F, 1 F)
55. Vlasto, TO 24	2	(1 M–F, 1 VF)
56. Vlasto, TO 26/7	2	(2 M–F)
57. Vlasto, TO 27	2	(I M-F, I F)
58. Vlasto, TO 29	I	(W-M)
59. Vlasto, TO 30	2	(2 VF)
60. Vlasto, TO 31	5	(1 M, 2 M-F, 2 F)
61. Vlasto, TO 31/2	I	(M)

<sup>45</sup> See note 23 above.

<sup>46</sup> M. P. Vlasto, Taras Oikistes, NNM 15.

```
62. Vlasto, TO 33
                                                            (F)
                                                        I
63. Vlasto, TO 34
                                                            (4 \text{ M}-\text{F})
                                                        4
64. Vlasto, TO 37
                                                            (3 VF)
                                                        3
65. Vlasto- TO 38
                                                            (2 M, 4 F, 1 VF)
                                                        7
66. Vlasto, TO 40
                                                            (1 VF, 1 FDC)
                                                        2
67. Vlasto, TO 41
                                                            (1 VF, 2 FDC)
                                                        3
68. Vlasto, TO 46
                                                            (2 VF)
                                                        2
69. Vlasto, TO 47
                                                            (VF)
                                                        Ι
70. Vlasto, TO 46/8
                                                            (VF)
                                                        Ι
71. Vlasto, TO 49
                                                            (1 VF, 2 FDC)
                                                        3
72. Vlasto, TO 50
                                                            (1 F, 1 FDC)
                                                        2
73. Vlasto, TO 51
                                                            (1 F, 1 VF)
                                                        2
74. Vlasto, TO 52
                                                            (FDC)
                                                        I
75. Vlasto, TO 53
                                                            (3 VF, 2 FDC)
                                                        5
76. Vlasto, TO 57
                                                            (1 VF, 1 FDC)
                                                        2
77. Vlasto, TO 59
                                                            (2 F, 6 VF, 2 FDC)
                                                       10
78. Vlasto Cat. 267 (rev. horseman)
                                                        3
79. Vlasto Cat. 268 (rev. horseman)
                                                        2
80. Vlasto Cat. 269 (rev. horseman)
                                                        3
81. Vlasto Cat. 270 (rev. horseman)
                                                        Ι
82. Similar to nos. 78–81 (horse walking)
                                                        4
83. Vlasto Cat. 274 (rev. horseman)
                                                        3
84. Vlasto Cat. 276 (rev. horseman)
                                                        2
85. Vlasto Cat. 278 (rev. horseman)
                                                        Ι
86. Similar to nos. 83–85 (horse prancing, pl. 10, 19)
                                                        8
```

The above list covers the full range of the Oecist issues, but since some even of the latest Oecists show some wear, the hoard will have been closed at least some years after that series had terminated. It was also noted that the condition of the uncirculated Oecists was comparable to that of the Thurian issues (with and without letters in the field) with which they should be contemporary. The «horsemen» appeared to overlap (or alternate with) the later Oecists, which gives some substance to Vlasto's view that the Oecist series ended at about the time when the horseman was transferred from reverse to obverse in Evans' Period II <sup>47</sup>. Horsemen of Period I only were included in this hoard. The terminal date may be about 425/20.

### TERINA (9)

```
87. Regling 3 2
88. Regling 8/9 (pl. 10, 21) 5 (1 VF, 4 FDC)
89. Regling 14 1
90. No wreath on obv. (presumably Regling 19 ff.) 1 (FDC)
```

On Regling's chronology no. 90 would be dated ca. 430. It is worth noting that the heads of nos. 88 and 90 with their elaborately waved hair should be of about the same date as the heads of Kore (Noe 366–89) and Demeter (Noe 398) on the latest issues of Metapontum represented in the hoard.

### THURIUM (64)

```
91. Obv. Wreath on helmet; rev. bull walking.
                                                              (F-FDC)
                                                        12
    No letter
 92. Obv. Wreath on helmet; rev. bull butting.
                                                             (VF)
    No letter
 93. As 91, but obv. A
                                                             (IM, IF)
                                                         2
 94. As 91, but obv. \Gamma, rev. \Gamma
                                                             (F-FDC)
                                                        ΙI
 95. As 91, but obv. \Gamma, rev. \Lambda
                                                             (2 F, 1 FDC)
                                                         3
 96. As 91, but obv. no letter, rev. \Lambda
                                                         Ι
 97. As 91, but rev. \Delta
                                                         6
                                                             (M-F)
 98. As 92, but rev. E
                                                             (VF-FDC)
                                                        15
 99. As 92, but rev. Z
                                                             (F)
100. As 92, but rev. \Theta
                                                             (VF-FDC)
                                                         4
101. As 91, but obv. E, rev. conical helmet
                                                             (VF)
                                                         3
102. Obv. Hippocamp on helmet; E, rev. bull walking
                                                             (FDC)
103. Obv. Sphinx and wreath on helmet; cf. SNG V,
                                                             (VF)
    872
104. Obv. Griffin on helmet; cf. SNG V, 916
                                                              (VF)
105. Obv. Scylla on helmet, bull walking 1.; under-
                                                             (FDC)
     neath, bird, cf. SNG V, 928-929 (pl. 10, 23)
```

No. 105 on which the Scylla on helmet marks a departure at Thurium is clearly the latest coin; presumably it is of much the same date as the latest coins in the hoard from the neighbouring mints of Metapontum and Taras, which were attributed above to the period 425/20.

106. Obv. lion r.: above, B. Rev. head of nymph
(as BMC 2)

107. Obv. head of Athena r. wearing wreathed
helmet; to r. A. Rev. lion attacking stag

It has not proved possible among published coins of Velia to trace the obverse die of no. 107 with A in field, but it was probably modelled on coins of Thurium with the same letter in front of the helmet. A date near 430 might be hazarded.

# III. The Paestum 1858 hoard and the Oecist hoard

The descriptions given above will by now have made it clear that these two hoards have many features in common. Both are accumulations of coinage from all the major mints active in the area at the time, and indeed the range of mints in both is identical except for the single coin of Laus in the Oecist hoard, which has no parallel at Paestum. Though precise figures are not available, both hoards seem to have been of a similar size. No figure is given for the number of coins at Paestum, but the total weight of 8100 g would imply at least 1000 coins, if all had been staters; but the presence of a number of smaller denominations means that the total must have been over 1000, though the number of staters alone may well have been not far from the estimated 800 of the Oecist hoard. Both hoards were clearly closed at about the same period in the last quarter of the fifth century. The only substantial difference between them is due to the burial of one near Taranto, and of the other near Paestum; this undoubtedly accounts for differences in the volume of coins from the same mint in each hoard. Taras and Poseidonia are naturally each more prominent in their respective local deposits; few coins of Heraclea, Sybaris, Terina and Velia are included in either hoard. On the other hand the very high proportion of Thurium in the Paestum hoard is interesting, because it is precisely in this direction, at Velia, Cumae and Naples, that the influence of Thurian coinage is to be detected in local coin types, whereas in the South it appears only at Heraclea, of which Thurium was co-founder.

The following paragraphs will compare the later elements of the two hoards, in order to reach an estimate of the interval between them, as a step towards determining as nearly as possible their terminal dates. For convenience the main conclusion can be stated now: for almost every mint there is clear evidence that the series represented in the Paestum hoard extends a little later than that in the Oecist hoard.

### Caulonia

	Oecist	Paestum
I. Noe Group G	x	$\mathbf{x}$
2. Kraay Group I1 (pl. 9, 1-3) 48	$\mathbf{x}$	X
3. Kraay Group H¹ (pl. 9, 4)	_	$\mathbf{x}$
4. Kraay Group J <sup>1</sup> (pl. 9, 5)	_	x

The end of Group G should be about 425, so that the terminal date of the Oecist hoard will be no later than 420. The Paestum hoard extends to Group J<sup>1</sup> (with Ionic letters in legend) which will bring its terminal date into the last decade of the century.

### Croton

	Oecist	Paestum
1. Tripod/tripod incuse (pl. 9, 6)	$\mathbf{x}$	$\mathbf{x}$
2. Tripod/tripod in relief (crude style: pl. 9, 7)	$\mathbf{x}$	x ?
3. Tripod/tripod in relief ( $\Pi$ in exergue: pl. 9, 8)		x
4. Heracles/tripod; E in ex. (pl. 9, 9)	-	x (1)

No. 2 is not specifically attested in the Paestum hoard, but since «nearly all» examples of no. 3 had  $\Pi$  in exergue, there may well have been examples of no. 2 among those which lacked  $\Pi$ . The Paestum hoard clearly extends a little later than the Oecist hoard, but in our present ignorance of the activity of Croton at this period, no precise dates can be suggested. The FDC condition of some of the latest incuse issues in both hoards indicates that this fabric survived at Croton as at Metapontum until after the middle of the century. On a strict interpretation of the date of these two hoards and the interval between them, issues 3 and 4 ought to be attributed to ca. 425/20-410.

## Heraclea

	Oecist	Paestum
1. Athena on aegis/Heracles seated (pl. 9, 10)	x (1)	x(1)
2. Diobols, Heracles/lion	_	$\mathbf{x}$
3. Athena/Heracles and lion (Work 6?)	» —	x(1)
4. Diobols, as 3	_	x

The foundation of Heraclea in 433/2 provides a terminus post quem for both hoards. Since the Oecist hoard was buried comparatively near Heraclea, no. I was probably the only variety of stater to have been issued before burial; no similar assumption can be made in the case of diobols, because none were included in the hoard. The appearance of one of the earliest staters of the later type (no. 3) con-

<sup>48</sup> See note 42 and p. 49 above.

firms the later date of the Paestum hoard. The helmeted Athena heads at Heraclea are clearly related to those of Thurium, and belong to the period when Thurium was abandoning the helmet with wreath; a date late in the fifth century (415/10?) is thus indicated for no. 3.

# Metapontum

The Metapontine issues in the two hoards have already been compared above on p. 53, so that only the conclusion need be repeated, that the Paestum hoard was buried during the last decade of the fifth century. The Paestum hoard overlaps the Oecist only to the extent of the «Zeus Ammon» issue and of a very few small issues with female heads; ca. 420 would be a reasonable terminus for the Oecist hoard.

### Poseidonia

In the Paestum hoard coins of Poseidonia were naturally very numerous, whereas from the Oecist hoard only twelve are recorded. The varieties present, however, enable the interval between the two hoards to be determined with some precision. The Oecist hoard contained an example of the first issue only of Noe's alphabetical sequence (pl. 10, 16); the Paestum hoard included the whole of the alphabetical sequence plus one additional later issue (pl. 10, 17–18). I have argued elsewhere that the duration of Noe's sequence need not have been more than a decade, and tentatively suggested the years 420–410 <sup>49</sup>. On this basis the Oecist hoard will have been buried the near former date, the Paestum hoard soon after the latter.

# Sybaris

See above p. 55; the Sybarite issues afford no evidence for the dates of burial or for the interval between the hoards.

### Taras

	Oecist	Paestum
1. Oecists	X	x (all showing wear)
	x (some FDC)	
2. Horsemen, Period I (pl. 10, 19)	x	X
3. Horsemen, Period II (part) (pl. 10, 20)	-	X

Once again the Paestum hoard is seen to contain a somewhat later series than the Oecist hoard; the overlap in terms of coins is small, for part only of Period II is represented at Paestum, but owing to the distance of Paestum from Taras, it is possible that still later issues which had not yet circulated as far as Paestum had appeared before the hoard was buried. Nevertheless the interval between the burial of the two hoards would not seem to be more than ten to fifteen years.

<sup>49</sup> Op. cit. in n. 23 above p. 130 ff.

### Terina

This mint adds little evidence, though Regling 24 (pl. 10, 22) in the Paestum hoard appears to be later than anything in the Oecist hoard.

### **Thurium**

Oecist	Paestum
x	x
x	<b>x</b> ?
x	x
x(1)	-?
	x x

So far there has been clear evidence at every mint that the Paestum hoard contained issues later than the latest in the Oecist hoard; in the case of Thurium this evidence is lacking, though we cannot be sure that it was never present. On the form of Athena's helmet Sambon gives no help, and though the earliest Scylla's are normally accompanied by  $\Phi$  or another letter in front of Athena's brow, the letter in many cases is off the flan and so may have escaped Sambon's notice. Alternatively it could be argued that new issues from Thurium reached the area of Taras much more quickly than that of Poseidonia. In any case there is little difference in time between the final issues in the two hoards, though the later date of the Paestum hoard cannot be actually demonstrated.

Exact chronology is hard to come by. The alphabetical sequence (no. 1) still seems to represent the earliest issues starting ca. 440 or slightly earlier, and if each letter represents a year, it would last about a decade. The relation to this series of the numerous issues without a letter or with such combinations as EY or with symbols remains obscure, but it is hard to avoid the conclusion that at least another ten years' coinage is involved. This will mean that the terminal issues of our two hoards (so far as they can be identified) cannot be earlier than the decade 420–410.

## Velia

For this mint too the evidence is slight and indecisive. The Oecist hoard contained only a single stater with helmeted head of Athena on obverse, and though there were more in the Paestum hoard, only one variety can be identified (pl. 10, 27). Both hoards, however, clearly ended with similar staters, of which the Athena heads can be related to those at Thurium with wreathed helmet, and to the head of Kore at Metapontum (above p. 57); their date will thus conform in general with those of the other issues included in the hoards.

### Conclusion

Both hoards terminate within the last quarter of the fifth century and provide a remarkably similar cross-section of the coinage of the period. The Oecist hoard is, however, about a decade earlier than the Paestum hoard so that a date 425/420 may be suggested for the burial of the former and 410/405 for the latter. In the Oecist hoard the mints of Taras, naturally, and Croton provide the largest elements with the other mints of the area (Thurium, Metapontum and Caulonia) well represented except Heraclea which had hardly yet started to coin. It is of some interest that at the presumed date of burial (425/20) coins of Croton from the dumpy incuse phase alone still outnumber those of Thurium, whereas some ten years later in the Paestum hoard Thurium is dominant even in a remote area. The mints of the West coast of Italy - Poseidonia, Velia, Laos and Terina - each provide few specimens only. In the case of the Paestum hoard it is less easy to draw conclusions: Poseidonia was represented by a very large number of coins (Q) with Thurium the only other mint to be given the same grading. While the predominance of Thurium in the area is interesting, it must be remembered that all coins of Thurium are listed under the one heading FDC, whereas those of other mints such as Metapontum and Croton are distributed over three grades of preservation, and Sambon's system of notation does not make it clear how many times M (or C) must be multiplied to yield Q; these two mints also were probably present in very large numbers.

Finally attention can be drawn to a few other hoards from the same period. Slightly earlier than the Oecist hoard is Cotrone 1927 (Noe 277 and 506, see Appendix): Taras is perhaps slightly earlier, there are no heads of deities from Metapontum; Thurium, Poseidonia and Terina are also earlier, and there is nothing from Heraclea. Burial about 430 is suggested below. – The small hoard (18 coins) found in the Via Oberdan at Taranto in 1938 is perhaps a few years later <sup>50</sup>: from Taras only oecists (2); Metapontum (2), Sybaris (2), Caulonia (1) and Croton (4), only incuse; Laus (1), double relief as in the Oecist hoard and Cotrone 1927; Thurium, wreathed helmet only (1); but Poseidonia (5) included 3 with  $\Delta$  from Noe's lettered sequence and one with M <sup>51</sup>. – Lastly the hoard from S. Eufemia Lamezia, 1949, on the west coast, of which a full publication is awaited, may be about the same date as the Paestum hoard <sup>52</sup>. The Tarentine horsemen reach about the same point in Period II; Thurium is represented by one early variety with Scylla on helmet; Croton has an example with tripod in relief on both faces; and Terina with specimens signed  $\Phi$  extends slightly later than any variety identifiable from the Paestum hoard.

<sup>&</sup>lt;sup>50</sup> I have to thank Professore G. F. Loporto, Soprintendente at Taranto, for showing me this hoard in 1968.

<sup>51</sup> See n. 23 above.

<sup>52</sup> Forty-nine coins, about one third of the hoard, are in the Museo Nazionale, Reggio Calabria. Professore Foti, the Soprintendente, kindly showed them to me in 1969; cf. preliminary account in *Annali* I, 165. My remarks are based on the coins at Reggio only.

# Appendix

Noe 53 277, Cotrone (Contrada Ameri) 1927 and Noe 506, Ataly, 1927.

The Cotrone hoard was a chance discovery of coins, contained in a pot, which were dispersed and then in large part recovered. N. Catanuto was able to list 133 coins in Notizie degli Scavi 1932, 387 ff.; these coins, exactly as listed, are now preserved in the Museo Nazionale at Reggio Calabria. From this examination I was forced to conclude that not all the coins listed could have belonged to the original hoard, which seemed to terminate consistently in the latter part of the fifth century at all mints represented. In addition, however, there were the following later or anomalous items, which so far from being better preserved than the rest of the hoard were mostly in far worse condition:

- 1. Taras. Two heavily corroded horsemen were of much later date than a third horseman (Evans' Per. I), which was roughly contemporary with the 12 Oecist nommoi in the hoard.
  - 2. Croton. Two worn drachms, obv. Apollo head, rev. tripod.
  - 3. Croton. Eight very worn diobols, obv. Athena head, rev. club.
- 4. Leontini. Two ruined tetradrachms, one of which was listed by Catanuto as a core for plating, but may be of silver.
  - 5. Syracuse. One fifth century tetradrachm (listed by Catanuto as unidentifiable).
  - 6. Syracuse. Two bronze coins of Hiero II.

The subtraction of these seventeen items leaves 116 late fifth century coins from Caulonia (19), Croton (41), Metapontum (10), Poseidonia (2), Taras (14), Terina (6), Thurium (22) and Velia (2).

At this point my attention was caught by Noe 506, which bore the same date of discovery, covered the same range of mints (except for single coins of Sybaris and Laos), was thought to be of roughly the same late fifth century date, and was also fairly close in size of the intrusive section of Noe 277 (24 coins as against 17). At my request Miss Margaret Thompson generously provided me with a list of the contents which was preserved in the archives of the American Numismatic Society. The essential details are as follows:

## Taras

- Incuse stater, rev. dolphin rider. Vlasto Cat. 69 is probably the actual coin. Worn.
- 2-3 Staters, rev. hippocamp; cf. Vlasto Cat. 124. Both much worn.
  - 4 Half stater, rev. head; cf. Vlasto Cat. 155 ff. Much worn.
  - 5 Stater, rev. oecist; cf. NNM 15, type 14 G. Good condition.
  - 6 Stater, rev. oecist; NNM 15, type 53 C. Vlasto Cat. 245 is probably the actual coin. FDC.

<sup>&</sup>lt;sup>53</sup> «A bibliography of Greek coin hoards», NNM 78.

Laos

7 Stater, rev. man-faced bull; cf. BMC 5. Rather worn.

Metapontum

- 8 Stater, spread incuse; cf. Noe 87. Well preserved.
- 9 Stater, rev. five barley-grains; Noe 310. Rather badly preserved.

Poseidonia

10–11 Staters, rev. bull, developed type as McClean, pl. 36, 11. Fine.

Sybaris

12 Incuse stater. Very well preserved.

Thurium

13–14 Staters as SNG V, 883 and 887. These two may be the actual coins since they once belonged to Ginori, who is said to have acquired coins of Thurium from this hoard.

Velia

15 Drachm, rev. owl. Extremely fine.

Caulonia

- 16–17 Staters, spread incuse. Much worn; well preserved.
  - 18 Stater, obv. symbol, bucranium in branches; Noe 108/9. Extremely fine.
  - 19 Stater, rev. symbol, bird on basin; Noe 155. FDC.

Croton

- 20–21 Staters, *obv.* symbol, heron, *rev.* tripod incuse. Dumpy fabric. Both well preserved.
  - 22 Stater, rev. eagle incuse. Dumpy fabric; very well preserved.
  - 23 Diobol, rev. infant Heracles and snakes; BMC 104. Very fine.

Terina

24 Stater, rev. Nike seated on amphora; Regling 7. FDC.

Of the above no. 23 was thought to be probably intrusive, though the oxidisation was noted as similar to that of the others. It will be remembered that in Noe 277 also many fractional denominations of Croton were intrusive.

When, however, the 23 coins listed above are compared with those in the Cotrone hoard, there is not only a general similarity of period but also a remarkable number of identities of type:

Taras: both hoards contained oecists; Noe 277 contained in addition a single

«horseman» of similar date.

Metapontum: both contain an example of Noe 310 as the latest coin for this mint.

Poseidonia: the same general period, preceding Noe's lettered series, is present

in both.

Thurium: wreathed helmets only in both.

Velia: both contained a drachm with owl on reverse.

Caulonia: among the latest varieties in the Cotrone hoard were Noe 109 and 155

(in three examples); Noe 506 contained an example of each.

Croton: both contained dumpy staters with incuse tripod on reverse, though

in Noe 277 there were also two with reverse in relief.

Terina: Noe 506 included an example of Regling 7; in Noe 277 the only

coins of Terina were six examples of the same general type with Nike

seated on amphora.

Given the common year of discovery and the virtually identical range of mints represented in the two hoards there appears to be little doubt that between the dispersal and recovery of Noe 277, the fine or rare varieties represented by Noe 506 were extracted and replaced by roughly the same number of coins. It remains possible, however, that the fourth century Crotoniate fractions themselves form a separate hoard; diobols with Athena head and club are not common and eight specimens in similar condition can hardly have come together by chance.

The combination of Noe 277 and 506 yields a hoard with the following characteristics: at Taras the Oecist series is drawing to an end and the issue of overlapping or alternating horsemen has begun; at Metapontum the moment of transition to double-relief types has been reached (Noe 310 is linked by its obverse to the incuse series); Poseidonia is in a developed stage of its Poseidon/bull coinage, but has not yet reached the start of Noe's lettered sequence; Thurium is still minting the earlier varieties with wreathed helmet; Croton, like Metapontum, has issued its first double-relief types; and Terina is in Regling's Period II, which he dated 444–425. These features all indicate that the Cotrone hoard was buried around 430 B. C.

### Key to Plates

Note. None of the specimens here illustrated are known to derive from the hoards under discussion; they are included only to exemplify the issues involved.

- 1. Caulonia: British Museum.
- 2. Caulonia: British Museum.
- 3. Caulonia: Oxford (SNG V, 1450).
- 4. Caulonia: British Museum.
- 5. Caulonia: Oxford (SNG V, 1446).
- 6. Croton: Oxford (SNG V, 1486).
- 7. Croton: Oxford (SNG V, 1496).
- 8. Croton: Oxford (SNG V, 1497).
- 9. Croton: Oxford (SNG V, 1507).
- 10. Heraclea: British Museum.
- 11. Metapontum: Oxford.
- 12. Metapontum: Oxford (SNG V, 693).
- 13. Metapontum: Oxford (SNG V, 688).
- 14. Metapontum: Oxford (SNG V, 687).

- 15. Metapontum: Oxford (SNG V, 686).
- 16. Poseidonia: Oxford (SNG V, 829).
- 17. Poseidonia: Berlin.
- 18. Poseidonia: Brussels (L. de Hirsch 174).
- 19. Taras: Oxford (SNG V, 240).
- 20. Taras: Vienna.
- 21. Terina: British Museum.
- 22. Terina: British Museum.
- 23. Thurium: Oxford (SNG V, 893).
- 24. Thurium: Oxford (SNG V, 895).
- 25. Thurium: Oxford (SNG V, 897).
- 26. Thurium: Oxford (SNG V, 929).
- 27. Velia: Oxford (SNG V, 1111).

## Résumé d'auteur

Les dernières frappes de la trouvaille faite à Paestum, en 1858 (Noe 2 782) sont examinées en détail, afin de déterminer la date de l'enfouissement. Pour la première fois il est donné un compte rendu de la trouvaille dénommée Oecist, découverte près de Tarente aux environs de 1948. Ces deux trésors ont été enfouis dans le dernier quart du cinquième siècle et il semble qu'ils ne soient séparés que par une dizaine d'années; le trésor de Oecist est le plus récent. Un complément montre que les trésors signalés par Noe 2 277 et 506 font très probablement partie d'une même cachette, découverte près de Crotone en 1927 et enfouis aux environs de 430 avant Jésus-Christ.

Trad. par C. M.



z 8

