

dbc
DEPARTMENT
OF BENTON
CULTURAL
HERITAGE
OF THE UNIVERSITY
OF CALIFORNIA
AT BERKELEY



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

V CONGRESSO INTERNAZIONALE DI
NUMISMATICA E DI STORIA MONETARIA

**LE MONETE DI
CIRENE E DELLA
CIRENAICA NEL
MEDITERRANEO**
problemi e prospettive



17 - 19 MARZO 2016

Padova, Palazzo del Bo
Archivio Antico e Aula Nievo



Cyrenaican coin in central Italy

Clive Stannard
&
Samuele Ranucci

Heureux qui, comme Ulysse, a fait un beau voyage,
Ou comme cestuy-là qui conquiert la toison,
Et puis est retourné, plein d'usage et de raison,
Vivre entre ses parents le reste de son âge !

Joachim du Bellay (1522–1560)

**UNDERWATER
INVESTIGATIONS AT
ROMAN MINTURNAE**

Liris-Garigliano River

Part I

REPORT

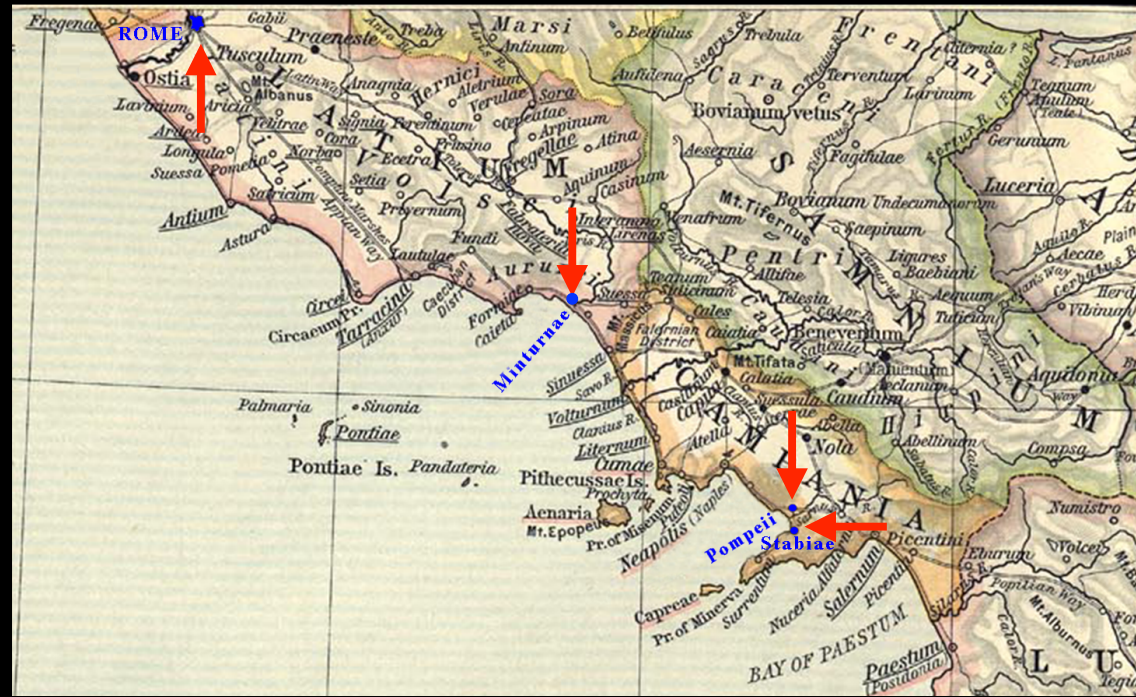
Best regards!
Bro. S. Dominic Ruegg, FIC
S. Dominic Ruegg

with contributions by
G. Belluomini, B. Becker, J. Campbell,
F. Fahy, L. Houghtalin, H. Hoskins,
T. Linick, and L. Mechem.

For Brother S. Dominic Ruegg
“Brother Errant”

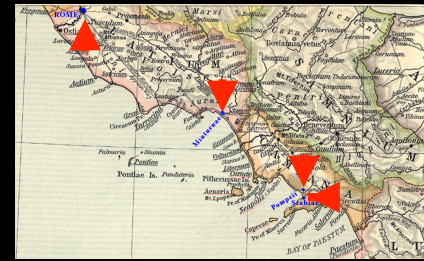
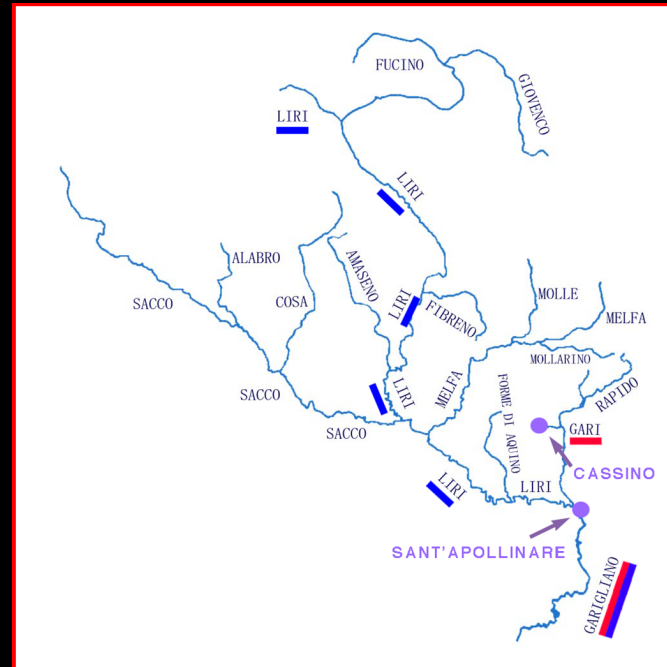
We’d like to dedicate this paper to Brother Domenic Ruegg, “Brother Errant”, as he calls himself, who is now in his 98th year, and whose underwater investigations brought the coins from the Liri to light.

The samples



For this study, we have compiled and analysed information on the bronze coins of Cyrenaica found in central Italy, in Rome, the River Liri, Pompeii, and Gragnano, Stabiae. We draw on coins from archaeological excavations and provenanced finds, for which there is good documentary evidence, and where there are adequate photographs to allow identification.

The samples



The River Liri at *Minturnae*

The largest group comes from the River Liri at Minturnae. *Liris* was the Latin name for the whole river now called the Garigliano. Dante called it the Green: “di fuor del Regno, quasi lungo ’l Verde”. The modern name, Garigliano, is late-mediaeval, and covers both the Gari, which rises in the city of Cassino, joins the Liri at Sant’Apollinare, and flows to the sea below Minturnae. The name, “Liri”, has been used in English publications of the coins since the first report of the finds, in the 1970 *Numismatic Chronicle*.

Between 1967 and 1977, Brother Domenic Ruegg led a series of underwater investigations in front of the castrum of *Minturnae*, where the Via Appia crossed by bridge from Latium to Campania. This Roman colony was founded in 295 BC. It lies about two kilometres from the coast, and became an important river port. The bridge was probably constructed shortly after the middle of the third century BC, certainly before about 200 BC. The original settlement covered 2.5 ha, but, by the early Empire, this had grown to about 28 ha, implying a population within the walls of perhaps 4,500 inhabitants. Minturnae was an important way-station, and Rome’s armies, and other travellers, regularly passed through Minturnae. Brother Domenic recovered 4,918 coins from the river-bed, which were published in three articles in *The Numismatic Chronicle*. Most were found in a layer of concretion, chunks of which were brought up and broken with hammers, when coins and other things fell out, many very well preserved. Large quantities of explosives and military debris had been dumped in the river, during the fighting around Monte Casino in World War II; Italian Navy divers partly cleared these out in 1970.

The Liri database

- No attempt was made to document Roman finds
- Many blocks of coins identified over 30 years
- The patina, the range of mints, and the presence of the Italo-Baetican series identify blocks
- Currently documents some 2050 “foreign” coins
- Cyrenaica and overstrikes on Cyrenaica represent 3.7% of the total, the biggest group of foreign coins, after Neapolis

Because of my interest in lead coinages, Brother Dominic showed me some of these. It was common knowledge that clandestine divers were removing very large numbers of coins and other objects from the river. I became convinced of the importance of these rich finds, and began to try to build up a database of “foreign”—non-Roman—coins from the Liri. I visiting dealers and talked to many collectors, and even now continue to turn up more coins.

The Liri database

A Liri patina, with traces of black concretion



If you know the Liri materials, blocks of these coins are easy to spot: the patina is characteristic, often with traces of the black concretion. Here's an example. The range of mints present also tends to be similar, and presence of the unusual and largely unpublished bronze and lead pieces that I call the “central Italian assemblage of the Italo-Baetic series” is diagnostic.

The Liri database

- No attempt was made to document Roman finds
- The patina, the range of mints, and the presence of the Italo-Baetican series identify blocks
- Many blocks of coins identified over 30 years
- Currently documents some 2050 “foreign” coins
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So I was able, over the years, to trace blocks of coins in a number of countries, and in most cases to make casts or get photographs. In addition to coins in trade, the Liri database contains the coins from Brother Dominic's investigations, and a group sequestered by the authorities in 1981, now in the Naples Museum, and published by Teresa Giove. I currently know about 2050 foreign coins from the Liri at Minturnae; Cyrenaican coins present about 3.7% of the total. This is the biggest group of non-Roman coins in the Liri finds, after Neapolis.

Groups of coins from the Liri

	Ruegg		Giove		Ruegg + Giove	
Period	no.	%	no.	%	no.	%
Greek, Punic, <i>etc.</i>	71	1.4	79	3.0	150	2.0
Republican	592	12.0	451	16.9	1,043	13.8
Empire to AD 285	1,310	26.6	837	31.4	2,147	28.3
After AD 285	671	13.6	631	23.7	1,302	17.2
Mediaeval, modern	5	0.1	1	0.1	7	0.1
Others & illegibles	2,269	46.1	665	25.0	2,934	38.7
Total	4,918		2,665		7,583	

There is no discernible stratification in the deposits. Here are details of Ruegg's materials, and of a group of coins published by Teresa Giove.

The "foreign" material accounts for only about 2% of the total. The foreign coins are contemporary with the Roman Republican coins, which represents about 14% of the whole; during the Roman Republic, then, about one foreign coin for every seven Roman coins entered the River. Unless we assume that foreign coins were being preferentially discarded, this gives a very interesting picture of the small change in use at Minturnae in late Republican times.

Projected total finds

Period	Ruegg	Giove	Ruegg + Giove
Greek, Punic, <i>etc.</i>	2,050	2,050	2,050
Republican	17,093	11,703	14,254
Empire to AD 285	37,824	21,720	29,342
After AD 285	19,374	16,374	17,794
Mediaeval, modern	144	52	96
Others & illegibles	65,513	17,256	40,098
Total	141,999	69,155	103,634

How many coins did the divers take from the Liri? We can use the proportions of the different periods in Ruegg and Giove's samples to project the universe of which the Liri finds are a sample, assuming that they follow a similar distribution. In this table, we have imposed the number of foreign coins from the Liri (2,050) on both their samples, and then calculated the likely number of coins of other periods, on the basis of the ratios of the various periods in each sample.

There is no way of estimating the proportion of the total number of foreign coins taken from the river that the Liri database reflects; on the arbitrary assumption that it may equal, say, one third of the total number, this would equate to a total for all periods of between about 210,000 and 420,000 coins, and this is probably an under-estimation. However we reason, the number must have been enormous; apart from the Liri database, the information these finds represent has been lost to science.

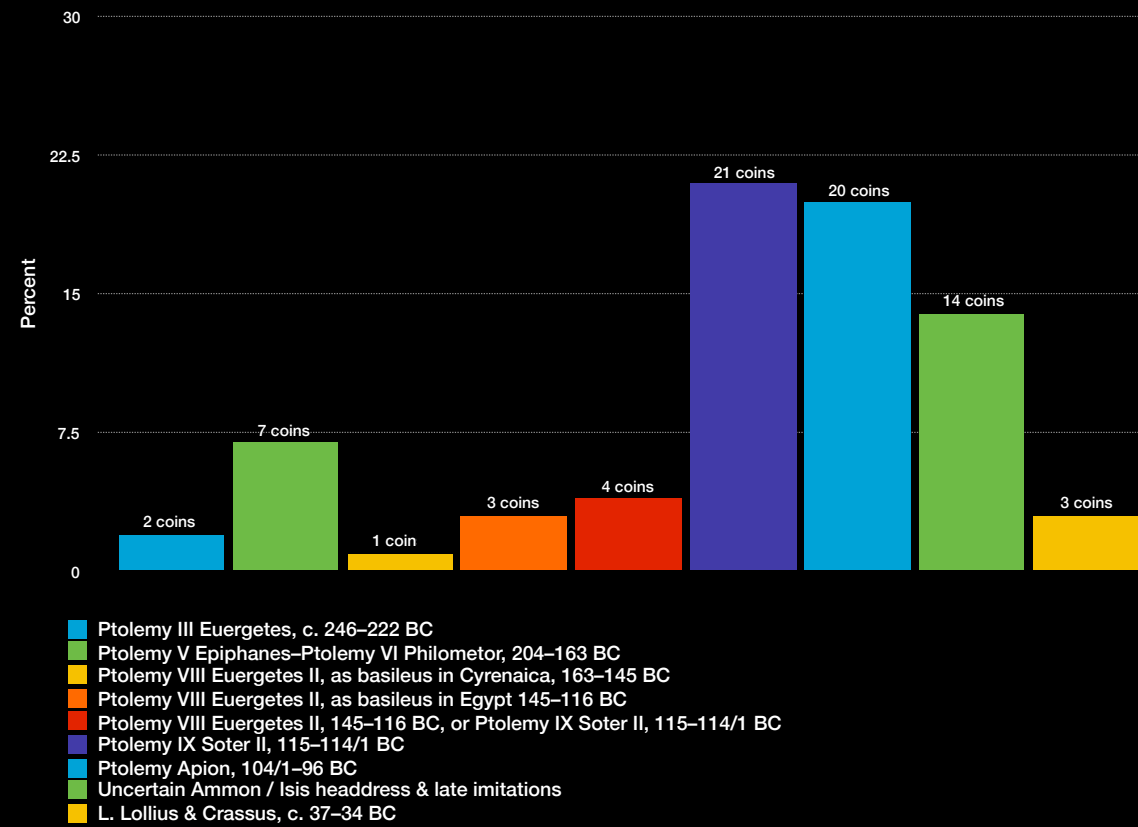
There is no certainty as to how this mass of coin got into the river, but we think it's likely that most were tossed from the bridge by the travellers on the Via Appia.

For comparison

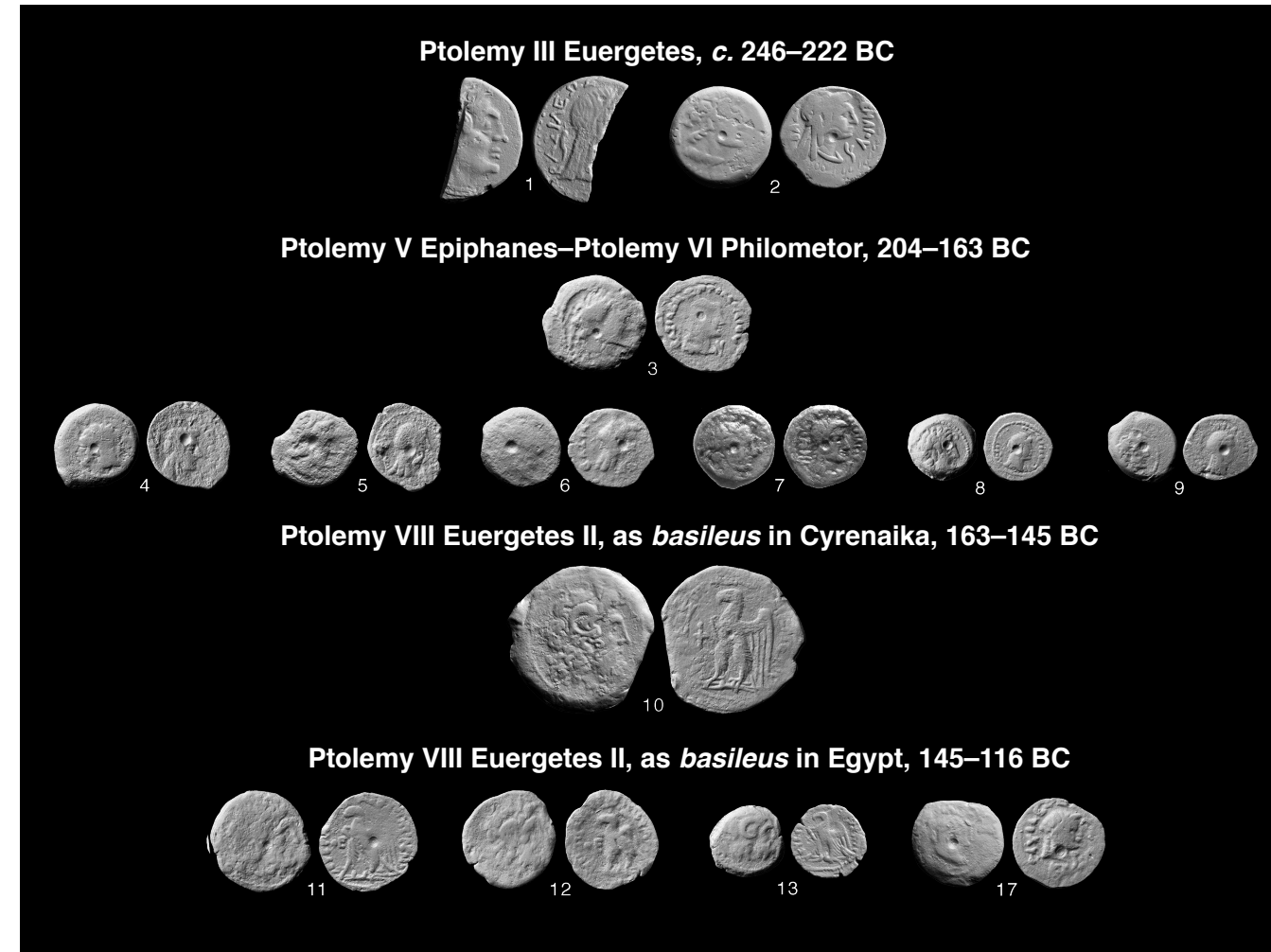
- Liri database: 2050 foreign bronze coins
- Athens Agora: 12,842 bronze coins (5th – 1st c. BC), of which:
 - Athens and Eleusis: 9,737 coins
 - Nearby states: 1,172 coins
 - Further afield: only 761 coins
- Morgantina: 8,711 coins, less Rome, Sicily, Rhegion and Carthage, only 132 coins

These figures show the historical importance of the Liri finds. Even the excavations in large and very cosmopolitan Athens do not come near the numbers of foreign coins from the Liri, or the numbers generally.

Structure of the Cyrenaican finds from the Liri



The structure of the Cyrenaican group is heavily biased towards later emissions,; this suggests strongly that most coins entered Italy soon Cyrenaica was bequeathed to Rome,in 96 BC, and that the mixture of issues reflects circulation in Cyrenaica at that time. It's of course possible that some coins came earlier, and some later.



The earliest coin is of Ptolemy III Euergetes (c. 246–222 BC), and was cut in half. It is unlikely to have been cut in Cyrenaika; Ted Buttrey noted that the halving of Cyrenaican coin is most unusual, and knew only a single example, which he suggested “was simply swept up with the Roman for cutting”. Halving is common with coins from the Liri, and seems to have occurred sporadically, not in a single event, and to have been most common in the late Republic. It isn’t limited to Roman coins. The excellent condition of this coin may suggest early cutting, but, on balance, we think it’s most likely that it was halved in Italy in the first century BC.

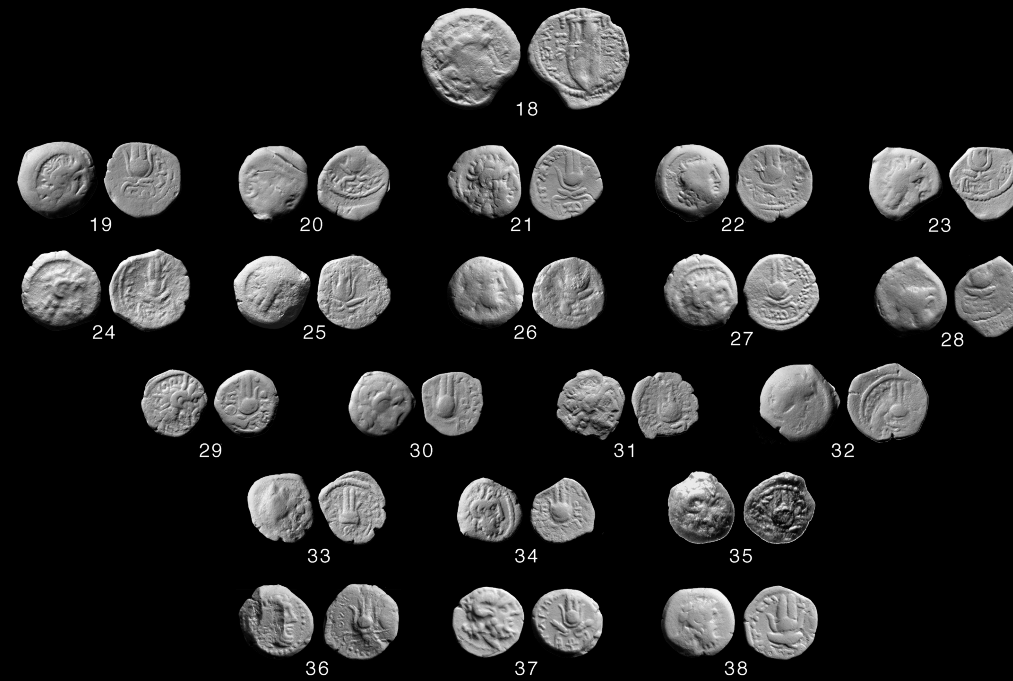
Ptolemy VIII Euergetes II, as *basileus* of Egypt, 145–116 BC

or

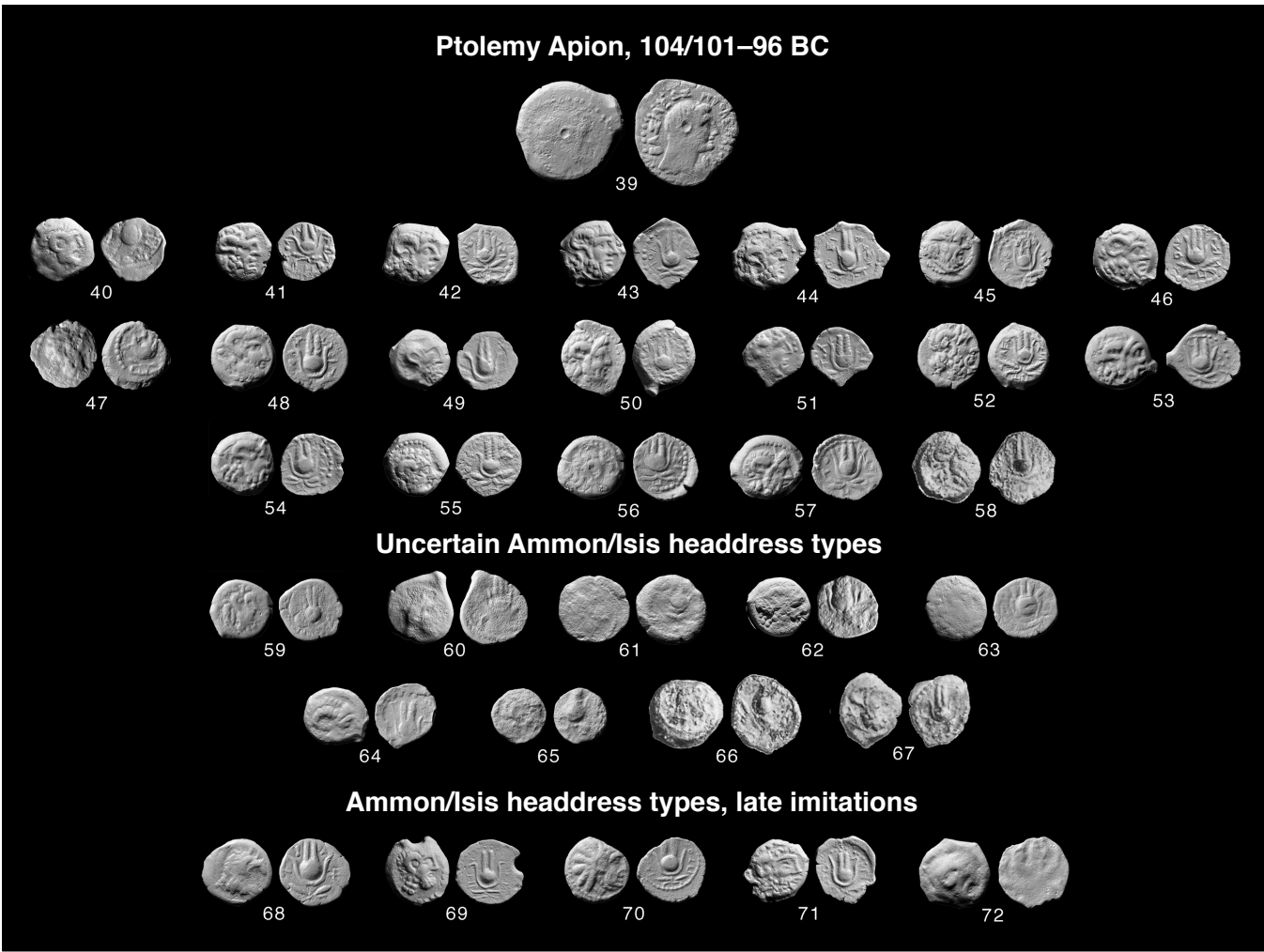
Ptolemy IX Soter II, 115–104/101 BC



Ptolemy IX Soter II, 115–104/101 BC



The small late pieces, with the head of Ammon on the obverse, and the headdress of Isis on the reverse, are by far the commonest types in the Liri database.

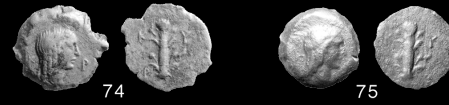


Here are more of these small pieces.

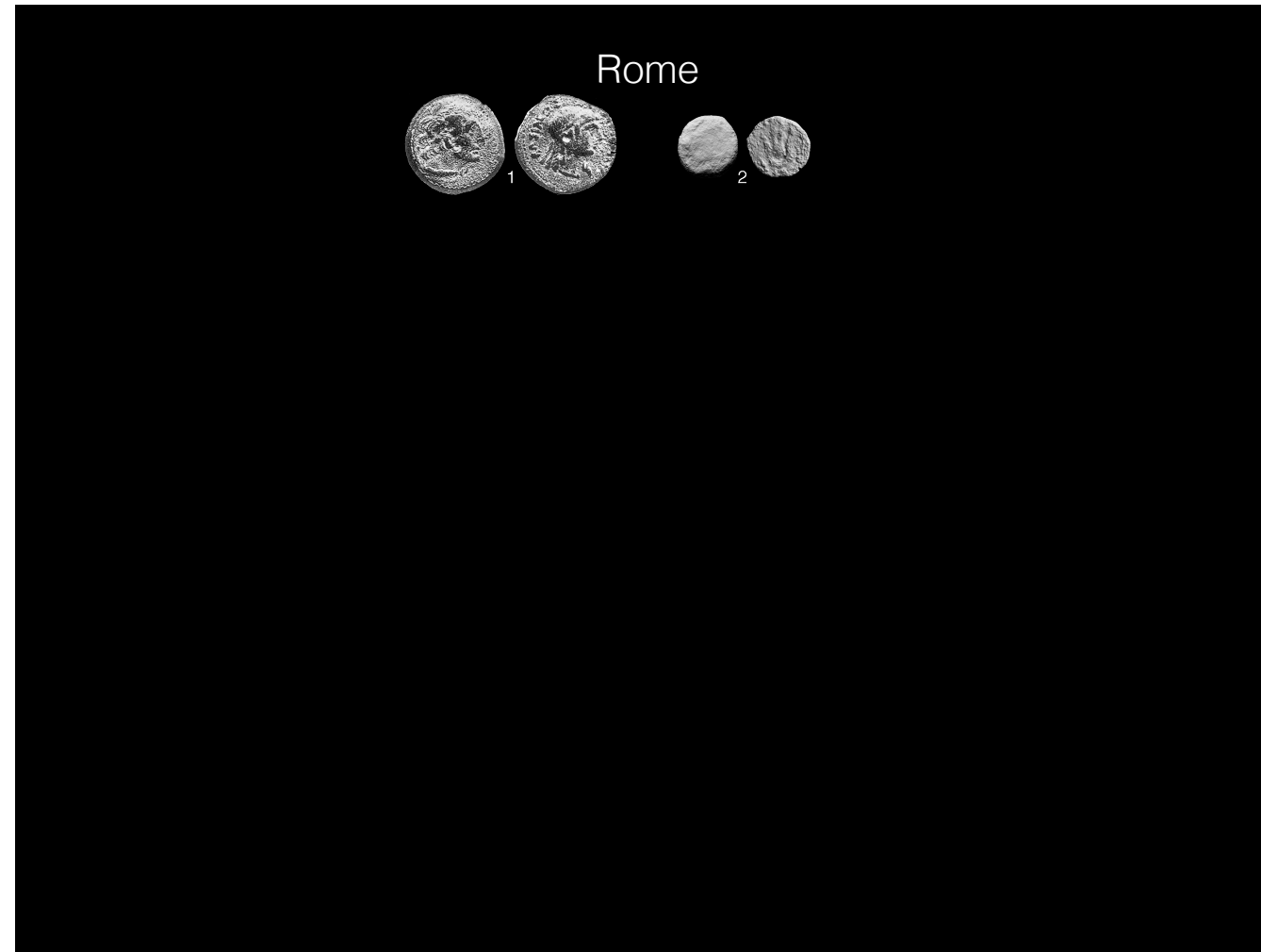
L. Lollius, c. 37–34 BC



Crassus, c. 37–34 BC

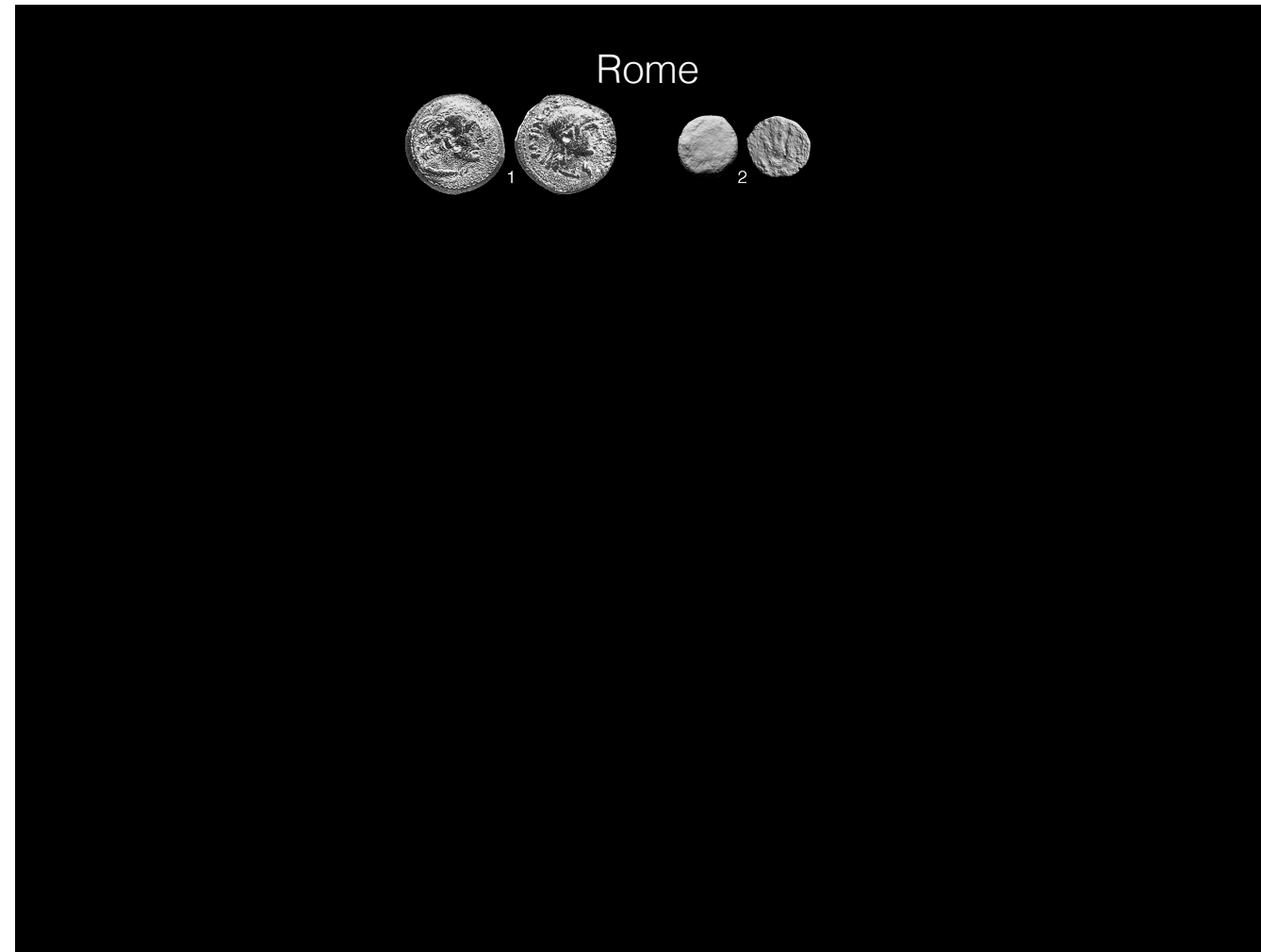


The three coins of Lollius and Crassus show that coins—probably including some of the Ptolemaic coins—continued to arrive throughout the first century BC.

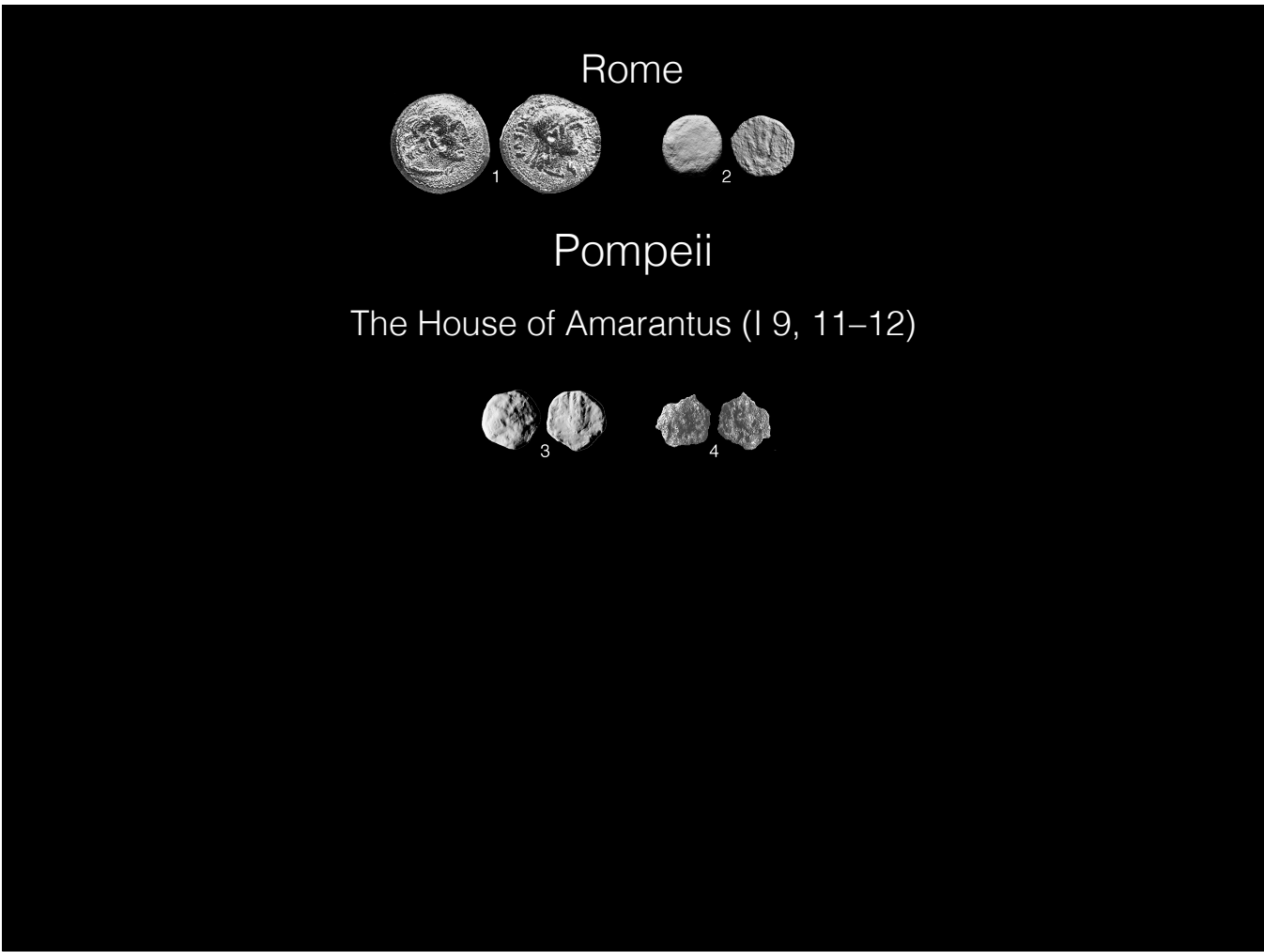


There is little published evidence from Rome. Coin 1, which Suzanne Frey-Kupper published, was found in building the river embankments during the nineteenth century. Coin 2 is said to have been found about 18 km north of Rome, along the *via Flaminia*.

Marta Barbato has described to us the important group of coins from old excavations in Rome, in the Capitoline Museum; it is the only useful sample from Rome that we know. Her six Cyrenaican coins are 2.3% of legible pre-Imperial non-Roman coins.



The British School in Rome excavation in the House of Amarantus, below the AD 79 level, produced two Cyrenaican coins in 60 legible non-Roman coins, or 3.3% of all.



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Rome

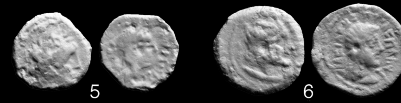


Pompeii

The House of Amarantus (I 9, 11–12)

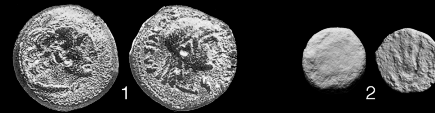


Naples museum: old excavations from Pompeii



There are a few Cyrenaican pieces amongst the coins from old excavations at Pompeii, kept in the Naples museum.

Rome



Pompeii

The House of Amarantus (I 9, 11–12)



Naples museum: old excavations from Pompeii



The House of Ariadne (VII 4, 51–31)



Excavations by the University of Valencia in the House of Ariadne, below the AD 79 level, recovered one coin, from a stratum of the colonial period, following Sulla's conquest of the city.

Pompeii

University of Perugia excavations



There are four Cyrenaican coins from the University of Perugia excavations below the AD 79 level. Of 117 legible coins, 74 were non-Roman, of which these four are 5.4%.

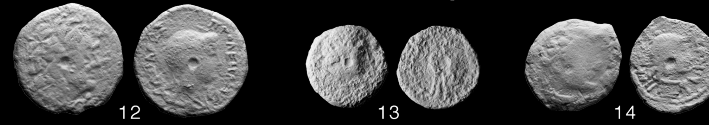
Three were from a votive deposit in the Vicolo di Narciso, that closed at the earliest in the first third quarter of the first century BC. The fourth Cyrenaican coin is from the Casa dei Fiori.

Pompeii

University of Perugia excavations



Universities of Cincinnati and Stanford excavations (PARP:PS) (VIII 6, 1-15)



The Universities of Cincinnati and Stanford excavations, below the AD 79 level, recovered 68 foreign coins (including 27 canonical—not pseudo-mint—Ebusitan and eight Massaliot coins). There are 118 coins of the Pompeian pseudo-mint, and 15 coins are recorded as being either canonical Ebusitan or coins of the Pompeian pseudo-mint imitating Ebusus. The three Cyrenaican pieces were found in strata of Imperial or later times; they represent 4.4% of the foreign coins.

Pompeii

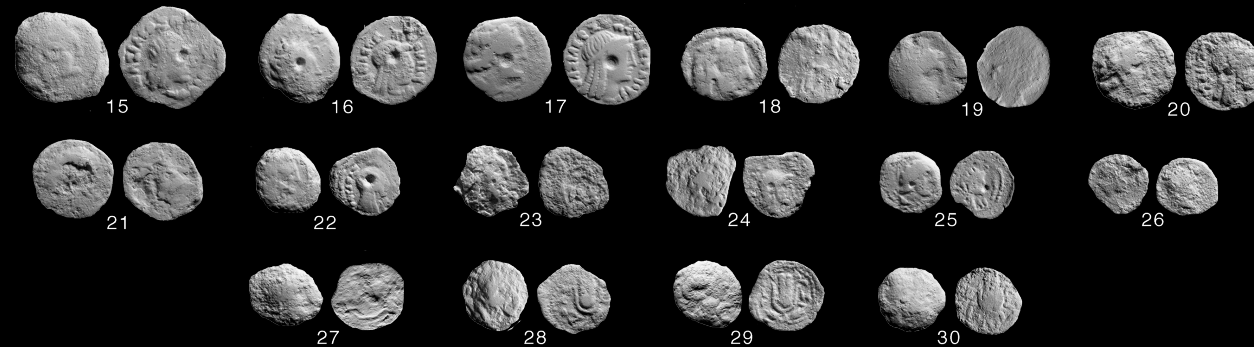
University of Perugia excavations



Universities of Cincinnati and Stanford excavations (PARP:PS) (VIII 6, 1-15)



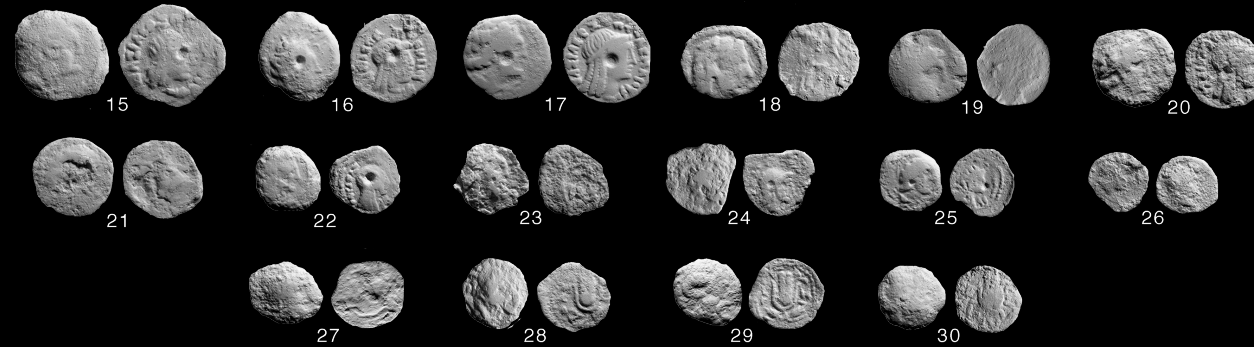
The Anglo-American Project at Pompeii excavations (AAPP) (*insula V 1*)



The Anglo-American Project at Pompeii excavations, below the AD 79 levels, recovered 18 Cyrenaican coins.

Pompeii

The Anglo-American Project at Pompeii excavations (AAPP) (*insula V 1*)



	Canonical	Canonical or Pseudo-mint	Pseudo-mint	Total
Ebusus	39	124	223	386
Massalia	9	262	31	302
Total	48	386	254	688

There are 82 “regional and foreign imports”, not counting Massalia and Ebusus; and it is difficult to estimate the number of coins of these two mints—that is, to distinguish them from coins of the Pompeian pseudo-mint with these types—because Hobbs does not always do so, as this table shows.

At Pompeii, the proportion of canonical Massalia to coins of the Pseudo-mint imitating Massalia is general rather low, while the proportion of canonical Ebusus to imitations of Ebusus is usually slightly less than 50%. Applying a ratio of 5/95 to canonical and Pseudo-mint “Massalia”, and 45/55 to canonical and Pseudo-mint “Ebusus” in these finds, we can tentatively estimate that there are really about 199 foreign coins. Four coins are at best uncertain, and two not illustrated; discounting these, Cyrenaican coins represent about 6.0% of the whole. Of the nine Cyrenaican coins listed by stratigraphic unit, one dates to before Sulla’s conquest in 89 BC; the others are all in considerably later contexts.

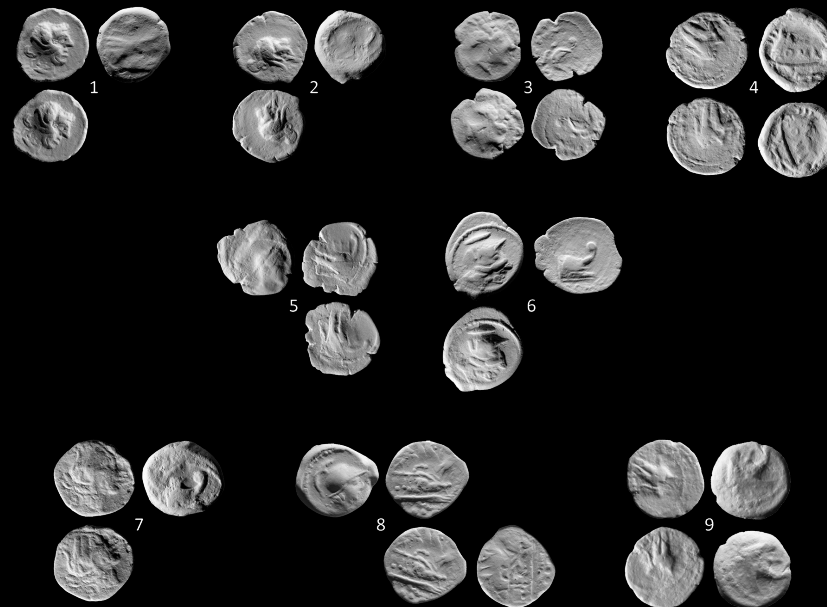
Gragnano



A votive deposit at Gragnano (Stabia) contained over 600 coins, mostly bronze and probably closed with Sulla's conquest of Pompeii, in 89 BC. Four Cyrenaikan coins have been published, and these two that illustrated. We don't have the data to estimate the percentage of Cyrenaikan coins.

Overstrikes

1. Imitating Rome



There are a substantial number of overstrikes on the small head of Ammon / headdress of Isis pieces. The largest group draws on Roman types. I have documented ten examples, five from the Liri, and there is the specimen in Marta's materials from Rome.

Overstrikes

2. Part of the “Italo-Baetican” series



A



B



C

There are other overstrikes in the Italo-Baetican series. These are characterised by a number of unusual shared images, not otherwise known on coinage. This is “the man with a shovel”, or *furnacator*.

Overstrikes

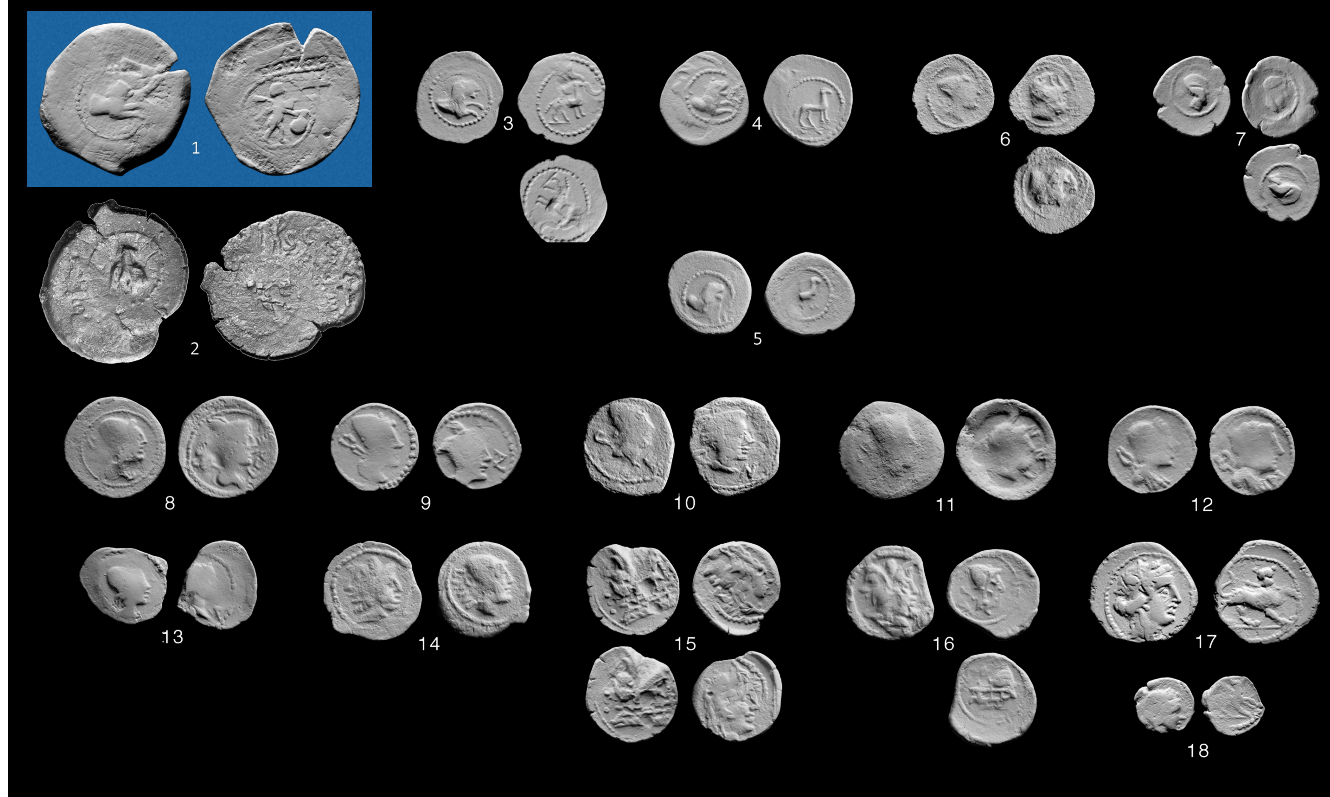
2. Part of the “Italo-Baetican” series



He is used, for example, on a group of overstrikes on asses of the 90s and 80s BC. They were probably made in the late 80s BC, as the undertype of this coin—an as of 84 BC—shows.

Overstrikes

2. Part of the “Italo-Baetican” series



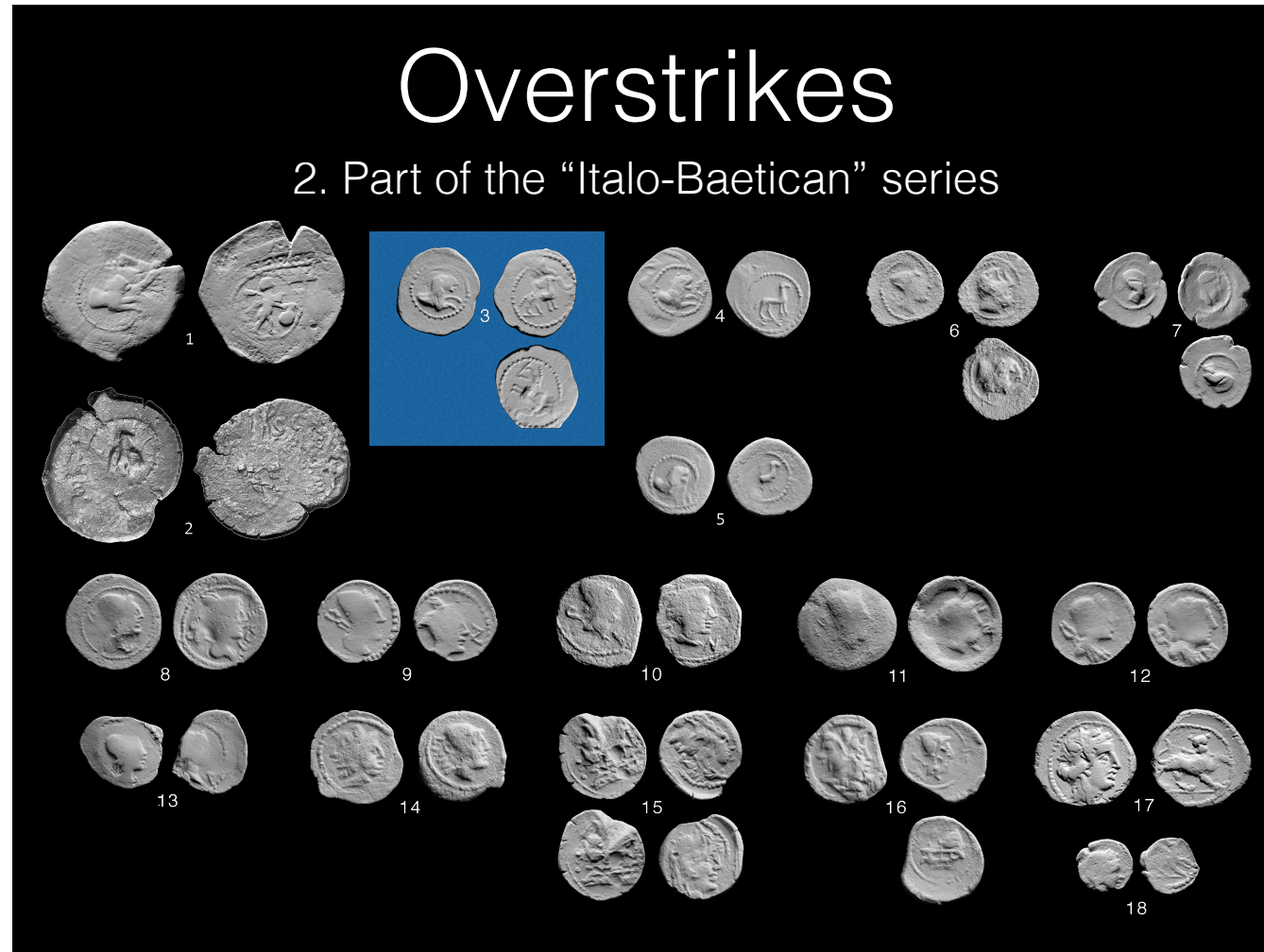
There is divisional piece [click](#) (coins 3 and 4) that shares the same forepart of lion obverse, at least one of which is over a Cyrenaican head of Ammon / headdress of Isis piece.

One of these smaller pieces is itself overstruck [click](#) with Vulcan/Hercules types. It belong to a period when the Italo-Baetican issues were undergoing size and weight reductions, for example: [click](#) coin 7; [click](#) coin 13, at the end of the Vulcan/Mercury group; [click](#) coin 16, at the end of the Janus/Vulcan group; and [click](#) coin 18, at the end of the enormous Dionysus/panther issue that dates to the Social War. All these issues seem to have been made by Romans, or supporters of the Roman

Both groups of overstrikes raise the possibility that the Cyrenaican pieces were at least selectively used, and perhaps deliberately imported for overstriking.

Overstrikes

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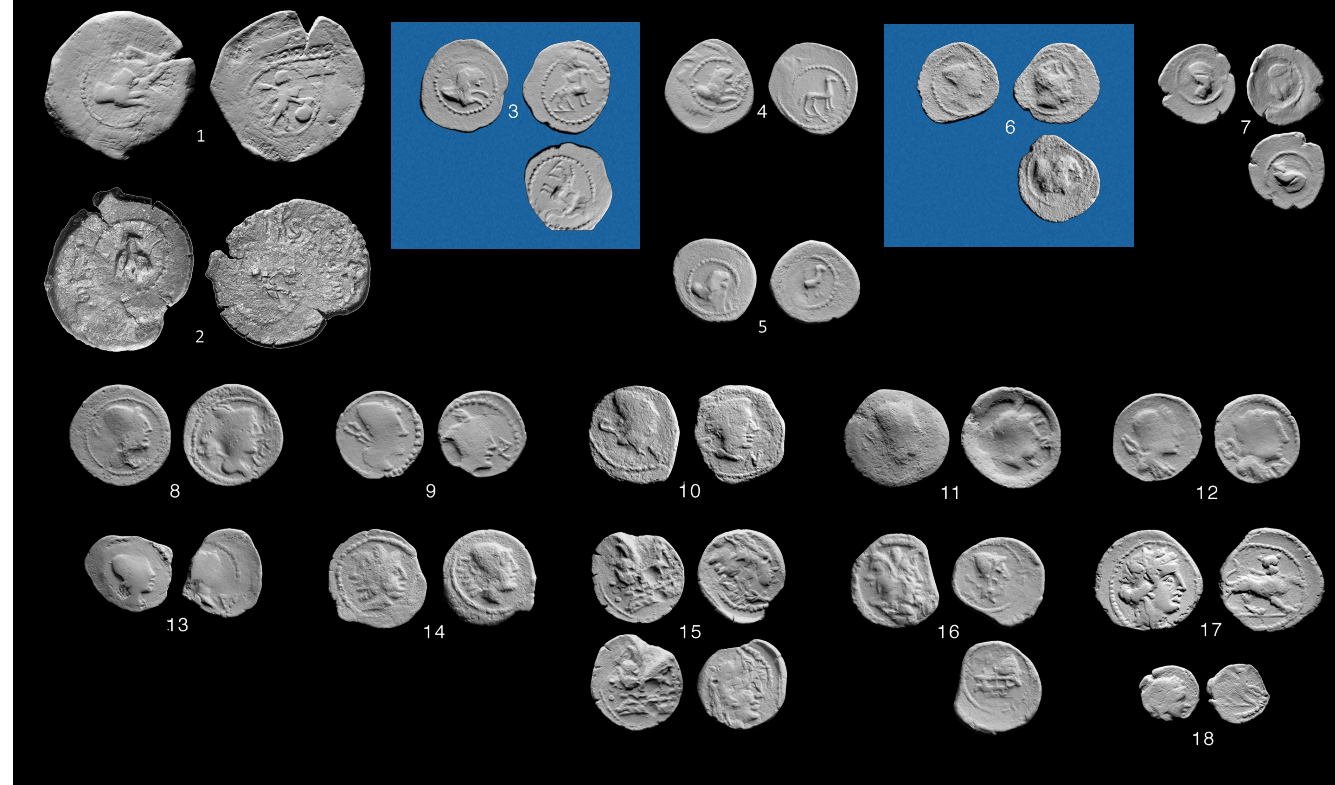
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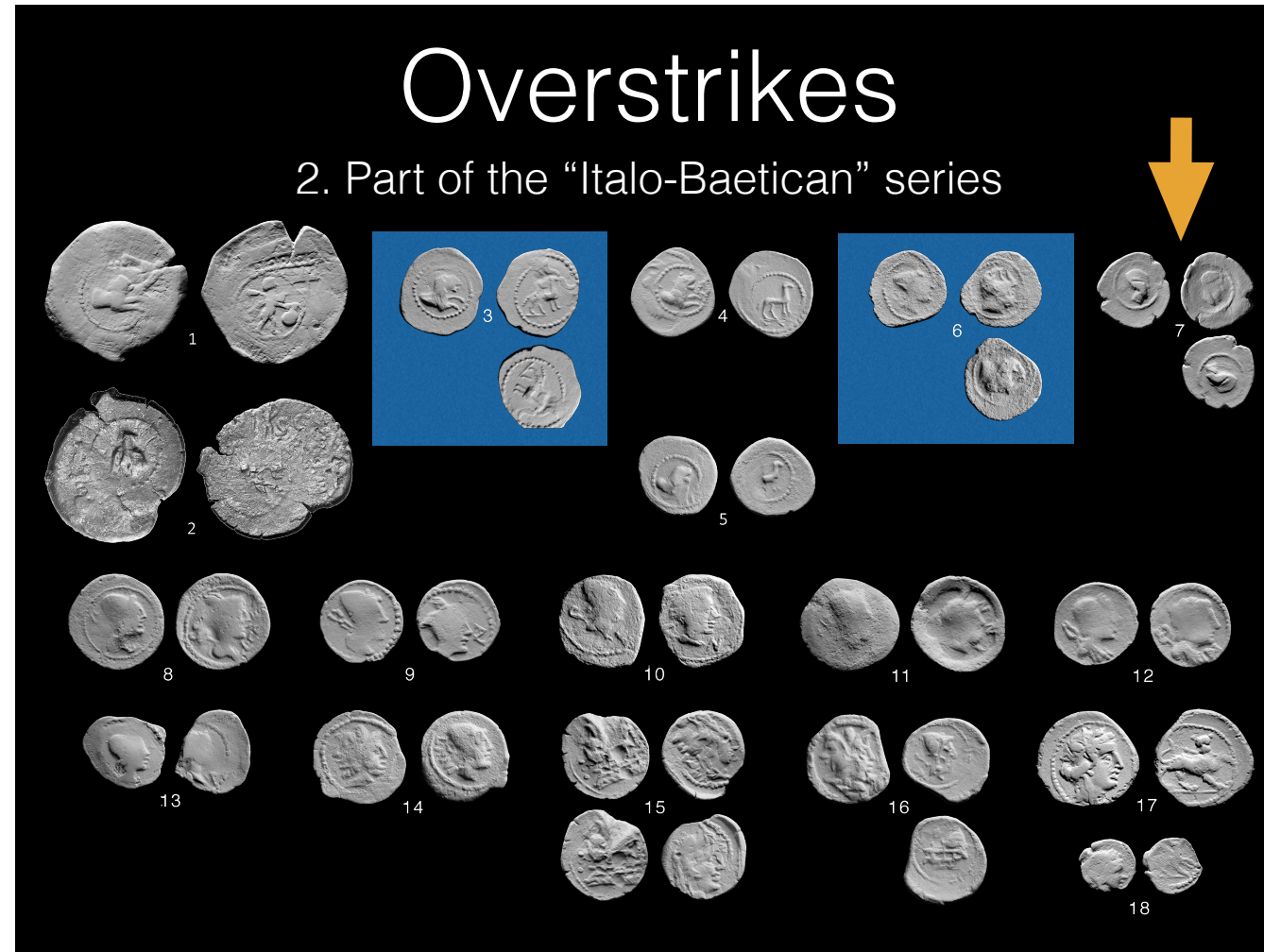
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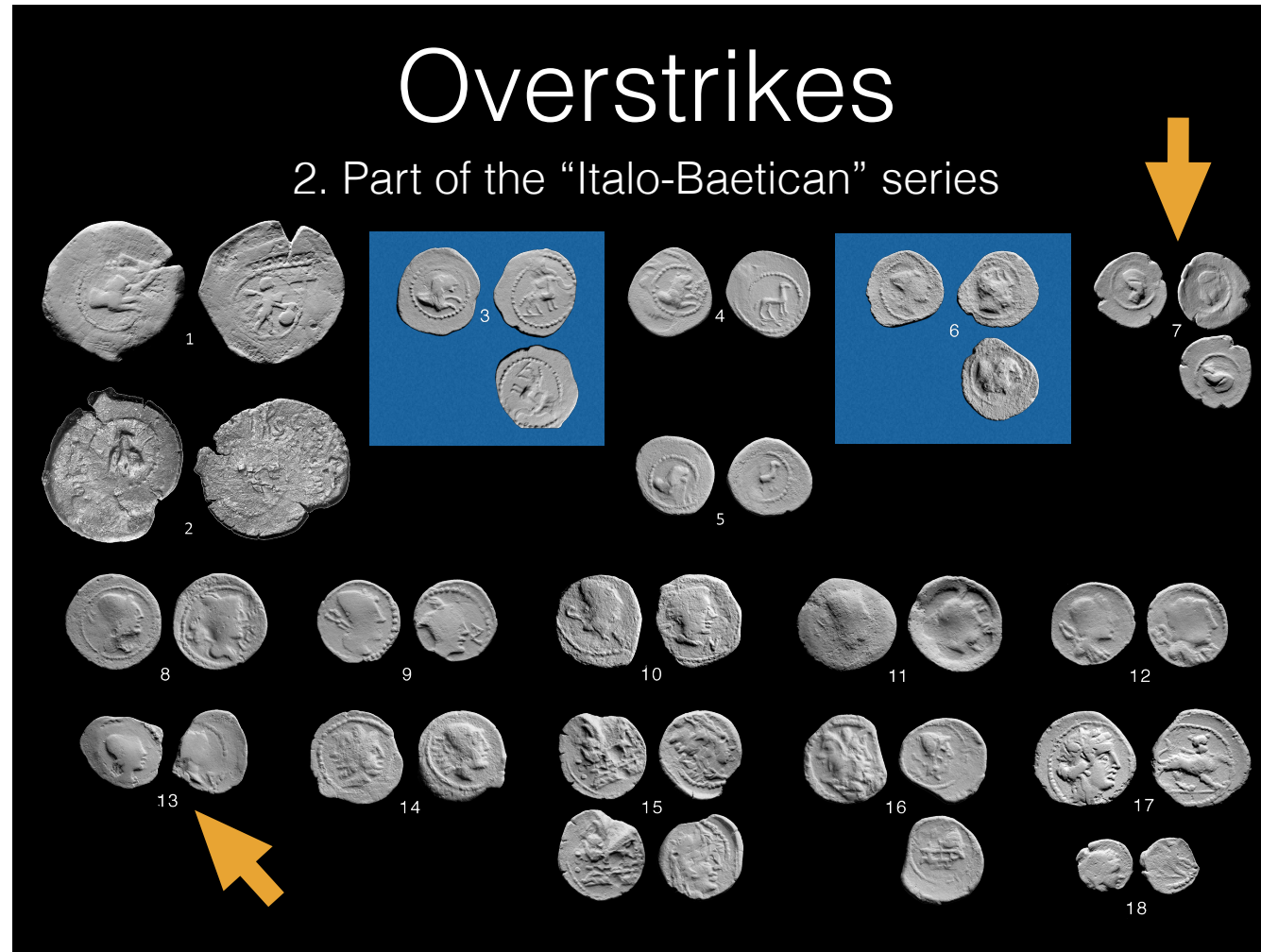
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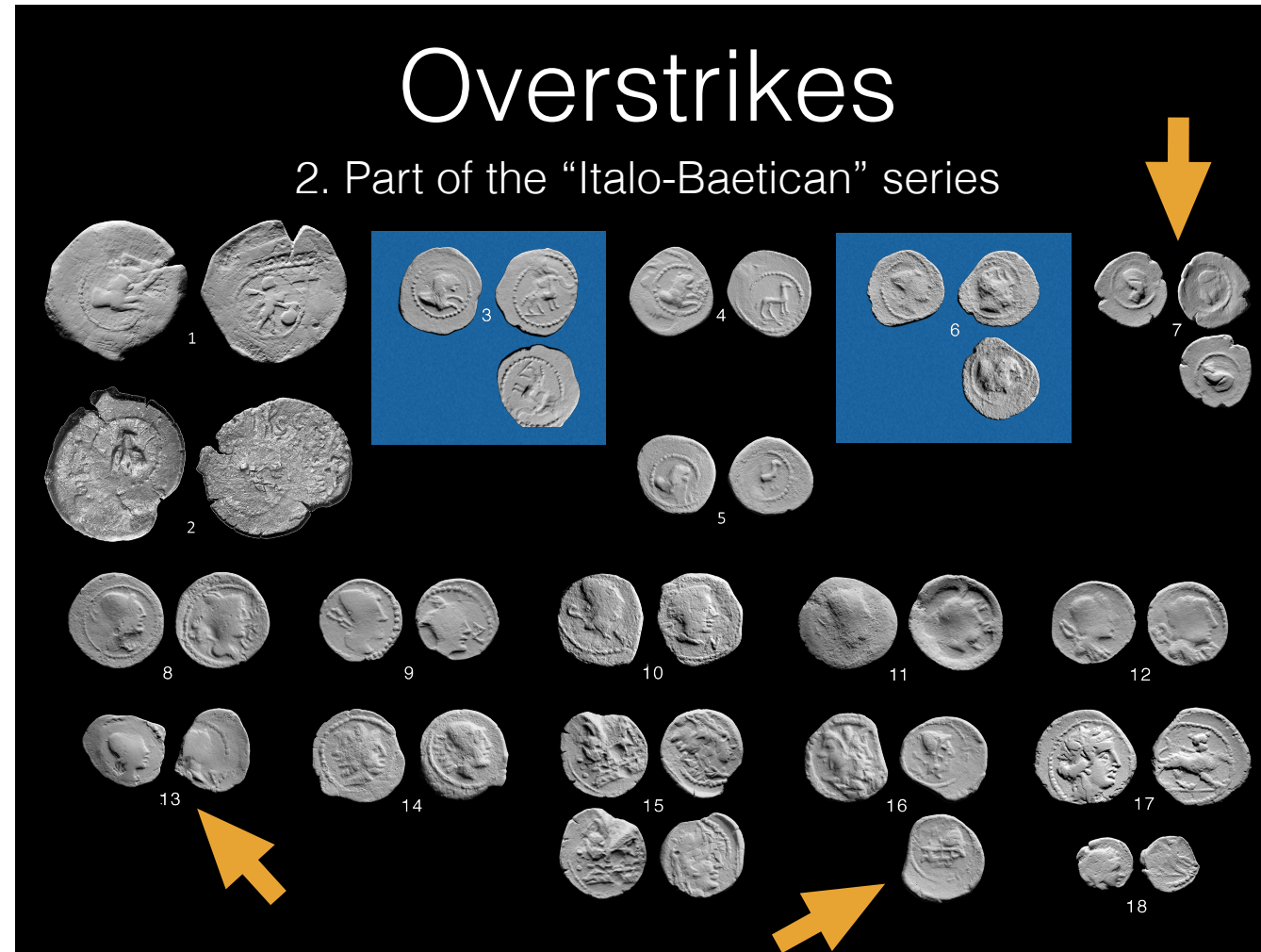
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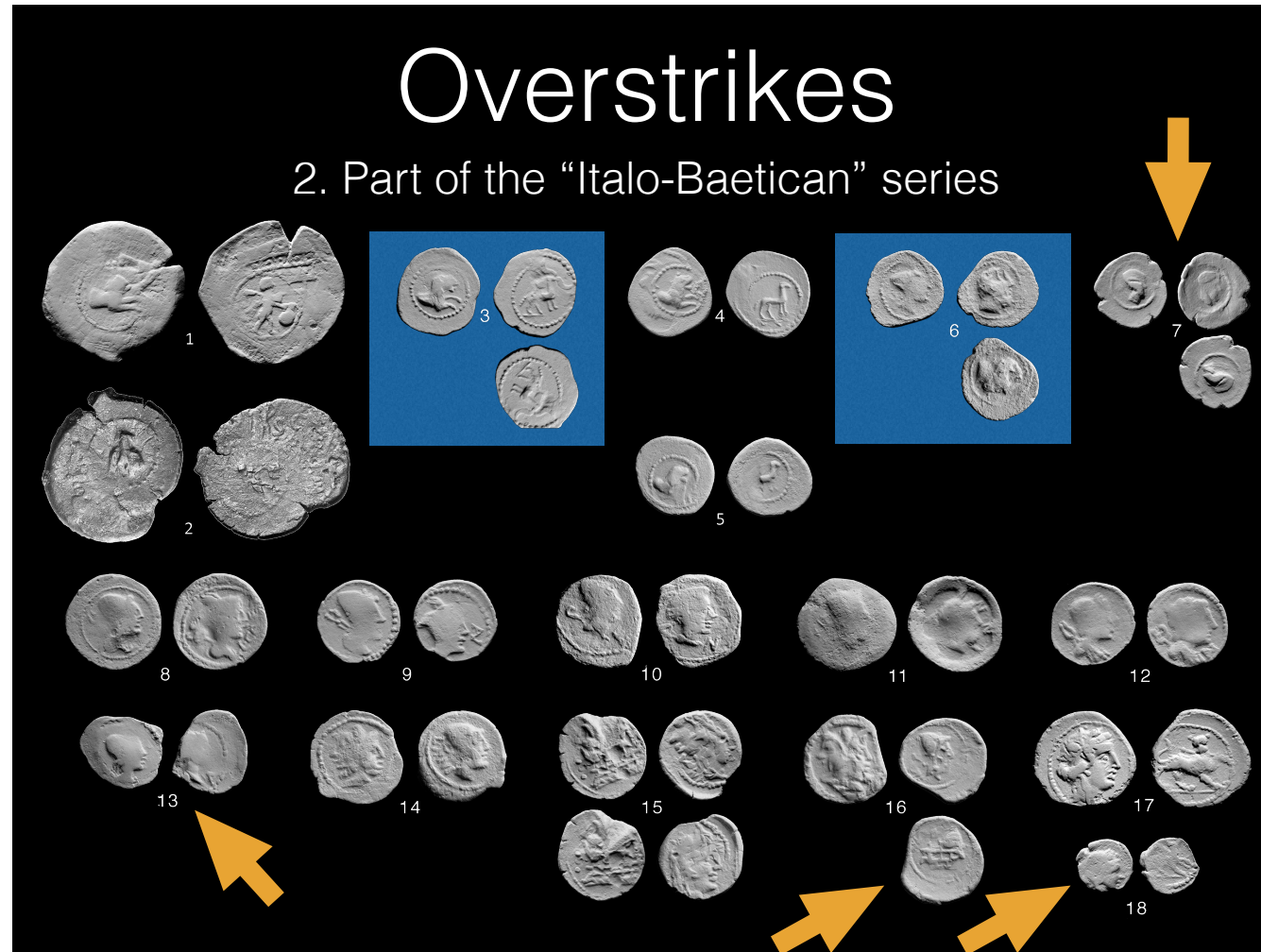
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Conclusions

Group	%	Group	%
Rome	2.3	Perugia University	4.5
Liri database	3.7	PARP:PS	4.4
House of Amarantus	3.3	AAPP	6.0

Cyrenaica as a proportion of foreign coins

The coins of Cyrenaica are common in finds in central Italy, as this table shows.

I have shown that a very large block of Ebusan coin was deliberately brought to Pompeii, about 140 BC, for use as small change; if we exclude these from the AAPP excavation's estimated 199 foreign coins, the percentage of Cyrenaican coin rises to 8.4%. We must take the late date of AAPP site into account: the period of greatest construction was the first century: the other samples may therefore include more coins from earlier times.

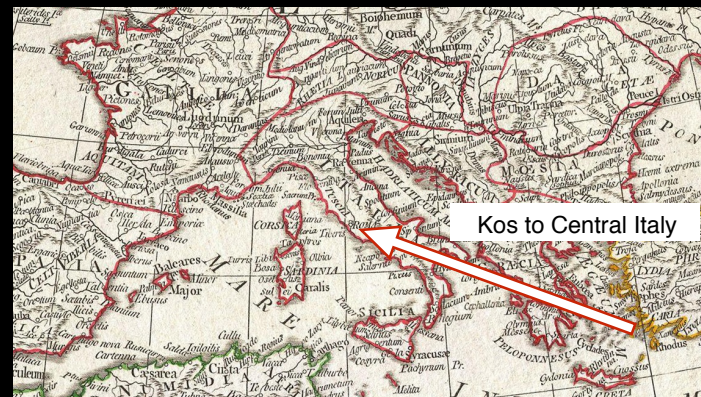
Conclusions

Group	Ratio	%
Rome (old excavations)	2 : 6	33.3
Liri database	63 : 72	87.5
House of Amaranthus	7 : 30	23.3

Proportion of head of Ammon / headdress of Isis to all other issues

The high ratio of late head of Ammon / headdress of Isis coins in the Liri is interesting. One explanation may be a question of arrival times; the two coins from Gragnano, with the head of Libya type, arrived before 89 BC; and the one coin with a high archaeological date from the AAPP excavations is also a head of Libya piece. Other possibilities are that *Minturnae* was particularly involved in the Roman take-over of Cyrenaica, or that a large number of head of Ammon / headdress of Isis coins were deliberately imported.

Conclusions



XIX/1 – KOION

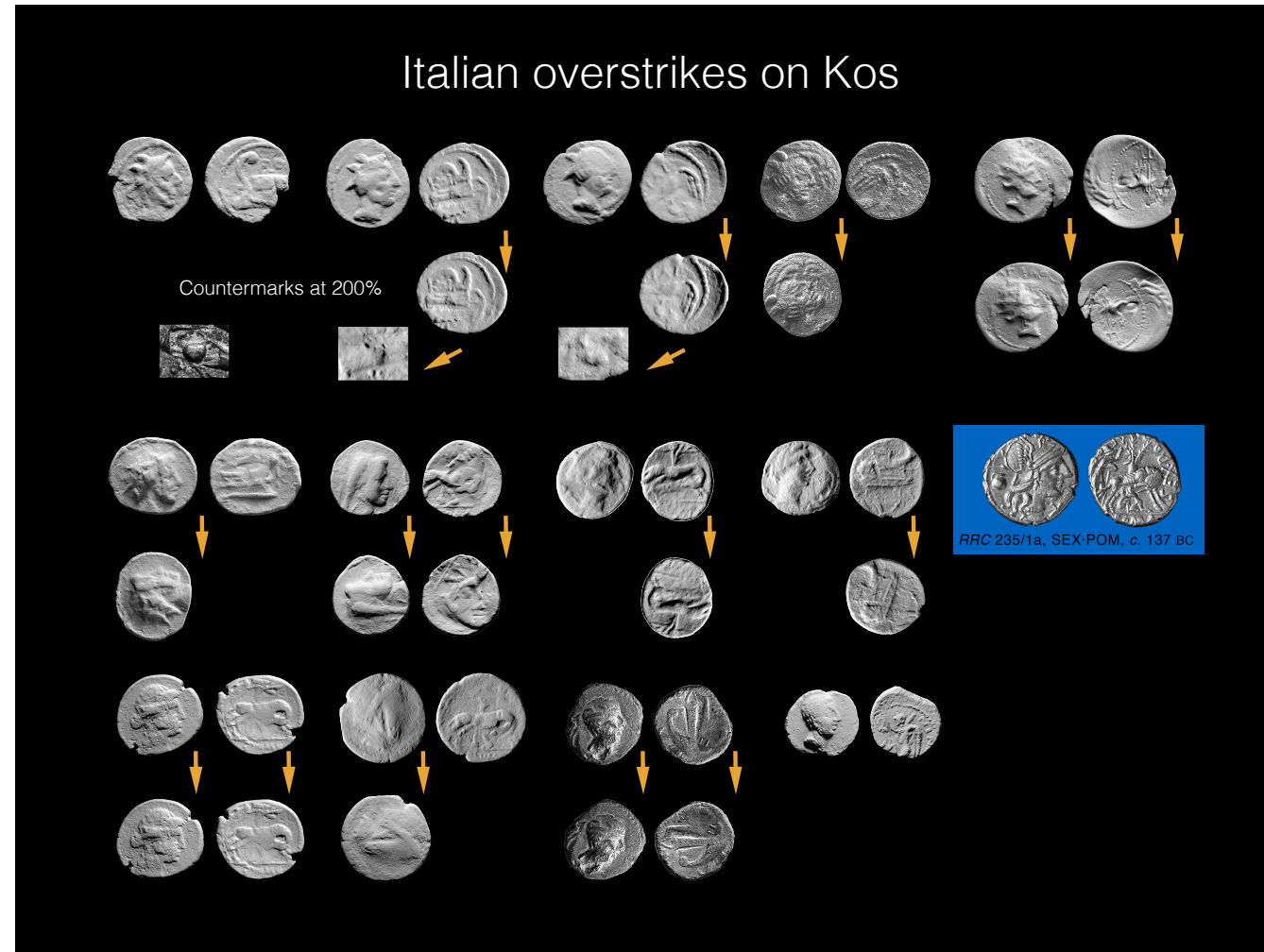


XIX/2 – KOION

Hemi-obols, 210/200 – 180/170 BC

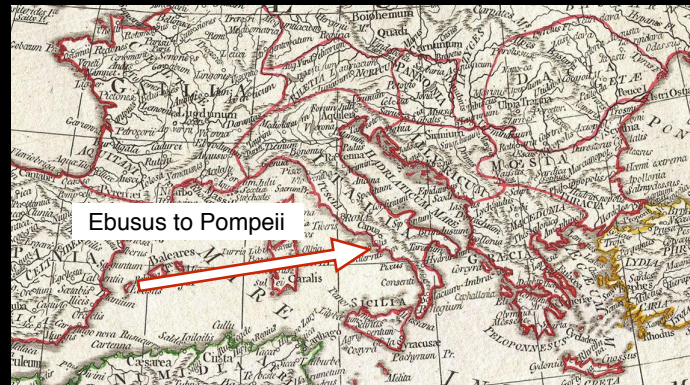
Suzanne Frey-Kupper and I have recently shown that two enormous blocks of bronze coin were brought to central Italy in the second century BC, and were used as they were, or overstruck. One was of this Koan coin. The block came at some stage between 180/170 and 140 BC, perhaps to Rome itself.

Italian overstrikes on Kos



And here are the Italian overstrikes on that coin. Some imitate a *denarius* of about 137 BC.

Conclusions



c.214–c.195 BC

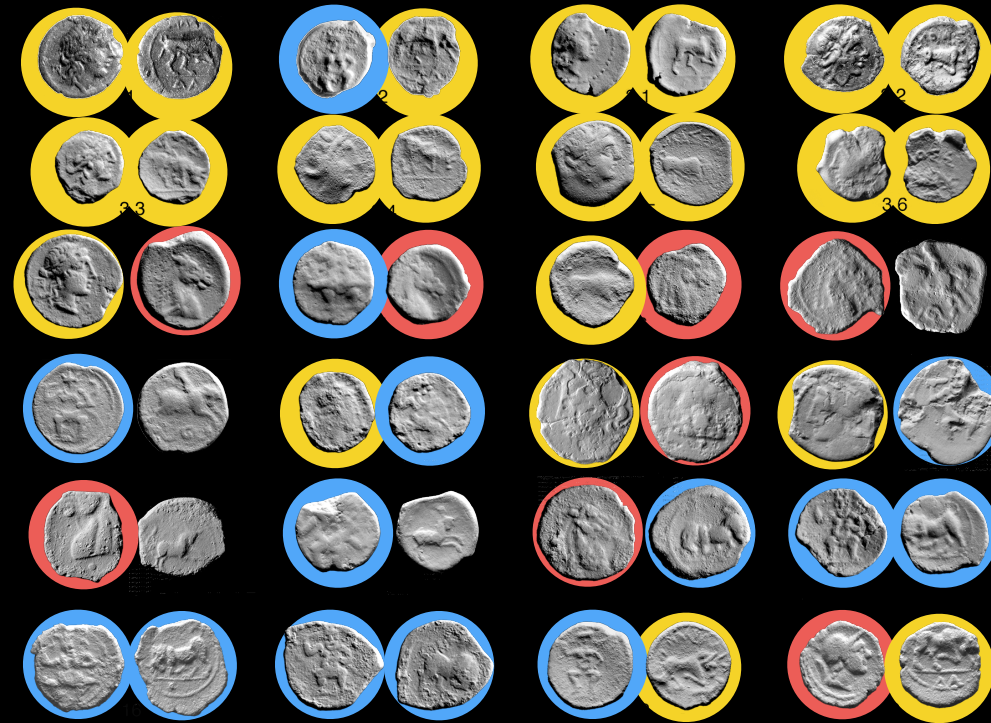


c.214–c.150/130 BC

The other great block is from Ebusus, which came to Pompeii, probably about 140 BC. most coins were of the Bes / Bes type on the right.

The Pompeian Pseudo-mint

Μασσαλία Rome Ebusus

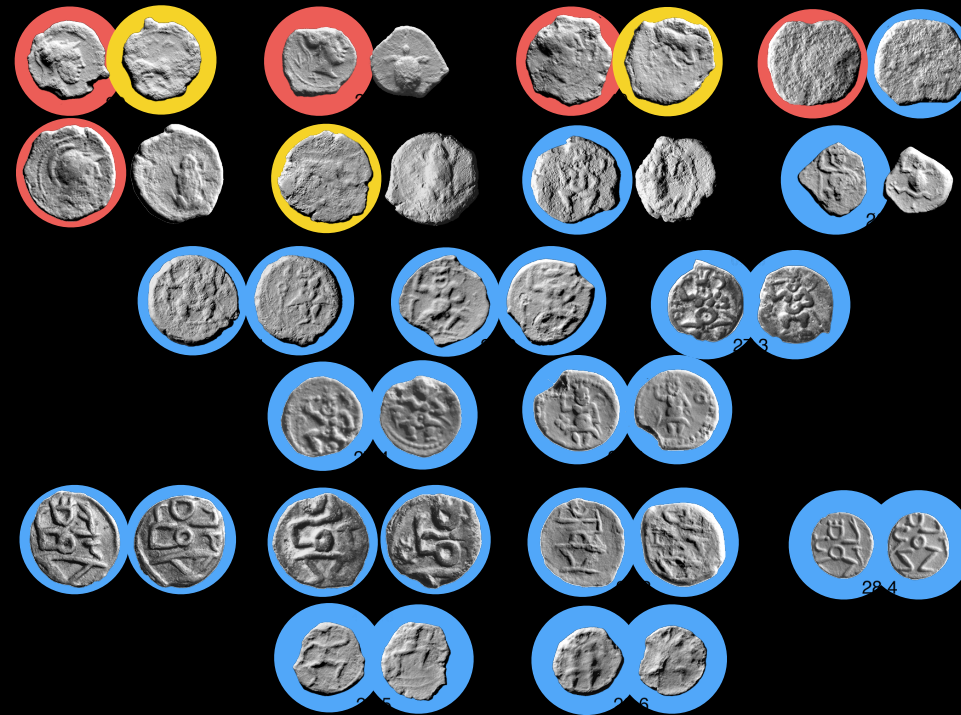


Ebusan coins were heavily imitated by the Pompeian pseudo-mint. Its coins, with the Ebusan imports, supplied most of the small change at Pompeii from about 140 BC to the time of Augustus.

I'll now briefly show the issues of the Pompeian pseudo-mint. I stress that it is wrong to isolate the imitations of the different mints from the whole, because, as you can see, the imitations mixed the images, and even legends, of the prototypes. This reflects the very mixed coin stock in central Italy at the time.

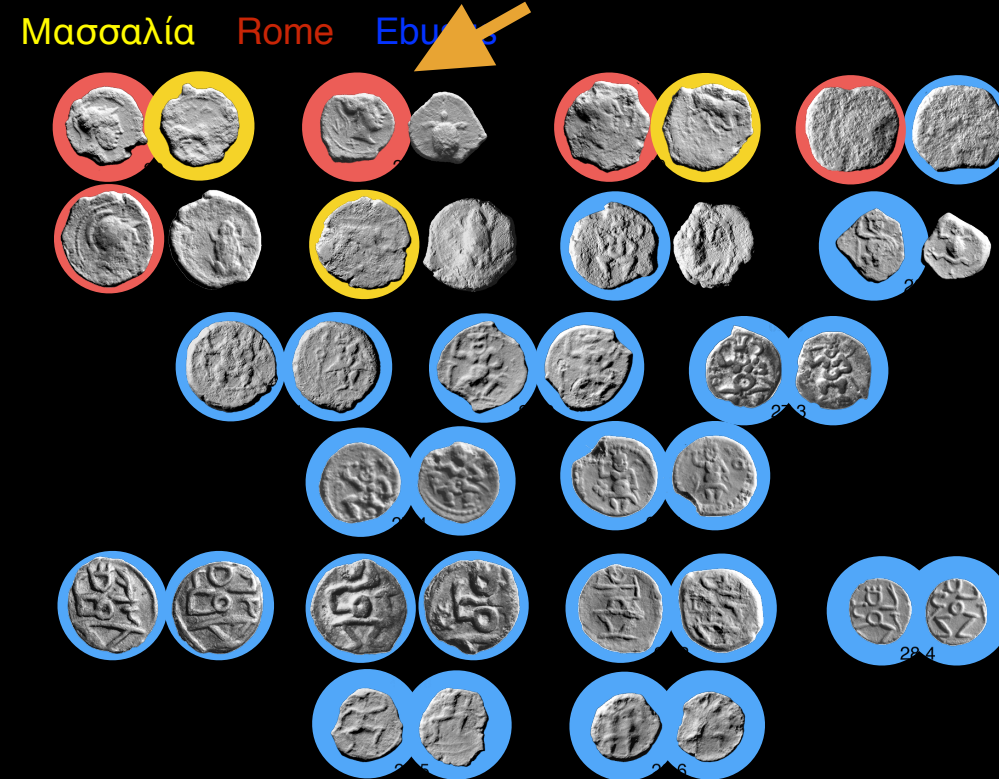
The Pompeian Pseudo-mint

Μασσαλία Rome Ebusus



The commonest types, and perhaps the earliest, are the “rudimentary Bes” that you see here. A curiosity: If you look at the obverse of the second coin from the left [click](#), you’ll see that it imitated the gold sixty-as coin of Rome, complete with the value-mark.

The Pompeian Pseudo-mint



The commonest types, and perhaps the earliest, are the “rudimentary Bes” that you see here. A curiosity: If you look at the obverse of the second coin from the left [click](#), you’ll see that it imitated the gold sixty-as coin of Rome, complete with the value-mark.

The Pompeian Pseudo-mint

Μασσαλία Rome Ebusus Athens



And, as you can see, even Athens [click](#) ,with its ethnic, was imitated.

[illegible]

And, as you can see, even Athens [click](#) ,with its ethnic, was imitated.

Could the head of Ptolemy I / Isis headdress pieces also have been a deliberate import?

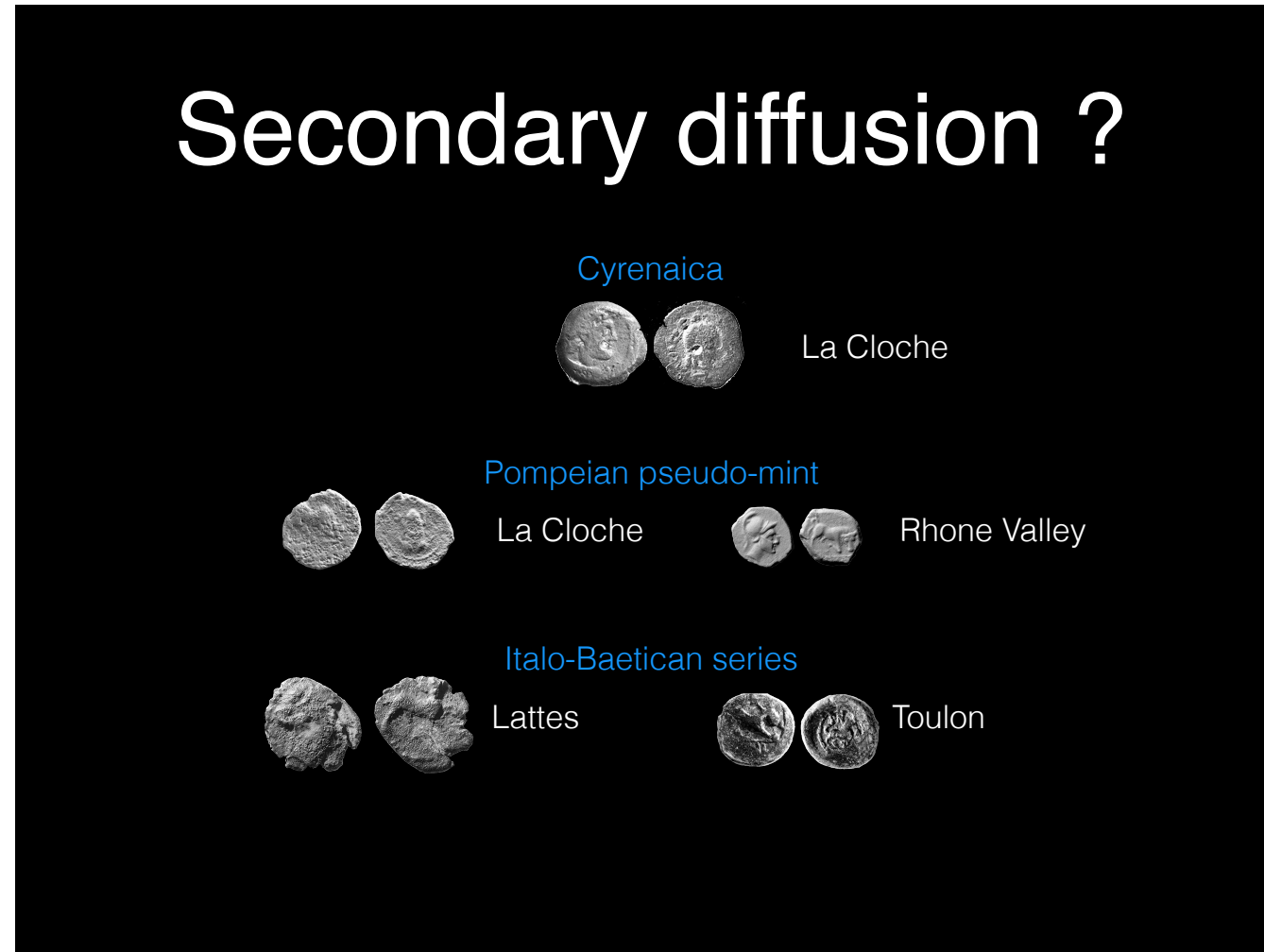
Criteria for identifying blocks

- ? A. The numbers of relevant coins in the receiving area, checked against their relative frequency in other areas
- X B. The presence of only a specific issue, or set of issues, without significant numbers of the preceding or following issues
- ? C. The one-sidedness of the exchange, that is, the lack of evidence of a two-way flow of coins
- ? D. The relationship of the coins to non-numismatic finds
- ✓ E. The evidence of the use of the coins in the area of importation, including imitations and overstrikes.

Suzanne Frey-Kupper and I proposed this set of criteria, to identify deliberately imported blocks. For criterion **a**, we know that these coins arrived in considerable numbers, but we have little information on their relative presence elsewhere. For criterion **b**, a number of earlier coins accompanied this issue, but the relatively higher proportion of the issue in the Liri database might suggest that a block arrived there. We don't have the information to evaluate criterion **c**, that is, whether coins from central Italy about 90 BC flowed to Cyrenaica, but, in any case, the circumstances of Rome's take-over would mask the significance of this criterion. A proper evaluation of criterion **d** would require considering, in detail, whether other artefacts flowed from Cyrenaica to central Italy at the time, and, again, we don't have the information. In the case of criterion **e**, however, we do have definite evidence of the overstrikes.

The importation of a block is possible, but we lack the information to decide.

Secondary diffusion ?



The secondary diffusion of the mass of Cyrenaican small change is more difficult to document. Here's a coin from the oppidum of La Cloche, about 14 km north of Massalia, which was sacked by Caesar's troops in 49 BC. Feugère and Py, in their compendium of coins found in Southern France, listed only 33 coins from Italy and Sicily, Rome excluded. But we now know a coin of the Pompeian pseudo-mint at La Cloche, and another from the Rhône Valley. There are also coins of the Italo-Baetican series from Lattes and Toulon. All date to about the end of the second century BC. This proportion of rare and datable central Italian coins strongly suggests frequent contact between south-Western France and central Italy, at about the time the Cyrenaican piece arrived at La Cloche. It probably rode this route north, and is not a sign of direct contact between Cyrenaica and Massalia.

Successful warfare drove economic expansion in central Italy, 150–50 BC

Measure	150 BC	100 BC	50 BC
Total nominal value of monetised expenditure (% of nominal income GDP) ¹	39%	56%	68%
Estimated velocity (V) of circulation in mainland Italy ²	1.26 x	1.43 x	2.47 x
Italian nominal GDP (millions of denarii) ³	976	2,464	3,760

Per capita GDP is estimated to have grown at an annual compound rate of 0.54%, and to have increased by 72% between 150 and 50 BC

Source: Philip Kay 2014: (1) 317, tab. 11.20; (2) 319, tab. 11.21; (3) 322, tab. 11.23

The presence of Cyrenaican small change in central Italy, and the overstrikes, is part of the larger phenomenon, the growing need for small change in an increasingly market economy, from about the middle of the second century BC, when wealth flowed to Rome and its allies, as a result of successful warfare. Philip Kay has recently argued that the period from about 150–50 BC saw the most rapid growth in the economy of Rome and its central Italian allies, unmatched even in the high Empire, and we reproduce here some of his key estimates.

It appears that Roman small change did not reach its allies, like Pompeii, or even its colonies, like Minturnae, in quantities sufficient for the rapid growth in market transactions; it probably did not even suffice for Rome and its immediate vicinity; and, after Sulla, Rome stopped coining bronze altogether. For this reason, central Italy is characterised by a large number of informal, low-value bronze coinages, between the middle of the second century BC and the flood of Augustus' large-scale new coinage. This is not a general late Hellenistic phenomenon, as it does not occur elsewhere. This is the environment in which Cyrenaican coins operated, once they had arrived: they joined the mass of varied Roman, obsolete Italian, imported foreign and imitative, and informal coinages, that were all pressed, it seems, into use.

Thank you

