

Coins and Archaeology: the (Mis)use of Mithridatic Coins for Chronological Purposes in the Bosporan Area

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Coins in context tend to be the artefacts most in demand by field archaeologists (although, for the area and the period of time encompassed by this conference, amphora stamps, if extant, are usually better). Yet, they tend to make poor use of them. Obsessed with chronology, they abuse and neglect at the same time that type of material. Generally speaking for, Classical antiquity coins are indeed among the best dated documents we may find (possibly the best dated are the most commonly used) and these favourable circumstances give them a unique value.

Chronological measures can be very accurate with ancient coinages. Most of the Imperial Roman coins can be dated within a span of less than twelve months owing to the mention of certain imperial charges (how many times the Emperor was granted the *tribunicia potestas*, how many times he was *consul* or *pontifex maximus*, and so on).

For the Greek world, many Hellenistic coinages, both royal and civic, do indicate the year of a local era whose start is generally known. And there are a few cases, for which we are fortunate enough to know not only the year of production but also the month. It is appropriate here to sum up our information.

The most famous and widespread of these coinages are the Athenian “stephanophora”, the so-called “New Style” coins.¹ On the reverse, the owl appears standing on an amphora on which we may distinguish one of the letters from *alpha* to *nu*, i.e. from 1 to 13 (the twelve regular months + a thirteenth one for the “embolistic” years of the Methonic cycle). This would be most convenient were it not for the fact that, as for the eponyms on amphora stamps, we can never be absolutely sure of the sequence of years since those are not numbered but given together with two names of what numismatists call, not without risk, “monetary magistrates”. We thus have to reconstruct, through a minute study of die-links and hoards, the most likely sequence of issues. The same pattern occurs with some Rhodian imitations struck in Mylasa, a Carian mint, in late Hellenistic times.² This case is complicated by a number of factors but mainly by the lack of any epigraphic assistance since there is no proper name given in full on the reverse of those small silver denominations. Apart from interesting statistics about month frequencies,

there is no hope of determining in which year issues were struck. An additional case of the same nature has to be published by Ashton. It concerns the cistophoric coinage of Tralles.

The easiest cases are the ones which refer to a specific era. Three are known, all royal and located in Eastern Anatolia or Mesopotamia in the 1st century BC or the 1st century AD. Most famous is the coinage of Mithridates Eupator, called "the Great", King of Pontos (c. 120-63 BC).³ In May 95 BC, he suddenly decided, immediately after a strike without any chronological references, to add on reverse dies the year and the month of the royal era which began in October 297 BC (ΒΣ-Θ). This is quite extraordinary and, to the best of my knowledge, there has been no attempt to explain "why then?" As months never appear on coins of smaller size, gold staters or silver drachms, we may presume that space has to play a role. But once applied to tetradrachms, this habit was pursued until the end of the Mithridatic issues (except for the very last one), with one conspicuous exception: the heavy strike made in 89 BC, presumably for the siege of Rhodos. It could be argued that silver tetradrachms of Mithridates Eupator are the most precisely dated coins of all ancient coinages, both Greek and Roman. They afford a unique opportunity to study the rhythm of striking, an opportunity I have tried to take advantage of in my *PhD*.⁴ An opportunity greatly facilitated by the fact of the Mithridatic wars, which means that we know very well the historical sequence of events during those much troubled times.

This last comment does not apply to Parthian kings who used this device for a while. Indeed, except for the moments of real fighting against the Romans, we are not so well provided with documentation about the *fasti* of those reigns. Consequently we may know that tetradrachms were minted from June to September 37 BC but we are unable to explain why the strike stopped then and for what specific purpose that issue was minted.⁵ At least, Parthian kings used to note months on their tetradrachms for centuries. It is even more difficult to understand why some drachms of Tigranes the Great (c. 95-c. 55 BC), struck at Artaxata between 61 and 58 BC, have letters on their reverse which seem to refer to months (from A to I, 1 to 10).

Leaving aside those exceptions, it is worth reiterating, again and again, that basic principle of numismatic expertise: if we are often able to date the time of coin production with remarkable accuracy (within a range of less than twenty years most of the time), that only gives us a *terminus post quem*. Coins are not as fragile as common or fine pottery. They tend to keep circulating for a very long time (see the statistics produced by S. Rotroff in this volume comparing deposits in which coins or amphoras were the "last datable objects"). The lifetime of circulation is itself rarely well defined. Moreover, the presence of one coin in an archaeological layer does not mean that that particular type was actually in circulation at the time it was buried. In other words: the field archaeologist has to be careful not to give to coins naïve credence, to be too trusting of their potential chronological assistance.

At the same time, the archaeologist tends (or tended) to neglect the real amount of information coins can bring along for a true historical reconstruction of the past. Coin studies are too often pushed to the end of site monographs, as appendices written by external specialists without real links to the broader questions posed by the excavations. I have tried elsewhere to structure an historical interpretation in a grid of increasing complexity, which starts with most purely numismatic issues and ends with largely historical concerns. The first column gives for each historical issue the most useful (but not the only one) category of coin finds:

Categories of material	Historical issues
Site finds	<ul style="list-style-type: none"> - dating of the archaeological layers - occupation of the site (who? how long? etc.) - "trade" - "prosperity of the site"
Isolated finds	<ul style="list-style-type: none"> - localization of mints - trade and military roads
Hoards	<ul style="list-style-type: none"> - areas of circulation - length of circulation - speed of circulation (study of weights) - homogeneity of circulation (integrated economy or not)

This is more "ingénue" (as we say in French) than "ingenious". It may surely be refined but gives some idea of what could be achieved.

Without even mentioning the self-explanatory issues (with calendar inscriptions), numismatic chronologies are, to a great extent, built on a network of other chronologies (coinages, hoards, etc.), which implies, among other things, a serious risk of circular argumentation. And it is even worse when one needs to employ other kinds of material, since we all try to be very prudent and critical in our own field but are, as it happens, more inclined to uncritically accept the advice of recognized specialists from other fields.

The case examined here is an example of how a change of pattern has in some way contributed to changing ideas elsewhere. This is the story of how a change produces another change which will in turn produce a third one.

The bronze Mithridatic coins have been studied and dated by the Swiss numismatist Friedrich Imhoof-Blumer in a paper published in 1912.⁶ A major improvement at that time, due to one of the most illustrious numismatists of his time, this article has never really been challenged since then. Much more material is now available, some hoards have been scientifically published, archaeological contexts have been made known and emphasized. It turns out that, with this increase of material and by using the tools of modern numis-

matics, the sequence and dates of Imhoof-Blumer are no longer valid as such. Some major revision has to be made. And this has an impact on the chronology of Bosphoran coinages and Bosphoran archaeological excavations as well. Since many “Pontic”, i.e. Mithridatic coins have been found on the northern shores of the Black Sea (not alone in the Bosphoran kingdom) and since many Bosphoran bronze coins have been overstruck on Mithridatic bronzes, those Mithridatic bronzes were used by Russian scholars and others as the key-material in order to establish chronologies for the contemporary Bosphoran coinages and, directly or indirectly, for the Bosphoran excavations. All those are thus in need of some revision. Actually, I dealt with Mithridatic bronzes (being in Athens in 1985) in my *PhD* entitled: “Economical and social history of the Mithridatic wars” but refrained from including this chapter in the published version since, as frequently occurs, it looked to me from the very beginning easy to criticize Imhoof-Blumer but much more difficult to rebuild another model which could be plainly satisfying. What I shall bring along here is – I fear (and I beg you for mercy for that) – an unsympathetic demolition enterprise which is probably more convincing in its criticisms against Imhoof’s sequence than in its new chronological proposals.

The Pontic Cappadocia, as it was called in Persian times or, more precisely, the Kingdom of Mithridates Eupator Pontos failed to use coinage for a very long time. Not a single bronze coin can be attributed safely to this area prior to the last quarter of the 2nd century BC. Until then, only three mints were active, albeit on very different scales: Sinope, Amisos and Trapezous. The vast majority of the coins they struck were heavy silver ones, thus very awkward to daily transactions. Then, all of a sudden, at the end of the 2nd century BC and the first decades of the 1st century BC, which is likely to have been entirely located within the reign of Eupator, no less than thirteen different mints seem to have been active in the strike of many common types. Due to the recent discovery of many of these hoards, these coinages are today very common in public and private collections. A few tens of thousands are likely to exist all over the world.

Their sequence and chronology rest on an article published in 1912 by Friedrich Imhoof-Blumer, whose huge authority seems to have discouraged anyone for re-examining the case. It comes as no surprise that the two specific volumes of the *Sylloge Nummorum Graecorum* recently devoted to the Black Sea coinages adopt, *sine varietur*, Imhoof-Blumer’s sequence (*SNG British Museum – Black Sea* and *SNG Stancomb*). True, the sequence of Imhoof made a considerable progress compared to the former sequences which I only recall here for a thorough understanding of the problem:

Table 1 Sequence of BMC (Wroth 1889)	Table 2 Sequence of RG (Babelon et al. 1904)
Zeus/Eagle (c. 19.80g) - 22	Young man/Bowcase (c. 20.60g) - 13
Zeus/Eagle (c. 7.50g) - 23-29	Zeus/Eagle (c. 19.80g) - 14
Athena/Perseus (c. 19.00g) - 30-36	Zeus/Eagle (c. 7.50g) - 15-16
Artemis/Tripod - 37-38	Athena/Perseus (c. 19.00g) - 17-18
Eros/Bowcase (c. 3.90g) - 39	Artemis/Tripod (c. 7.70g) - 19
Ares/Sword (c. 7.80g) - 40-50	Artemis/Stag (c. 1.80g) - 20
Dionysos/Cista (c. 8.10g) - 51-56	Apollon/Hippocamp (?) - 21
Dionysos/Thyrsos (c. 3.60g) - 57-58	Apollon/Tripod (c. 2.70g) - 22
Panther/Cista (c. 4.00g) - 59	Herakles/Club (c. 4.40g) - 23
Perseus/Pegasos (c. 12.80g) - 60-64	Dionysos/Cista - 24
Perseus/Pilei (c. 4.10g) - 65-67	Dionysos/Thyrsos (c. 3.60g) - 25-26
Perseus/Harpa (c. 2.70g) - 68	Panther/Cista (c. 4.00g) - 27-28
Aegis/Nike (c. 7.60g) - 69-78	Ares/Sword (c. 7.80g) - 29-31
Wolf/Nike (c. 8.40g) - 79	Perseus/Pegasos (c. 12.80g) - 32-34
Young man/Bowcase (c. 20.60g) - 80-82	Perseus/Harpa (c. 2.70g) - 35
	Perseus/Pilei (c. 4.10g) - 36
	Eros/Bowcase (c. 3.90g) - 37
	Wolf/Nike (c. 8.40g) - 38
	Wolf/Herakles (?) - 39
	Herakles/Club (c. 1.50g) - 40
	Tyche/Owl (c. 7.50g) - 41
	Aegis/Nike (c. 7.60g) - 42-44

Both sequences appear to have been established on a purely iconographical basis: they deal first with the Olympian gods (Zeus, Athena, Artemis) and bring together divinities and their symbols (thus the type "Panther/Cista" follows the two representations of Dionysos).

Then came Friedrich Imhoof-Blumer who divided all these bronze issues (22 types all in all) into seven groups and five different periods of time. The thirteen mints, which appear in bold characters on the first line in abbreviated forms, are Amaseia, Amisos, Kabira, Chabakta, Komana, Gazioura, Laodikeia, Pharnakia, Taulara, Amastris, Pimolisa, Sinope and Dia. The order is first geographical (Pontos - Paphlagonia - Bithynia) and then alphabetical (Amaseia, Amisos, etc. [with the exception of Chabakta]). To the types of Imhoof-Blumer, marked with a cross (X), I have added all those which, while unknown to him, appear in my database (O). The average weight, given in brackets, is an approximation provided only to give an idea of the denominations. The numbers which follow the weights are those of the varieties given by F. Imhoof-Blumer in his catalogue. Descriptions of types are minimal and therefore sometimes exaggeratedly reduced.

Table 3. *Sequence of Imthoof-Blumer (1912)*

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
<i>Group I (c. 120-111 BC)</i>													
Perseus/Pilei (c. 4.10g) 1-3	x	x	-	-	-	-	-	-	-	-	-	x	-
Apollon/Tripod (c. 2.70g) 4	o	x	-	-	-	-	-	-	-	-	-	o	-
Artemis/Stag (c. 1.80g) 5	o	x	-	-	-	-	-	-	-	-	-	-	-
<i>Group II (c. 120-111 BC)</i>													
Young man/Bowcase (c. 20.60g) 6-9	-	x	o	o	-	-	o	o	o	-	-	x	-
Artemis/Tripod (c. 7.70g) 10-12	-	x	-	-	-	-	-	-	-	-	-	o	-
Eros/Bowcase (c. 3.90g) 13-14	-	x	-	-	-	-	-	-	-	-	-	x	-
<i>Group III (c. 111-105 BC)</i>													
Zeus/Eagle (c. 19.80g) 15-23	x	x	x	o	o	x	o	-	x	-	x	x	-
Ares/Sword (c. 7.80g) 24-34	x	x	x	o	-	x	x	o	x	x	x	x	-
<i>Group IV (c. 105-90 BC)</i>													
Athena/Perseus (c. 19.00g) 35-39	-	x	x	o	x	o	o	o	o	x	-	x	o

What is remarkable is the increase of material. Out of the 94 different types which are documented today, 31 were unknown to Imhoof (“O”), compared with the 63 available to him (“X”). This is a good example of how much our numismatic documentation has grown in less than one century.

The main argument of Imhoof in support of classifying these different types are the secondary marks, what some numismatists used (wrongly it seems) to call “marks of monetary magistrates”. Bronze coin types without any secondary marks have been classified first, leaving till the end the highest number of monograms and/or symbols (up to four).

I have discussed elsewhere at length why this sequence, no matter how ingenious it is, must be criticized.⁷

Central here are overstrikes, both for Pontic as for Bosphoran bronze issues, hoards and excavation material. In the paper I gave in Bordeaux in 2002, you will find appendices for each of these matters. However, it seems worth mentioning here some of the evidence. Let us begin with the Piraeus hoard, of paramount importance in establishing the chronology of Mithridatic bronzes, and then the Bosphoran hoards for which we may know type details of Mithridatic coins.

Table 4. *Hoards with Mithridatic bronzes.*

CH III 73, 1973, Piraeus – see Oekonomides-Caramessini 1976 – 8 Mithridatic bronzes

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
Aegis/Nike (c. 7.60g)	-	8	-	-	-	-	-	-	-	-	-	-	-

Rem.: This deposit proves that Type “Aegis/Nike” was struck prior to 86 BC, the date of the Sack of Athens and of the destruction of the house where it was found.

IGCH 1141, 1937, Myrmekion (Kerch) – 6 Mithridatic bronzes in a grave

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
Dionysos/ Cista (c. 8.10g)	-	6	-	-	-	-	-	-	-	-	-	-	-

IGCH 1144, 1897, Kerch – 66 Mithridatic bronzes

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
Perseus/Pegasos (c. 12.80g)	-	2	-	-	-	-	-	-	-	-	-	-	-
Ares/Sword (c. 7.80g)	-	32	-	-	-	-	-	-	-	1	-	2	-
Aegis/Nike (c. 7.60g)	-	28	-	-	1	-	-	-	-	-	-	-	-
Total	-	62	-	-	1	-	-	-	-	1	-	2	-

Poljanka 1984 (Frolova & Ireland 1999) – 9 Mithridatic bronzes out of 66 coins

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
Ares/Sword (c. 7.80g) 2 ex.	-	-	-	-	-	-	-	-	-	-	-	-	-
Zeus/Eagle (c. 19.80g)	-	1	-	-	-	-	-	-	-	-	-	5	-
Aegis/Nike (c. 7.60g)	-	-	-	-	-	-	-	-	-	1	-	-	-
Total	-	1	-	-	-	-	-	-	-	1	-	5	-

Rem.: Other types are “Apollon/Eagle” from Pantikapaion (28 ex.), “Nike/Prow” of Asander (22 ex.), “Dionysos/Bowcase” (4 ex. = “Bosporan anonymous”), “Dionysos/Tripod and thyrsos” from Pantikapaion (1 ex.) and Gorgippia (1 ex.) and “Artemis/Eagle” from Chersonesos (1 ex.).

Poljanka 1985 (Frolova & Ireland 1999) – 15 Mithridatic bronzes out of 1,140 coins

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
Zeus/Eagle (c. 19.80g)	-	1	-	-	-	-	-	-	-	-	-	-	-
Athena/Perseus (c. 19.00g)	-	10	-	-	-	-	-	-	-	2	-	2	-
Total	-	11	-	-	-	-	-	-	-	2	-	2	-

Rem.: Other types are “Dionysos/Bowcase” (150 ex. = “Bosporan anonymous”), “Apollon/Eagle” from Pantikapaion (908 ex. most of them overstruck on “Dionysos/Bowcase”), “Men/Dionysos” from Pantikapaion (3 ex.) and Gorgippia (1 ex.).

Kumatyr’ 1976 – near Anapa (Abramzon et al. 2002) – 5 Mithridatic bronzes out of 177 coins

	Ama	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia
Perseus/Pilei (c. 4.10g)		1	-	-	-	-	-	-	-	-	-	-	-	-
Ares/Sword (c. 7.80g)		-	3	-	-	-	-	-	-	1	-	-	-	-
Total		1	3	-	-	-	-	-	-	1	-	-	-	-

Rem.: Of all known hoards with Mithridatic bronzes, this one looks the oldest. Only hoard evidence for the type “Perseus/Pilei”, this deposit links some Mithridatic bronzes of heavy denomination (“Ares/Sword”) to a great number of light bronzes struck in Pantikapaion during the 2nd century BC.

It looks altogether worthwhile to draw the attention of the specialists of the northern Black Sea area to the presence of Pontic coins in Aegean excavations.

Table 5. *Pontic coins found in some Aegean archaeological excavations.*

Ilion (Bellinger 1961, 170)

no. 200: Aegis/Nike (Amisos - 12h, 20 mm).

Rem.: No. 199, a bronze attributed to Dia (Head of Dionysos r./ΔΙΟΝΥ-ΣΙΟΥΥ. Ear of wheat in an ivy crown) is wrongly linked to Mithridatic times.

Pergamon (Voegtli 1993, 37)

no. 458: Artemis/Tripod (Sinope - 22 mm - Inv. 1978/441 [no detail on the archaeological context]).

Delos (Hackens 1969, 395 and 399)

no. F411: Head of Poseidon r./Prow l. (Pantikapaion - 12h - Inv. 63-C-151).

no. F412: Head of Pan r./Cornucopia between two pilei (Pantikapaion - 12h - Inv. 62-C-92).

no. F413: Head of Pan r./ Cornucopia between two pilei (Pantikapaion - 12h - Inv. 62-C-126).

no. F452: Ares/Sword (Amisos - 12h - Inv. 63-C-140).

no. F453: Aegis/Nike (Amisos - 12h - Inv. 62-C-170).

no. F455: Aegis/Nike (Amastris - 12h - Inv. 62-C-6).

Rem.: Total lack of Athenian bronze coins with Mithridatic types (star and two crescents).

Athens (Kroll 1993, 255)

no. 852: Head of Artemis r./Stag l. (Phanagoria - [broken], 12h, 21 mm - Inv. Σ-3566a).

no. 854: Ares/Sword (Amisos - 5.72g, 12h, 18 mm - Inv. ΠΠ-877).

no. 855a: Dionysos/Cista (Amisos - 6.41g, 12h, 21 mm - Inv. ΠΘ-632).

no. 855b: Dionysos/Cista (Amisos - 5.65g+, 12h, 22 mm - Inv. K-552).

Coins found in Delos and Athens are particularly relevant to the present debate. Dealing with Mithridatic bronzes found in the Bosporos, the most astonishing fact is the superabundance of the type "Zeus/Eagle". Although, as Karyškovskij showed a long time ago (1965), the pattern could be different for Chersonesos and Olbia, Bosporan excavations have revealed a large number of that particular type, mostly struck in Sinope. I present here the details of some archaeological reports (with my most sincere thanks to Vladimir Stolba who was kind enough to send me a copy of those papers). These

reports are old and I am pretty sure that it could be possible to add much more evidence nowadays but, nonetheless, it is doubtful that this new evidence would affect the model:

Table 6. *Mithridatic bronzes found in Bosporan archaeological excavations.*

Tyritake 1935-1940 (Zograf 1952)

- 10-"Zeus/Eagle" (Pharnakia, 5.52g)
- 23-Light siglos of Amisos (3.20g)
- 29-"Zeus/Eagle" (Sinope, 5.00g)
- 54-"Ares/Sword" (Amisos [?], 5.92g)
- 81-"Zeus/Eagle" (Sinope, 6.78g)
- 103-"Perseus/Pegasus" (10.88g)
- 125-"Ares/Sword" (Amisos, 5.53g)
- 153-"Aegis/Nike" (Amisos, 3.30g)
- 154-"Aegis/Nike" (Sinope, 2.76g)
- 2274-"Zeus/Eagle" (Sinope)
- 2286-"Dionysos/Cista" (Amisos)
- 2295-"Aegis/Nike" (Amisos, 7.11g)
- 2302-"Aegis/Nike" (Amisos, 4.20g)
- 2304-"Zeus/Eagle" (Amisos, 4.50g)

14 coins out of 310 (4.5%)

Tyritake 1946-1953 (Belova 1953)

- 50-"Zeus/Eagle" (Sinope, 6.13g)
- 84-"Zeus/Eagle" (Sinope, 5.75g)

2 coins out of 114 (1.8%)

Myrmekion 1935-1940 (Zograf 1952)

- 2435-"Ares/Sword" (Amisos, 5.40g)
- 2440-"Zeus/Eagle" (Sinope, 8.01g)
- 2459-"Perseus/Pegasus" (Amisos, 10.20g)
- 2467-"Zeus/Eagle" (Pharnakia, 5.35g)
- 2536-"Dionysos/Cista" (Amisos, 6.57g)
- 2552-"Dionysos/Cista" (Amisos, 6.57g)
- 2553-"Dionysos/Cista" (Amisos, 6.65g)
- 2554-"Dionysos/Cista" (Amisos, 5.55g)
- 2555-"Dionysos/Cista" (Amisos, 6.25g)
- 2556-"Dionysos/Cista" (Amisos, 5.20g)
- 2557-"Dionysos/Cista" (Amisos, 6.75g)

2576-"Zeus/Eagle" (Sinope)
 2588-"Zeus/Eagle" (Amastris)

13 coins out of 299 coins (4.3%)

Myrmekion 1946-1953 (Belova 1953)

200-"Ares/Sword" (Amisos, 6.61g)
 205-"Zeus/Eagle" (Sinope, 8.86g)
 221-"Athena/Perseus" (Amisos, 14.91g)
 222-"Zeus/Eagle" (Sinope, 6.40g)
 223-"Zeus/Eagle" (Sinope, 4.70g)
 246-"Zeus/Eagle" (Sinope, 4.93g)
 247-"Zeus/Eagle" (Sinope, 5.75g)
 248-"Zeus/Eagle" (Sinope, 5.84g)
 250-"Zeus/Eagle" (Sinope, 7.40g)
 266-"Ares/Sword" (Amisos, 4.28g)

10 coins out of 172 (5.8%)

Kepoi 1958-1963 (Frolova & Šelov 1965)

107-"Ares/Sword" (Sinope, 5.53g)
 111-"Zeus/Eagle" (Sinope)
 202-"Zeus/Eagle" (Sinope)
 215-"Aegis/Nike" (Amisos)
 261-"Zeus/Eagle" (Sinope, 6.75g)
 262-"Dionysos/Cista" (Amisos, 7.53g)
 291-"Aegis/Nike" (Amisos)
 347-"Zeus/Eagle" (Sinope, 6.77g)
 384-"Ares/Sword" (Amisos, 6.96g)

9 coins out of 384 (2.3%)

Grand total: 48 out of 1,299 (3.7%)

By the way, these meagre but meaningful statistics show to what extent Mithridatic bronzes appear in Bosporan excavations (nearly 4% of the total amount of recovered coins, most of them from Imperial Roman times). They can be paralleled with the numbers put forward by P.O. Karyškovskij:⁸

Table 7. *Types of Mithridatic bronzes found in the Bosporos.*

	Bosporos		
Pontic types	Karyškovskij 1965	Table 6	
Apollo/Tripod	1	-	
Perseus/Pegasos	4	2	
Dionysos/Cista	9	9	(6 for IGCH 1141 = Myrmekion 2552-7)
Zeus/Eagle (heavy)	2	-	
Ares/Sword	16	7	
Zeus/Eagle (light)	45	22	(18 Sinope, 2 Pharnakia, 1 Amastris and Amisos)
Athena/Perseus	2	1	
Aegis/Nike	17	6	
Total	96	47	

This strong agreement gives a special place to the type “Zeus/Eagle” of light standard (c. 46%). This is in stark contrasts to the usual representation of that type in the Pontic kingdom itself. With 37 specimens out of 1,133 Mithridatic bronzes, the type “Zeus/Eagle” only counts for 3.3% in the Amasya Museum recently published by Stanley Ireland. Similarly, in my database which mainly gathers material from public collections and sale catalogues, the type “Zeus/Eagle” is attested by 360 specimens out of a total of 2,404 Mithridatic bronzes (thus 15.0%).

Actually – and I refer once again to my paper given in Bordeaux – it seems that types “Zeus/Eagle” and “Ares/Sword” were struck at the same time by different mints. It looks like as if inland mints were in charge of producing the type “Ares/Sword”, whereas coastal mints (Amastris, Sinope, Pharnakia + Amisos) were asked to produce the type “Zeus/Eagle”. Anyway, it must be clear that – at a moment and for a reason we cannot determine – a massive influx of Sinopean “Zeus/Eagle” bronzes occurred in the Bosporos (and, despite the well-known economic role played by Sinope as witnessed by amphoras, it may be better to suspect here something linked to a Mithridatic garrison).

To be brief, the sequence of Imhoof-Blumer, although confirmed to a certain extent, has to be severely modified. Despite the existence of a unique variety with the letters ΓΚΣ (thus 223, i.e. the year 75/74 BC [two known specimens struck with the same pair of dies]), we may assume that no significant strike of Mithridatic bronzes ever occurred after the end of the first war (85 BC). This has major historical consequences for our understanding of Mithridates’ monetary policy, about which I shall say nothing here. Obviously, it compresses the sequence of issues into a possibly short period of time. Here

is the proposal I am tempted to defend and for which it is safer not to be too precise with chronological limits:

Table 8. *Proposed sequence of issues for Mithridatic bronzes.*

	Ama	Ami	Kab	Cha	Kom	Gaz	Lao	Pha	Tau	Amas	Pim	Sin	Dia	Tot
Artemis/Tripod (c. 7.70g)	-	31	-	-	-	-	-	-	-	-	-	12	-	43
Perseus/Pilei (c. 4.10g)	30	60	-	-	-	-	-	-	-	-	-	27	-	117
Eros/Bowcase (c. 3.90g)	-	19	-	-	-	-	-	-	-	-	-	5	-	24
Apollon/Tripod (c. 2.70g)	1	15	-	-	-	-	-	-	-	-	-	3	-	19
Young boy/Bowcase (c. 20.13g)	-	36	1	1	-	-	1	1	1	-	-	5	-	46
Perseus/Pegasus (c. 12.17g)	-	99	1	13	1	-	1	1	1	-	-	-	-	117
Dionysos/Cista (c. 8.19g)	-	223	-	-	-	-	-	-	-	-	-	-	4	227
Panther/Cista (c. 4.00g)	-	4	-	-	-	-	-	-	-	-	-	-	-	4
Zeus/Eagle (c. 19.52g)	15	38	5	1	1	15	2	-	12	-	15	14	-	118
Ares/Sword (c. 7.93g)	10	245	5	36	-	21	5	1	14	6	17	28	-	388
Zeus/Eagle (c. 7.90g)	3	137	1	-	-	-	-	84	-	26	-	70	39	360
Herakles/Club (c. 4.40g)	-	3	-	-	-	-	-	-	-	-	-	-	1	4
Herakles/Club (c. 1.50g)	-	3	-	-	-	-	-	-	-	-	-	-	-	3
Athena/Perseus (18.61g)	-	140	12	4	11	1	3	2	2	39	-	44	1	259
Aegis/Nike (7.32g)	-	311	35	26	43	-	8	-	-	61	-	71	-	555
Dionysos/Thyrsos (3.71g)	-	26	4	2	8	-	7	-	-	1	-	3	-	51
Perseus/Harpa (2.55g)	-	17	2	-	-	-	2	-	-	-	-	2	-	23

Now Imhoof-Blumer's sequence and chronology have been accepted by scholars as the crucial argument in the dating of Bosphoran bronze issues, then silver issues and, finally, Bosphoran archaeological contexts of those times. Let us remember that: 1) several monetary types of Bosphoran bronzes have been massively overstruck, *inter alia* on Mithridatic bronzes; 2) as shown, many Mithridatic bronzes have been found in Bosphoran excavations; 3) the very pattern of strikes among the Bosphoran cities (Pantikapaion, Phanagoria and Gorgippia) looks similar to the one imposed by Eupator on the cities of his kingdom (community of types and even of monograms) and 4), speaking of monograms, some have been impressed by what appears to them as a too close a connection between Bosphoran and Mithridatic monograms (chiefly for the Bosphoran anonymous [type "Dionysos/Bowcase"] and the Mithridatic type "Dionysos/Cista").

Chronologies of Bosphoran coinages struck at the end of the 2nd century and during the first half of the 1st century BC do not seem to be firmly established. Table 9 below follows up various recent proposals made by some authorities on the subject.⁹

The reasons, largely based on the study of the Mithridatic bronzes, which enable us to improve those chronologies have been explained elsewhere.¹⁰ I shall restrict myself to giving again the table of results (Table 10), which is the suggested improved chronology.

Bosphoran coinages under Mithridatic influence are the ones dated from 85 to 70 BC, that is, after the end of the first Mithridatic war (89-85 BC) and not the vague dates of "c. 100-75 BC" which – one suspects – have been proposed in order to cover the zenith of the Mithridatic power.

Traditional dates for those issues in the scholarly tradition are "90-80 BC". As far as I can see, these are the results of several misunderstandings of numismatic material. Taking for granted the chronology of Imhoof-Blumer, scholars observed that Mithridatic bronzes were numerous in the Bosphoros for the periods "c. 105-90 BC" (which, according to Imhoof, includes type "Aegis/Nike", which is the commonest of all types struck by Pontic cities, as well as type "Ares/Sword") and "c. 80-70 BC" (which, according to the same Imhoof, is the period of the type "Zeus/Eagle", over-represented in Bosphoran excavations). Conversely, bronzes of Group V, dated "c. 90-80 BC" ("Dionysos/Cista") were much rarer. Then, creating some confusion between time of production and time of circulation, those scholars were inclined to date the group of Bosphoran issues struck under Mithridatic influence to the years "90-80 BC", in accordance with the *horror vacui* principle. From these tricky assumptions, a theory was devised whose main lines were: Mithridates Eupator later interfered with monetary affairs of the Bosphoros (c. 90 BC). His policy was initially a very favourable one for the Greek cities of Pantikapaion, Phanagoria and Gorgippia which kept their rights to strike coins (or better, were encouraged to strike coins) as a sign of their autonomy (this being the period "90-80 BC"). Then, around 80 BC, Eupator, whose power was now

increasingly challenged after his defeat by the Romans and the Treaty of Dardanos signed in 85 BC, decided to, or had to, be less liberal. He abolished the monetary rights of the Bosporan cities and imported a huge amount of coins of Sinope ("80-70 BC").

Table 9. *Recent proposals of chronologies for Bosporan coinages (End of the 2nd c.-First half of the 1st c. BC).*

Types	Anochin 1986	Price 1993	Stancomb 2000	Frolova 2003
Head of Poseidon r./Prow (AE - c. 18g)	109-100	-	E. 2nd c.-B. 1st c.	E. 2nd-B. 1st c.
Bust of Artemis r./Stag lying l. (AE - c. 7g)	109-100	E. 2nd-c. 50	E. 2nd c.	B. 1st c.
Artemis/Stag feeding r. (AR - drachm)	90-80	100-75	-	100-75
Dionysos/Crown (AR - didrachm)	90-80	100-75	100-75	100-75
Dionysos/ Stag running r. (AR - drachm)	100-90	100-75	-	100-75
Head of Men/Dionysos stand- ing l. (AE - c. 17g)	90-80	100-75	100-75	100-75
Head of Apollon r./Tripod and thyrsos (AE - c. 8g)	90-80	100-75	100-75	100-75
Head of Dionysos r./Bowcase (AE - c. 18g)	80-70	c. 50	1st c. (1st half)	E. 2nd-63
Head of Dionysos r./Thyrsos (AR - c. 4g)	90-80	100-50	100-75	1st c. (2nd half)
Head of Dionysos r./Thyrsos (AR - c. 1.9g)	90-80	E. 2nd-B. 1st c.	-	1st c. (2nd half)
Head of Apollon r./Eagle on fulmen (AE - c. 15g)	70-63	100-75	c. 50	After 63
Bust of Nike/Prow (AE - c. 17g)	50/49-48/7	c. 50	49/8-45/4	c. 50
Bust of Nike/Prow (AE - c. 8g)	50/49-48/7	c. 50	49/8-45/4	c. 50
Head of Apollon-Asander r./ Pegasus feeding	47-37	c. 50	1st c. (2nd half)	-

Table 10. *Improved chronology for Bosporan coinages (c. 100-40 BC).*

End 2nd c. or beginning of the 1st c. BC	
Head of Dionysos/ Stag running r. (AR – drachm, c. 4g)	Pantikapaion, Gorgippia
c. 100-c. 88 BC?	
Head of Poseidon r./Prow (AE – c. 18g)	Pantikapaion
c. 95-c. 86 BC?	
Bust of Artemis r./Stag lying l. (AE – c. 7g)	Pantikapaion, Phanagoria
c. 90-80 BC?	
Head of Artemis r./Stag feeding r. (AR – drachm, c. 4 g)	Pantikapaion
c. 85-c. 70 BC?	
Head of Dionysos r./Crown and bunch of grapes (AR – didrachm, c. 8.5g)	Pantikapaion, Phanagoria, Gorgippia
Head of Dionysos r./Thyrsos (AR – Drachm, c. 4g)	Phanagoria
Head of Dionysos r./Thyrsos (AR – Hemidrachm, c. 1.9g)	Pantikapaion, Phanagoria
Head of Men r./Dionysos standing l. (AE – c. 17g)	Pantikapaion, Phanagoria, Gorgippia
Head of Apollo r./Tripod and thyrsos (AE – c. 8g)	Pantikapaion, Phanagoria, Gorgippia
c. 80-c. 63 BC?	
Head of Dionysos r./Bowcase (AE – c. 18g)	Bosporan anonymous
c. 63-c. 49 BC?	
Head of Apollon r./Eagle on fulmen (AE – c. 15g)	Pantikapaion
Head of Apollon r./Tripod (AE – c. 8g)	Pantikapaion
c. 49-c. 44 BC?	
Bust of Nike/Prow (AE – c. 17g)	ΑΡΧΟΝΤΟΣ ΑΣΑΝΔΡΟΥ
Bust of Nike/Prow (AE – c. 8g)	ΑΡΧΟΝΤΟΣ ΑΣΑΝΔΡΟΥ
Second half of the 2nd c. BC	
Head of Apollon r./Pegasos feeding l. (AE – c. 7.5g)	Pantikapaion

There is nothing to recommend in this reconstruction. The three errors are: 1) to have taken the chronology of Imhoof-Blumer for granted, 2) to have confused time of production with time of circulation and 3) to think that monetary issues are a clear sign of autonomy. This last assumption, sometimes called

among numismatists “*lex seyrigiana*” or “*Lex Seyrig*”, from Henry Seyrig, has received considerable criticism in recent times (after Martin 1985). The many counter-examples we might propose have recently encouraged some to downgrade the importance of the right to strike coins to a minor privilege, which may coexist with a lack of autonomy.¹¹ This explanation is missing the point, I think. Monetary strikes by Athens under Antigonos Gonatas or by Pontic or Bosporan cities under Mithridates Eupator were not the result of some *benevolentia* or toleration by a king who wished to please the cities. Quite the opposite: they were encouraged by the king to serve his policy.

What appears now is a very different *scenario* for the Bosporos. The first phase, which may have started late (c. 90 BC or after), was a massive import of Mithridatic bronzes in the Bosporan kingdom, beginning with the type “Zeus/Eagle” from Sinope. This flow is likely to have been prolonged in the eighties. Then, not before 85 BC and possibly as late as 80 BC or even 75 BC, several local issues were minted, both silver and bronze, in Pantikapaion, Phanagoria and Gorgippia. Those issues, Mithridatic indeed by their types and their pattern (but which could be attributed to Machares), do not mean that the cities in question were free but, instead, that Pontic power took care to control and direct the monetary production. By the way, from a quantitative point of view (which, so far, is lacking), it seems that those issues are not as significant or large as generally assumed.

That this scenario has to be negotiated (a more trendy word than “discussed” – see M. Lawall in this volume) is clear. But it is altogether clear that numismatic chronologies do not support the fiction of a Mithridates Eupator, first friendly and respectful, then obliged to be brutal with the Bosporan cities.

Notes

- 1 Thompson 1961.
- 2 Ashton 1992.
- 3 Callataÿ 1997.
- 4 Callataÿ 1997.
- 5 Callataÿ 1994, 54-60.
- 6 Imhoof-Blumer 1912.
- 7 Callataÿ (forthcoming).
- 8 Karyškovskij 1965.
- 9 Anochin 1986; Price 1993; Stancomb 2000 and Frolova & Ireland 2003.
- 10 Callataÿ (forthcoming).
- 11 Oliver 2001 and Meadows 2001.