

“Pseudomints” and Small Change in Italy and Sicily in the Late Republic

PLATES 83–85

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Two “pseudomints” of the first century BC are described: Pseudo-Ebusus/Massalia (almost certainly at Pompeii) and Pseudo-Panormos/Paestum (probably at Minturnae). The circulation of their coins, and of a plethora of foreign coins, suggests that a relatively monetarized economy in Latium and Campania was pressing all available coin into service, in a context of a penury of small change. Appendix 1 considers the circulation and overstriking in central Italy of Koan bronze coin. Appendix 2 compiles finds of foreign coin from Rome, Minturnae and Pompeii.

The systematic imitation of the small bronze coinage of a number of foreign mints is a strange feature of the monetary history of central Italy in the late second and first centuries BC.¹ Stannard has documented the systematic copying in this area of a number of foreign mints, drawing, in particular, on two very large bodies of material:

A database of “foreign” (that is, non-Roman) coins—in trade or in private collections—that can be provenanced to the River Liri, or Garigliano, at Minturnae; no attempt was made to record the large numbers of standard republican and imperial coins that are part of the same finds.² This database

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1. We thank those who kindly read and commented on drafts of this paper, or gave advice on a variety of questions: Andrew Burnett, Richard Hobbs, Maria R. Alföldi, Rick Witschonke, and Max Stöckli, Schwarzenburg, who designed the maps.

2. Some idea of the range of finds can be obtained from Frier and Parker (1970), Metcalf (1974), and Houghtalin (1985). The coins listed in these articles are from underwater exca-

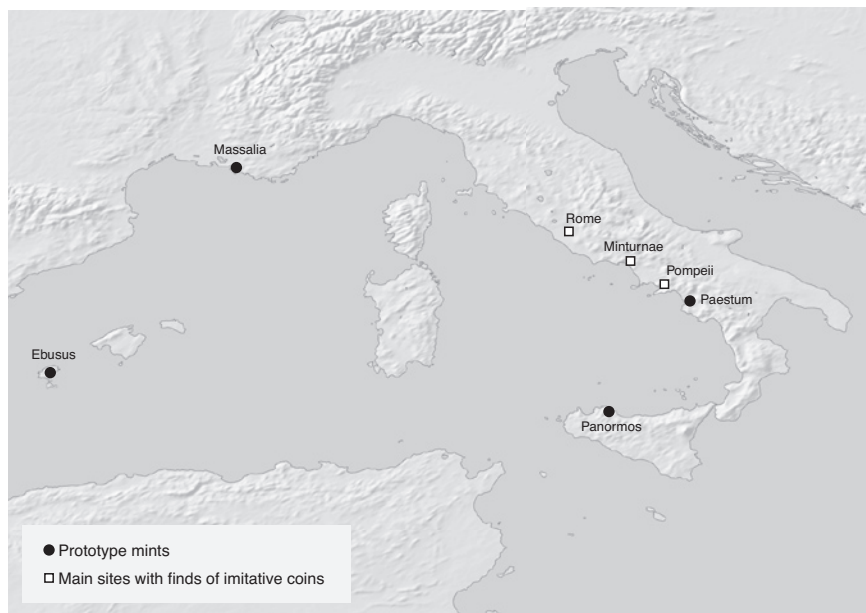


Figure 1. Mints imitated by the pseudomints (Ebusus, Massalia, Panormos, and Paestum), and the main sites discussed in this paper.

gested that three other pieces with the same Panormitan reverse were imitations of Panormos, probably of Italian origin.¹⁰

We have since pooled our materials and looked in more detail into the Pseudo-Paestan and associated coins that we discuss here, in the context of reconsidering the general phenomenon of imitative bronze coinages in central Italy and the circulation of small change in Italy and Sicily in the late Republic. Our conclusions go beyond the ideas in earlier papers and supplant them.

We illustrate a number of coins showing that Pseudo-Panormos and Pseudo-Paestum share dies and must have been made in a single pseudomint. We tentatively attribute Pseudo-Panormos/Paestum to Minturnae in the latter part of the first century BC. We consider the dating and describe the circulation in Sicily of the

reverse (like our no. 5) and is linked by the obverse die to her 49, no. 11, with the Panormitan standing warrior (like our nos. 1 and 2). Unfortunately, her illustrations were mixed up, and repeated the obverse of 48, no. 10, as the reverse of 48, no. 9; see also 39–40.

10. Frey-Kupper (1995, 50, nos. 16 [illustrated here as no. 21], 17, and 18). “Le monete ai nn. 16–18, che generalmente vengono definite come imitazioni del tipo *testa di Zeus / guerriero* . . . a mio avviso, non sono state emesse a *Panormos*; infatti, nei ritrovamenti a me noti è stato rivenuto un solo esemplare di questo tipo, e precisamente tra le circa 10.000

Panormitan model for Pseudo-Panormos. We also show that Pseudo-Ebusus and Pseudo-Massalia were struck in a single pseudomint, which we attribute with near certainty to Pompeii in the early first century BC. We discuss the circulation in central Italy of both pseudomints' coins and of small change in general and address the implications for understanding the contemporary economy. We compare this to the situation in Sicily, recently studied on the basis of large samples from excavations.

In Appendix 1, we discuss a group of imitative coins, struck over an issue of the island of Kos that is commonly found in the Liri, the Tiber, and central Italy generally. In Appendix 2, we present a synoptic table listing the finds of foreign coins from a number of major sites, in order to give a context for our discussion of the circulation of the coins of the pseudomints and the circulation of small change in Latium and Campania in the late Republic.

Our work builds upon important previous studies of the circulating *aes* in Italy and related subjects. Attilio Stazio (1955) first drew attention to the enormous number of Ebusan coins in central Italy. Marta Campo's (1976, 1993) analyses of the structure of Ebusan bronze coinage made it possible to identify the imitative series. Michael Crawford provided a firm range of dates for the Roman Republican coinage and for several local series.¹¹ He and Andrew Burnett began the systematic analysis of the larger framework of coin circulation in late Republican Italy.¹² The finds at a number of Italian sites have been documented, making comparison and analysis possible, for the material we discuss here: in Italy (from north to south), Cosa (Buttrey 1980), Rome and the river Tiber (Appendix 2), Minturnae and the river Liri (Appendix 2), Pompeii and its surroundings (Appendix 2), Velia (Libero Mangieri 1990a, 1993) and Paestum (Cantilena, Pellegrino and Satriano 1999); and in Sicily (from east to west), Morgantina (Buttrey, Erim, Groves, and Holloway 1989), Solunto (Tusa Cutroni 1955, 1956, 1958–1959), Monte Iato (Frey-Kupper forthcoming; 1992a, esp. 281–287), and Segesta (Gandolfo 1995; Mammina 1995, 1997). For Italy, the new *Historia Nummorum* is an important tool, which, if used systematically to document new finds, will facilitate comparison.¹³

CATALOGUE OF THE TYPES DISCUSSED

The Panormitan and Paestan Prototypes

The systematic striking of coins imitating Panormos and Paestum is a purely central Italian phenomenon. Such coins were not made in Sicily. The Pseudo-Panor-

monete rinvenute a Morgantina [Buttrey, Erim, Groves and Holloway 1989, 94, no. 264, pl. 24]. Non è chiaro dove queste imitazioni sono state prodotte. Allo stato attuale, l'ipotesi più probabile mi sembra una localizzazione dell'emissione in Italia" (Frey-Kupper 1995, 40–41).

11. *RRC* and Crawford (1973), and the following note.

12. *CMMR*, 52–74, 103–115, 177–194; Burnett (1982); Crawford (1982).

13. The Sicilian volume is in preparation.

mos group copies the standing warrior reverse used on the two following canonical Panormitan coins.

Obv. Laureate head of Zeus, left; border of dots.

Rev. Helmeted warrior standing half-left, holding *patera* and spear; shield rests against spear; ΠΑ-NOP-MITAN around; border of dots.

1 Æ 18 mm ↓ 3.46 g Gàbrici (1927, 154, nos. 36–43); Vienna 6679 (this coin)

Obv. Same as last, but head right.

Rev. Same as last, but ΠΑ-NOP up to left.

2 Æ 17 mm ✓ 3.70 g Gàbrici (1927, 154, nos. 32–35); Paris, Seymour de Ricci Panormos 2 (this coin)

The following variant of this Panormitan type, which includes an ear of corn, was not imitated.

Obv. Same as last, but of a bolder style.

Rev. Same as last, but of a bolder style, and an ear of corn with leaf sprouting from the ground to the left of the warrior, ΠΑ-NOP-MITAN around.

3 Æ 18 mm ✓ 2.69 g Gàbrici (1927, 154, nos. 44–51); from Monte Iato, Frey-Kupper (forthcoming), no. 409 (this coin)

Two Paestan types are copied.

Obv. Helmeted head, right; S behind; PAE before upward; border of dots.

Rev. Rudder and tiller; M.OCI above; IIII.VIR below; border of dots.

4 Æ 14 mm ↖ 2.66 g Crawford (1973, 91, no. 31/1); Liri 13.104 (this coin)

Obv. Same as last.

Rev. Clasped hands; L.FΔ above; L.SA below; border of dots.

5 Æ 15 mm ↘ 2.42 g Crawford (1973, 91–93, no. 32); Liri 4.094 (this coin)

The Pseudo-Panormitan/Paestan Issues

A number of die links prove that a single “mint” imitated both Panormos and Paestum. The imitations are mostly of a rudimentary style, with macaronic legends, and the Panormitan obverse head of Zeus is often replaced by a variety of odd heads. The legends on these pieces are so deformed that we hesitate to transcribe them, and in so doing attribute sense that may not be there.

No. 6 copies the rudder-and-tiller reverse of no. 4. Only one reverse die is known, but the obverse die also pairs with four standing warrior reverse dies that copy Panormos (nos. 7 to 10). These are part of a much larger group of imitations with the standing warrior reverse: Stannard (1998, 220) earlier identified at least fifteen obverse and twenty reverse dies. Our nos. 7 to 11, 13, 15, 18 and 19, 21 and

22, and 24 and 25, also use the Panormitan standing warrior reverse and include new dies and die links within Pseudo-Panormos and between Pseudo-Panormos and Pseudo-Paestum.¹⁴ We hope to publish a corpus of this material in due course.

Obv. Laureate, bearded head, left; border of dots.

Rev. Rudder and tiller, arrow to right, APTE above, MCN below; border of dots.

6 Æ 16 mm ↙ 2.74 g Copenhagen uncertain = Stannard (1998, 220, no. 57) (this coin)

Obv. Same as last; same die.

Rev. Helmeted warrior standing left, holding *patera* and spear; shield rests against spear; macaronic legend; border of dots.

7 Æ 16 mm → 2.69 g Liri 8.001 = Stannard (1998, 220, no. 58) (this coin)

Rev. Same as last, but different macaronic legend.

8 Æ 18 mm ↖ 3.25 g Liri 4.117 = Stannard (1998, 220, no. 59) (this coin)

9 Æ 15 mm ↗ Liri 100.108 = Stannard (1998, 220, no. 60) (this coin)

Rev. Same as last, but different macaronic legend.

10 Æ 15 mm ↓ 2.92 g Liri 28.018 = Stannard (1998, 220, no. 61) (this coin)

There are three pairs of coins that tie Pseudo-Paestum (clasped hands) to Pseudo-Panormos (standing warrior) through shared obverse dies (nos. 11 and 12, 13 and 14, and 15 and 16). No. 17 also copies this Paestan type, but the obverse die is closer in style to the model. The legends of nos. 16 and 17 are macaronic, as in the Pseudo-Panormitan issues. It is also difficult to decide which side of these clumsy reverses is up: the coins are shown with thumbs uppermost. Although much less common than Pseudo-Panormos, Pseudo-Paestum is still a substantial issue: nos. 12, 14, 16, and 17 all use different obverse and reverse dies.

Obv. Head of Mercury, wearing winged *petasus*, right; C behind; IIOVO before;¹⁵ border of dots.

Rev. Helmeted warrior standing half-left, holding *patera* and spear; no shield; AVH to left; border of dots.

11¹⁶ Æ 17 mm ↑ 2.54 g BerlinLöbbecke = Stannard (1998, 222, no. 77) (this coin)

14. Our nos. 15, 21 and 22, and 24 and 25 are new dies or die links.

15. Although we transcribe the legend, the letters are so poor that it is unlikely to have any significance.

16. We know of many specimens from this pair of dies. There are five from the Liri, three weighed (2.12 g, 3.46 g and 3.46 g). From Rome, there are Frey-Kupper (1995, 48, no. 10 [2.68 g]) and a certain specimen (3.02 g) from the *Sottosuolo*, as well as two much corroded but probable specimens (c. 2.1 g and 1.9 g). For the Greek material from the *Sottosuolo*, see

Obv. Same as last; same die.

Rev. Clasped hands; L.FA above; L.SA below; border of dots.

12 Æ 16 mm ← 2.96 g Rome, Lungotevere (1877–1890); Rome, Museo Nazionale Romano, Inv. 47050 = Frey-Kupper (1995, 48, no. 9) (this coin)

Obv. Beardless, helmeted head right; border of dots.

Rev. Same as no. 11; same die.

13 Æ 17 mm ✓ Liri 32.070 = Stannard (1998, 222, no. 78) (this coin)

Obv. Same as last; same die.

Rev. Same as no. 12, but a different die.

14 Æ 16 mm → 3.49 g Paris 1350 (this coin)

Obv. Same as no. 13, but S behind and PAE upwards before.

Rev. Same as no. 11, but any legend illegible.

15 Æ 16 mm ↑ 3.77 g SNG Cop., *Italy-Sicily*, no. 1378 (this coin)

Obv. Same as last; same die.

Rev. Clasped hands; macaronic legend around.

16¹⁷ Æ 16 mm ✓ CIN Naples, Sallusto plaasters 627 (this coin)

Obv. Like no. 5.

Rev. Same as last, but different macaronic legend around.

17 Æ 15 mm ✓ 2.87 g Crawford (1973, 93, no. 32 var.);¹⁸ Liri 4.091 (this coin)

Nos. 18, 19 and 20 share a common obverse. Nos. 18 and 19 copy the Panormitan standing warrior. The heavily double-struck reverse of no. 20 is illegible, but it seems not to be a Panormitan or a Paestan type, which shows that these issues could extend into yet other types. Perhaps a readable specimen will turn up.

Obv. Laureate head of Zeus, right.

Rev. Helmeted warrior standing right, holding *patera* and spear; shield rests against spear; ΠA-NOP down to right; MITAN down to left; border of dots.

18 Æ 17 mm ↖ 2.21 g Liri 4.118 = Stannard (1998, 221, no. 70) (this coin)

Obv. Same as last; same die.

Rev. Same but no shield; SI up to left, TO down to right; border of dots.

19 Æ 16 mm ↑ 2.47 g Liri 4.119 = Stannard (1998, 221, no. 71) (this coin)

R. Alföldi (1991); we are grateful to her for having shown this material to Frey-Kupper in Frankfurt am Main some years ago. We know of the following museum specimens: Berlin (our no. 11), the Ashmolean in Oxford (3.27 g; we thank Henry Kim for a cast), and SNG Cop., *Italy-Sicily*, no. 568 (2.92 g).

17. Vismara (1998, 60–61, and pl. III, no. 40) is another specimen from the same dies.

18. Crawford (1973, 93) notes that “this issue is perhaps an unofficial copy.”

Obv. Same as last; same die.

Rev. Unclear: inscription in a wreath?

20 Æ 12 mm 2.71 g Liri 37.011 (this coin)

Two more coins in the Pseudo-Panormos standing warrior group (nos. 21 and 22) share an obverse die with a coin copying a Roman *quadrans* prow reverse (no. 23). The reverse die of no. 21 also links to an obverse with a helmeted head, used with a standing warrior reverse (nos. 24 and 25) and with an eagle on a thunderbolt reverse (no. 26).¹⁹

Obv. Diademed and bearded head, right; border of large dots.

Rev. Helmeted warrior standing left, holding *patera* and spear; shield rests against spear; no visible legend; border of dots.

21 Æ 15 mm ↘ 2.85 g Rome, Lungotevere (1877–1890); Rome, Museo Nazionale Romano, Inv. 103189 = Frey-Kupper (1995, 50, no. 16) (this coin)

Obv. Same as last; same die.

Rev. Same as last; different die.

22²⁰ Æ 17 mm ↖ 2.61 g Naples P 14184 bis (this coin)

Obv. Same as last; same die.

Rev. Prow left; ∞ above; border of dots.

23²¹ Æ 15 mm ↓ 3.28 g Berlin 28624/13 (this coin)

Obv. Helmeted head right.

Rev. Same as no. 21; same die.

24 Æ 16 mm → Liri 100.177 (this coin)

25 Æ 15 mm ↑ 2.70 g Benedetti, Catalli, and De Lucia Brolli (1999, 60, no. 16), listed as “Aetolian League,” from Monte Li Santi-Le Rote/*Narce* excavations, inv. 3135 (this coin)

Obv. Same as last; same die.

Rev. Eagle, right, its wings spread to either side, on a thunderbolt; border of dots.

26 Æ 15 mm ↙ 2.93 g Liri 100.189 (this coin)

19. For a possible connection to a group of coins struck over Kos, see Appendix 1, nos. 44 and 45.

20. There are two known specimens of this piece: the one illustrated and one from the British School excavations in the House of Amarantus at Pompeii (I.9.11–12) (ID 68; Seaton 98; Room 11.4; Context 1015).

21. This is a relatively common coin in the Liri finds.

The Ebusan and Massaliot Prototypes

Most Pseudo-Ebusan issues imitate the canonical Ebusan facing Bes and butting bull types (Campo's groups XII and XVIII), examples of which we illustrate below.

Obv. Bes, nude, a hammer in his raised right hand, a snake in his left.

Rev. Bull butting left.

27 Æ 16 mm ↓ 3.39 g Campo (1976, group XII); Liri 14.071 = Stannard (2005a, 63–64, no. 41) (this coin)

Obv. Same; with symbol to left.

Rev. Same as obverse.

Obverse and reverse symbols: caduceus to left; *shin* to right (Campo [1976, group XVIII, 129, nos. 59–60]).

28 Æ 17 mm ↖ 3.13 g Campo (1976, group XVIII); Pompeii sporadic 59016 = Stannard (2005a, 63–64, no. 42) (this coin)

Massalia issued many small bronze pieces with an obverse head of Apollo and a butting bull reverse, and a variety of symbols. The imitations copy these types generally. We cannot be certain of which issue or issues specifically.

Obv. Laureate head of Apollo, right.

Rev. Bull butting right; ΜΑΣΣΑ above; ΑΙΑ in exergue.

29 Æ 16 mm ↑ 2.40 g Depeyrot (1999, 82, type 48/4); Py (2006, 235–257, PBM-50); Barrandon and Picard (2007, 99, no. 90); Liri 45.392 (this coin)

The Pseudo-Ebusan/Massaliot Issues

The largest group of imitations are of Ebusus, usually copying Campo's group XVIII, such as the following coin.

Obv. Bes, wearing a tunic, his left hand raised, and a snake on his right arm; “T” to right.

Rev. Same as obverse.

30 Æ 15 mm ↖ 1.97 g Liri 5.003 = Stannard (2005a, 71–72, group VIII, 7, no. 75) (this coin)

There are also a number of linked anomalous types, including a walking horse (Stannard 2005a, 65, group I, 1); heads of Apollo, Mars, and Diana, a horse head, and a toad (Stannard 2005a, 68, the anomalous issues of groups III to VI); and a man with a palm-frond (Stannard 2005a, 73, group IX). The complex of Pseudo-Ebusan types is not described in detail here.²²

22. For these types, see Stannard (2005a, 64–78), which supersedes Stannard (2005b).

In studying excavation coins from Pompeii, Stannard (2005b, 133–134, nos. 85–107) also demonstrated the existence of coins imitating Massalia, with a variety of legends, though this complex has not yet been studied in detail.

Obv. Laureate head of Apollo, right; border of dots.

Rev. Bull butting right; AOMΣ above; border of dots.

31 Æ 13 mm  1.20 g Pompeii Bathhouse purse hoard, no. 25 = Stannard (2005b, 133, no. 92) (this coin)

A number of new finds²³ show that there are still issues to be discovered, and that a single “mint” struck both Pseudo-Ebusus and Pseudo-Massalia. No. 32 is one of the anomalous types, from the bathhouse purse hoard. It shares its reverse type (a toad), with no. 35, the obverse of which imitates the Massaliot bull butting right. No. 35’s obverse type (Mars) is also used with coins, the reverse types of which (a butting bull) also imitate Massalia. The legends, which do not appear on Ebusan models, show this: MA above on no. 33 (the exergue is off the flan), and ΔA in exergue, on no. 36 (any legend above is off the flan). The same reverse type and exergual legend (another die) is used by no. 34, which might at first glance appear to be a canonical Massaliot issue of Depeyrot’s group 47/9,²⁴ but is almost certainly imitative, because the obverse symbol is not otherwise attested and because of its Liri provenance. (If so, it shows that Pseudo-Massalia imitations were sometimes so well made as to pass for originals.)²⁵ Moreover, no. 36 shares its reverse die with no. 37, the obverse die of which is Bes, the standard Ebusan type. A stylistically very similar obverse die is used, in no. 38, with a reverse type of a bull leaping right, which is not found on either the canonical Ebusan or Massaliot coins. This reverse die is then used, in no. 40, with a horse-head right obverse, which is probably the reverse die of Pseudo-Ebusan no. 39. This closely linked group of coins shows clearly that Pseudo-Ebusus and Pseudo-Massalia were struck together.²⁶

23. Including in the materials from the Anglo-American Project at Pompeii (AAPP) excavations (discussed in Hobbs 2003 and Hobbs 2005) and from the University of Perugia excavations at Pompeii (Ranucci 2008, 252, fig. 4, no. 1).

24. See the reference in our catalogue.

25. The same problem in identifying the imitations occurs with Stannard (2005a, 70) (for Pseudo-Ebusus group VII): “These relatively normal Pseudo-Ebusan issues are in some ways the most difficult to identify, except when they carry symbols not present in the canonical Ebusan material, but nos. 67 and 68 have symbols also found on canonical Ebusus. I suspect that there are other—perhaps many other—relatively accurate local imitations of Ebusus in the coins found in Italy: those that are too accurate, we shall never be able to identify.”

26. “Obverse” and “reverse” dies appear to switch about in this group of coins. This shows that the dies were mobile, probably taking the form of small bronze shafts that could be

Obv. Head of Mars right, in crested helmet; border of dots.

Rev. Toad; border of dots.

32 Æ 15 mm ↗ 2.01 g Pompeii, bathhouse purse hoard 41 = Stannard (2005a, 68–69, no. 60) (this coin)

Obv. Same as last; different die.

Rev. Bull butting right; MA above.

33 Æ 13 mm → 1.48 g AAPP 2000, 120, 18, 173 (this coin)

Obv. Head of Apollo, right; $\overline{\text{PA}}$, behind.

Rev. Bull butting, right; $\text{MA}\Sigma\Sigma\text{A}$ above; ΔA in exergue.

34 Æ 13 mm ✓ 1.43 g cf. Depeyrot (1999, 81, group 47/9 [ΔA in exergue]); cf. Py (2006, 221–222, PBM-47-9); cf. Barrandon and Picard (2007, 98, no. 86); Liri 27.158 (this coin)

Obv. Bull butting right.

Rev. Toad.

35 Æ 15 mm ↗ 1.40 g AAPP 1996, 32, 7, 212 (this coin)

Obv. Same as nos. 32 and 33; different die.

Rev. Like no. 34, different die.

36 Æ 13 mm ↓ 1.20 g AAPP 2006, 600, 26, 199 (this coin)

Obv. Bes facing, wearing a tunic, holding a hammer in his raised right hand and a snake in his left.

Rev. Same as last, same die.²⁷

37 Æ 13 mm ✓ 1.95 g Liri 14.070 = Stannard (2005a, 66–67, no. 47) (this coin)

Obv. Same as last; same die.

Rev. Bull leaping right; snake (?) below; the “wing” on the bull is a die break.

38 Æ 15 mm ↘ 2.31 g Liri 27.051 = Stannard (2005a, 66–67, no. 46) (this coin)

Obv. Laureate head of Apollo right; possibly O below right and monogram to left.

Rev. Horse-head, right.

39 Æ 15 mm ← 2.37 g Pompeii, from a cinery urn in tomb 7 OS Columella 2 = Stannard (2005a, 68, no. 53) (this coin)

mounted in either an iron anvil (an “obverse” die) or an iron punch (a “reverse” die). Stannard (1987) demonstrated such die mobility for Roman republican denarii and imperial bronzes. As used in the catalogue here, “obverse” simply means the image to the left on the plates; “reverse,” the image to the right.

27. Misdescribed in Stannard (2005a, 67) as having two stars in exergue.

Obv. Same as the reverse of no. 39; probably same die.

Rev. Same as the reverse of no. 38; same die.

40 Æ 15 mm ↗ 1.44 g AAPP 2001, 140, 147, 219 (this coin)

DISCUSSION

The Panormitan Prototype

Before discussing Pseudo-Panormos, it is useful to look more closely at the prototype—that is, the issues with the types of a head of Zeus on the obverse and standing warrior and the ethnic ΠΑΝΟΡΜΙΤΑΝ on the reverse (nos. 1–3). The prototype is later than the larger “Romano-Sicilian” coins with the same types, which carry magistrates’ names in Latin but not the ethnic (Bahrfeldt 1904, 331–445, pl. 1–5: 384–407 [second group]). The find spots of these coins in northwestern Sicily concentrate around Panormos. This—and the monogram, \mathbb{P} , which the later magistrates of this series use—shows that they were intended to meet the needs of this important harbor metropolis. They date roughly to the second and third quarters of the second century BC, or slightly later, as archaeological data and hoards indicate.²⁸

The date of the prototype—the coins with the warrior and ethnic—can be inferred from the presence of specimens in excavation strata related to the construction of the younger *bouleuterion*, the western stoa, and the podium temple built against the wall of the stoa, in the agora of Iaitas (Monte Iato), which is about forty kilometers southwest of Panormos (Palermo).²⁹ This complex was built during the last quarter of the second century BC, after the Second Slave War (135–132 BC). We propose to date the prototype between 130/120 and 90 BC: it was therefore available to be imitated from at least the early first century BC. Later in the first century BC, Panormos—like many other Sicilian cities—struck a large number of further issues with the ethnic.³⁰

Of the twenty-nine coins with the warrior and ethnic reverse from the 1971–1990 Monte Iato excavations, eleven are of good style (like nos. 1 and 2). Most of the others are of a “bold” style, especially a group of nine coins with a head of Zeus, right, and a corn-ear growing from the ground to the left of the

28. For detailed arguments, see Frey-Kupper (forthcoming, part 1, chap. 4.5.2; 1992b).

29. For the contexts in which these coins are found, see Daehn (1991, 91, 94 [M 1117 = Frey-Kupper, forthcoming, no. 394], 93 [M 207 = Frey-Kupper, forthcoming, no. 395], and 120–122). For the discussion of the coins, see Frey-Kupper (forthcoming, part 1, chap. 4.5.3; part 2, chap. 2.2 [nos. 394–395]).

30. Frey-Kupper (forthcoming, part 1, chap. 4.5.3.3–8); for Panormos, see Gàbrici (1927, 155, nos. 98–108; 161, nos. 277–321 [units], and 153–155, nos. 1–3, 8–21, and 52–53 [halves]).

warrior (like no. 3). In studying these materials, Frey-Kupper wondered whether this group might be imitations, concluding that the complete legend (the layout of which is identical to that on the pieces without the corn-ear) and the normal average weight³¹ give no grounds for this. A corn-ear is a frequent and normal symbol on Sicilian coins. These issues—with and without the corn-ear—may have been a useful intermediate fraction (c. 3.50 to 3.75 g) between the older, heavier warrior with magistrates' names series (c. 5 to 8 g for the various issues) and their corresponding fractions, which were much lighter (head of Demeter / prow, c. 1.20 to 2 g).

In addition to finds of the Panormitan warrior-and-ethnic coins in western Sicily, specimens have been found at sites between Latium and Calabria, including Rome, Minturnae, Paestum, and Locri (Fig.4).³² Their high frequency in the Tiber and Liri³³ materials, coupled with their relative rarity at Paestum and Locri and their absence at Velia, suggest that this dispersion pattern results from the commercial activities of Roman *negotiatores* in northwestern Sicily and Panormos.

It is instructive to compare the relative numbers of the two groups—the earlier warrior and magistrates' names coins and the later warrior-and-ethnic coins—that have been found in Sicily and in Latium (Rome and the Liri), as given in Table 1. Although information from Latium is limited, there appears to be a clear reversal of the relative numbers in the finds in Sicily and Latium. At Monte Iato, the coins with the magistrates' names are three times as common as those with the ethnic, and the picture is similar at other Sicilian sites.³⁴ This reflects the fact that the magistrates' issues were simply larger. The relatively larger numbers of coins in Latium with the warrior and ethnic reflects an increased flow of coins from Panormos to Latium in the late second and early first centuries BC, which then lessened, to judge from the rare finds of later Panormitan issues.³⁵

31. At 3.75 g (n = 21 from collections), this is slightly higher than the weight of our nos. 1 (3.48 g for the variant with head left, n = 31) and 2 (3.49 g for the variant with head right, n = 65). See Frey-Kupper (forthcoming, part 1, table 59, and part 3, appendix 5, nos. 14, 1–14, 3).

32. For the detailed list of the find spots and the bibliography, see Frey-Kupper (forthcoming, part 3, appendix 3, no. 24).

33. Four warriors with magistrates' names and one Demeter / prow fraction; nine warriors with *ethnic*.

34. *Morgantina*/Serra Orlando: ten coins with magistrates' names and one with *ethnic*; *Solus*/Solunto: forty-four coins with magistrates' names and twenty-three with *ethnic*; *Entella*/Rocca d'Entella: three coins with magistrates' names and none with *ethnic*. See Frey-Kupper (forthcoming, appendix 3, nos. 15 and 24).

35. Frey-Kupper (1995, 53, no. 33 [head of Zeus/tetrastyle temple]); Liri database: three ram over Janus-head/eagle (Gàbrici 1927, 161, nos. 314–321) and one Tiberian issue (Gàbrici 1927, 162, nos. 339–341 = *RPC* I, 172–173, no. 644).

Table 1. Relative numbers, in Sicily and in Latium, of coins of Panormos with magistrates' names, and coins with the ethnic

Sicily				Latium					
Iaitas		Rome				Minturnae		Latium total	
Monte Iato		Tevere		Sottosuolo		Liri			
Magistrates	Ethnic	Magistrates	Ethnic	Magistrates	Ethnic	Magistrates	Ethnic	Magistrates	Ethnic
88	29	—	4	1	4	5	9	6	17
75%	25%							26%	74%

The Paestan Prototype

The issue with the clasped hands and the legend $\text{F}\Delta / \text{L.SA}$ (no. 5) is the most frequent of all late Paestan issues, to judge from its occurrence in collections,³⁶ in the Tiber at Rome, and in the Liri at Minturnae. Its dating is important for establishing the chronology of the pseudomint. Crawford has proposed a date for the clasped-hands type in the 40s BC, as it appears to derive from denarii of the time of Caesar.³⁷ We use this dating in this paper and consider it further when discussing the dating of the imitative issue. The tiller-and-rudder issue, with the legend $\text{M.OCI} / \text{IIII.VIR}$ (no. 4), is common, but relatively less so.³⁸ The two issues are very similar in style and must be of roughly the same date. Both of the Paestan prototypes (nos. 4 and 5) occur in the Tiber³⁹ and the Liri.⁴⁰

The Ebusan Prototypes

Campo (1993, 154–155) dates her group XII to the period of the Second Punic War (c. 214–200 BC), and her group XVIII to the second century BC. This wide range of dates for the prototypes provides little absolute evidence for the dating of the imitative issues. The next of her main groups is XIX, which she dates to after 91/90 BC.⁴¹ It is very common in Spain but rarely found in Italy, which suggests that the large flow of Ebusan coin to Italy was over by then (Stannard 2005a, 62–63).

36. Cf. Crawford (1973, 91–93, no. 32 [n = 70]), like our no. 5, compared to Crawford (1973, 91, no. 31/1 [n = 23]), like our no. 4. See also Sallusto (1971), which he includes.

37. “Of the types which may be borrowed from Roman denarii, none need have a model later than Caesarian” (Crawford 1973, 100).

38. Frey-Kupper (1995, 47–48, nos. 2–8); Cantilena, Pellegrino, and Satriano (1999, 38, no. 124 [n = 30], compared to no. 123 [n = 10]), like our no. 4.

39. See n. 9 above.

40. For finds of Paestum, see appendix 2. The Liri database currently includes twenty-one canonical Paestan coins of all periods, including two of the issue of our no. 4 and three of our no. 5. There are three Pseudo-Paestan coins, all with the clasped-hands reverse.

41. Campo (1994, 48) derives the *terminus ante quem* for group XIX from its use of the Roman semiuncial standard, introduced by the *Lex Papiria*. Costa Ribas (2007, 98) suggests

The Massaliot Prototypes

Massalia produced a variety of "petits bronzes" with an obverse head of Apollo and a butting bull reverse. Their dating has been the subject of much controversy. Michel Py's (2006, 177–349) full study of coins from excavation contexts at Lattes and other sites in southern France is an important advance in our understanding of this difficult material. Drawing on Georges Depeyrot's (1999) typology,⁴² and taking into account the work of other scholars (e.g., Brenot 1990; Gentric 1987), Py proposes a relative order and loose dates (with a precision of several decades) for the various types, between the late third and the middle of the first centuries BC.⁴³

Because the types are largely immobile, it is difficult to say which of the many minor Massaliot Apollo / butting bull types served as the prototype. At this stage, it seems most likely that the imitations derive from the variants with the short legend ΜΑΣΣΑ and from one to three letters in the exergue.⁴⁴ The archaeological evidence shows that the bulk of these coins were emitted in the last third of the second century BC.⁴⁵ Variants of these types were produced until the middle of the first century BC but differ in detail from the imitative types.⁴⁶ Further research may clarify the prototype or prototypes of the Pseudo-Massaliot coins.⁴⁷

a date of c. 80 BC and that the issue reflects the establishment of a *foedus* between Rome and Ebusus.

42. The chronology derived from the analysis of archaeological contexts does not fundamentally contradict that proposed by Depeyrot (1999, 5–17) but puts it on a firmer ground and makes greater precision possible.

43. Py numbers his "petits bronzes de Marseille" (PBM) largely, though not entirely, by Depeyrot's (1999) type numbers. His conclusions regarding the different types and groups and their dating, which take into account both the archaeological evidence and earlier research, can be found as follows in Py (2006): PBM-29 and 30, 185–186; PBM-34 and 35, 193–194; PBM-39 and 40, 215–216; PBM-45, 46, 47, and 48, 234–236; PBM-50, 255–256; PBM-51 and 52, p. 257; PBM-53, 65, and 66, 301–303.

44. Py (2006, 216–236, PBM-45, 46, 47, and 48), which corresponds to Depeyrot (1999, 80–82, nos. 47–48).

45. Py (2006, 234): "L'abondance des attestations antérieures à la fin du II^e s. av. n. è. suggère que ces émissions ont battu leur plein durant le dernier tiers du siècle, et l'on est en droit de supposer de manière corollaire que la masse des frappes au cours de cette période a été suffisante pour expliquer qu'un nombre conséquent de spécimens se retrouve dans les habitats tout au long du I^{er} s. av. n. è." In his final chapter ("Conclusions"), Py proposes a wider dating (second half of the second century BC). See Py (2006, 1177, fig. 470).

46. Py (2006, 257–303, PBM-53 and 65–66). In these cases, for example, the bull's tail does not take the form of an S, as on the imitative pieces, but runs horizontally above the animal's back.

47. As far as we can judge, none of the pieces that Py illustrates are Pseudo-Massaliot. We have, as yet, not identified any such pieces from France.

Jean-Noël Barrandon and Olivier Picard have recently published a study of the Massaliot series, based on metal analysis, and date the small bronzes widely from c. 150–49 BC.⁴⁸

There are no imitations of the later type, with an obverse head of Apollo left and a bull standing right reverse, which Py dates to between 80/70 and 60/50 BC.⁴⁹

Locating and Dating the Pseudomints

We have shown that Panormos and Paestum were imitated by a single pseudomint, as were Ebusus and Massalia. We can also show that the two pseudomints were separate. There are a number of stylistic similarities and differences. In both cases, there are crude and clumsy pieces, such as the rudimentary images of Bes in Stannard's groups VIII, IX and X,⁵⁰ but there are also some Pseudo-Ebusan/Massaliot pieces that are relatively close to their models, whereas Pseudo-Panormos/Paestum is generally clumsier, with borders of overly large dots. In both, there is the occasional phenomenon of reversed types. No. 18, for example, simply mirrors the image and the legend of the model (no. 1) and, with many Pseudo-Ebusan groups, Bes raises his left hand, rather than his right, as on the prototype (no. 30). This comes about because the engraver has copied mechanically and failed to invert the types on the dies, with the result that they appear the wrong way around on the coins. Both pseudomints also extend into anomalous types not derived from the model: for Pseudo-Ebusus, groups III to VI and group IX; for Pseudo-Panormos, nos. 20, 23, 24 and 25, and 26.

48. Barrandon and Picard (2007, 114–116: “petits bronzes de la seconde période”). The authors derive their date from the initiation of the use of “cuivre gris” of high antimony content (from tetrahedrite-tennantite ores), from which most of these pieces are struck. They appear not to have taken Py (2006) into account when considering the dating of Massaliot bronze, although they mention it for one find context (Barrandon and Picard [2007, 115, n. 34]).

49. Py (2006, 350–357, PBM-67 and 68 = Depeyrot [1999, 103–104, nos. 67 and 68]), which he dated to after 70 BC. He notes that some scholars have attributed them to Nîmes or more generally as “émissions péri-massaliètes.” He suggests that only part of type PBM-67 may have been produced at Nîmes, namely those coins similar in style to its coins “au sanglier” with the legend NAMA/ΣAT (PBM-67-1). Others, he suggests, are closer in style to Massalia proper (particularly those with Λ in the exergue). “Cependant cette supposition se heurte au fait que toutes les variantes sont attestées dans la plupart des zones, ainsi que dans la colonie marseillaise d’Olbia.” See Py (2006, 354–356). Barrandon and Picard (2007, 99–100) list these pieces as their issues 95–98, at the end of the “petits bronzes.” On their plates, however, two specimens only are illustrated, as issues 72 (Bibliothèque nationale 1866) and 79 (Bibliothèque nationale 1864), which should be butting bull types.

50. When Pseudo-Ebusus groups are mentioned, they refer to Stannard (2005a).

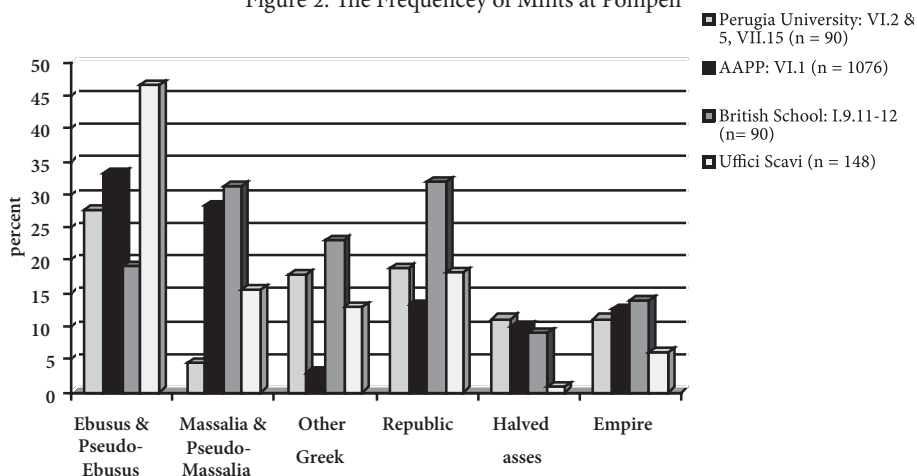
The two pseudomints do not share dies, and the diameters and weights of their coins are different. The coins of Pseudo-Panormos/Paestum are 15 mm to 18 mm in diameter and weigh between about 2.25 g and 3.75 g. Those of Pseudo-Ebusus/Massalia can be as small as 10 mm and are seldom larger than 16 mm, with weights ranging between about 1.15 g and a maximum of about 2.55 g; most are considerably lighter. It is significant that whereas the legends on Pseudo-Panormos/Paestum are Latin and the lettering often defective, the legends on Pseudo-Massalia are Greek and the letters well formed. There are no legends on Pseudo-Ebusus.

Table 2. Frequency of foreign coins in the Liri database⁵¹

	%		%
Spain, excluding Ebusus	4	Other Italy	27
Ebusus	4	Sicily	12
Gaul, excluding Massalia	2	Greece	11
Massalia and Pseudo-Massalia	9	Asia Minor	11
Pseudo-Ebusus	5	Carthage and Africa	11
Pseudo-Panormos	5	Total	100

There is also a clear distinction in the relative frequencies of the two pseudomints at Pompeii and in the Liri database, where we have information on large enough samples to make comparison meaningful. Table 2 shows the breakdown of coins in a sample of over 1,400 foreign (non-Roman) coins in the Liri database. Roman coins were not recorded. Figure 2 gives, for comparison, the breakdown of the coins (including Roman coins) from excavations below the AD 79 destruction

Figure 2. The Frequency of Mints at Pompeii



51. Derived from Stannard (2005a, 61–62).

layer, by the University of Perugia (Ranucci 2008), the Anglo-American Project at Pompeii (AAPP), and the British School at Rome (Stannard 2005b, 121: the House of Amarantus), as well as of the coins conserved in the Uffici Scavi at Pompeii (Stannard 2005b, 121).⁵²

The overwhelming presence at Pompeii of the coins of Ebusus and Pseudo-Ebusus and of Massalia and Pseudo-Massalia stands out despite differences in these samples.⁵³ In the case of the AAPP coins, for instance, these issues together account for over 60 percent of all coins and for virtually all non-Roman coins. The insula excavated contained two commercial areas (Hobbs 2003, 377) from the late second century on, and these finds show that these coins formed the bulk of the small change at Pompeii at the time. By comparison, these coins are less common in the Liri, though still extremely common. Ebusan and Pseudo-Ebusan coins together make up 8.4 percent of the foreign material, the second largest number of coins from any single polity, after Neapolis (Stannard 2005b, 120). As at Pompeii, Massaliot and Pseudo-Massaliot material is also present in quantity, with the third largest number of coins (8.4 percent). The absolute preponderance of these issues at Pompeii, and the fact that a number of the types have so far only been found there, suggests that Pseudo-Ebusus/Massalia should be attributed to Pompeii or at least to the area.⁵⁴ In this case, the coins in the Liri database would have reached Minturnae from Pompeii.

At both Pompeii and at Minturnae, about half the “Ebusan” coins are imitations: in the Liri database, 49 percent; in the AAPP excavations, 48 percent; in the British School excavations, 48 percent; and in the material conserved in the Uffici Scavi, 32 percent (Stannard 2005b, 124).

The coins from the votive well at Gragnano (Privati di Stabiae) (Cantilena 1997) contain a relatively low ratio of imitative to canonical Ebusus (9 percent). The excavators associate the well’s closure with Sulla’s campaigns in the area in 89 BC, when Pompeii fell to the Romans and Stabiae was razed.⁵⁵ Stannard (2005b, 124), who examined this material, found no post-*Lex Papiria* Roman coins, that is, coins later than 91 BC. This could imply a *terminus post quem* for the

52. We thank Samuele Ranucci, Richard Hobbs, and Andrew Wallace-Hadrill for this information.

53. This pattern is visible even in small samples: for example, in the as yet unpublished 2002–2004 Geneva University excavations *extra muros* near the Terme di Porta Marina, at Pompeii, studied by Frey-Kupper, which are mainly from below the destruction layer: six Pseudo-Ebusus, one Pseudo-Massalia, one Pseudo-Ebusus or Pseudo-Massalia, one Neapolis, one Punic, three Roman republican, five Roman Empire. For a preliminary report of the excavations, see Hernandez (2005).

54. There are no other large site finds from the Vesuvian area on which to base a more definitive decision.

55. The excavation materials have yet to be published in detail.

closure of the well, and that the Pseudo-Ebusan issues reached their apogee in the late 90s and early 80s BC.

It seems clear that Pseudo-Ebusus and Pseudo-Massalia were contemporary: they are, for example, found together in the bathhouse purse hoard from Pompeii Insula VIII.5.36, probably of the early 80s BC (Stannard 2005b, 122), a date compatible with that of the possible prototypes (the last third of the second century BC). The fact that the Massaliot Apollo / bull standing right types (80/70–60/50 BC) are not copied suggests that the imitations were earlier than this and supports a date for them in the late second or early first century BC. We have, however, no sure evidence for when Pseudo-Ebusus/Massalia ceased production and hope that this will eventually be resolved through stratified archaeological materials.

In the case of Pseudo-Panormos/Paestum, the relative frequencies at Pompeii and Minturnae are reversed: while there are very few specimens of Pseudo-Panormos⁵⁶ and Pseudo-Paestum⁵⁷ from Pompeii, they are common at Minturnae: the canonical Panormitan model accounts for 1.3 percent of the foreign material, Pseudo-Panormos for 3.3 percent, and Paestum and Pseudo-Paestum together for 1.9 percent. Although the proportion of Panormitan and Pseudo-Panormitan coins in the Liri at Minturnae is much lower than the massive presence of Ebusus, Massalia, and Pseudo-Ebusus/Massalia at Pompeii, allowance must be made for far larger relative numbers of foreign coins at Minturnae and for the Pseudo-Panormitan/Paestan group being smaller than the massive Pseudo-Ebusan/Massaliot group. It therefore seems reasonable to attribute Pseudo-Panormos/Paestum provisionally to Minturnae while awaiting comparative material from other sites.

The imitations are tightly die linked.⁵⁸ The linking pattern suggests a die box, from which reverse dies were taken occasionally, rather than the sequential use of the reverse die to destruction, which would be consistent with their having been made in a relatively short period. In dating Pseudo-Panormos/Paestum, we need to take a number of factors into account: the dates of the two prototypes and the imitations' probable period of production. The Panormitan prototype, as we have seen, dates to c. 130/120–90 BC. In Sicily, by the middle of the first century BC, it was being replaced, as a major constituent of the circulating *aes*, by numerous later issues.⁵⁹ Allowing for a time lag for the coins to travel from Panormos to central Italy, the copying could have begun a decade or more after the issue ended

56. In the House of Amarantus coins, there is one Pseudo-Panormitan coin (ID 68; Season 98; Room 11.4; Context 1015) that shares both dies with our no. 22, and one canonical Panormitan warrior-and-ethnic piece (ID 59; Season 95; Room 11.5; Context 163).

57. In the AAPP coins, there are two clasped-hands pieces, one Pseudo-Paestan (2005, 507, 28, 19) sharing at least an obverse die with our nos. 13 and 14 and one probably canonical (2001, 168, 4, 2).

58. See Stannard (1998, 220–222, nos. 57–80, pl. 33).

59. See n. 30, above.

in Sicily. The Paestan model, however, would appear to be copying Roman types (clasped hands), which Crawford dates to 48 BC and to 42 BC.⁶⁰ The period we need to bridge in thinking through the dates of the imitations, even if we assume that Pseudo-Panormos closely followed the date of the prototype, need be no more than two or three decades. For the moment, it seems best to assume that the whole issue was made in the 40s BC, but this is crucially dependent on the dating of the Paestan model. In any case, it appears almost certain that Pseudo-Panormos/Paestum is later than Pseudo-Ebusus/Massalia, which reinforces the supposition that they are separate phenomena.

The Circulation Pattern of Ebusus and Pseudo-Ebusus and of Massalia and Pseudo-Massalia

Pseudo-Ebusus is a wholly Italian phenomenon. It is not found in the Balearic islands⁶¹ or on the Spanish mainland, as demonstrated by its absence or rarity in the copious material assembled by Campo (1976), mostly from Spanish museums and collections. Where Campo does list Pseudo-Ebusan issues in her corpus,⁶² there are very few specimens, and these are cited from non-Spanish collections. We also monitored the Iberian coins on sale on eBay, Spain, over two years: while many Ebusan coins were offered, none were Pseudo-Ebusan.

Ebusus and Pseudo-Ebusus are widely found together in Italy and Sicily (Fig. 3), though never in such quantities as at Pompeii and Minturnae.⁶³ The relative number of canonical to imitative coins is difficult to establish because of small samples, because the understanding of the imitative issues is recent, and because very few specimens have been illustrated in publications. Campo (1993, 163) cites finds of "Ebusus" in Italy from: Mirabella Eclano/*Aeclanum*⁶⁴ and San Felicità (Rocca San Felice),⁶⁵ in the Irpino; Pietracatella,⁶⁶ in the Molise; Ordona

60. 48 BC: *RRC*, 466, no. 450/2 and 467, no. 451/1, both with two clasped hands holding a winged caduceus. 42 BC: *RRC*, 504, no. 494/10–12, and *RRC*, 508, no. 494/41, both with two clasped hands holding winged caduceus.

61. Santiago Padrino Fernández kindly confirmed this, in a letter of June 2, 2008: "With respect to the Pseudo-Ebusan coins in Eivissa, according to what I know about Ebusan material in the Museu Arqueològic d'Eivissa i Formentera, I don't remember the existence of this kind of piece there. Neither have I been able to find them in private collections, shops, or markets in the island in which coins are sold."

62. As Ebusan: when Campo wrote, the existence of Pseudo-Ebusus had not yet been recognized.

63. Campo (1976) also lists many finds from the Balearic islands, Spain, southern France, and North Africa ("Descripción de los hallagos," 63–83, with a map on 82).

64. Grell (1980–1981, 224–225): Pseudo-Ebusus, group VIII.

65. Grell (1983, 165): canonical, Campo (1976, group XVIII).

66. Stazio (1955, 43 and pl. III, no. 5): canonical, Campo (1976, group XVIII).



Figure 3. Finds of Ebusus and Pseudo-Ebusus in Italy and Sicily.

(Foggia);⁶⁷ Sarno;⁶⁸ the Sallusto collection, formed in the Paestum area⁶⁹ (but not necessarily from there, as Cantilena denies the presence of Ebusus at Paestum);⁷⁰

67. Travaini (1991, 197): canonical, Campo (1976, group XII).

68. Catalli (1971–1972, 315) and Libero Mangieri (1990b, 207–208): canonical, four Campo (1976, group XVIII) and one Campo (1976, group XVIII, 51; one Pseudo-Ebusus, group VIII).

69. Libero Mangieri (1990b, 207, n. 13): eight undescribed pieces.

70. Cantilena, Pellegrino, and Satriano (1999, 150): “Al di fuori delle serie di Roma e dei piccoli nominali di Paestum e di Velia, sono assenti in II secolo a.C. le monete di altre zecche. Stupisce, ad esempio, la quasi totale mancanza di monete di zecche ispaniche e galliche, non rare in questi anni in ambito italico. A Paestum finora sono attestate una moneta in bronzo da Emporion e una da Carmo Baetica, mentre non risultano circolanti le monetine in bronzo di Ebusus di fine III-prima metà del II a.C. [these dates should be corrected downward] assai abbondanti, invece, in Italia meridionale e soprattutto in area vesuviana e sorrentina. Il dato va interpretato forse come il segnale dell’estraneità della colonia latina al

Velia,⁷¹ Pompeii;⁷² the Salerno Coast;⁷³ Rome;⁷⁴ and Cosa.⁷⁵ From Sicily, she cites Serra Orlando/*Morgantina*,⁷⁶ Solunto/*Solus*,⁷⁷ and an uncertain find.⁷⁸ To these we can add, from Italy: one piece from the temple of Hercules at Campochiaro⁷⁹ and two pieces from Monte Li Santi-Le Rote/*Narce*;⁸⁰ many from Gragnano, Minturnae, and Pompeii; and several from the Roman *Sottosuolo*.⁸¹ We have also seen specimens in collectors' hands, said to come from Ostia and from north of Rome, along the Via Aurelia. In Sicily, we have documented coins from four further places: four from Marsala/*Lilybaion*,⁸² one from

movimento di uomini e beni collegato ai traffici dei *negotiatores* con la Spagna e la Provenza, assai attivi in Campania meridionale nel II secolo a.C.”

71. Two specimens (canonical or imitations), Libero Mangieri (1993, 29, no. 14, described as Campo, group XVIII; and 36, no. 52, described as Campo, group I, 1).

72. Not in Campo (1993), but Campo (1976, 65) cites the purse hoard analyzed in Stannard (2005b, 122).

73. Travaini (1991) republishes fifteen late nineteenth century finds by Padre Gaetano Foresio, eight illustrated on p. 195, here reclassified. Fig. 2 is probably canonical Campo (1976, group XVIII), and the rest are probably Pseudo-Ebusan: fig. 1, group II (?); figs. 3 and 4, group VII, 5 (?); fig. 6, group VIII, 1; fig. 7, group VII, 5 (?); and fig. 8, group III, 5.

74. Travaini (1991, 197, n. 13): “various examples.”

75. Buttrey (1995, 39, no. 1): canonical, Campo (1976, group XII).

76. Buttrey, Erim, Groves, and Holloway (1989, pl. 9, no. 2) is canonical Campo (1976, group XIII), and no. 3 is Pseudo-Ebusus (Stannard 2005a, 71–72, no. 75, group VIII, 7).

77. Citing (after Campo 1976, no. 72b) Tusa Cutroni (1961, 121).

78. Citing (after Campo 1976, no. 72a) Tusa Cutroni (1956, 211). We do not include this coin in Fig. 3, as its provenance is uncertain. It is in a group of coins of “provenienza sconosciuta” acquired by the Museo Regionale di Palermo in 1896 (GE 2291) and seen there by Frey-Kupper. This contains the core of a hoard of Romano-Sicilian coins. Other coins, among them this Ebusan piece, a coin of Panormos under Augustus, and a medieval coin, seem intrusive. See Frey-Kupper (forthcoming, part 3, appendix 1, no. 24).

79. See Nassa (1999), citing various authors, including Di Iorio (1997, 35): one “Ebusus” among 730 excavation coins.

80. Benedetti, Catalli, and De Lucia Brolli (1999, 57, no. 1 [canonical Campo 1976, group XVIII] and 58, no. 9 [like our no. 35]).

81. R. Alföldi (1991, 34): “Auffallend stark sind auch die Stücke mit dem Bild des Gottes Bes vertreten (Abb. 35), die wohl von der Baleareninsel Ebusus-Ibiza stammen.” The piece illustrated is canonical (Campo 1976, group XVIII).

82. Frey-Kupper (1999, 448–449, no. 168), from T. 58 Via De Gasperi. Probably Pseudo-Ebusus, Stannard (2005a, Group I, 1); this rare piece is known in two specimens only, this one and one in Berlin. Also Frey-Kupper (1999, 449, no. 172) from T. 162a Via Berta, p. 452, no. 178 from T. 47 Via De Gasperi, 453–454, no. 189 near T. 88 Via de Gasperi (all canonical, Campo 1976, group XVIII).

Monte Iato/*Iaitas*,⁸³ four from Rocca d'Entella/*Entella*,⁸⁴ and one from Camarina/*Kamarina*.⁸⁵

We need to address the fact that half the "Ebusan" material, both at Pompeii and in the Liri database, is canonical; that the model and the imitation circulated together; and that (like the Pseudo-Ebusan coins) the number of canonical Ebusan coins at Pompeii is absolutely much larger than anywhere else. There is, as yet, no evidence that commerce between Pompeii and Ebusus can have been so uniquely important as to lead to Pompeii receiving such proportionally larger numbers of Ebusan coins. Nor are any military events known that might have brought large numbers of these coins to Pompeii. Did they arrive sporadically, or was there a single transfer of a block of circulating coin from Ebusus, in some as yet unknown way, in the late second or early first century BC? In that case, they would reflect the structure of the circulating medium in Ebusus at the time, containing mostly the latest issues but also a few residual, earlier pieces, and, in fact, only 6.5 percent of the pieces studied at Pompeii date to before c. 200 BC (Stannard 2005b, 124). This might, of course, simply reflect differential trade flows over time, but the lack of specimens of Campo's large first century BC group XIX, when there is evidence of continued trade between Ebusus and central Italy,⁸⁶ reinforces the possibility of a single transfer.

Py (2006, 685–688) has reviewed the presence of Ebusan coin at Lattes and elsewhere in southern France. There are few coins of the period before the Second Punic War (Campo group II). Second-century BC coins (Campo group XVIII) are commoner, which he interprets as evidence of intensifying maritime trade. This is reinforced by infrequent but consistent finds of Punico-Ebusan amphoras at Lattes. Campo group XVIII coins are found mainly in the lower Rhône valley, and more in Provence than in the Languedoc. (We have not examined any for this material for the possible presence of Pseudo-Ebusan pieces.) Coins of the first century BC (Campo group XIX) are commoner still, but finds concentrate in the west, in the Roussillon, the Aude valley, and at Toulouse, which suggests they came by land from Spain. The large presence of these coins in southern France is the main divergence from the pattern of finds in central Italy.

83. Frey-Kupper (forthcoming, no. 1, pl. 1) (canonical, Campo 1976, group XVIII).

84. Two canonical coins (Inv. E 3904 and E 3907, as Campo 1976, group XVIII, 127–130, nos. 50–60 and 62–70) and two pseudocoins (Stannard 2005a, Group IV, 2 [no. 58, head of Apollo/Bes] and VI, 1 [no. 62, bull butting right / eagle]). See also Stannard (2005a, 68, n. 73) and the documentation of the coin finds from Rocca d'Entella by Frey-Kupper.

85. Canonical or imitation, Lucchelli and Di Stefano (2004, 69, no. 1) (described as Campo, group XVIII, of 1.84 g, "usurato," and not illustrated).

86. Costa Ribas (2007, 94): "The presence on Ibiza of Italian 'Campanian' black glaze ceramics (mostly late A and B), Italic and E Mediterranean wine amphorae, thin-walled vessels, and many pointed *unguentaria* illustrates how Roman trade gradually took over," in the first century BC.

A further question is whether the canonical material traveled with the imitations from Pompeii to other sites where it is found, or whether it arrived (at least in part) directly from Ebusus. This could be tested if we were able to study the ratio of canonical Ebusus to imitations in statistically adequate samples from different sites. A significantly higher ratio of canonical to imitative coins would indicate a separate influx of material from Ebusus. The very similar ratios of canonical Ebusus to imitations, in the Liri database and at Pompeii, suggest that they traveled together, which further reinforces the likelihood that the canonical coins arrived in Pompeii as a single transfer from Ebusus.

In the case of Sicily, we think it probable that most of the canonical Ebusan pieces arrived from Italy with the imitations rather than from Ebusus directly. This is conjectural without more solid evidence. The direct arrival, in both Italy and Sicily, of some individual coins from Ebusus is anyway probable. An Ebusan amphora from Marsala⁸⁷ testifies to occasional imports of wine from Ebusus. A study of amphorae and other goods from Ebusus or Spain, to parallel the numismatic data, would be a useful way to know more about contacts between the Balearic islands and Italy and Sicily. Unfortunately, there is, as far as we know, as yet no systematic database of provenanced finds of amphorae and ceramics from the late republican period in Italy and Sicily.⁸⁸

The Massalia/Pseudo-Massalia complex in Italy has not yet been studied in sufficient detail to be able to ask similar questions of it, in particular, how large numbers of Massaliot bronze coins reached central Italy and whether this was part of the same phenomenon that brought the Ebusan coins to Italy.⁸⁹ There were clearly relations between the important trading center of Massalia and the Spanish mainland and Ebusus. Massaliot and Ebusan bronzes have been found together in Spain,⁹⁰ and Ebusan bronze has been found at a number of sites in the hinterland of Massalia (Campo 1976, 63–83; Py 2006, 684–688). While it could be hypothesized that Ebusan and Massaliot coins traveled together to central Italy,

87. Bechtold (1999, 163), from tomb T. 6 of the Via Berta, dated to the last quarter of the first century BC, though a date in the early first century BC is not excluded (information kindly provided by Babette Bechtold).

88. We are grateful for discussions regarding ceramics with Babette Bechtold (Graz), Verena Gassner (Vienna), Marie-France Meylan Krause (Avenches), Marek Palaczik (Zurich), and Samuele Ranucci (Perugia), who are working on materials found at Rome, Pompeii, Velia, Sicily, Eretria, and Carthage.

89. Stannard is gathering material for such a study.

90. Ibáñez and Blanco (1995) describe a hoard, from Cuenca, of fifty-six Massaliot bronze coins (Depeyrot [1999, 85–86, no. 53]; for the hoard, see also Py [2006, 301]) and one Ebusan (Campo 1976, group XVIII), both of types imitated at Pompeii. The authors note that, though there are frequent finds of Massaliot silver in Spain, bronze is rare.

there is no specific evidence for this, and we do not yet assume this to be the case. It would also seem likely that the intense Roman commercial and military contacts with southern France in this period would have independently brought quantities of Massaliot small change to central Italy. It is possible that Pseudo-Massaliot coins also flowed back to southern France, but we have as yet no evidence of this.

Our initial impression is of a different pattern in the finds of Ebusan and of Massaliot coins from Pompeii and Minturnae, which will need to be factored into further analysis of the question. While, for Ebusus, coins of after 91 BC (Campo 1976, group XIX) are extremely uncommon at both sites, and while Massaliot Apollo left / bull standing right coins⁹¹ of 80/70–60/50 BC and the dumpy post-49 BC issues⁹² are very uncommon at Pompeii,⁹³ both are relatively common at Minturnae. At the same time, it would also appear that the ratio of Pseudo-Massalia to canonical Massalia is considerably higher at Pompeii than at Minturnae. These facts would seem to suggest a continued flow of coin from Massalia to Minturnae but not to Pompeii after the Pseudo-Ebusus/Massaliot coins were made, which overlays the flows from Pompeii to Minturnae and complicates the analysis.

The Circulation Pattern of Pseudo-Panormos/Paestum

For Pseudo-Panormos/Paestum (Fig. 4), the southernmost reported finds are at Morgantina.⁹⁴ These pieces are extremely rare in Sicily: the two from Morgantina are part of excavation finds of some 10,000 coins.

Some coin finds from excavations at Paestum have recently been extensively described (Cantilena, Pellegrino, and Satriano 1999),⁹⁵ but these do not include specimens of this pseudomint. The Sallusto collection, which he formed at Paestum, does contain a number of Pseudo-Paestan pieces, but as pieces were brought from the market, it is possible that dealers brought them in from elsewhere. There are only three cited coins from Panormos and, if Pseudo-Paestum were present in quantity, we would expect even larger numbers of Pseudo-Panormos. The presence or otherwise of Pseudo-Panormos/Paestum in site material at Paestum deserves further study.

91. Py (2006, 350–357, PBM-67 and 68 [Depeyrot 1999, 103–104, nos. 67 and 68]).

92. These characteristically crude pieces, with a variety of types, are usually struck on flans of about 11 mm, often as thick as 4 mm; Py (2006, 357–365, PBM-69 to PBM-90); Depeyrot (1999, 105–111, nos. 69–88); Barrandon and Picard (2007, 109–111, nos. 99–110).

93. There are none in the AAPP finds, and there are none among the twenty-three Massaliot coins conserved in the Uffici Scavi at Pompeii (Stannard 2005b, 121–122).

94. Buttrey, Erim, Groves, and Holloway (1989, pl. 24, no. 264, with the obverse die of our nos. 6 to 10, and there are twenty-six canonical Panormitan coins of all periods, and pl. 10, no. 26, with the obverse die of our no. 17, and there is only one canonical Paestan piece, *Paestum* 3a, of c. 280–240 BC).

95. The coins are not illustrated, and we have not seen the material.

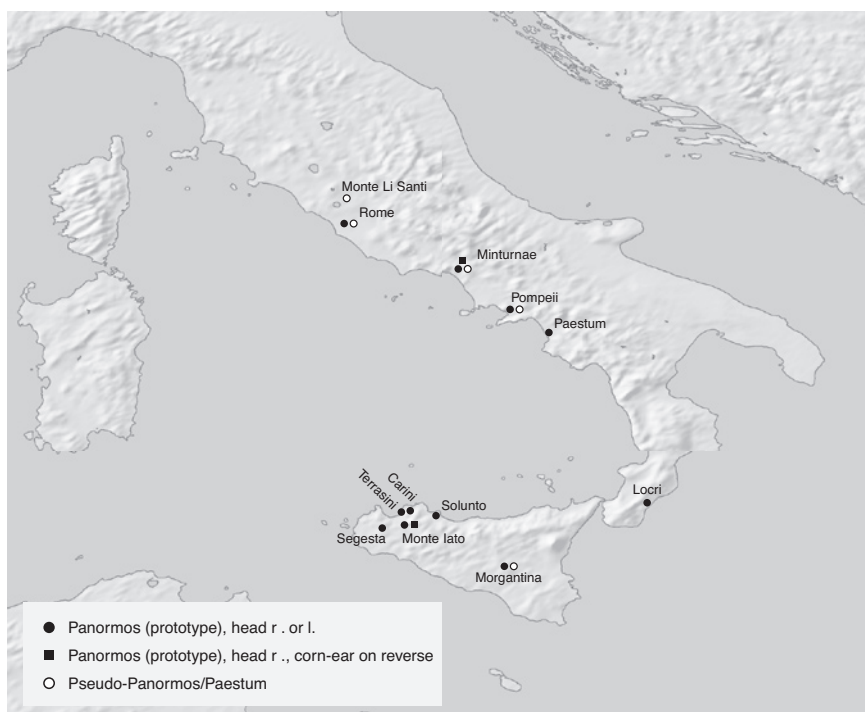


Figure 4. Finds of Panormos and Pseudo-Panormos/Paestum in Italy and Sicily

Both the canonical Panormitan model and the imitations are common in the Liri database, as we have seen, at a ratio of about 1:3, respectively. They are very infrequent at Pompeii. The AAPP materials contain no imitations of Panormos, one Pseudo-Paestan coin,⁹⁶ and one canonical piece.⁹⁷ Table 6, in Appendix 1 of this paper, shows that Paestum, Panormos, and Pseudo-Panormos/Paestum are all common in the Tiber.⁹⁸ There are specimens from Rome in the *Sottosuolo* material,⁹⁹ as well as a piece from recent excavations in San Isidoro in Rome (Travaini 1996–1997, 412–413 [given to Panormos]). We have also seen specimens of Pseudo-Panormos in collectors' hands, said to come from Ostia and from north of Rome along the Via Aurelia. This northern penetration of Pseudo-Panormos is confirmed by the finds at Monte Li Santi-Le Rote/Narce, in the *Ager Faliscus* (Table 3).

96. AAPP 2005, 507, 28, 19, which shares an obverse die with our nos. 13 and 14.

97. AAPP 2001, 168, 4, 2.

98. For the Tiber, see Frey-Kupper (1995, 48–50, nos. 9–10, 16–18).

99. Frey-Kupper counted at least twenty-two specimens beside at least four canonical coins.

Table 3. Frequency of foreign mints at Monte Li Santi-Le Rote/Narce¹⁰⁰

Spain	1	
Ebusus		1
Campania	13	
Pseudo-Ebusus/Massalia?		1 ¹⁰¹
Pseudo-Panormos		2 ¹⁰²
Neapolis		9
Suessa		1
Calabria	1	
Rhegion		1
Apulia	1	
Arpi		1 ¹⁰³
Sicily	1	
Syracuse?		1
Macedonia	1	
Amphipolis		1
Unknown	2	
Possibly Central Italy		1
Other		1 ¹⁰⁴
Total	20	

The Role of Imitative Issues in the Economy of Central Italy

The phenomenon of imitative coinages in central Italy in the late Republic is more widespread than has previously been recognized. It seems to reflect a growing need for small coin in an increasingly monetized economy in the towns of central Italy, over the period that runs from c. 100 BC until Augustus's new *aes* coins reached them. Paestum and Velia were the only mints striking in their own name at this

100. Benedetti, Catalli and De Lucia Brolli (1999); there are also 110 Roman coins and twenty-five illegible pieces.

101. *Ibid.*, 58, no. 9, given as Neapolis, but probably Pseudo-Ebusus/Massalia, of the types of our no. 35: Bull butting right / Toad.

102. *Ibid.*, 60, no. 15, misattributed as Epiros, King Ballaios (?), and no. 16, misattributed as the Aetolian League (?) = our no. 25. On p. 52: “Peccato non poter confermare, a causa del cattivo stato di conservazione, l'identificazione del pezzo presunto di re Ballaeus . . . e dei pezzi di Panormus e della lega etolica.” The coins cited are from “unità stratigrafica 22.” “I materiali votivi e ceramici contenuti nello strato si datano tra la fine del IV e il II sec. A.C., in accordo con i dati forniti dai reperti numismatici” (57): our dating of Pseudo-Panormos brings the terminal date for these finds down to the late first century BC.

103. *Ibid.*, 60, no. 18; listed as “zecca magno-greca” = SNG Cop., *Italy*—Sicily, no. 611; *HN, Italy*, 77, no. 644.

104. We are unable to identify the coin (*ibid.*, 59, no. 12) described as Panormos.

time,¹⁰⁵ and the supply of new Roman coin was deficient, as Rome did not strike bronze after the abandonment of Sulla's attempt to reintroduce a heavy copper *as* in 82 BC (*RRC*, 387, no. 368/1). Some deliberately halved and quartered *asses* of the 90s and 80s in the Liri database speak of the need for small change.¹⁰⁶ We illustrate two examples as nos. 41 and 42. Many imitations of Roman *quadrantes*—of varying degrees of verisimilitude—also circulated widely in central Italy.¹⁰⁷

Obv. Laureate head of Janus; I above.

Rev. Prow right, on which stands Victory; L-PISO above; FRVGI below.

41 Æ 13 mm \wedge 2.69 g *RRC*, 340–344, no. 340/4 of 90 BC

Obv. Laureate head of Janus; I above.

Rev. Three prows right, on which palm-branch; caps of the Dioscuri before; ROMA above; C·VIBI PAN below.

42 Æ 15 mm \leftarrow 2.87 g *RRC*, 346–351, no. 342/7 of 90 BC

The preponderance of Ebusan, Massaliot, and Pseudo-Ebusan/Massaliot issues in the monetary stock at Pompeii shows that they were the mainstay of daily monetary transactions in the city. They were produced in huge numbers, particularly pseudo-Ebusan group VIII, 7 (no. 30). In the sample of about seventy pieces, Stannard was unable to identify any die identities, which suggests that the sample does not cover the original issue very thoroughly. Purely speculatively, to have an idea of values, we can hypothesize the issue as 70 pairs of dies, multiplied by 10,000 coins a pair, or 700,000 coins; if these are *quadrantes*, the total value would have been about 11,000 *denarii*.¹⁰⁸

The AAPP excavations testify to the extensive use of minor bronze coinage in daily commercial transactions in Pompeii.¹⁰⁹ *Tabernae*, which included cook

105. Crawford (1976–1977, 152): “The persistence of autonomous coinage at Paestum in the age of Tiberius appears less surprising than it once did in the light of the Velia hoard [Greco Pontrandolfo 1971–1972], in which 333 bronzes of Velia were associated with Roman coinage down to Augustus. The date when the last of these bronzes were struck is not precisely certain, but in any case not long before Augustus.”

106. These *asses* circulated for a very short period, and it is therefore likely that they were cut soon after issue. For the rapid loss of these semiuncial *asses*, see Burnett (1982, 126).

107. The Roman materials have not been collected or studied systematically, but many of the types listed by Crawford (1982, 142–163) are probably from the area. We suspect, as well, that many *quadrantes* with prow left are also central Italian imitations.

108. These arguments were first made by Stannard (2005b, 142).

109. The coins recovered from excavations cannot reflect the overall monetary stock in action, because people more easily tolerated the loss of small bronze than of precious metal, but the AAPP materials (like the other finds from Pompeii analyzed for Stannard 2005b) contain so many more bronze relative to silver coins that the preponderance of bronze is clear.

shops and wine bars, became more evident in the late Republic as well and were the basic source of daily staples. . . . It is likely that coins played an important part in supplying the urban poor with food” (Hollander 2007, 113–114). They were part of the larger monetary system, in which silver and bronze circulated at different speeds. Profits from such commerce would not have been retained in the bronze in which they were largely made but would have been consolidated by conversion into silver. Similarly, it would sometimes have been necessary to convert silver into bronze, for small change. In considering the economy of central Italian cities in the late Republic, we need to take into account this layered structure of the monetary stock.

Such low-value coins were not issued as a store of value and probably not merely to meet a polity’s official obligations (which could theoretically have resulted in large numbers being struck to make up even small values). Their importance in the economy depended on the speed of circulation, that is, how frequently they were transacted, and the commercial exchanges they facilitated. To look at money supply only in the aggregate, that is, the overall value it represented, cannot adequately describe the quickening pulse of commerce, where small coins were passing ever more frequently from hand to hand, changing the economic structures of daily life. It is in this sense, we argue, that the economy was increasingly monetized and required increasing supplies of small change. Though this does not automatically tell us much about the growth in the overall money supply in coin of all metals and other stores of value and financial instruments, which is one factor that economists would like to recover, as a contribution to price history, it is likely that it also reflects a generally growing economy.

The bathhouse purse hoard at Pompeii (Maiuri 1950; discussed in Stannard 2005b, 122) shows that the bronze in circulation promiscuously included Ebusan, Massaliot, Pseudo-Ebusan/Massaliot, Roman, and sundry Greek coinage. The large quantities of diverse foreign bronze coins in the Liri database—including the Ebusan, Pseudo-Ebusan/Massaliot, and Pseudo-Panormitan/Paestan issues—as well as in other site finds, such as at Monte Li Santi-Le Rote/*Narce*, suggest that all available coin was pressed into service. These coins must therefore have been brought into some form of parity with one another, though how this was done may have varied from place to place. Outside their home market, coins were probably valued primarily on the basis of diameter. It seems unlikely that foreign markets would have been interested in—or even have known—the fiduciary value in their home markets of a plethora of minor foreign bronze, or that profits could be made in assembling blocks of foreign coin and returning them to their home market, which could, in theory, be a source of value.

The Roman minor denomination most commonly in use in the first part of the first century BC seems to have been the *quadrans*,¹¹⁰ and it is possible that Pseudo-Ebusan/Massaliot pieces circulated at Pompeii at this value (Stannard 2005b, 142). The slightly larger, probably later, Pseudo-Paestan pieces, which—like their model—are value marked as *semissis*, might have been accepted as such.

The similarity of finds from the sites considered and the spread of imitative coinages throughout Latium and Campania also suggest that there was, in the late Republic, a relatively unified daily transactional economy in this area, at least between major towns.¹¹¹

While precious metal could be carried from one place to another as a store of value, there would be no incentive to take bronze with one, unless there was the possibility of using it at destination. If a variety of coin was useable throughout central Italy, this would be possible.

We cannot generalize these comments to areas outside central Italy, as very many fewer foreign coins were present, for example, at Paestum (as shown in Table 4) and further south, as well as in Sicily, at this period. We think they apply, however, to an area containing at least Pompeii, Minturnae, Rome, and Narce.

The foreign coins, with the large number of types they constitute, allow one to draw inferences regarding similarities in the monetary stock in different places more easily than does the uniform coinage of the Roman republic. As Appendix 2 shows, several key mints in this analysis are, in addition to the “Ebusus” and “Mas-salia” complexes, Kos, with Samos, Chios, and Miletos; Elis, Thebes, and Thesbiai; Kyrenaika; and Apollonia and Dyrrhachion.

The patterns will become clearer as more information on large numbers of coin finds is brought together. It should then be possible to build up a finer-grained picture, which can take into account the specific patterns at individual sites and allow a better understanding of the flow of coin among them.

There is an important methodological corollary if foreign coin was often assimilated into a monetary stock that circulated over a wide area. In that case, one cannot simply treat a coin—or a large number of coins—of a foreign mint, found in a particular site, as an indication of direct contacts. The challenge is then to identify both the initial entry points for foreign coin and the pattern of their subsequent absorption into circulation.

At Paestum, local coins were struck until the reign of Tiberius and were by far the largest part of the monetary stock (70 percent), supplemented by Rome (24 per-

110. Crawford (1982, 140): “The imitations are for the most part *semissis* and *quadrantes*, which suggests a period after the *sextans* had ceased to be the smallest denomination in regular use and given way to the *quadrans*.” See also Burnett (1982, 134).

111. Though there were clearly differences of degree, with Paestum, for example, outside the main circuits of exchange.

cent) (Table 4). In Italy, only Velia also struck until the late Republic. The presence of Roman coin in Sicily at this time (including the *asses* of Sextus Pompeius) was also low (about 20 percent) (Frey-Kupper forthcoming, chap. 5.3, with fig. 88 and table 76). Moreover, many towns continued to strike coins in their name until the late Republic, and in many cases, its end: Akragas, Alaisa, Lilybaion and Segesta until Augustus, and Panormos (the last mint to close) until Tiberius.¹¹² The study of several Sicilian sites, mainly in the west (Monte Iato/*Iaitas*, Solunto/*Solus*, Rocca d’Entella/*Entella*, Segesta/*Segesta*, Tusa/*Alaisa*) but also Serra Orlando/*Morgantina*, shows that smaller cities generally supplied about 15 to 25 percent of their own coin needs and relied for about 30 to 40 percent on the coins of the nearest important mints, such as Panormos and Lilybaion in the west and Syracuse and Katane in the east. The coin of the Mamertines continued to circulate in many cities, sometimes making up 15 percent of the bronze monetary stock.

In the Greek areas of southern Italy and Sicily, then, local coin appears to have been sufficient for the needs of small change. In such circumstances, imitative coinage would have been superfluous. The rare examples found there would have come from Latium and Campania.

Table 4. Mints frequencies at Paestum: Greek and Roman *aes* coins (211–c. 30 BC)¹¹³

Spain	1	Sicily	5
Emporion	1	Katane	1
Italy	613	Panormos	3
Capua	1	Tyndaris	1
Brundisium	2	Macedonia	1
Copia	3	Autonomous issue	1
Paestum	578	Delos	2
Velia	26	Delos	2
Brettii	1	Rome, Republic	197
Petelia	1	AE	197
Rhegion	1	Total	819

The Choice of Prototype and the Status of the Pseudomints’ Coins

Why did neither Pompeii nor Minturnae strike in its own name, as Paestum and Velia did? This may simply reflect the fact that neither city had ever before struck in its own name (whereas Paestum and Velia had centuries of tradition behind them) and were not likely to begin to do so at a time when most civic mints in Italy had closed. In this context, there are in the Liri database a number of as yet unpublished anonymous issues, which may be attributable to Minturnae.

112. *RPC* I, 168–177; Frey-Kupper (forthcoming, part 1, chap. 4.6.2).

113. Cantilena, Pellegrino, and Satriano (1999).

Were the pseudomints informal and tolerated? One should not simply describe such pieces as “forgeries” or “fakes,” which are legal concepts implying that it was formally forbidden to make them, that people had to be tricked into accepting them, and that their makers would be punished as criminals. There is no such evidence, and one needs to be careful to not simply extrapolate backward from medieval or modern concepts.¹¹⁴ Moreover, many of the types were clearly recognizable as not being of the cities they purported to copy. They were nonetheless accepted in commerce so could therefore not have been perceived as “fraudulent.” Consider, moreover, how the coins were put into circulation: the numbers were so large—and their individual value so low—that the clandestine passing of a piece or small number of pieces at a time into the monetary stock would not have sufficed to get them off the minter’s hands or make an acceptable profit.

If there were profits to be made, did the authorities try to capture them? We know from an honorific decree from Sestos of the late second-century BC that Greek city-states could issue bronze coins specifically to make money.¹¹⁵ It is therefore possible, even probable, that Pompeii took all or some of the profits, if there were any. The most likely scenario is that they were handled in quantity by moneychangers under control of the civic authorities, in the context of breaking larger-value precious metal coins into smaller denominations for the needs of daily commerce.

The Sestos decree also gives civic pride, the setting of the emblem of the state onto coinage, as a reason for coinage. Why then did Pompeii not strike a city coinage? And why choose Ebusus and Massalia for copying, rather than Rome, the dominant power? There were obviously differences between Latium and Campania, and the east and Spain, where there were many functioning civic mints in the late Republic. One possibility is that Roman authorities were in some way capable of forbidding civic mints, which is patently not the case outside Italy. There is no evidence for this. It is also implausible that Rome would act to prevent the copying of Roman coins: in fact, it seems that imitations of Rome are more common at Minturnae (a Roman colony) than at Pompeii, as there are many closely or widely Rome-derived imitative issues struck over foreign coin in the Liri database (Stannard 1998, 210–212).

The use of Roman coinage in Latium and Campania and economic factors had already led to the closing of all city mints in the area. (Velia and Paestum belong to a separate cultural area, where Greek monetary traditions survived, as in Sicily.)

114. For a discussion of the role of imitative coinages and their status and of moneychangers in Roman times who handled them, see Peter (2004, esp. 26–29). See also Wigg-Wolf (2004, esp. 72–74).

115. *OGIS*, 339, lines 45–46; Louis Robert (1973, esp. 49–50). For a more recent edition of the text and for translation and comment, see Krauss (1980, 14–63, esp. 34–35). For numismatic comments on the law, see, for example, Meadows (2001, 59, 61); Figueira (1998, 252, n. 90); Howgego (1995, 41).

It is possible that, at the time Pseudo-Ebusan and Pseudo-Massaliot coins were made, the economy of Pompeii was still relatively independent of Rome and that the coins of Ebusus and Massalia were accordingly more common than those of Rome and had already been assimilated into the monetary pool.¹¹⁶ The imitative issues may then simply have topped up the supply of these types, and it may be significant that only the smallest coins were involved.

While it is also hypothetically possible that the choice of foreign mints to imitate reflects the anti-Roman position of Pompeii in the Social War, the more banal explanation seems, on balance, the more likely. This reasoning will not apply to Pseudo-Panormos/Paestum at Minturnae, but that is a less massive and later phenomenon, which probably reflects trade contacts with western Sicily, and to a lesser extent with Paestum, in the 40s BC, as well as a penury of small change, with Rome no longer striking bronze, when the day-to-day use of foreign coinage had become commonplace.

The choice of the Panormitan prototype (the warrior and the ethnic reverse) presumably reflects its ample presence in Latium and Campania at the time, as shown in Table 1. This and the imitations themselves suggest more intense contacts between these areas and Panormos, and a more important role for its harbor, than previously supposed. At the time the prototype was struck—toward the end of the second or at the beginning of the first c. BC—Sicilian communities were becoming more autonomous in administrative matters.¹¹⁷ It was a period of general prosperity and renewal likely accompanied by increased contacts with Italy and a more prominent role for Italian *negotiatores* in Sicily.

The choice of Paestum as a mint to imitate probably reflects the generally flourishing condition of the city in the first century BC: the large number of inscriptions from Paestum at the time attests to the activities of a large number of local magistrates and to an intense building program (Mello-Voza 1968, esp. 95–104 [*personaggi*] and 203–208 [*opere pubbliche*]). Paestum also produced a large number of coins in the Late Republic, signed both by local magistrates and by private persons—probably by members of the elite—who may have distributed them to the citizens (Crawford 1973, 50–55; Burnett 1982, 128–129; *CMRR*, 72).

Panormos and Paestum were both important centers whose coins were frequently seen in Latium and thus good models for imitative issues in these areas. The same familiarity with the coins of Ebusus and Massalia is probably behind their role as models in Campania.

116. If so, the subsequent spread of these coins to other regions may have become more important after the planting of the Sullan colony at the end of the Social War opened the economy more to the north.

117. Frey-Kupper (forthcoming, part 1, chap. 4.5.4), who suggests that this is a consequence of the *Lex Rupilia* of 131 BC.

CONCLUSIONS AND PERSPECTIVES

The hypotheses that we have put forward draw on an increasing documentation and understanding of the changing monetary history and economy of the central Italian region, in particular as regards the production and movement of small local coinages and the role of small change arriving, for whatever reason, from a wide range of foreign mints in Italy, Sicily, and elsewhere. We hypothesize that this was, in the first century BC, a more unified monetary area than has so far been suggested. The probable attribution of Pseudo-Ebusus/Massalia to Pompeii in the early first century BC has made it possible to follow the spread of these coins from this center and draw certain conclusions, in particular that the similarity of finds of foreign coins throughout the area—which includes the imitative series that originated from Pompeii and later the Pseudo-Panormitan/Paestan material—suggests that small coins were circulating, throughout the area, with a monetary function. Concentrating on the foreign coins, with their large number of types, rather than on Roman coinage, which was more uniform, allows one to see such similarities in the movement of small change.

It now becomes important to integrate these ideas into a more general analysis. A first step could be to refocus on the Roman republican coinage and the overall monetary stock, with all its elements. The imitations of Rome, which in the nineteenth century were collected and studied, for example, by d'Ailly, were subsequently ignored as unimportant, until Crawford pointed out their economic importance (Crawford 1982, esp. 138–141). They deserve to be restudied, and we suggest that many of them circulated and possibly originated in southern Latium and northern Campania.¹¹⁸

The time is also ripe to focus more on the overall monetary and economic context than on the presence of coins from individual foreign mints, seen as examples merely of bilateral contacts. However, this will only be fruitful if more precise dates are available for the different issues of Italy and Sicily and the foreign issues entering Italy. Our discussion in appendix 1, of the overstriking of Kos in central Italy, shows the range of questions to be addressed if historical implications are to be drawn from them.

There is a compelling argument to move beyond the coins alone, in order to integrate information on other classes of objects, in particular, from stratigraphic contexts. This includes trade containers such as amphoras, trade goods such as fine ceramics, local wares, other indices of trade such as lead fiscal and commercial sealings, epigraphy, and the literary evidence. Such studies will only really be possible with an increasing collaboration between specialists in the different disciplines.

118. Crawford (1982, 140–141) suggested “Italy and the Romanised provinces of the Narbonensis and what later became Tarraconensis.” He did not exclude a production of some issues north of Rome.

APPENDIX 1

The Presence of Koan Coin in Central Italy, and Overstrikes on Kos

There is an interesting group of coins¹¹⁹ struck over the Koan issue¹²⁰ that we illustrate as no. 43. The obverse overtype is Mercury, copied from Roman *sextantes*. Two pieces with a common obverse die share an eagle reverse (nos. 44 and 45): the images on the overstrikes are poor, but the eagle looks much like that on no. 26. A third (no. 46), with a stylistically similar obverse die, uses a Roman prow reverse, but it is self-evidently not a canonical *sextans*.

Obv. Three-quarters facing head of young Herakles in lion's skin, right.

Rev. Bow in case and club; ΚΩΙΩΝ above; magistrate's name below.

43 Æ 15 mm ◀ 3.37 g SNG Cop., *Caria*, nos. 677–682; Ingvaldsen (2002, issue XIX); Liri 11.070 (this coin)

Obv. Mercury wearing *petasus*, right; border of dots.

Rev. Eagle with wings spread, left; border of dots.

44 Æ 17 mm ↗ 3.09 g Paris Ailly 1044 (this coin)

Obv. Same as last; same die.

Rev. Same as last.

45 Æ 17 mm ✓ 2.97 g Paris Ailly 1046 (this coin)

Obv. Same as last.

Rev. Prow, left; border of dots. The coin is overstruck, but the undertype is unreadable.

46 Æ 17 mm ✓ 2.15 g Paris (this coin)

Coins of the same Koan issue are also used as flans in another group of central Italian issues: nos. 47 and 48, and nos. 49 and 50—each a pair of coins that shares an obverse die and links a shepherd and wolf and twins reverse with a prow reverse—are all overstruck Kos. The wolf-and-twins reverse is also used by two other issues, which we illustrate as nos. 51 and 52. All specimens that we know of the issue of no. 51 are struck over Roman *quadrantes* of the late second or early first century BC. The specimens of the issue of no. 52 do not seem to be overstruck.

Obv. Radiate head of Apollo, right; border of dots.

Rev. Wolf suckling twins, right; *Ficus Ruminalis* behind; the shepherd, Faustulus, to left; ROMA in exergue.

47 Æ 16 mm ↖ 2.60 g Paris Ailly 1283 (this coin)

119. Brought to our attention by Michel Amandry.

120. We thank Kerstin Höghammar, Håkon Ingvaldsen, Selene Psoma, and Vassiliki Stefanaki for helping us with Kos.

Obv. Same as last; same die.

Rev. Prow right.

48 Æ 18 mm \blacktriangledown 3.61 g Liri 100.120 (this coin)

Obv. Head of Mercury wearing *petasus*, *caduceus* on shoulder, right.

Rev. Same as no. 47; probably the same die.

49 Æ 16 mm \blacktriangledown 2.42 g Liri 100.087 (this coin)

Obv. Same as last; same die.

Rev. Same as no. 48.

50 Æ 16 mm \rightarrow 2.51 g Kestner 2784 (this coin)

Obv. *Gryllos* formed of a Silenus head, right, and a beardless head, left, topped by a gryphon's head and wings; border of dots.

Rev. Same as no. 47.

51 Æ 18 mm \leftarrow 2.72 g Berlin 8212 IF (this coin)

Obv. Hercules and Antaeus; border of dots.

Rev. Same as no. 47.

52 Æ 15 mm \uparrow 3.64 g BM SP plates 2873 2/1

If nos. 44 and 45 do, in fact, share the eagle-on-thunderbolt reverse type of no. 26, it is possible that they are part of the Pseudo-Panormos/Paestum group. This would date them to the 40s BC, if the date we suggest for Pseudo-Panormos is correct. Other factors suggest that a higher date is probable. The shepherd and wolf and twins reverse is copied from a denarius of c. 137 BC (*RRC*, 267, no. 235/1, *SEX.POM*), which gives an earliest possible date. Some of these coins use Roman *sextans* types (though without uncial value marks). This and the size of the flans suggest a second-century BC date. There seems, however, to be a contradiction with the contemporaneous use of Roman *quadrantes*¹²¹ as flans for the issue of no. 51, because it would be very odd to overstrike and retariff *quadrantes* as *sextantes* (assuming that all these pieces were intended to be the same denomination). It may therefore be best to disassociate the date of the group struck over Kos from the date of the issues of nos. 51 and 52 and to suggest a date in the last quarter of the second century BC for the Kos overstrikes and a date in the first half of the first century BC for the others.

It remains possible that all these issues are contemporaneous (in which case the use of *sextans*-derived types is not significant), which would make possible a date in the first century BC, on the basis of the overstrikes. In this case, these issues could well be grouped with the Pseudo-Panormos/Paestum issues.

121. Probably of the first century BC, as they seem quite light. The five weighed pieces we know average 2.91 g.

The presence in Italy of Koan coin of the late second and first centuries BC—and more generally coins from the Asia Minor coast of this period—is an important fact that deserves to be probed further. The Italian overstrikes suggest that, during the last quarter of the second century BC, specimens of the issue of no. 43 were reaching central Italy in large numbers, both absolutely and by comparison to other Asian mints of the period. They were present in large enough numbers to be preferentially used as flans for overstriking. They are found widely, including at Minturnae, in Rome, and to the north of Rome, but they do not yet seem to be attested at Pompeii.

Table 2, in the body of this paper, shows that coins from Asia Minor account for 11 percent of the large sample of non-Roman coins in the Liri database (these coins are also integrated, with other finds, in Appendix 2). Table 5 gives a breakdown of these coins, which are very largely of the second and first centuries BC. Kos—overwhelmingly, the issue of no. 43—is the most common Asia Minor mint, with Miletos a close second. The mints of Ionia and Karia and their islands are in general well represented: Ephesos, Chios, Samos, and Rhodos. The coins of Prusias II of Bithynia (182–149 BC) are also common, a testament to the intensity of Roman political and economic involvement with Bithynia.

Table 5. Coins of Asia Minor in the Liri database

Bosporos	1		Karia	4	
Phanagoreia		1	Bargylia		1
Kolchis	1		Mylasa		1
Dioskurias		1	Stratonikeia		2
Pontos	4		Islands off Karia	32	
Amisos		3	Kos		26
Kabeira		1	Rhodos		6
Paphlagonia	1		Lydia	3	
Sinope		1	The Kaystrianoi		1
Bithynia	13		Philadelphieia		1
Nikaia		1	Sardeis		1
Nikomedea		2	Phrygia	3	
Kingdom, Prusias II		10	Apameia		2
Mysia	5		Laodike		1
Adryamytteion		1	Lycia	3	
Kyzikos		1	Kragos		1
Parion		1	Masikytes		1
Pergamon		2	Phaselis		1
Troas	1		Pamphylia	4	
Assos		1	Aspendos		1
Lesbos	2		Side		3
Mytilene		2	Pisidia	4	
Ionia	30		Kremna		1
Ephesos		5	Isinda		1
Magnesia		2	Sagalassos		2
Miletos		20	Cilicia	3	
Phokaia		1	Korykos		1
Teos		2	Tarsos		2
Islands off Ionia	9		Total	123	
Chios		4			
Samos		5			

The Greek finds from the Tiber, listed in Table 6 (and included in Appendix 2, Table 8) suggest a similar picture, with a high proportion of coins from the Asia Minor coast (18.6 percent), and an overwhelming presence of Kos, followed by Samos. The Koan issue of no. 43 is also well represented in the material in *Sottosuolo* (R. Alföldi 1991, 34, fig. 38).

Table 6. Greek coins in the Tiber¹²²

Spain	1		Attica	1	
Carthaginians		1	Athens		1
Italy	17		Elis	1	
Paestum		7	Zakynthos		1
Pseudo-Paestum		1	Messenia	1	
Pseudo-Panormos		4	Messene		1
Rhegion		5	Argolis	2	
Sicily	53		Argos		2
Akragas		7	Pontos	1	
Katane		1	Amisos		1
Alaisa		1	Paphlagonia	1	
Panormos		6	Amastris		1
Syracuse		32	Ionia	8	
Tauromenion		3	Klazomenai		1
Carthaginians		3	Miletos		2
Sardinia	7		Samos		5
Carthaginians		7	Karia	13	
Illyria	2		Kos		13
Apollonia		1	Kyrenaica	1	
Dyrrhachion		1	Kyrene		1
Boeotia	3		Zeugitania	9	
Thebes		1	Carthage		1
Thebes (?)		2	Carthage (?)		7
Euboea	1		Utica		1
Chalkis		1	Total	122	

The usual dating of the Koan issue of no. 43 is conventional (166–88 BC). The upper date derives from Rome's establishment of Delos as a free port under Athenian protection, to punish Rhodes for its ambivalent role in the Third Macedonian War. The lower is Mithradates VI Eupator's fleet's visit to Kos, on an expedition against Rhodes. Recent scholarship has proposed higher dates. Kerstin Höghammar (2007, 85–90) dates it to the early second century, drawing on Håkon Ingvaldsen (2002, 143–146, 324–343), who lists it as his issue XIX and dates it to 210–180 BC. During the issue, the ethnic changes from ΚΩΙΟΝ to ΚΩΙΩΝ, while the next bronze issue (XXI, with an obverse head of Asklepios and a club and serpent-staff

122. Frey-Kupper 1995, with no. 9 re-attributed as Pseudo-Paestum, and nos. 10 and 16–18 as Pseudo-Panormos.

reverse, dated by Ingvaldsen (2002, 149–151, 349–359) to 190–170 BC,¹²³ which Giannikouri and Stefanaki (2006, 108–109) as well as Höghammar accept, with, perhaps, a slightly earlier beginning [Höghammar 2007, 88; Giannikouri and Stefanaki forthcoming]) uses only ΚΩΙΩΝ. The two issues are linked by shared magistrates’ names. Whatever the issue dates, it appears that issue XIX circulated in the east until about 100 BC, in very worn condition and usually countermarked with a crab (Ingvaldsen 2002, 62). Its dating depends ultimately on finds in the Athenian agora, in two different contexts both until now dated to 230–190/180 BC (Höghammar 2007, 88, drawing on Kroll 1993, 49–50, 274, n. 62). One of these is the Middle Stoa building fill, the dating of which depends largely on the chronology of Rhodian amphora stamps (first published by Grace 1985). The relevant stamps have recently been dated down from c. 187–183/182 BC to c. 175/173 to 169/167 BC.¹²⁴ The consequences of this for the dating of the coins from the context cannot be discussed in detail here,¹²⁵ but 169/167 BC gives a *terminus ante quem* for the closing of the fill and for the loss of the Koan issue XIX coin (of the earlier type, with the ethnic, ΚΩΙΩΝ) found in it.¹²⁶

There are also anomalies in the evidence of the Italian finds that need to be taken into account. Issue XIX is very common; issue XXI is very rare. The thirteen Koan pieces published by Frey-Kupper (1995, 68–70, nos. 100–112) from the Tiber are of issue XIX only. The twenty-six Koan coins in the Liri database (see appendix 2) break down as follows:

123. Giannikouri and Stefanaki (forthcoming) also discuss both issues in an unpublished study of a hoard discovered near the ancient well of Vourinna. We thank the authors for providing us the paper, which is also mentioned in Höghammar (2007, 88).

124. Finkielsztejn (2001, 123–125, 196, table 22, 1). Lawall (2002, esp. 319) independently reached the same conclusions. Rotroff (2006, 7–8) in discussing the dates of the plain wares accepts the new chronology. Höghammar (2007, 88) mentions Finkielsztejn’s chronology but proposes the upper date of the period as closing date of the stratum.

125. Kroll (1993 [49–50]) fixed the end of his period II for the Athenian bronze coinage “by the great construction fill of the Middle Stoa in the Agora (Deposit H-K 12–14). The 189 identifiable coins excavated from the fill give a nearly complete run of the Athenian bronze from the middle of the fourth century down to the closing of the fill ca. 183 BC.” He supposed that minting was interrupted at the end of period II and started again in period III in the 160s “presumably because continued production was judged unnecessary” (Kroll 1993, 50). Kroll has now accepted the implications of the downdating of the Rhodian amphora stamps for the dating of the Athenian bronze coinage, in a note cited in Rotroff (2006, 8): “With the closing of the Middle Stoa deposit lowered to 170/160, however, the lacuna vanishes, and we find the period III varieties following directly upon the latest varieties of period II.”

126. Kroll (1993, 274, no. 958a [H-K 12–14]). The coin from the other context is no. 958b (also with the ethnic ΚΩΙΩΝ), “found with other coins, the latest being Athenian period II pieces of ca. 220s–190s BC and . . . Antiochos III, 223–187 BC.”

Table 7. Koan coins in the Liri database

Issue XIX	19
Issue XXI	1
RPC I, 453, nos. 2733, 2735, or 2737, c. 10 BC–AD 10:	
Head of Augustus / Head of Herakles in a lion's skin	4
RPC I, 453, no. 2739, c. 10 BC–AD 10:	
Head of Augustus / Club and serpent-staff	2

The fact that issues XIX to XXI did not travel to Italy together is difficult to explain, as they circulated together in Kos and as issue XXI was the larger.¹²⁷ This, the close chronological link between the two issues and the absence of the countermark in Italy, suggest that these coins arrived early, when issue XXI was only just coming into circulation. This argues strongly for the movement of a block of coins and not a gradual trickle in through trade. It is possible that this block was exported—we cannot suggest how or for what reason—at the time of or just before countermarking for continued circulation, in connection, Stefanaki believes, with Koan silver and bronze plinthophoric issues of between c. 180 BC and the end of the century.¹²⁸

The prototype of the Italian overstrikes gives a *terminus post quem* of 137 BC for the overstriking of the Koan type. The coins of issue XIX found in Italy show little sign of wear and are never countermarked. The overstruck pieces do not seem to be over worn coins. It is also important to evaluate the historical probability of large numbers of Koan coins traveling to Italy during the Second Punic War or early afterward, which seems unlikely. From our evidence, then, we would suggest revisiting the Greek evidence, to see whether it is not prudent to date these series later.

Whatever the date, the presence of Koan coin at Rome and at Minturnae testifies to substantial contacts with Rome and is evidence for the island's role in trade with Italy. Kos was known for three exports: wine (made with added seawater), silk,¹²⁹ and perfume. Koan wine, in particular, is amply attested, including in Rome and at Pompeii.¹³⁰ The ties between the two regions were obviously close.

127. Ingvaldsen (2002, 61–62, fig. 5), however, points out that issue XIX is far better represented than issue XXI in the single finds from within the *temenos* of the Asklepieion, in comparison to the relationship of these issues in the corpus generally. He attributed this to “the coin circulation within the Asklepieion [being] proportionally reduced compared to the island in general in the latter half of the second century.”

128. We thank Vassiliki Stefanaki for her advice.

129. Sherwin-White (1978, 254–255): “The silk trade, too, must have been especially operative in drawing Romans to Cos, whose importation of the rare and luxurious cloth from Cos is so well attested in the early Imperial period.”

130. Sherwin-White (1978, 237, 252): “The Elder Cato had a recipe for the local production of ‘Coan sea-flavoured wine,’ which was evidently known already in Rome by 160 BC, sufficiently well-liked for local production to seem desirable. Indeed Coan wine was popular enough by the first century BC for manufacturers there to imitate the shape of Coan amphorae; a number of locally produced Italian ‘Coan amphorae’ have been found

This drew numbers of Roman and Italian *negotiatores* to settle in Kos.¹³¹ In 88 BC, Kos gave asylum to these Romans in the Asklepion, on the occasion of Mithradates' visit, while otherwise receiving him hospitably (Sherwin-White 1978, 138–140). Kos remained in Rome's good graces until the civil war of 49–46 BC, when it aligned itself with the republicans and fought with Pompey's fleet.

APPENDIX 2

Foreign Coins from Rome, Minturnae, and Pompeii and the Surroundings

In the following Table 8, we have brought together information on the distribution of foreign mints, in a number of substantial finds, from Rome, Minturnae, and Pompeii. At this stage, it is not possible to associate in any meaningful way this information with information on finds of Roman republican coins.

Rome: At the moment, only one substantial group, from the Tiber, has been exhaustively described.¹³² From several recent excavations, small numbers only of coins have been described, which we do not list.¹³³ There are other sources that

at Pompeii. Varro attests the importation of Coan wine to Italy in the first century BC. . . . In his *Res Rusticae*, writing in 37 BC, Varro referred to Romans' current inclination to rely on a contractor to bring grain from Africa and Sardinia, and the wine they stored in their cellars from Cos and Chios, rather than cultivate these products themselves. It is probable that part of the business of the *negotiatores* on Cos was shipping wine. The involvement of Romans, or Italians, in the Coan wine trade is directly attested by the presence of Latin names, written in Latin, on a number of Coan amphorae handles."

131. Sherwin-White (1978, 253): "We receive a distinct impression of the density in which Romans were settled on Cos from inscriptions of the first century BC. This is particularly striking when comparison is made with Roman settlement on Rhodes. There is, for example, no trace of a Roman community established on Rhodes at the time of the First Mithradatic War, as there was on Cos, and on other Aegean islands."

132. Frey-Kupper (1995, 33–34): "Le monete ritrovate nel Tevere, conservate nel Museo Nazionale Romano di Roma, sono venute alla luce tra il 1877 e il 1890 in occasione dei lavori di sistemazione dell'alveo del fiume e di costruzione degli argini del Lungotevere. L'inventario dei singoli pezzi di questo complesso ebbe inizio nel 1903 quando S.L. Cesano prese a lavorare nel Museo Nazionale Romano. Nel 1923, l'inventario della Cesano contava 11.183 monete antiche. I pezzi inventariati non rappresentano tutto il materiale numismatico originale proveniente dal Tevere, ma comunque una buona parte di esso, cioè i pezzi scelti da S.L. Cesano per la raccolta del Museo Nazionale Romano della quale costituiscono un nucleo. L'inventario delle monete 'greche' fu realizzato nel 1909 e ripreso successivamente nel 1923. Nell'inventario mancavano i riferimenti ai luoghi precisi di rinvenimento di questi pezzi e anche non si trovano indicazioni in merito. In occasione del nostro lavoro si sono potute identificare 122 monete 'greche' che corrispondono all'1,1% ca. dei materiali numismatici inventariati dal Tevere. Può sembrare poco, tuttavia il nostro contributo presenta il più grande complesso mai pubblicato di monete 'greche' rinvenute a Roma."

133. Five Greek coins in Molinari (1995, 112–113, nos. 1–5), including one "Dionysus / panther" (Stannard 1995a, 212–213); see also Travaini (1985, 79, no. 1), with another

have not been used, because they have not yet been described: the *Sottosuolo* material on which Maria R. Alföldi (1991) is working with her collaborators and Reece's (1982, 119) assembly of 108 Greek coins from old excavations in Rome. He apologizes for the poverty of the section on the Greek coins, which he does not describe in any detail.

Minturnae: There is substantial information on the Greek and Roman imperial coins recovered in the underwater excavations in the Liri at Minturnae by Br. S. Dominic Ruegg (1995, 61–73, 148–152), republished by Novella Vismara (1988).¹³⁴ A further substantial block of coins from the Liri, which we list, was described by Teresa Giove (1998).¹³⁵ It should be noted that, in Table 8, under the Liri database, we do not list all the coins in the database, only those of mints listed from the other sources, for comparison.¹³⁶

Pompeii: We repeat and slightly refine earlier listings.¹³⁷ These include material from the British School at Rome excavations in the House of Amarantus (Stannard 2005b, 121), from the Uffici Scavi at Pompeii (Stannard 2005b, 121–122), and from the votive well at Gragnano (Privati di Stabiae) (Cantilena 1997).

This listing is a blunt instrument. A fuller study would need to take into account the dates of the various issues. Table 8 contains coins from the fourth century BC to the third century AD and, without the time element, the historical value of the information is low. The dating of many Greek bronze issues is, however, uncertain and imprecise. This makes the full photographic publication of site finds (as in Vismara 1998) crucial.¹³⁸ In this way, the materials may be reinterpreted as numismatic research progresses.

"Dionysus / panther" and Travaini (1996–1997, 412–413), with one Pseudo-Panormitan coin, given to Panormos. There is also a small number of Greek coins from Ostia, published in Silberstein Trevisani (1989, 123, no. 6), given as Punic like SNG Cop., *North Africa*, nos. 94–96; 123, no. 7, "Dionysus / panther," given as Naples; 124, no. 12, given as Antipolis (?), but may be Kos, like our no. 43; 128, no. 32, uncertain Greek Imperial; 126, nos. 21–22, 128, no. 31, and 129, no. 41 (all Massalia of the post-49 BC dump types).

134. This listing replaces and refines the earlier, unillustrated, and partial publication of these coins in Frier and Parker (1970), Metcalf (1974), and Houghtalin (1985).

135. The listings of the coins from Ruegg's excavations that she gives in her table B, on p. 132, are based on Frier and Parker (1970), Metcalf (1974), and Houghtalin (1985) and are therefore superceded by the more complete and accurate listings in Vismara (1998).

136. The listing of coins from the Liri database expands those in Stannard (2005b). This is work in progress, and further coins are still to be identified and the whole material published.

137. Stannard (2005b, 141, fig. 13) is based on the material mentioned in the following sources; he examined and counted most of the coins.

138. For poorly preserved bronze coins, illustrations from casts are infinitely preferable to direct photographs. In our studies, we have sometimes only been able to identify coins once we have made casts.

Table 8. A preliminary listing of substantial groups of foreign coins from Rome, Minturnae, and Pompeii and the area

		Rome		Minturnae		Pompeii and area		
		Tevere	Liri	Liri	Liri	Amarantus	Pompeii	Gragnano
		database (Vismara) ¹³⁹ (Giove)						
Spain	Untikesken / Emporiai		6	1				
	Kese / Tarraco		5	2 ¹⁴⁰				
	Carmo			1				
	Carteia		1	1				
	Ebusus		48	5		13	47	52
	Ebusus and Pseudo-Ebusus				6			
	Carthaginians	1						
Gaul	Massalia and Pseudo-Massalia		106	2	2	4	12	few
	The Turones		1	1				
	The Leuci			1				
	The Eburones			1				
	Narbo		1	1				
	Nemausus		1	3				
Campania	Allifae							1
	Atella or Calatia							1
	Cales		20		3			1
	Compulteria		3					
	Irnthii (Sorrento, sanctuary of Punta della Campanella?)		1		1	1	2	8
	Minturnae (?), Pseudo-Paestum	1	2	1 ¹⁴¹				
	Minturnae (?), Pseudo-Panormos	4	68	3 ¹⁴²		1		
	Neapolis		182	7	8	9	10	300+
	Nuceria Alfaterna		1			2		15
	Phistelia					1		1
	Pompeii, Pseudo-Ebusus		61	1		12	22	5
	Pompeii, Pseudo-Massalia	At least 3 AOY					1	?
	Suessa		6		1			

139. In this column, we give, in a footnote, the reference in Vismara (1998) of those coins we attribute differently. We have not checked all the attributions, which is difficult from photographs of poor coins. Vismara herself notes that some of her attributions are hypothetical. We have also excluded those coins that she lists as illegible and a few very uncertain pieces: nos. 99–104 and 146.

140. No. 8 (as Kese) and no. 122 (as Tarraco).

141. No. 40, the same dies as no. 16 of this paper.

142. Nos. 52–55.

		Rome		Minturnae	Pompeii and area		
		Tevere	Liri	Liri	Liri	Amarantus	Pompeii Gragnano
		database	(Vismara)	(Giove)			
Latium, Samnium, Campania	Shared types (Athena / cock)			2			
	Shared types (Apollo / Bull)			3	13		
Central Italia assemblage ¹⁴³	Bearded Hercules, club on shoulder						
	/ young Hercules, wearing lion's skin, in wreath	2		1 ¹⁴⁴			
	Dionysus / panther ¹⁴⁵	245		6 ¹⁴⁶	4		1
	Geryon / Hercules fighting Hydra	10		2 ¹⁴⁷			
	Janus / Vulcan, L.NNI	4		1 ¹⁴⁸			
	Vulcan / ring, holding strigils and <i>aryballos</i> ; P.CAIO	31		1 ¹⁴⁹			
	Vulcan / <i>cornucopiae</i> ; P.CAIO	14		1 ¹⁵⁰			
	Helmeted Athena / centaur; SC.EVA / MF or MF;	12		1 ¹⁵¹			
	Elephant / standing male figure			1 ¹⁵²			

143. The “central Italian assemblage” is a term that Stannard uses for a large and mostly unpublished group of coins on which he is working. It is mainly bronze, but it includes struck lead issues, sometimes from the same dies as the bronze; there are divisional pieces with uncial values and coordinated denominations. All legends are Latin, often the names of members of the *Annia gens*, using the ligate letters, *N*, alone, and in a variety of expanded forms. Overstrikes—including on post-*Lex Papiria* Roman bronze—give dates in the early part of the first century BC. The coins were probably struck in southern Latium and northern Campania. For an overview, see Stannard (2005a, 48).

144. No. 64 (as Panormus) = Bahrfeldt (1904, 438, no. 92, and pl. V, no. 107). The issue is not Sicilian.

145. This is the commonest of the issues in the central Italian assemblage and is discussed in Stannard (1995a, 212–213, and pl. 31, 15–19, and pl. 32, 45). He dates it, by overstrikes discussed there, to the late 90s and early 80s BC. Morello (1996) publishes 221 specimens of this issue, all taken without reference from the photographs in Stannard (1995b), which represented the status of the Liri database of the central Italian assemblage at that time.

146. Nos. 16–21 (as Minturnae).

147. Nos. 23–24 (as uncertain of central Italy).

148. No. 27 (as uncertain of central Italy, or Sicily). For this issue, see Stannard (2005a, 55, no. 20). This is an example of a legend of a member of the *Annia gens*, which is common in the central Italian assemblage.

149. No. 25 (as uncertain of central Italy). For this issue, see Stannard (2005a, 53, no. 10). The strigils and *aryballos* is one of the Italo-Baetican types that characterize much of the central Italian assemblage; *ibid.*, 47–61.

150. No. 26 (as uncertain of central Italy).

151. No. 15 (as Larinum): listed by Babelon as Aufidia 4.

152. No. 22 (as uncertain of central Italy).

		Rome		Minturnae		Pompeii and area		
		Tevere	Liri	Liri	Liri	Amarantus	Pompeii	Gragnano
		database	(Vismara)	(Giove)				
Apulia	Arpi		4		4			1
Calabria	Brundision		3	1				1
	Orra				1			
	Taras		2					1
Lucania	Copia		1	1				
	Heraklea		1					
	Paestum	7	21	2	1	1		6+
	Velia		29	1	1	1		1
Bruttium	Locri Epizephyrii		4		1			
	Rhegion	5	35	1	3			
Sicily	Akragas	7	3	1				
	Alaisa	1	5		1			
	Kamarina		1					
	Katane	1	7					
	Kentoripai		2	1				
	Lilybaion (?)			3 ¹⁵³				
	Messana, Mamertines		14	3	5		1	3
	Morgantina, Hispanorum		1		1			
	Panormos	6	28	3		1		1
	Uncertain western Sicilian mint		1	2 ¹⁵⁴				
	Syracuse	32	61	5 ¹⁵⁵	6	2	1	9
	Tauromenion	3 ¹⁵⁶	6					
Sardinia	Carthaginians	3	5		3 ¹⁵⁷			1
	Carthaginians	7	9	4	1		2	
	Kingdom		4	3				
Macedonia	Philippi			1				

153. Nos 61 (Janus / *W.ACILI Q* in wreath), 62 (Janus / *NASO* in wreath), 63 (Janus / wolf and twins, P.E) (as uncertain of Sicily). Frey-Kupper (1999, 411–413), attributed these coins to Lilybaion (?), and we list them here as such.

154. Nos. 65 and 66 (as uncertain of Sicily). These are of a Romano-Sicilian series (Gàbrici 1927, 160, nos. 261–267); see Frey-Kupper (forthcoming, part 1, chap. 4.5, nos. 684–689).

155. No. 56 is very small and light (18 mm, 2.9 g). It may be an imitation (like Buttrey, Erim, Groves, and Holloway 1989, 102, no. 343) or a coin of the Mamertines (like Särström 1940, group V C).

156. Tusa Cutroni (2003, 361) proposes to attribute the two specimens of the type “woman’s head with *polos*, left / bunch of grapes,” Frey-Kupper (1999, 60, nos. 67–68) to Sardinian mercenaries in Sicily.

157. From the description, one possibly Carthage.

		Rome		Minturnae		Pompeii and area		
		Tevere	Liri	Liri	Liri	Amarantus	Pompeii	Gragnano
		database	(Vismara)	(Giove)				
Thrace	Sestos		5	1		1		
	Odessos		1					
Thessaly	General		3	1		1		
Illyria	Apollonia	1	12	1				
	Kings of, Ballaios		11			1		
	Epidamnos-Dyrrhachion	1	9				1	
Islands off	Korkyra			1				
Illyria								
Acarnania	Leukas			1				
Boeotia	Thebes	3	10					
	Thespiiai		5	2				
Peloponessos	Elis		7	1				
Islands off Elis	Zakynthos	1			1			
Aitolia	Aitolian League							1
Euboea	Chalkis	1						
Attica	Athens	1	7					
Achaia	Aigion				1			
	Patras		1	1				
Messenia	Messene	1						
Argolis	Argos	2	15		1			3
Arcadia	Mantineia					1		
Cyclades	Paros							
Pontos	Amisos	1	3					
Paphlagonia	Amastris	1						
Bithynia	Kingdom, Prusias II		10	1 ¹⁵⁸				
	Prusias ad Hypium (?)			1				
Mysia	Kyzikos		1	1				
	Pergamon		2	1				
Ionia	Klazomenai	1						
	Ephesos		5	1		1		
	Magnesia		2	1				
	Miletos	2	20	3				
	Smyrna			1				
Islands off								
Ionia	Samos	5	5					

158. No. 46 (as Sicily, Aitna).

		Rome	Minturnae		Pompeii and area			
		Tevere	Liri	Liri	Liri	Amarantus	Pompeii	Gragnano
		database	(Vismara)	(Giove)				
Islands off	Teos		2	1				
	Kos	13	26	1				
Phrygia	Apameia		2			1		
	Eukarpeia			1				
Lycia	Masikytes		1			1		
Pisidia	Termessos			1				
Cappadocia	Caesarea			2				
Syria	Antioch		2	5				
	Laodikeia ad Mare			1				
	Seleukeia Pieria			1				
Coele-Syria	Chalkis			1				
Phoenecia	Karne			1				
Palestine	Herod Agrippa I			1				
Judaea	Procurators		10	3				
	Aelia Capitolia			1				
Nabataea	Aretas IV			1				
Mesopotamia	Carrhae			1				
	Raphaena			1				
	Edessa			1				
Egypt	Alexandria		13	1	1	1		
Islands								
between								
Africa and	Melita							
Sicily			10	1				
Kyrenaika	General	1	138+	5	4	2	2	
Zeugitania	Carthage	23	19	2		1		Some
	Utica	1						
	Total	137	1438+	134	74	59	102	412+

ABBREVIATIONS

BAR = British Archaeological Reports.

CMRR = Crawford, Michael H. 1985. *Coinage and money under the Roman republic*. London.

HN, Italy = Rutter, N. Keith, ed. 2001. *Historia Nummorum. Italy*. London.

OGIS = Dittenberger, Wilhelm, ed. 1903–1905. *Orientis Graeci inscriptiones selectae. Supplementum Sylloges inscriptionum Graecarum*. Leipzig.

RPC I = Amandry, Michel, Andrew Burnett, and Pere Pau Ripollès. 1992. *Roman provincial coinage*. Vol. 1, *From the death of Ceasar to the death of Vitellius (44 BC–AD 69)*. London and Paris.

RRC = Crawford, Michael H. 1974. *Roman republican coinage*. Cambridge.

SNG Cop., Italy–Sicily = *Sylloge Nummorum Graecorum. The Royal collection of coins and medals. Danish National Museum*. Vol. 1, *Italy–Sicily*. Copenhagen, 1942.

SNG Cop., Ionia, Caria and, Lydia = *Sylloge Nummorum Graecorum. The Royal collection of coins and medals. Danish National Museum*. Vol. 5, *Ionia, Caria, and Lydia*. Copenhagen, 1947.

SNG Cop., North Africa = *Sylloge Nummorum Graecorum. The Royal collection of coins and medals. Danish National Museum*. Vol. 42, *North Africa, Syrtica–Mauretania*. Copenhagen, 1969.

REFERENCES

- Bahrfeldt, Max von. 1904. Die römisch-sicilischen Münzen aus der Zeit der Republik. *Schweizerische Numismatische Rundschau* 12: 331–445.
- Balbi de Caro, Silvana, et al. 1991. Geld aus dem antiken Rom. 'Assem habeas, assem valeas—Hast du was, bist du was'. *Ausstellung im Dormitorium des Karmeliterklosters, Frankfurt am Main, vom 17.1. bis 10.3.1991*. Frankfurt am Main.
- Barrandon, Jean-Noël, and Olivier Picard. 2007. *Monnaies de bronze de Marseille. Analyse, classement, politique monétaire*. Cahiers Ernest-Babelon 10. Paris.
- Bechtold, Babette. 1999. *La necropoli di Lilybaeum*. Palermo.
- Bellini, Giovanna Rita, ed. 1996–2000. *Minturnae Antiquarium: monete dal Garigliano*. Vol. 1, *Guida alla mostra, catalogo delle monete esposte* (texts by Giovanna Rita Bellini, Fiorenzo Catalli, Teresa Giove, Rodolfo Martini, Massimiliano Munzi, Novella Vismara) (1996); Vol. 2, *Monete greche, provinciali romane e tessere romane (di bronzo e di piombo)* (texts by Stefano Medas, Mechtild Overbeck, Novella Vismara) (1998); Vol. 3, *La città ed il porto (296–44 a.C.), monete romane repubblicane (fino alla morte di Cesare)* (texts by Giovanna Rita Bellini, Fiorenzo Catalli) (1998); Vol. 4, *Monete romane (Caesar–Nero), fonti epigrafiche e letterarie* (texts by Rodolfo Martini,

- Francesca Pompilio) (1998); Vol. 5, *Minturnae: trasformazioni e società tra la tarda Repubblica e gli Antonini. Committenza degli edifici pubblici di Minturnae tra la tarda età repubblicana e il periodo antonino. Monete dal Garigliano (68–98 d.C.), l'Interregno, la dinastia Flavia e il regno di Nerva* (texts by Giovanna Rita Bellini, Giuseppe Mesolella, Fiorenzo Catalli) (2000); Vol. 6, *Monete imperiali romane: Traiano-Commodo (98–192 d.C.)* (text by Fiorenzo Catalli) (2000). Rome and Milan.
- Benedetti, Maria Gilda, Fiorello Catalli, and Maria De Lucia Brolli. 1999. Rinvenimenti monetali nel territorio dell'antica Narce: il santuario suburbano in località Monte Li Santi-Le Rote. Catalogo. *Bollettino di Numismatica* 32–33: 47–102.
- Brenot, Claude. 1990. Le monnayage de Marseille du III^e s. à 49 av. J.-C. In *Gaule interne et Gaule méditerranéenne aux II^e et I^{er} siècles av. J.-C.: confrontations chronologiques, actes de la table ronde de Valbonne (11–13 novembre 1986)*, Alain Duval, Jean-Paul Morel and Yves Roman, eds., 27–35. Revue archéologique de Narbonnaise, Supplément 21. Paris.
- Burnett, Andrew. 1982. The currency of Italy from the Hannibalic war to the reign of Augustus. *Annali dell'Istituto Italiano di Numismatica* 29: 125–137.
- Buttrey, Theodore. 1980. Cosa: The Coins. *Memoirs of the British Academy in Rome* 34: 11–154.
- , Kenan T. Erim, Thomas D. Groves, and R. Ross Holloway. 1989. *Morgan-tina Studies*. Vol. 2, *The Coins*. Princeton, N.J.
- Campo, Marta. 1976. *Las monedas de Ebusus*. Barcelona.
- . 1993. Las monedas de Ebusus. In *VII Jornada de arqueología fenico-púnica*, 147–171. Trabajos del Museo Arqueológico de Ibiza 31. Ibiza.
- . 1994. Les Monedes de l'Eivissa Púnica. In *La Moneda a l'Eivissa Púnica*. Palma de Majorca.
- Cantilena, Renata. 1997. Le Monete. In Gragnano: Il santuario campano in località Privati presso Castellammare di Stabia. Osservazioni preliminari, by Paola Miniero et al., 39–50. *Rivista di Studi Pompeiani* 8: 11–56.
- , Marcella Pellegrino, and Monica Satriano. 1999. Monete da Poseidonia-Paestum: trasformazioni e continuità tra Greci, Lucani e Romani. *Annali dell'Istituto Italiano di Numismatica* 46: 9–154.
- Catalli, Fiorenzo. 1971–1972. Soprintendenza alle Antichità delle Provincie di Salerno, Avellino e Benevento. *Annali dell'Istituto Italiano di Numismatica* 18–19: 315.
- Costa Ribas, Benjamí. 2007. Punic Ibiza under the Roman republic. In *Articulating local cultures: Power and identity under the Roman republic*, Peter van Dommelen and Nicola Terrenato, eds., 85–101. Journal of Roman Archaeology, Supplementary Series 63. Portsmouth, N.H.

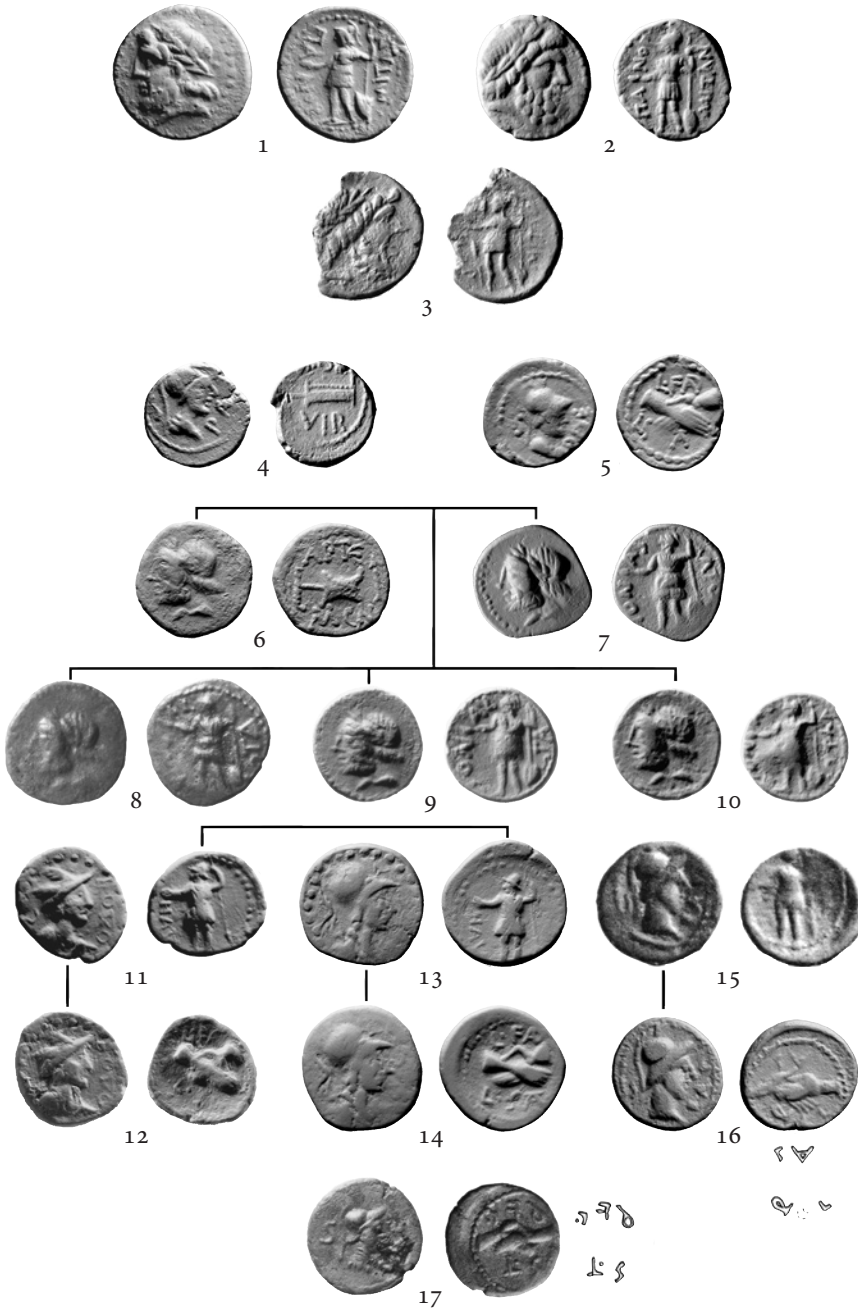
- Crawford, Michael H. 1973. Paestum and Rome: The form and function of a subsidiary coinage. In *La Monetazione di bronzo di Poseidonia-Paestum. Atti del III Convegno del Centro Internazionale di Studi Numismatici, Naples, 19–23 April 1971*, 47–109. *Annali dell'Istituto Italiano di Numismatica*, Supplemento al Volume 18–19. Rome.
- . 1976–1977. The imperial bronze coinage of Paestum. *Annali dell'Istituto Italiano di Numismatica* 23–24: 151–159.
- . 1982. Unofficial imitations and small change under the Roman republic. *Annali dell'Istituto Italiano di Numismatica* 29: 139–164.
- Daehn, Hans-Steffen. 1991. *Die Gebäude an der Westseite der Agora von Iaitas*. *Studia Ietina* 3. Zürich.
- Depeyrot, Georges. 1999. *Les monnaies hellénistiques de Marseille*. Collection Moneta 16. Wetteren.
- Di Iorio, Antonino. 1997. *L'apporto della civiltà magnogreca in area sannitica*. Rome.
- Figueira, Thomas John. 1998. *The power of money: Coinage and politics in the Athenian empire*. Philadelphia.
- Finkielsztejn, Gérald. 2001. *Chronologie détaillée et révisée des éponymes amphoriques rhodiens de 270 à 108 av. J.-C. environ. Premier bilan*. BAR International Series 990. Oxford.
- Frier, Bruce W., and Anthony Parker. 1970. Roman coins from the River Liri. *Numismatic Chronicle* 7, no. 10: 89–109.
- Frey-Kupper, Suzanne. 1992a. La circolazione monetaria a Monte Iato dall'inizio della dominazione romana fino all'età tiberiana. In *Giornate internazionali di studi sull'area elima (Gibellina, 19–22 Settembre 1991)*, 281–297. Pisa and Gibellina.
- . 1992b. Zur frühen Münzprägung Siziliens unter römischer Herrschaft: der Hort von Campobello di Licata. *Schweizerische Numismatische Rundschau* 71: 149–178.
- . 1995. Monete dal Tevere—I rinvenimenti 'greci'. *Bollettino di Numismatica* 25: 33–73.
- . 1999. I ritrovamenti monetali. In *La necropoli di Lilybaeum*, by Babette Bechtold, 395–457. Palermo.
- . Forthcoming. *Die Fundmünzen vom Monte Iato 1971–1990. Ein Beitrag zur Geldgeschichte Westsiziliens*. *Studia Ietina* 10.
- Gàbrici, Ettore. 1927. *La monetazione del bronzo nella Sicilia antica*. Palermo.
- Gandolfo, Lucina. 1995. Le monete (1989–1992). *Annali della Scuola Normale Superiore di Pisa* 3, no. 25: 1204–1260.
- Gentric, Gisèle. 1987. Essai de typologie des petits bronzes massaliètes au taureau cornupète. In *Mélanges offerts au Docteur J.-B. Colbert de Beaulieu*, 389–400. Paris.

- Giannikouri and Stefanaki. (Forthcoming in *Οβολός* 9.) = Αγγελική Γιαννικουρή και Βασιλική Ε. Στεφανάκη. Forthcoming. «Θησαυρός» χάλκινων νομισμάτων ελληνιστικής περιόδου από την Κω. Νομισματικό σύστημα και υποδιαιρέσεις των χάλκινων κωακών νομισμάτων. Paper presented at the Fifth Numismatic Scientific Meeting, held in Mytilini (Lesbos) in 2006.
- Giannikouri and Stefanaki 2006 = Αγγελική Γιαννικουρή και Βασιλική Ε. Στεφανάκη, Νομίσματα. Νομισματική Δωδεκανήσου: Η περίπτωση της Κω. Πρώτη παρουσίαση του προγράμματος. *Το νόμισμα στα Δωδεκάνησα και τη Μικροασιατική τους Περαία*, 105–124. *Οβολός* 8. Athens.
- Giove, Teresa. 1998. Soprintendenza Archeologica di Napoli e Caserta: monete dal fiume Garigliano. *Annali dell'Istituto Italiano di Numismatica* 45: 129–286.
- Grace, Virginia R. 1985. The middle stoa dated by amphora stamps. *Hesperia* 54: 1–45, pl. 1–5.
- Greco Pontrandolfo, Angela. 1971–1972. Ripostiglio monetale da Velia. *Annali dell'Istituto Italiano di Numismatica* 18–19: 91–111.
- Grella, Consalvo. 1980–1981. Museo Provinciale Irpino. *Annali dell'Istituto Italiano di Numismatica* 27–28: 223–236.
- . 1983. Museo Provinciale Irpino. *Annali del Museo Provinciale Irpino* 30: 159–180.
- Hernandez, Alain-Christian. 2005. Pompéi extra muros. La première campagne de fouilles. In *Nuove ricerche a Pompei ed Ercolano, Atti del Convegno Internazionale, Roma 28–30 Novembre 2002*, Pietro Giovanni Guzzo and Maria Paola Guidobaldi, eds., 371–378. Studi della Soprintendenza Archeologica di Pompei 10. Pompei.
- Hobbs, Richard. 2003. Coins from the AAPP excavations, Pompeii. *Numismatic Chronicle* 163: 377–379.
- . 2005. Coins from the AAPP excavations, Pompeii: update 1. *Numismatic Chronicle* 165: 377–381.
- Höghammar, Kerstin. 2007. A group of Koan issues from c. 200 BC. *Numismatic Chronicle* 167: 79–92.
- Hollander, David B. 2007. *Money in the late Roman republic*. Columbia Studies in the Classical Tradition 29. Leiden.
- Houghtalin, Liane. 1985. Roman coins from the River Liri, III. *Numismatic Chronicle* 145: 67–81.
- Howgego, Christopher. 1995. *Ancient history from coins*. London and New York.
- Ibáñez, Miguel, and José Blanco. 1995. Un ensemble de petits bronzes massaliotes en Celtiberie. *Bulletin de la Société Française de Numismatique* (January): 979–984.
- Ingvaldsen, Håkon. 2002. *Cos—Coinage and society: The chronology and function of a city-state coinage in the classical and Hellenistic Period, c. 390–170 BC*. Acta Humaniora 149. Oslo.

- Krauss, Johannes, ed. 1980. *Die Inschriften von Sestos und der thrakischen Chersones*. Bonn.
- Kroll, John H. 1993. *The Athenian agora*. Vol. 26, *The Greek coins*. Princeton, N.J.
- Lawall, Mark L. 2002. Early excavations at Pergamon and the chronology of Rhodian amphora stamps. *Hesperia* 71: 295–324.
- Libero Mangieri, Giuseppe. 1990a. Monete rinvenute negli scavi di Velia: l'acropoli. *Rivista Italiana di Numismatica* 92: 19–32.
- . 1990b. Soprintendenza Archeologica delle Province di Salerno, Avellino e Benevento. *Annali dell'Istituto Italiano di Numismatica* 37: 203–237.
- . 1993. Velia: problemi di circolazione monetaria. *Rassegna Storica Salernitana*, annata 10, no. 2, fascicolo 20 (December): 9–42.
- Lucchelli, Tomaso, and Giovanni Di Stefano. 2004. *Monete dall'agorà di Camarina. Campagane di scavo 1983–1995*. Milan.
- Maiuri, Amadeo. 1950. Pompei—Scoperta di un edificio termale nella Regio VIII, Insula 5, nr. 36. *Notizie degli Scavi di Antichità* 11: 116–136.
- Mammìna, Giuseppina. 1995. Le monete 1993. *Annali della Scuola Normale Superiore di Pisa* 3 (25): 1260–1295.
- . 1997. La documentazione numismatica. In *Il castello e la moschea (scavi 1989–1995)*, by Alessandra Molinari, 189–204. Segesta 2. Palermo.
- Meadows, Andrew. 2001. Money, freedom, and empire in the Hellenistic world. In *Money and its uses in the ancient Greek world*, by Andrew Meadows and Kirsty Shipton, 53–63. Oxford.
- Mello, Mario, and Giuseppe Voza. 1968. *Le iscrizioni latine di Paestum*. Naples.
- Metcalf, William E. 1974. Roman coins from the River Liri, II. *Numismatic Chronicle* 7 (14): 42–52.
- Martini, Rodolfo. 1988. *Monetazione bronzea romana tardo-repubblicana I*. Milan.
- Molinari, Maria Cristina. 1995. Le monete della Meta Sudans (Roma). *Annali dell'Istituto Italiano di Numismatica* 42: 109–161.
- Morello, Antonio. 1996. Le monete di Bacco a Minturnae. Il culto di Bacco, i riti. Il culto dei Bacchanali. *Quaderno di studio di Circolo Filatelico Numismatico 'Mario Rasile'* Formia 13 (January–February).
- Nassa, Mario. 1999. Ritrovamenti monetari del Medio Volturno e delle zone campane limitrofe nel quadro dei più noti ripostigli scoperti in area Sannitica. *Annuario dell'Associazione Storica del Medio Volturno*, 209–250.
- Peter, Markus. 2004. Imitation und Fälschung in römischer Zeit. In *Faux–contre-façons–imitations, Actes du quatrième colloque international du Groupe suisse pour l'étude des trouvailles monétaires (Martigny, 3–4 mars 2002)*. *Fälschungen–Nachahmungen–Imitationen. Sitzungsbericht des vierten internationalen Kolloquiums der Schweizerischen Arbeitsgemeinschaft für Fundmünzen (Martigny,*

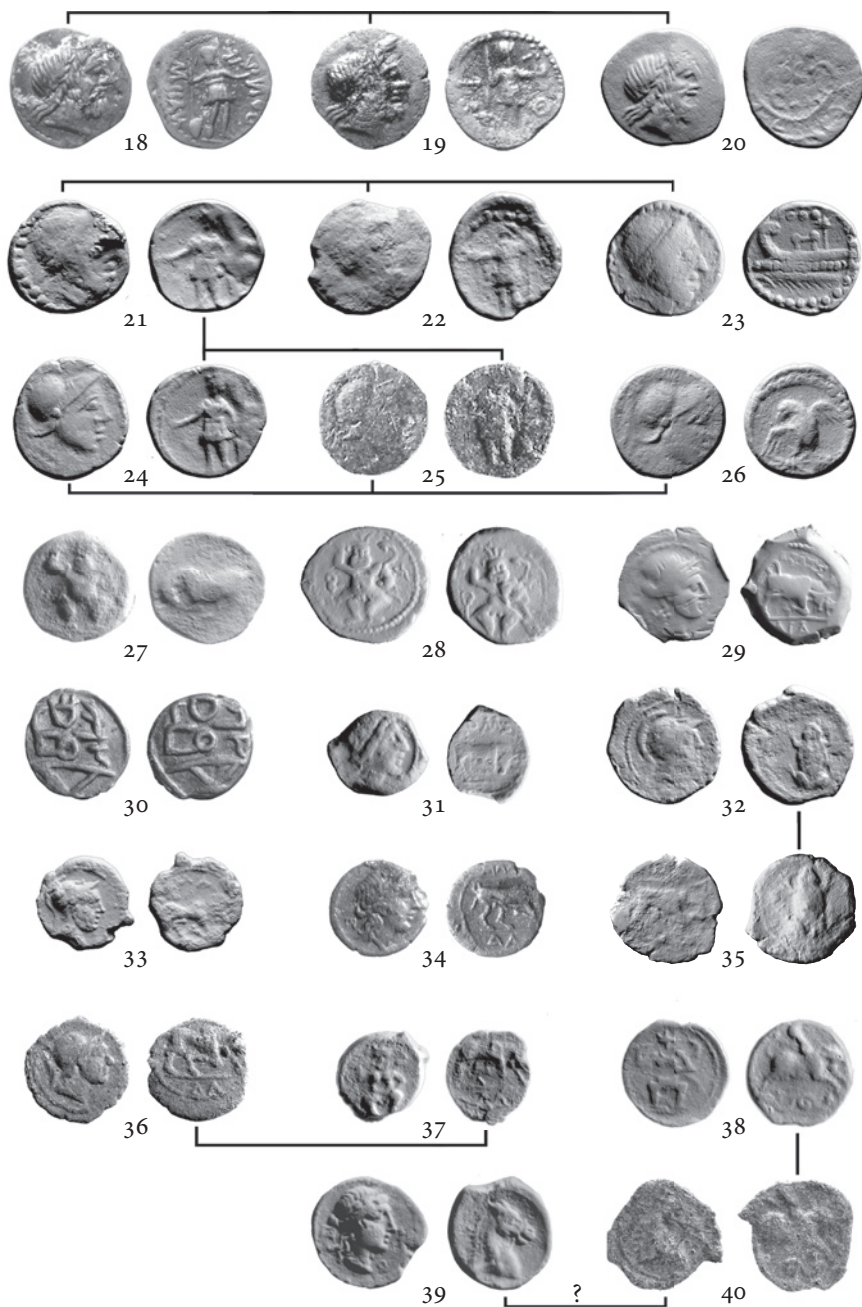
- 3.-4. März 2002), by Anne-Francine Auberson Fasel, Harald R. Derschka, and Suzanne Frey-Kupper, 19-30. *Études de numismatique et d'histoire monétaire 5 / Untersuchungen zu Numismatik und Geldgeschichte 5*. Lausanne.
- Py, Michel. 2006. *Les monnaies préaugustéennes de Lattes et la circulation monétaire protohistorique en Gaule méridionale*. Lattara 19. Lattes.
- R. Alföldi, Maria. 1991. Griechische Münzen in Rom. In *Geld aus dem antiken Rom. 'Assem habeas, assem valeas'—Hast du was, bist du was'*. Ausstellung im Dormitorium des Karmeliterklosters, Frankfurt am Main, vom 17.1. bis 10.3.1991, by Silvana Balbi de Caro et al., 33-35. Frankfurt am Main.
- Ranucci, Samuele. 2008. Moneta straniera a Pompei in età repubblicana: nuove acquisizioni. In *Iberia e Italia: modelos romanos de integración territorial. IV Congreso hispano-italiano, Murcia, 26-29 abril 2006*, José Miguel Noguera Celdrán and Filippo Coarelli, eds., 249-260. Murcia.
- Reece, Richard. 1982. A collection of coins from the centre of Rome. *Papers of the British School at Rome* 50: 116-145.
- Robert, Louis. 1973. Les monétaires et un décret hellénistique de Sestos. *Revue Numismatique* 6 (15): 45-52.
- Rotroff, Susan I. 2006. *The Athenian agora*. Vol. 33. *Hellenistic pottery. The plain wares*. Princeton, N. J.
- Ruegg, S. Dominic. 1995. *Underwater investigations at Roman Minturnae, Liris-Garigliano River*. Patrol, Sweden.
- Sallusto, Federico. 1971. *Le Monete di Bronzo di Poseidonia-Paestum nella collezione Sallusto*. Naples.
- Särström, Margit. 1940. *A study in the coinage of the Mamertines*. Lund.
- Sherwin-White, Susan M. 1978. *Ancient Cos*. Göttingen.
- Silberstein Trevisani, Susanna. 1989. Le monete rinvenute ad Ostia nella *taberna* presso il muro del *castrum* (Regio I, *Insula* X, 3). In *La moneta nei contesti archeologici. Esempi dagli scavi di Roma. Atti dell'incontro di studio, Roma 1986*, 121-137. Studi e materiali 2. Rome.
- Stannard, Clive. 1987. Two-headed and two-tailed denarii in the Roman republic. *Numismatic Chronicle* 147: 160-163.
- . 1995a. Iconographic parallels between the local coinages of central Italy and Baetica in the first century BC. *Acta Numismatica* 25 (July): 47-97.
- . 1995b. *The local coinages of central Italy in the late Roman republic: provisional catalogue, June 1995*. Rome.
- . 1998. Overstrikes and imitative coinages in central Italy in the late republic. In *Coins of Macedonia and Rome: Essays in honour of Charles Hersh*, Andrew Burnett, Ute Wartenberg, and Richard B. Witschonke, eds., 209-229. London.

- . 2005a. Numismatic evidence for relations between Spain and central Italy at the turn of the first and second centuries BC. *Schweizerische Numismatische Rundschau* 84: 47–79.
- . 2005b. The monetary stock at Pompeii at the turn of the second and first centuries BC: Pseudo-Ebusus and pseudo-Massalia. In *Nuove ricerche a Pompei ed Ercolano, Atti del Convegno Internazionale, Roma 28–30 Novembre 2002*, Pietro Giovanni Guzzo and Maria Paola Guidobaldi, eds., 120–143. Studi della Soprintendenza Archeologica di Pompei 10. Pompei.
- Stazio, Attilio. 1955. Rapporti fra Pompei ed Ebusus nelle Baleari alla luce dei rinvenimenti monetali. *Annali dell'Istituto Italiano di Numismatica* 2: 33–57.
- Travaini, Lucia. 1985. Sito B: Monete dallo Scavo di Lungotevere Testaccio (anni 1979–1983). *Bollettino di Numismatica* 5: 71–126.
- . 1991. More evidence on the finds of coins of Ebusus in Italy. *Revue Belge de Numismatique et de Sigillographie* 137: 193–197.
- . 1996–1997. Roma—Saggio di scavo nell'aula di “San Isidoro in Thermis”: monete. *Notizie degli Scavi di Antichità*, serie 9, vol. 7–8: 412–413.
- Tusa Cutroni, Aldina. 1955. Vita dei medaglieri. Soprintendenza alle antichità per le province di Palermo e di Trapani. *Annali dell'Istituto Italiano di Numismatica* 2: 192–195.
- . 1956. Vita dei medaglieri. Soprintendenza alle antichità per le province di Palermo e di Trapani. *Annali dell'Istituto Italiano di Numismatica* 3: 221–224.
- . 1958–1959. Vita dei medaglieri. Soprintendenza alle antichità per le province di Palermo e di Trapani. *Annali dell'Istituto Italiano di Numismatica* 5–6: 306–318.
- . 1961. Osservazioni sulla circolazione monetale a Selinunte nel IV–III sec. a.C. *Kokalos* 7: 113–121.
- . 2003. Mercenari sardi in Sicilia? In *Quarte giornate internazionali di studi sull'area elima (Erice), 1–4 Dicembre 2000. Atti*, 355–365. Pisa.
- Vismara, Novella. 1998. Monete Greche e Provinciali Romani dal Garigliano. In *Minturnae Antiquarium: Monete dal Garigliano, II: Monete Greche, Provinciali Romane e tessere Romane (di bronzo e di piombo)*, Giovanna Rita Bellini, ed., 9–104. Rome and Milan.
- Wigg-Wolf, David. 2004. Zur Interpretation und Bedeutung der “Barbarisierung” der römischen Kaiserzeit. In *Faux-contrefaçons-imitations, Actes du quatrième colloque international du Groupe suisse pour l'étude des trouvailles monétaires (Martigny, 3–4 mars 2002). Fälschungen–Nachahmungen–Imitationen. Sitzungsbericht des vierten internationalen Kolloquiums der Schweizerischen Arbeitsgemeinschaft für Fundmünzen (Martigny, 3.–4. März 2002)*, by Anne-Francine Auberson Fasel, Harald R. Derschka, and Suzanne Frey-Kupper, 55–75. *Études de numismatique et d'histoire monétaire* 5 / *Untersuchungen zu Numismatik und Geldgeschichte* 5. Lausanne.

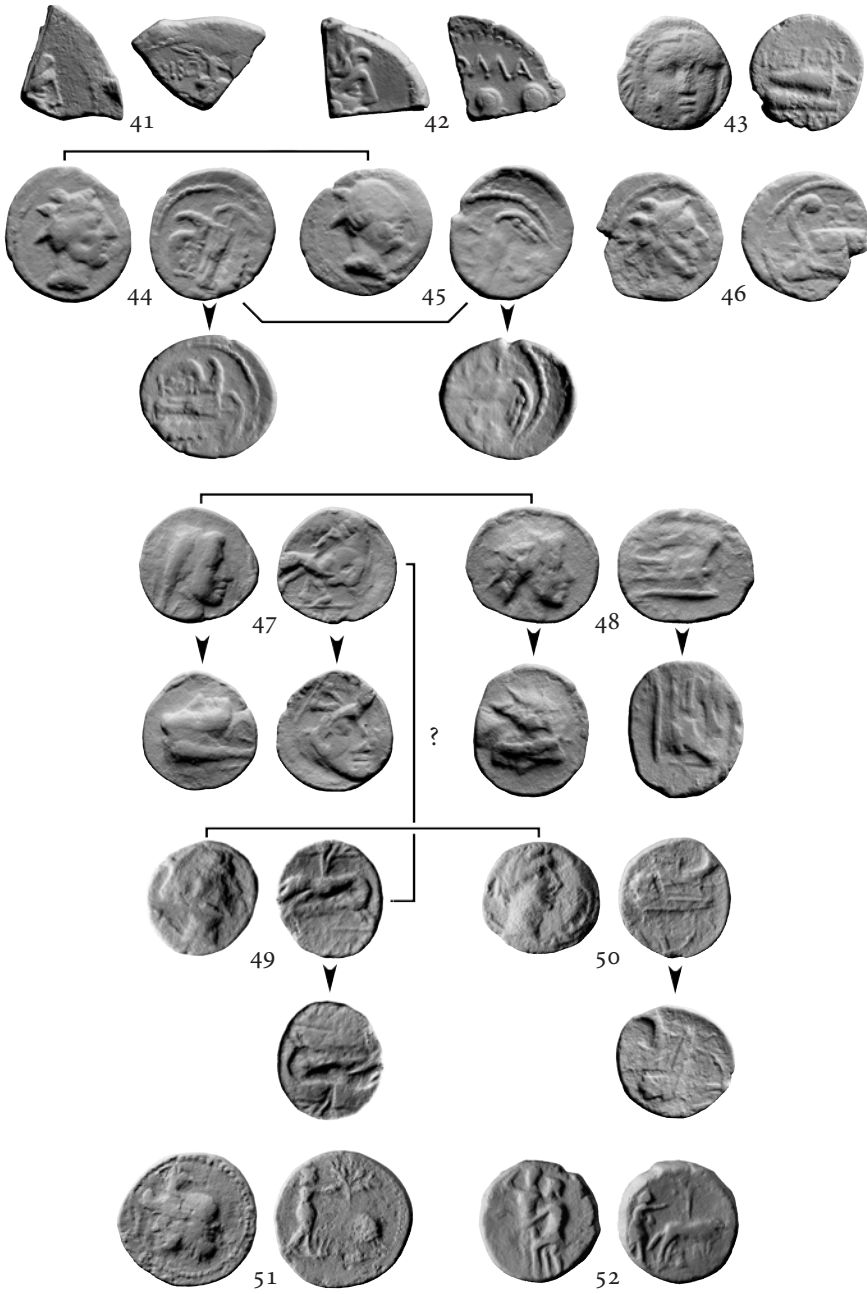


“Pseudomints” and Small Change in Italy and Sicily in the Late Republic

Plate 84



“Pseudomints” and Small Change in Italy and Sicily in the Late Republic



“Pseudomints” and Small Change in Italy and Sicily in the Late Republic