

The Alexanders of Assos and Phokaia

Abstract – There has been considerable uncertainty in the attribution of Alexanders to Assos and Phokaia because both cities used a griffin as their civic badge. This article attempts to resolve these uncertainties by providing a die study of the Alexanders attributed to Assos and Phokaia and combining the results of this study with the available hoard evidence. This produces a new picture of the minting activity of Assos and Phokaia in the late 3rd and early 2nd century which raises questions about how the production of these high-value series fits into the broader context of the Attalid kingdom.

Key Words – Assos, Phokaia, posthumous Alexanders, Attalids, griffin.

1. Introduction

At various points between the 210s and the 160s, the cities of Assos in the southern Troad and Phokaia in northern Ionia intermittently produced silver coinage using the types of Alexander the Great.¹ While by no means the most productive mints in western Asia Minor during this period, these issues amount to at least 25 tetradrachm dies and one drachm die and thus represent a significant level of expenditure for medium-sized poleis such as these.² Although parts of this coinage can be straightforwardly attributed to either Assos or Phokaia, a significant proportion of it cannot because these two mints both used a griffin as their civic badge. This leaves us in the frustrating position of knowing that this corpus of Alexanders represents a significant body of evidence for the history of Assos and Phokaia in this period, but being quite unclear as to which parts of the evidence are telling us what about which city. These difficulties of attribution can, however, be resolved to a significant extent by focusing less on typological distinctions (which have produced unsatisfactory results) and instead on die links and hoard evidence. The picture which results of the minting activity of Assos and Phokaia in this period opens up interesting new questions about the relationship between these cities and the Attalids in the late 3rd and early 2nd century.

2. Problems of Attribution

The civic badge of Assos was either a griffin or a bucranium and that of Phokaia either a griffin or a seal. Consequently, in cases where a coinage of one of these cities displays a griffin as its distinguishing type or control mark, there can be confusion as to the attribution when other identifying marks are absent. In such cases, numismatists have attempted to distinguish issues of the two cities on stylistic grounds by arguing that either Assos or Phokaia only ever depicted

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¹ All dates are BC unless otherwise stated. Abbreviations: BNJ = *Brill's New Jacoby*; CH = *Coin Hoards*; IACP = HANSEN AND NIELSEN 2004; IGCH = *Inventory of Greek Coin Hoards*; LGPN = *Lexicon of Greek Personal Names*; Price = PRICE 1991; RPC = *Roman Provincial Coinage*; SC = HOUGHTON AND LORBER 2002; Seyrig, *Trésors* = SEYRIG 1973.

² DELRIEUX 2019, pp. 104-6, Table 3 provides an overview of die figures and number of types for Alexanders minted in western Asia Minor in the late 3rd and first half of the 2nd century which gives context to the output from Assos and Phokaia. For the Classical period, IACP estimates the size of the territory of Assos (no. 769) as ca. 200-500 km² and of Phokaia (no. 859) as 100-200 km². These estimates place Assos in the top quarter of the 635 polis territories surveyed in IACP and Phokaia in the top third: IACP pp. 70-3.

its griffin in a particular way.³ While this approach has some merit, it also has its limits. Firstly, there are only so many ways one can depict a griffin at the scale of a control mark: a certain amount of stylistic overlap is inevitable.⁴ Secondly, the two cities were located in the same general area of western Asia Minor (the southern Troad and northern Ionia respectively), but were hardly neighbours. Consequently, the two mints may not have felt the need to rigorously distinguish their issues from one another.

This ambiguity in the types of the two cities has caused particular problems with the attribution of posthumous Alexanders to Assos and Phokaia. All the issues attributed to Assos (Price 1599-1610) and half the issues attributed to Phokaia (Price 2223-6) feature a griffin. Price attempted to distinguish between the issues to be attributed to the two mints on stylistic grounds: “At Assos the griffin has clearly defined feathers on straight wings, and is normally lying on a ground line. In this respect the symbol is very similar to the design on the autonomous bronze issues of Assos. At Phocaea (2223), the wings are strongly curved, and it is possible that the griffin is flying rather than recumbent. This in turn is very similar to the bronze issues of Phocaea with ‘griffin forepart’. While these could be two variants of the same issues, the closeness of the autonomous issues of the two cities has led to their separation here”.⁵ As the last line indicates, Price himself had doubts about this solution. Indeed, in the entry for Phocaea he refers twice to 1599 as a variety of Phocaea even though in the catalogue he gives it to Assos, presumably reflecting an earlier stage in his thinking.⁶

The die study presented below (Section 5) shows that Price was right to be unsure. Firstly, if the stylistic distinction Price drew were correct, we would expect to see no obverse dies shared between reverses depicting the seated griffin in the ‘Assos’ style and the seated griffin in the ‘Phokaia’ style. On the contrary, we see precisely the opposite: examples of both styles share obverse dies, suggesting that both 1599 and 2223 were produced by the same mint. Secondly, there is an obverse die link between an example of 1599/2223 (seated griffin) and 2225 (griffin forepart). Phokaia used a griffin forepart as its identifying control mark on the tetradrachms it minted for Antiochos II (SC 508.1, 510, 513) and also depicted it on its bronze coinage, for example on a series which dates to precisely the late 3rd or early 2nd century when Phokaia was producing 2225.⁷ By contrast, this depiction of a griffin appears nowhere on the coinage of Assos. Thus, the same mint must have produced both 1599/2223 and 2225, and that mint is much more likely to be Phokaia than Assos.

Secondly, Price noted that an example of 2223 has the same obverse die as an example of 1844 in the British Museum which, with some uncertainty, he attributed to Kolophon (**Figure 1.a**).⁸ This example of 1844 has as its reverse control mark a cithara shown from the back. By contrast, Kolophon’s Alexanders instead typically show a cithara from the front, as indeed we see on two other examples of 1844 in the ANS and the BnF.⁹ The attribution to Kolophon of

³ See most recently LAZZARINI 2017, p. 38, n. 54.

⁴ This is particularly clear if we compare depictions of griffins on lifetime and early Alexanders when they appeared as control marks on issues from a wide variety of mints: Price 842 (uncertain Macedonia or Greece – seated griffin), 1558ff (‘Abydos’ – griffin head), 1924-7 (Magnesia on the Maeander – griffin sitting up), 2271-82 (Teos – griffin sitting up), 2533-6 (Sardis – griffin head).

⁵ PRICE 1991, vol. 1, p. 236.

⁶ PRICE 1991, vol. 1, p. 291.

⁷ For the bronze coinage see KINNS 2002, pp. 25-6 (Plate 5.F and I), especially n. 51 for the dating.

⁸ PRICE 1991, vol. 1, pp. 258, 291. For the discussion which follows I am indebted to Philip Kinns who first drew my attention to the significance of this material.

⁹ ANS 1956.134.6 and BnF R 4010. Philip Kinns informs me that both share obverse dies with proven issues of Kolophon.

the example of 1844 which shares a die with Phokaia is therefore not absolutely proven but highly likely. If for the moment we accept the attribution to Kolophon, then it seems far more likely that a die transfer would have happened between two cities in Ionia (Kolophon and Phokaia) than between a city in Ionia and a city in the Troad (Kolophon and Assos).



Figure 1 – Alexanders of Kolophon (?) and Phokaia with a shared obverse die. (a) Price 1844 (Kolophon?): BM G3, GIS.7 (29mm, 1h, 17.01g). (b) Price 2223 (Phokaia Series 1a, O3/R13): BM 1896,0703.152 (29mm, 12h, 16.83g).

Finally, the shared die under discussion also bears stylistic similarities to dies cut at Kyme and Myrina for their contemporaneous series of Alexanders. At Kyme, a die used for Price 1614, 1621, and 1634 (**Figure 2.b**) is almost identical to the die shared between Phokaia and Kolophon (?). Coins from this Kymaian die have been found in IGCH 1410 (buried *ca.* 195) and in the Unknown Findspot hoard (buried *ca.* 192/1), indicating that Kyme was producing these Alexanders pre-195 and thus potentially at the same time as Price 1599/2223.¹⁰ At Myrina, a die used for Price 1650 (**Figure 2.c**) is a less exact match, but nevertheless has a number of correspondences to the die shared between Phokaia and Kolophon (?), especially in the depiction of the lion's mane headdress of Herakles. While there is no hoard evidence for this type or die at Myrina, Price was almost certainly right to class it with Myrina's pre-Apameia Alexanders given its similarities to dateable issues from this series in terms of style and choice of reverse control marks. The most likely explanation for these close stylistic correspondences between neighbouring mints is that they were sharing the services of the same die cutter. This is entirely to be expected if the mint of 1599/2223 was Phokaia, an immediate neighbour of Kyme and Myrina which had co-operated with both cities to produce coinage for Antiochos II.¹¹



Figure 2 – Dies of Alexanders from Phokaia, Kyme, and Myrina likely cut by the same die cutter. (a) Price 1599/2223 (Phokaia Series 1a, O3/R8): ANS 1947.98.149 (16.77g). (b) Price

¹⁰ For these two hoards and their dating see **Figure 3** below.

¹¹ For evidence of co-operation between Phokaia, Kyme, and Myrina in the production of tetradrachms for Antiochos II see MACDONALD 1907 and HOUGHTON AND LORBER 2002, vol. 1, part 1, pp. 179, 181.

1634 (Kyme): Triton 17 (7/1/2013) 278 (29mm, 12h, 17.14g), ex Unknown Findspot, 2013 (buried ca. 192/1). (c) Price 1650 (Myrina): ANS 1949.88.5 (12h, 16.99g).

Price dated both 1599 and 2223-2226 ca. 215-200. As the hoard evidence presented in **Figure 3** demonstrates, this still looks to be broadly correct.¹² The examples of 2225 in IGCH 1370 (Northwestern Asia Minor, 1929) and 1599/2223 in IGCH 1535 (Syria, 1959) suggest that the series began in the late 220s or 210s. A date earlier than the mid-220s is less likely given that these coins appear to be absent from the very large ‘Black Sea Tetradrachm’ (MARINESCU AND LORBER 2012) and ‘Seleucus III’ (CH X 272) hoards which have recently come to light. These hoards were buried ca. 225-223 and contain hundreds of posthumous Alexanders, so if Price 2225 and 1599/2223 had already been in circulation ca. 230-225 we might reasonably have expected to encounter them in these hoards.

The remaining issues of Phokaia (Price 2227-30) switch from the griffin control mark to controls which unambiguously identify the mint: a seal (punning on φώκη/Φώκαια) and/or monograms associated with the city (e.g. Φ = Φω(καίων)). As a result, the attribution of these coins to Phokaia is certain. Examples of 2227-8 were found in IGCH 1410 and so must pre-date the hoard’s burial ca. 195.¹³ The examples with the head and neck of a griffin and Phokaia’s monogram Φ (O10/R32-4, O11/R35) span the transition between the earlier issues with griffin control marks and the later examples with a seal and/or Phokaia monogram.¹⁴

We therefore have a grouping (Phokaia Series 1) made up of Price 1599 + 2223-30 which was produced between the 210s and the mid-190s. However, as Price had already noted, if we turn our attention to the style of these Phokaian Alexanders it becomes clear that, within this broad grouping, we can detect two sub-groups.¹⁵ Phokaia Series 1a (O1-6: Price 2225, 1599/2223, New 1-2) has obverse dies executed in a homogenous style and reverses which show remarkably little variation in the depiction of enthroned Zeus across twenty-six dies.¹⁶ This is the group with stylistic similarities to certain Alexanders of Kyme and Myrina and the die transfer with Kolophon (?). By contrast, the dies of Phokaia Series 1b (O7-15: Price 1599/2223, 2226-9, New 3-4) bear no resemblance to those of Series 1a and as a group are stylistically heterogeneous.¹⁷ Likewise, while the control marks of Series 1a are fairly unvaried, those of Series 1b are quite the opposite.¹⁸ This gives the impression that Series 1a was the work of a single die engraver working under a largely unchanging administration at the mint, and thus that Series 1a was produced in a single moment of minting. By contrast, Series 1b appears to

¹² References are provided in **Figure 3** for where my hoard dates diverge from those published in IGCH and CH.

¹³ IGCH 1410.290 (Price 2227), 291 (Price 2228).

¹⁴ The head and neck of a griffin is the reverse type of Phokaia’s hemidrachms from the second half of the 3rd century. As KINNS 2002, pp. 23-4 has shown, the first series (nos. 1-12, 9-12 with Φ-Ω) was produced in parallel to the city’s coinage for Antiochos II, while the second series (nos. 13-15, ΦΩ in left field and signer’s name in right field) was produced in parallel to Phokaia’s Series 1 Alexanders under discussion here.

¹⁵ PRICE 1991, vol. 1, p. 291: “The whole of this group [i.e. 2227-30] appears to have been struck before the deposit of the **Mektepini** hoard [IGCH 1410]. The *seal* group displays a rather different style to the *griffin* varieties [i.e. 2223-6], and probably represents a period of minting in the 190s BC”.

¹⁶ Zeus’ throne is double-backed and has a horizontal strut between its legs on R1-2, whereas on R3-26 it is single-backed and there is no horizontal strut.

¹⁷ For example, the reverse depictions of Zeus include double-backed throne surmounted with triangular decorations (R27), backless throne with horizontal strut (R28, R31) and without (R34-5, R39-41), single-backed throne with diagonal struts (R29-30), double-backed throne with crossbeam at top (R32-3, 38), and single-backed throne (R36-7). There is thus significantly more variation in these fifteen reverse dies than in the twenty-six which preceded them.

¹⁸ Series 1a: forepart of griffin (2225), seated griffin (1599/2223), seated griffin + monogram (New 1-2). Series 1b: seated griffin (1599/2223), griffin head (2226), griffin forepart + ΔΙ (New 3), griffin head and neck + ΦΩ monogram (New 4), seal + ΦΩ monogram (2227), seal + ΜΙ monogram (2229), ΦΩ monogram (2228).

be the work of a variety of different die engravers working under several different officials, and thus may represent more episodic minting spread out over a longer period of time.

It is unclear on current evidence whether we should consider Series 1a and 1b as two entirely separate series given that they share a type (Price 1599/2223) and the hoard evidence indicates that they were produced in broadly the same period (210s to mid-190s). Nevertheless, there is reason to think that they may belong to two slightly different contexts within this period. As the hoard evidence presented in **Figure 3** indicates, O1 and O4 had been used by *ca.* 210, O2-3 by *ca.* 210-205, and O5 by *ca.* 195. Given the indications just mentioned for Series 1a being produced in a single episode of minting, it is therefore likely that all six dies of Series 1a were used prior to *ca.* 210. In turn, the absence of Series 1b from our earliest four hoards from the late 210s and 200s containing examples of Series 1a and the first appearance of Series 1b in IGCH 1410 (buried *ca.* 195) may indicate that Series 1b was produced in the late 200s or early 190s after a hiatus in production.

Hoard	Burial Date	Variety (Price)	Dies
Phokaia Series 1a (O1-O6)			
IGCH 1370 ^a	<i>ca.</i> 215-210	2225	O1
IGCH 1535 ^b	<i>ca.</i> 210	1599/2223	O4
IGCH 1406 ^c	<i>ca.</i> 210-205	1599/2223	O4
IGCH 1303 ^d	<i>ca.</i> 210-205	1599/2223	O2, O3
IGCH 1410 ^e	<i>ca.</i> 195	1599/2223	O1, O4, O5
Unknown Findspot ^f	192/1	2225	O1
		1599/2223	O3, O4
IGCH 1537	<i>ca.</i> 190	1599/2223	O?
CH X 292	<i>ca.</i> 190/89	1599/2223	O4
IGCH 469	<i>ca.</i> 200-180	1599/2223	O3
IGCH 888	<i>ca.</i> 180	1599/2223	O3
CH X 308	Autumn 143	2225	O1
Phokaia Series 1b (O7-O15)			
IGCH 1410 ^e	<i>ca.</i> 195	2226	O8
		2227	O12
		2228	O15
CH X 292	<i>ca.</i> 190/89	2228	O15

Figure 3 – Hoard Evidence for Price 1599 and 2223-2230 (Phokaia Series 1a-b).

^a BOEHRINGER 1972, pp. 41-3. ^b DUYRAT 2016, pp. 105-6, no. 162. ^c HOUGHTON AND LORBER 2002, vol. 1, part 2, p. 88. ^d MEADOWS 2009, p. 59, Table 3, n. 'e'. ^e MEADOWS 2009, pp. 66-8. ^f Information kindly provided by Andrew Meadows who will be publishing this hoard.

The remaining issues attributed to Assos (Price 1600-10) stick with the seated griffin control mark. Consequently, the reattribution of 1599 to Phokaia in turn raises questions about whether 1600-10 should be attributed to Assos. Price treated 1600-10 as a single run of issues which were produced *ca.* 188-160. On closer inspection, however, we have two distinct series: Price

1600-4 and 1605-10 which most likely correspond to a second Phokaian series (Phokaia2 = 1600-4) and a first Assian series (Assos1 = 1605-10).¹⁹

1600-4 have two control marks in left field: a seated griffin above and a monogram below.²⁰ By contrast, 1605-10 also have a third control mark in the exergue (Assos1/R1-7, 9-10) or in left field (Assos1/R8) and on one occasion add a fourth control mark under the throne (Assos1/R4). Moreover, at the end of the sequence (Assos1/R11) the monogram in left field is resolved as a signer's name in the exergue and the control marks in left field become a bucranium (above) and a seated griffin (below). The implication is that these differences in the reverse type might correspond to two distinct series, and this is confirmed by die links and hoard evidence. In 1600-4 there is a die shared between 1601, 1602, and 1604 (Phokaia2/O2) and in 1605-10 there is one shared between 1605, 1606, and a type not listed in Price (Assos1/O2) and another between 1607 and 1610 (Assos1/O6), but there are no obverse dies shared between the two groups. When we turn to the hoard evidence (**Figure 4**), we also see that the two series appear to have been produced a decade or so apart.

Price 1600-1604			
Hoard	Burial Date	Variety (Price)	Dies (P2/O1-O3)
CH X 294	ca. 180-175	1601	O?
IGCH 1544	ca. 169	1603	O2
IGCH 1773 ^a	ca. 150-142	1602	O3 (very worn)
Price 1605-1610			
Hoard	Burial Date	Variety (Price)	Dies (A1/O1-O7)
CH VIII 433	ca. 162	1605, 1606, 1609	O2, O5
IGCH 1774 ^b	ca. 155	1610	O7
CH X 301	ca. 151/0	1607	O6
IGCH 1773	ca. 150-142	1608, 1609	O4, O5
CH IX 517 ^c	ca. 150-142	New 5	O1
CH X 308	Autumn 143	New 6, 1608	O2, O4

Figure 4 – Hoard Evidence for Price 1600-4 (P2 = Phokaia Series 2) and Price 1605-10 (A1 = Assos Series 1).

^a Lorber 2010, p. 155. ^b Houghton and Meadows 2010, p. 179, n. 13. ^c Lorber 2010, p. 155.

CH X 294 (Pamphylia, 1977) gives a *terminus ante quem* for Price 1600-4 of ca. 180-175, and the example of Phokaia2/O2 in IGCH 1544 (Latakia, 1759) and the very worn example of Phokaia2/O3 in the much later IGCH 1773 (Tell Kotchek, 1952) are consistent with this. By contrast, the hoards for Price 1605-10 are appreciably later: examples of Assos1/O2 and O5 appear in CH VIII 433 (Ma'aret En-Nu'man, 1980) buried ca. 162 and an example of the final obverse die is included in IGCH 1774 (Babylon, 1900) buried ca. 155. Of the two coins in CH VIII 433, the example of Assos1/O2 has some wear whereas the example of O5 is fresh. This suggests that Price 1605-10 was minted ca. 175-165, and indeed the examples in IGCH 1773

¹⁹ The dies of Phokaia Series 1 (Phokaia1), Series 2 (Phokaia2), and Assos Series 1 (Assos1) have been numbered separately. To distinguish them from one another in this discussion I will refer to them as (e.g.) Phokaia1/O1 = obverse die one in Phokaia Series 1.

²⁰ Price 1601 adds a bunch of grapes under the throne and 1603 an ivy leaf.

(buried *ca.* 150-142) are correspondingly fresher than the very worn example of Phokaia2/O3 in that hoard.

The attribution of Price 1605-10 to Assos is secure. 1610 from the end of the series features the problematic seated griffin in combination with a bucranium. As mentioned, these are the two main symbols of Assos on its coinage and in combination can refer to no other city. In addition, the signer's name on 1610 is closely associated with this region and Assos in particular. Μόμμωπτος is attested on a Hellenistic grave inscription from Assos, as a Lesbian *proxenos* (either of Methymna or Antissa) in a list of Eresian proxenoi from the late 3rd century, and on this coin.²¹ The strong epichoric character of the name thus dovetails with the control marks on this issue in indicating Assos as the mint. Finally, one example of 1610 shares an obverse die (Assos1/O6) with 1607 which has the same format for its reverse controls as 1605-9 (i.e. griffin and monogram in left field + control in exergue), thus strengthening the argument for attributing all of 1605-10 to Assos.

By contrast, the attribution of 1600-4 to Assos is far from certain. In the case of Phokaia Series 1b, the distinctive monogram Ϝ can be compared to the city's autonomous coinage to confirm the attribution to Phokaia which is also indicated by the seal control mark punning on the city's name. However, in the case of Assos we have no such comparanda except for Price 1605-10. The latest dateable coinage of Assos with civic types is an issue of bronzes probably dating to the mid-3rd century (**Figure 8.a** below).²² Neither this issue nor earlier issues feature monograms, and there are no similarities between the monograms on 1600-4 and 1605-10. However, the monogram on 1601 (Ϝ or ϝ) somewhat resembles that which Price draws for 2224 (Ϝ in left field). Unfortunately, no certain examples of this type are known except for the example Price gives for this issue which is in the currently inaccessible Hague collection and so cannot be checked. However, a coin in the collection of Philip Kinns (Phokaia Series 1a, O5/R25) appears to have the same monogram but in the exergue and is die-linked to an example of 1599/2223.²³




Figure 5 – Shared monogram on examples of Price – (New 1) (die-linked to Price 1599/2233 via IGCH 1410.238) and of Price 1601. (a) Price – (New 1) (Phokaia Series 1a, O5/R25): PK

²¹ LGPN VA s.v. (1-3). LGPN follows ROBERT 1966, pp. 118-21 in making the individual from the Eresian proxy list a citizen of Assos. However, HODOT 1976, 63-4 pointed out that this restoration does not work with the layout of the inscription and suggested that the individual was Mytilenaiian. MACK 2012, pp. 218-19 has confirmed this observation, but also notes that the individual is much more likely to be from either Methymna or Antissa and thus from the coast of Lesbos directly opposite Assos.

²² BMC Troas p. 38, no. 23. This is the only series of bronzes at Assos with die axes consistently adjusted to 12h and so must be the mint's latest series. At the same time, the types remain essentially those of the Classical period (i.e. head of Athena + griffin), suggesting a 3rd century date. The shift to fixed dies for bronze coinage happened in the course of the first half of the 3rd century in the neighbouring region of Aeolis: see ASHTON 2012, pp. 30-2 for the evidence from Kyme.

²³ I am grateful to Philip Kinns for drawing this example to my attention and alerting me to its larger significance.

Collection (31.5mm, 12h, 16.58g). (b) Price 1601 (Phokaia Series 2, O2/R2): BnF 1966.21 (36mm, 12h, 16.71g).

In sum, it seems increasingly likely that 1600-4 should be re-attributed from Assos to Phokaia. This in turn raises the question of whether these issues should also be placed at the same point in the sequence as the Kinns coin with the similar monogram  (Figure 5.a) and thus integrated into Phokaia Series 1. The hoard evidence certainly allows for this possibility: CH X 294 only provides a *terminus ante quem* of ca. 180-175 for Price 1600-4, and so could in theory as easily indicate a date in the 210s/200s as in the 180s. However, two points can be made against this high dating. Firstly, there are no examples of Price 1600-4 in the many large hoards of the 200s and 190s or die links between these issues and Price 1599/2223-30. Although an argument from silence, this is a difficulty for dating Price 1600-4 to the 210s/200s given how well-represented examples of Phokaia Series 1 are in these hoards. A second and perhaps less serious objection is that the weight and diameter of the Series 2 coins is more consistent with a date in the 180s than in the 210s/200s. As Figure 6 indicates, Phokaia's Series 2 coins have appreciably lower weights and broader flans than Phokaia's Series 1 coins. At least in these two respects, therefore, these coins have rather more in common with the Assos Series 1 coins of the 170s/160s. Both a target weight closer to 16.80g than 17.00g and broader flans are features of tetradrachm production which became ever more pronounced at many mints in the first half of the 2nd century.²⁴

Dies					
	Coins (n)	Obverse Dies (d)	Index Figure (n/d)	Estimated Obverse Dies (D) ²⁵	Singletons
P1a	54	6	9.0	6.8 ±0.9	O2, 6
P1b	20	9	2.2	16.3 ±9.4	O9, 11, 13, 14
P2	12	3	4.0	4.0 ±1.9	-
A1	17	7	2.4	11.9 ±6.8	O3, 4, 7
Weights and Diameters					
	Mean	Median	Mode	80 th Percentile ²⁶	Average Diameter
P1	16.66	16.70-9	16.90-9	16.90-5 (n = 74)	31.6 (n = 62)
P2	16.52	16.60-9	16.70-9	16.75-9 (n = 12)	34.4 (n = 9)
A1	16.21	16.50-9	16.70-9	16.75-9 (n = 15)	35.2 (n = 17)

Figure 6 – Figures for Phokaia Series 1 (P1), Series 2 (P2), and Assos Series 1 (A1).

3. Phokaia, Assos, and the Attalids

With all due caution, we can fit Phokaia's Alexanders into what we know of the city's history in this period. Phokaia went over to Achaïos in 223/2 and remained under his control until

²⁴ If we accept the conclusion that Price 1600-4 constitute a separate and slightly later Phokaian series in the 180s, this creates a sequence in which Phokaia switched back and forth between a variety of identifying control marks on its Alexanders. While this dashes the possibility of a neat typological progression, it is not an altogether surprising conclusion if we consider the variety within Series 1 (summarized above in n. 18).

²⁵ Calculated according to the formula of ESTY 2011.

²⁶ Andrew Meadows argues for the value of the 80th percentile as a means of determining a coinage's target weight in a forthcoming paper on silver coinages of Asia Minor in the 1st century BC to be published in R. ASHTON AND N. BADOUD (eds.), *Graecia capta? Rome et les monnayages du monde égéen (II^e-I^{er} s. av. J.-C.)*, Basel, 2021. For an application of the method alongside other approaches see THONEMANN 2019, pp. 66-8.

Attalos I reconquered the region in 218.²⁷ The fresh example of Price 2225 in IGCH 1370 (Northwestern Asia Minor, 1929; buried *ca.* 215-210) suggests that Phokaia minted its Series 1a Alexanders in the years immediately following Attalos' liberation of the city. As discussed earlier, the hoard evidence suggests that Series 1b was produced in the late 200s or early 190s. In late 197 the city was captured by Antiochos III and remained under his control until the Seleukid king's defeat at the Battle of Korykos in 191.²⁸ In the current state of our evidence, it is simply not possible to say whether all, part, or none of Series 1b was produced in the period between the Seleukid conquest in late 197 and the burial of IGCH 1410 *ca.* 195. However, given how tight this timeframe is and the indications discussed above that Series 1b was produced episodically over a longer period of time than Series 1a, the likelihood must be that some or all of these Alexanders predate 197.

Thus, it is certainly the case for Phokaia Series 1a and likely the case for some or all of Series 1b that the production of these Alexanders coincides with the period when the city was allied to the Attalids. The decision to mint this coinage as Alexander-type tetradrachms points to it being intended for external, high-value, and thus, most likely, military payments. In terms of size, the Series 1 Alexanders are appreciably larger than what Phokaia produced for Antiochos II.²⁹ This suggests that we are not looking at Phokaia's own military expenditure, but rather a contribution towards that of a much more powerful state which, given the historical context, must be the Attalids (and, in the case of Series 1b, possibly the Seleukids).³⁰ We know that a short time later in 191 Phokaia was required to support the Roman fleet using its harbour and to provide both material and financial support to the allies fighting Antiochos III.³¹ It is therefore reasonable to assume that the Attalids had made similar requests in the 210s and 200s.

If Phokaia was indeed minting Alexanders for the Attalids, then the evidence presented above for there being both a die transfer with a mint which may be Kolophon and a die cutter shared with Kyme and Myrina in Series 1a indicates that Phokaia did so in co-operation with its neighbours. In the case of Kyme and Myrina, such co-operation had a precedent in the period of Seleukid rule. Under Antiochos II, Myrina, Kyme, and Phokaia produced a variety of gold and silver coinages with Seleukid types.³² As George MacDonald was the first to note, these coinages show many signs of being produced in collaboration with one another: for example, they share monograms (above all varieties of Φ), they share die cutters and/or portrait models (as between Myrina's SC 499 and Phokaia's SC 511.1-2), and they share the unusual seated Herakles reverse type.³³

Going somewhat beyond what the evidence actually supports, MacDonald argued that these coins were the product of a defensive alliance centred on Phokaia which was formed to protect

²⁷ Polyb. 5.77.4-6, ALLEN 1983, pp. 41-3.

²⁸ MA 2002, pp. 86-7.

²⁹ A preliminary die study of Phokaia's coinage for Antiochos II shows that it consists of at least one stater die, six tetradrachms dies, and three drachm dies. Since a stater is worth five tetradrachms, this gives the coinage a value of 11.75 tetradrachm dies. By contrast, the Phokaia Series 1 Alexanders amount to at least 15 tetradrachm dies, and this figure will certainly rise in Series 1b where the index figure is low (2.2) and the number of singleton dies high (four of nine).

³⁰ Perhaps specifically on Mysian and Galatian mercenaries given the preponderance of examples found in hoards from northwest and central Anatolia.

³¹ Liv. 37.9.1-5, Polyb. 21.6.1.

³² Myrina: SC 498-9 (staters), 500-1 (tetradrachms); Kyme: SC 502, 506 (staters), 503-5, 507 (tetradrachms); Phokaia: SC 515 (staters), 508-12, 514 (tetradrachms), 513 (drachms). SC 497 (perhaps Temnos) should be classed with this group because of its seated Herakles type. In turn, its obverse (a die transfer from SC 495) loosely affiliates Aigai's output of staters (SC 494) and tetradrachms (SC 495-6) with this group as well.

³³ MACDONALD 1907, NEWELL 1941, pp. 310-16, HOUGHTON AND LORBER 2002, vol. 1, part 1, pp. 178-83.

against Pergamene and/or Ptolemaic aggression in the late 260s.³⁴ More reasonably, the editors of *Seleucid Coins* took this evidence for collaboration (in particular the shared use of the monogram Φ and its varieties) between Myrina, Kyme, and Phokaia to indicate that these coins were produced under a unified Seleukid administration. Thus, they concluded that: “These three associated mints attest to an increasingly conspicuous Seleukid administration in Asia Minor under Antiochos II ... They may have played a more general role in supporting the imperial ambitions of Antiochos II”.³⁵ While accepting the latter half of this statement, we may wish to challenge the implication in the first half that the co-ordination which we see between these mints can only have been orchestrated by the Seleukid administration and not by the cities themselves. As Kinns and Ashton have shown in their studies of the autonomous coinages of Phokaia and Kyme respectively, a number of the monograms on the Seleukid-type coinages of these cities also appear on their autonomous coinages (**Figure 7**).³⁶ Indeed, the crucial Φ monogram which *Seleucid Coins* cite as evidence for unified Seleukid administration also turn up on Kyme’s contemporaneous bronze coinage where it clearly cannot bear such an interpretation.³⁷ Thus, the collaboration which we see between Myrina, Kyme, and Phokaia in their Seleukid coinages most likely came about at the initiative of these cities, not of the Seleukid authorities. When, several decades later in the 210s/200s, Attalos I likewise requested coinage from these cities, they appear to have fallen back on this precedent of collaboration to fulfil his request.³⁸



Figure 7 – Shared monograms on the Seleukid and autonomous type coinage of Kyme from the 250s. (a) SC 503 (Attic tetradrachm): CNG 87 (18/5/2011) 619 (28mm, 11h, 17.08g). (b) ASHTON 2012, Group A.1 (Persic didrachm): BnF Fonds Général 75 (9.36g). (c) ASHTON 2012, p. 31, Pl. 1, D-K (bronze tetrachalkon): Rauch 95 (30/9/2014) 113 (4.03g).

This conclusion naturally raises the question of whether the die-cutter which Phokaia, Kyme, Myrina, and Kolophon (?) shared for some of their Alexander dies was provided by this consortium of cities themselves or instead by the Attalids for whom this coinage appears to have been produced. Boehringer long ago noted that some of the dies for Mytilene’s Price 1699 were cut by the same hand as had produced Pergamon’s Price 1473-1479 which Kleiner identified as being the work of ‘Hand A’ in his study of the Pergamene Alexanders.³⁹ Both issues of Alexanders can now be dated *ca.* 230-225 thanks to new evidence from the ‘Black

³⁴ MACDONALD 1907, pp. 157-9 with some pertinent criticisms in NEWELL 1941, pp. 311, 313.

³⁵ HOUGHTON AND LORBER 2002, vol. 1, part 1, pp. 179, 181 (quotation).

³⁶ KINNS 2002, pp. 23-4, ASHTON 2012, pp. 28-9. The civic bronzes of Myrina do not have monograms.

³⁷ ASHTON 2012, p. 33.

³⁸ Philip Kinns also draws my attention to the drachms in Series 1b (Price 2230). These are exceedingly rare at this late date (Magnesia provides a rare contemporary parallel: Kinns in VĀDAN 2018, pp. 102-3) and suggest that Phokaia was in charge of production and thinking of its own needs in addition to fulfilling its obligation to Attalos.

³⁹ BOEHRINGER 1972, p. 158: “diese V und die von Mektepini 241-242 sind von Pergamener Künstlern geschnitten”. Hand A: KLEINER 1971, pp. 100-2.

Sea Tetradrachm’ and ‘Seleucus III’ hoards, suggesting that they belong to the context of Attalos I ejecting Antiochos Hierax from western Asia Minor and expanding his kingdom.⁴⁰

Clearly, therefore, the Attalids were willing to provide technical assistance to allies who were producing coinage for their military endeavours. However, whether they were doing so in the case of Phokaia, Kyme, Myrina, and Kolophon (?) in the late 210s/200s is a separate question. The stylistically similar dies of these mints were produced fifteen to twenty years later than the products of Hand A, and while there are some correspondences with the features which Kleiner identified as diagnostic for Hand A, there are equally several differences.⁴¹ Moreover, now that the Pergamene Alexanders of Hand A can be dated *ca.* 230-225, there are no precisely contemporary Alexanders of the Pergamene mint with which to compare those of Phokaia, Kyme, Myrina, and Kolophon (?). It is therefore unclear how direct Attalid involvement was in these coinages. At a minimum, an Attalid request for coinage prompted these cities to pool minting expertise and for Phokaia to share a die with a mint which may be Kolophon. Potentially, though, this request could have been accompanied by a Pergamene offer of technical assistance to these mints which, with the exception of Kolophon, had no prior experience of producing Alexanders.

Phokaia Series 2 again appears to belong to a regional cluster of Alexander minting. If it is correct to reattribute Price 1600-4 from Assos to Phokaia and date these issues to the 180s, then we can add Phokaia to the roster of Ionian cities such as Samos, Erythrai, Chios, and Miletos which produced Alexanders in the 180s.⁴² Price thought that the 180s was a busy time for Alexander production throughout western Asia Minor, arguing that, “The new-found freedom of the cities of Asia Minor in 188 BC manifested itself in a burst of Alexander tetradrachm coinage”.⁴³ However, it has become increasingly clear that many of the series which Price placed soon after 188 did not in fact begin until the 170s or 160s.⁴⁴ Indeed, now that Price 1600-4 have been reattributed to Phokaia, with the exception of Pergamon (Price 1491-5), the only mint producing Alexander-type coinage in the whole of the Troad, Mysia, and Aeolis in the 180s appears to have been Alexandreia Troas (Price 1590, 1592-8).⁴⁵ Consequently, the cluster of Ionian mints producing Alexanders in the 180s turn out not to have been participating in a phenomenon common to mints across western Asia Minor, but rather in one which was particular to this region.

⁴⁰ ‘Black Sea Tetradrachm’ hoard: MARINESCU AND LORBER 2012, p. 215, nos. 338-40 (Price 1699) and p. 231 (dating significance). ‘Seleucus III’ hoard: in unpublished photos of the hoard kindly provided by Cathy Lorber I have identified for Pergamon examples of Kleiner dies ‘C’ (Price 1474) and ‘G’ (Price 1476) and for Mytilene examples of Price 1698, 1699, and 1706 which were not listed in CH X 272.

⁴¹ In terms of similarities with Hand A, both mane and brow have a single tier of hair, the hair of the mane is rendered in a compact way, and the hair on the brow curves from right to left. On the other hand, the profile of Herakles is different and the knot below the chin shows the lion’s claws on the examples of Phokaia and Kyme which are never present for Hand A (they are off flan on the only Myrina example).

⁴² Price 1911-1916 (Erythrai); 2195ff (Miletos); 2405ff (Chios), 2451-2452 (Samos). Of these issues, CH X 294 (buried *ca.* 180-175) contained examples of Price 1911 (Erythrai), 2212 (Miletos), 2451/2 var (Samos), and 2409-2410, 2412 (Chios).

⁴³ PRICE 1991, vol. 1, p. 79.

⁴⁴ See, for example, the overview in DELRIEUX 2019, pp. 90-2, Table 1 where his information for Ionia and Caria (based on the advice of Philip Kinns, Richard Ashton, and Andrew Meadows) is largely up-to-date and reflects the emerging picture referred to here.

⁴⁵ Pergamon: MEADOWS 2013, pp. 163-4. Alexandreia Troas: CH X 294 (Pamphylia, 1977; *ca.* 180-175) contained an example of Price 1595 which is now SNG Copenhagen Suppl. 134. This has been mistakenly omitted from the hoard listing in CH X 294.

The reattribution of Price 1599-1604 to Phokaia leaves Assos with a single episode of Alexander minting in the late 170s/early 160s. At first glance, the seven obverse dies so far attested for Assos Series 1 give the impression of a rather modest coinage. However, as the low index figure (2.4) and the high number of singleton dies (three out of seven) indicate, the series simply has a poor survival rate and its original size will have been greater.⁴⁶ Die studies of other Alexander- and Lysimachus-type coinages from the post-Apameia period suggest that the issue of poor survival rates is widespread in our evidence and needs to be borne in mind lest we underestimate the importance of these coinages.⁴⁷

Whatever the original size of Assos Series 1, in the broader context of the city's almost complete lack of minting activity in the Hellenistic period, its very existence is the most surprising thing about it. In the Classical period, Assos was an active mint: it produced silver coinage in the first and last quarters of the 5th century, did so again in the mid-4th century, and produced bronze coinage at various points throughout the 4th century.⁴⁸ Given how frequently Assos minted in the Classical period, its near silence in the Hellenistic period is all the more striking. There is one issue of bronzes with die axes adjusted to 12h, suggesting that these coins were produced by the mid-3rd century (**Figure 8.a**).⁴⁹ Beyond this, the Alexanders of Assos Series 1 are the only coins the city produced until the reign of Augustus. Revealingly, when Assos began minting once again under the Julio-Claudians they re-used the reverse type of seated griffin beneath the ethnic ΑΣΣΙ from the city's 4th century bronze coinage, recalling the last time the mint had been regularly active (**Figure 8.b-c**).⁵⁰



Figure 8 – Bronze coinage of Assos. (a) Obol, mid-3rd century (?): MM Basel FPL 587 (Jun. 1995) 27 (9.53g). (b) Tetrachalkon, 4th century: ANS 1944.100.43791 (7h, 3.89g). (c) RPC 1.2321 (reign of Augustus): Ares Web Auction 9 (17/5/2020) 154 (16mm, 3.31g).

It is unclear why Assos all but ceased minting in the Hellenistic period. However, given the city's strategic position, it is tempting to speculate that the Attalids garrisoned Assos at some point in the mid-3rd century and that this accounts for the mint's silence. From its notoriously

⁴⁶ As indicated in **Figure 6**, Esty's formula for estimating the original number of dies suggests this series might originally have consisted of 12 dies. However, with an index figure below three such estimates are not reliable and can change dramatically as new material emerges.

⁴⁷ In die studies I have prepared for the post-Apameia Alexanders of Alexandria Troas, Methymna, and Mytilene and the Lysimachi of Abydos, Ilion (ELLIS-EVANS AND EROL-ÖZDIZBAY 2020, pp. 42-3), and Lampsakos based on an exhaustive search of collections and auction catalogues, only Lampsakos has an index figure greater than three. By contrast, at Methymna and Mytilene, where there are late 3rd century Alexander series with which to compare the post-Apameia series, the index figures are comfortably above three. It is therefore dangerous to infer, as for example DELRIEUX 2019, p. 104 appears to, that Alexander production at civic mints was less significant post-Apameia than pre-Apameia.

⁴⁸ LAZZARINI 2017 has provided a sketch of the minting activity of Classical Assos which, however, requires considerable correction and so has not been followed here. The dates given in the text instead rely on ELLIS-EVANS AND VAN ALFEN 2018 (silver coinage ca. 500-475), ELLIS-EVANS 2019, pp. 189-96 (silver coinage ca. 425-400), ELLIS-EVANS 2018, esp. pp. 41-4 and 51-4 (silver coinage 360s-330s). Dates for the bronze coinage are pegged to the chronological structure provided by the silver.

⁴⁹ For the dating see n. 22 above.

⁵⁰ RPC 1.2320-1 (Augustus), 2322-3 (Claudius). Assos only begins to use entirely new types from the reign of Trajan on.

precipitous acropolis, the city commanded the main land route between the Troad and the core of the Attalid kingdom.⁵¹ Further east along this road, Eumenes I founded the settlement of Philetaireia under Ida and Attalos I garrisoned the city of Antandros (another active Classical mint which fell silent in the Hellenistic period).⁵² However, while Antandros provides an example of a city garrisoned by the Attalids which did not mint, one can equally point to Abydos post-Apameia as a garrisoned city which did continue to mint.⁵³ Since we lack clear evidence for the status of Assos under the Attalids, the hypothesis that it was garrisoned must for the moment remain speculation.⁵⁴

Firmer evidence for the relationship of Assos to the Attalids in the first half of the 2nd century can instead be found in the following fragment from the *Hypomnemata* of Ptolemy VIII Euergetes II:

Πτολεμαῖος δ' ὁ τῆς Αἰγύπτου βασιλεὺς ἐν τῷ ἐνάτῳ τῶν Ἀπομνημονευμάτων (?)⁵⁵, εἰς Ἄσσον, φησὶν, ἐπιδημήσαντί μοι οἱ Ἄσσιοι παρέστησαν χοῖρον ἔχοντα τὸ μὲν ὕψος δύο καὶ ἡμίσεος πήχεων, ὅλον δ' ἄρτιον πρὸς τὸ μῆκος, τῇ χροιά χιόνινον. ἔφασάν τε τὸν βασιλέα Εὐμένην τὰ τοιαῦτα ἐπιμελῶς ὠνεῖσθαι παρ' αὐτῶν διδόντα τοῦ ἐνὸς δραχμᾶς τετρακισχιλίας.

Ptolemy [VIII] the king of Egypt says in Book 9 of his *Commentaries*: “When I visited Assos, the local people presented me with a pig that was two and a half *peches* [four feet] tall, proportionately wide across, and the colour of snow. They claimed that King Eumenes [II] had been eager to purchase animals like these from them and had paid 4,000 drachmas apiece” (BNJ 234 F 10 = Ath. 9.375d, trans. Olson, Loeb).

Athenaeus quotes this fragment of Ptolemy in the context of a larger discussion about the use of pigs as sacrificial animals. This suggests that Eumenes was motivated to purchase these pigs at such extraordinary prices primarily because of their suitability as animals for sacrifice.

⁵¹ ELLIS-EVANS 2019, p. 88.

⁵² Philetaireia under Ida: *OGIS* 266. For the information currently available on the unpublished inscription from Antandros which was found in 2018 see: <https://vici.org/vici/57574/> (accessed 31/8/2020). The text will be published by Prof. Dr. Gürçan Polat of Ege Üniversitesi. For the strategic importance of Antandros see ELLIS-EVANS 2019, pp. 87-92. This new evidence quashes the doubts of BOULAY 2018, p. 142, n. 111 as to its subject status.

⁵³ For the subject status of Abydos and its garrison post-Apameia see *I. Ilion* 56 (180s/170s) with GAUTHIER 1996, pp. 31-5 and 48. The city's Lysimachi date *ca.* 175-150 and so to the period of subject status: ELLIS-EVANS 2019, pp. 41-6. Of the city's bronze coinage, the issue with *Obv.* Facing bust of Apollo, *Rev.* Lyre, A-B-Y/Δ-H (BMC Troas p. 5, no. 48) with die axes adjusted to 12h strongly resembles an issue at Alexandria Troas (BMC Troas p. 12, nos. 29-36) which dates to the mid-2nd century.

⁵⁴ BOULAY 2018, p. 141, n. 94 asserts that, “Assos ... fut manifestement reconnue libre après Apamée”, on the grounds that: 1) the city provided foreign judges to Mylasa and Alabanda (*I. Assos* 9); 2) it produced the Alexanders under discussion here; 3) it was the recipient of Attalid patronage (BNJ 234 F 10 discussed below and the two stoas Eumenes II may have paid for). Taking the second two arguments first, the Alexanders do not automatically indicate free status (see n. 53 on the parallel case of the Abydene Lysimachi) and subject cities were no less likely than free cities to attract Attalid patronage (e.g. ALLEN 1983, pp. 114-21, esp. 120-1 on Ephesos). Regarding foreign judges as evidence for free status, HAMON 2009, p. 372, n. 58 observes that, if the decree of the Peltai honouring Antandros for dispatching a judge (Michel 542) dates *ca.* 188-133, then it would prove that this was not a point on which the Attalids distinguished free and subject cities. In addition, it should be noted that none of the five documents relating to Assian foreign judges (*I. Assos* 7-11) certainly predate 133, so the point may in any case be moot.

⁵⁵ Olson in the Loeb suggests correcting this obvious textual corruption to Ὑπομνημονευμάτων. The work's title was *Hypomnemata* according to BNJ 234 T 1 = Ath. 14.654d.

Indeed, this must also be why Ptolemy emphasizes not just the size but also the snow-white colour of these pigs.⁵⁶ Since Eumenes has the royal title, the period in which he was buying pigs from Assos must date to 197-158, but we can be no more precise than that. In any case, the present tense of ὠνεῖσθαι suggests that this was an ongoing arrangement, not a one-off purchase. The fragment is tantalizingly brief, but at a minimum it establishes Assos as a community which had the ear of Eumenes II and which enjoyed the special status of providing this ostentatiously pious king with his prize sacrificial pigs. It was this same community which, quite unexpectedly, produced the Series 1 Alexanders in the late 170s or early 160s. Given the high value of the coinage, how exceptional the series is in the context of the minting history of Hellenistic Assos, and the close relationship with Eumenes which the fragment of Ptolemy attests, it seems reasonable to conclude that this coinage was minted at the request of Eumenes II to meet Attalid military expenditure.

4. Conclusions

The evidence presented above allows us to reconstruct the minting activity of Phokaia and Assos in the late 3rd and early 2nd century as follows. In the late 210s, Phokaia produced a brief issue of Alexanders in a single moment of minting (Series 1a, at least six dies). This involved a degree of co-operation with Kyme, Myrina, and a mint which may be Kolophon and was most likely a response to a request for coinage from Attalos I to support his military endeavours. In the 200s and early 190s, Phokaia then produced a larger and but less well-understood Alexander coinage on a more episodic basis (Series 1b, at least nine dies). While the most likely explanation for the production of so many Alexander tetradrachms is once again Attalid military expenditure, it is worth noting that alongside the tetradrachms Phokaia also produced Alexander-type drachms (one die) and a parallel issue of hemidrachms with civic types (two dies). This suggests that, in addition to providing coinage for Attalos I (and possibly Antiochos III), the city was also thinking of its own monetary needs. In the 180s, Phokaia may have produced a final issue of Alexanders on a smaller scale (Series 2, at least three dies), although neither the attribution nor the date are absolutely certain. As for Assos, it produced its one and only issue of Alexanders in the late 170s or early 160s (Series 1, at least seven dies). As almost the only issue of coinage which Assos produced in the Hellenistic period, it is highly likely that these Alexanders were produced at the request of Eumenes II.

The Alexanders of Phokaia and Assos are an example of how, from the reign of Attalos I onwards, the Attalids increasingly called upon cities to contribute to their military endeavours by minting tetradrachm coinages. The occasional, short-lived, and regional nature of these episodes of Alexander minting all suggest that these were not regular payments, but rather a response to one-off requests for support which the Attalids directed at specific regions when they found themselves in particular need. As we have seen in the case of Phokaia and Assos, while it is possible that Pergamon provided some technical assistance, it is clear from the connections with the civic coinage at Phokaia, the epichoric name Mormottos at Assos, and the control marks at both mints that these cities administered the minting of these coinages themselves. As John Ma has emphasized, there were several pinch points for Attalid finances in the 220s to 190s when the kingdom likely found itself militarily over-committed relative to its resources.⁵⁷ In these circumstances, the ability to call upon the minting infrastructure of the cities to provide military pay at short notice would have been extremely valuable. As Selene Psoma has argued, such requests could have been made to free cities (such as Phokaia) by couching the demand in the language of mutual obligation and emphasizing the protection and

⁵⁶ I can see no support for the inference of KOSMETATOU 2001, p. 123 that Eumenes was interested in these pigs (not boars, as she states) for breeding purposes.

⁵⁷ MA 2013, p. 76.

benefaction which the Attalids provided to loyal allies.⁵⁸ The story of how the Attalids came to be able to draw on the support of this network of cities in western Asia Minor is therefore an important aspect of the financial and political history of the Attalids *ca.* 230-140. However, as this case study demonstrates, it is all too easily obscured when we lack the studies of series and are thus overly reliant on the necessarily provisional typologies and chronologies of Price.

5. Catalogue

All the coins in the catalogue are tetradrachms with the standard Alexander types. All dies are adjusted to 12h unless otherwise noted. Discrepant reports of a coin's weight which differ by more than 0.1g are recorded in square brackets. Illustrated coins are marked with an asterisk. Where it has not been possible to establish a coin's diameter, I have used the average for that series: 31.5mm for Series 1 (nos. 38, 39, 51, 56), 34.5mm for Series 2 (nos. 83, 84). Examples of Assos (or commonly attributed to Assos) were collected by me in the course of my research on the Troad and derive from a thorough search of museum collections and auction catalogues. For examples of Phokaia I have instead been reliant on the generosity of Philip Kinns.

Phokaia Series 1a (Price 1599/2223, 2224-5, New 1-2; late 210s)




#	Dies	mm	g	References / Notes
<i>Ref.</i> Price 2225. <i>Rev.</i> <LF> Griffin forepart l.				
1*	O1/R1 (1)	29.5	16.96	IGCH 1370 (Northwestern Asia Minor, 1929; <i>ca.</i> 215-210). ANS 1944.100.31397 (E. T. Newell).
2	O1/R1 (2)	31	17.01	BM G3, GIS.15 (George III, 1771).
3*	O1/R2	32.5	16.78	Ashmolean HCR 24027 = SNG Ashmolean 3.2798 (acq. Spink, 9/6/1948).
4*	O1/R3 (1)	32.5	16.84	CNG 99 (13/5/2015) 196 (Dr. Will Gordon).
5	O1/R3 (2)	33	16.40	CNG 54 (14/6/2000) 468.
6	O1/R3 (3)	31	16.45	Naumann 70 (7/10/2018) 72.
7	O1/R3 (4)		16.60	SNG Munich 592 (Acc. 17346).
8	O1/R3 (5)	31	-	CH X 308.A1196 (Gaziantep, 1994; Autumn 143).
9*	O1/R4	31	16.65	Unknown Findspot, 2013 (<i>ca.</i> 192/1). HJBerk Buy or Bid 195 (29/10/2015) 56.
<i>Ref.</i> Price 1599 / 2223. <i>Rev.</i> <LF> Griffin seated l.				
10*	O1/R5	33	16.80	IGCH 1410.237 (Mektepini, 1956; <i>ca.</i> 195).
11*	O2/R6	30	13.76	IGCH 1303 (Pergamon, 1960; <i>ca.</i> 210-205). BOEHRINGER 1972, Neue Münzfunde 6.2 (Taf. 30) – Chipped.
12*	O3/R7 (1)	30.5	16.68	ANS 1944.100.31395 (E. T. Newell).
13	O3/R7 (2)	33	16.52	CNG EA 330 (9/7/2014) 49.
14	O3/R7 (3)	33	16.82	CNG 375 EA (1/6/2016) 368.
15	O3/R7 (4)	32	16.92	Heritage Auctions 3067 (11/9/2018) 33110.

⁵⁸ PSOMA 2013, pp. 280-9, 291-4.

16	O3/R7 (5)	33	15.80	Unknown Findspot, 2013 (ca. 192/1). Roma Numismatics E-Sale 4 (28/12/2013) 163.
17	O3/R7 (6)		16.77	Lanz Numismatik (eBay; seen 2/2/2018) – Two rectangular punch marks on obverse and one on reverse.
18	O3/R7 (7)	30	16.92	Heritage Auctions 232029 (15/7/2020) 63085.
19	O3/R7 (8)	32	16.43	Vienna Gr 10289.
20*	O3/R8 (1)	34	16.77	ANS 1947.98.149.
21	O3/R8 (2)	31	16.90	Berlin 18252256 = Leo Hamburger (27/5/1929) 803 (Prof. Dr. Richard von Kaufmann, 1908).
22	O3/R8 (3)	34	16.88	CNG 66 (19/5/2004) 214 = GM 112 (17/10/2001) 4086.
23	O3/R8 (4)	31	16.93	Unknown Findspot, 2013 (ca. 192/1). GM 215 (14/10/2013) 793.
24	O3/R8 (5)	31	16.40	CNG EA 99 (13/10/2004) 6.
25	O3/R8 (6)	32	16.90	Unknown Findspot, 2013 (ca. 192/1). GM 215 (14/10/2013) 794.
26*	O3/R9 (1)	32.5	16.55	IGCH 888 (Propontis, Thracian Coast, 1950; ca. 180). ANS 1951.35.19.
27	O3/R9 (2)	31	16.56	Roma Numismatics 7 (22/3/2014) 421.
28*	O3/R10 (1)	33	16.45	ANS 1951.138.6.
29	O3/R10 (2)	32	15.58	IGCH 1303 (Pergamon, 1960; ca. 210-205). BOEHRINGER 1972, Neue Münzfunde 6.3.
30*	O3/R11 (1)	32	16.61	CNG EA 375 (1/6/2016) 369 = 259 (6/7/2011) 104.
31	O3/R11 (2)	32	17.00	Heritage Auctions 3072 (15/1/2019) 35145.
32	O3/R11 (3)	32	16.95	Naville Live Auction 48 (7/4/2019) 44 (M. J. Collection).
33*	O3/R12 (1)	31.5	16.84	IGCH 469 (Macedonia? 1927-1928; ca. 200-180). ⁵⁹ ANS 1944.100.31396 (E. T. Newell).
34	O3/R12 (2)	31	16.93	CNG 96 (14/5/2014) 401.
35	O3/R12 (3)	31	16.69	MM Basel 64 (30/1/1984) 102 = SNG von Aulock 6638 [16.72g].
36*	O3/R13	29	16.24	BM 1896,0703.152 = Sotheby's (15/6/1896) 769.4 (lot of 4; E. H. Bunbury).
37*	O3/R14	33	16.68	Heritage Auctions 231846 (15/11/2018) 63041.
38*	O3/R15		16.40	Rauch 94 (9/4/2014) 250.
39*	O4/R16 ⁶⁰		16.57	Unknown Findspot, 2013 (ca. 192/1).
40*	O4/R17 (1)	32	16.84	Unknown Findspot, 2013 (ca. 192/1). Roma Numismatics E-Sale 3 (30/11/2013) 156 = 2 (2/11/2013) 154.
41	O4/R17 (2)	34	17.02	CH X 292.92 ('Pamphylia or Cilicia' Hoard, 2000; ca. 190/89). CNG EA 332 (6/8/2014) 50.

⁵⁹ Likely to be the same hoard as IGCH 1701 ('Delta', 1927-1928): see CH VIII 356, LE RIDER AND CALLATAÏ 2006, p. 101, DELRIEUX 2019, p. 114, no. 70.

⁶⁰ The reverse dies of O4 are organized according to a worsening die fault at 3h on the obverse. It first becomes visible as a mark in front of Herakles' mouth on R17/4. The fault then branches off to reach the lips from R20 onwards.

42	O4/R17 (3)	34	15.05	IGCH 1406.12 (Gordium, 1951; ca. 210-205). Broken.
43	O4/R17 (4)		16.75	Freeman & Sear (seen 19/3/2005). ⁶¹
44*	O4/R18	30	17.00	CNG 69 (8/6/2005) 172.
45*	O4/R19	29	16.75	IGCH 1410.236 (Mektepini, 1956; ca. 195).
46*	O4/R20	32	16.57	Rauch 103 (23/3/2017) 51.
47	O4/R21 (1)	31	16.89	Unknown Findspot, 2013 (ca. 192/1). Triton 17 (7/1/2014) 274.
48*	O4/R21 (2)	31	16.89	Unknown Findspot, 2013 (ca. 192/1). Roma Numismatics 5 (23/3/2013) 255.
49	O4/R21 (3)		16.81	IGCH 1535 (Syria, 1959; ca. 210). BOEHRINGER 1972, Neue Münzfunde 5.2.
50*	O4/R22	31	17.04	Unknown Findspot, 2013 (ca. 192/1). Künker 333 (16/3/2020) 156 (Dr. W. R. collection) = Roma Numismatics E-Sale 1 (31/8/2013) 78 (Tannenbaum collection).
51*	O4/R23		16.99	Heritage Auctions 3064 (20/4/2018) 32120.
52*	O5/R24	33	16.82	IGCH 1410.238 (Mektepini, 1956; ca. 195).
-	O?/R? (1)		16.44	IGCH 1537 (Kosseir, near Antakya, 1949; ca. 190). Seyrig, <i>Trésors</i> 7.12 – Not illustrated.
-	O?/R? (2)		-	IGCH 1537 (Kosseir, near Antakya, 1949; ca. 190). Seyrig, <i>Trésors</i> 7.13 – Not illustrated, now in Antakya.
Ref. Price – (New 1). Rev. <LF> Griffin seated l., <EX>  .				
53*	O5/R25	31.5	16.58	PK Collection (acq. 5/9/1998).
Ref. Price – (New 2). Rev. <LF> Griffin seated l., <TH>  .				
54*	O6/R26	32	16.56	Munthandel G. Henzen, MA-Shops ID 5474702010 (seen 7/10/2020).
Ref. Price 2224. Rev. <LF>  , griffin seated l.				
-	O?/R?	-	-	The Hague. ⁶²

Phokaia Series 1b (Price 1599/2223, 2226-30, New 3-4; ca. 205-195)

Ref. Price 1599 / 2223. Rev. <LF> Griffin seated l.				
55*	O7/R27	30	16.97	ANS 1953.145.9.
56*	O7/R28		16.88	H. Grün 64 (20/11/2014) 212.
Ref. Price 2226. Obv. Dotted border. Rev. <LF> Griffin head l.				

⁶¹ Philip Kinns noted the appearance of this coin on Freeman & Sear's website at the time.

⁶² Referenced in Price but unavailable to study.

57*	O8/R29 (1)	30	16.69	Ashmolean HCR 23439 = SNG Ashmolean 3.2799 (Balliol College).
58	O8/R29 (2)		17.11	IGCH 1410.289 (Mektepini, 1956; ca. 195).
59*	O8/R30 (1)	30	17.08	BM TC,p103.23.AleIII (Carcherode, 1799).
60	O8/R30 (2)		17.55	BnF R 1826 – Metal fasten accounts for higher weight.
61	O8/R30 (3)		16.33	eBay (seen July 2015). ⁶³
<i>Ref.</i> Price – (New 3). <i>Obv.</i> Dotted border. <i>Rev.</i> <LF> Griffin forepart l. (above), ΔI (below).				
62*	O9/R31	32	16.99	Naumann 78 (2/6/2019) 88.
<i>Ref.</i> Price – (New 4). <i>Obv.</i> Dotted border (only O10). <i>Rev.</i> <LF> Griffin head and neck l. (above), ⚡ (below).				
63*	O10/R32	30	16.90	BnF 1983.28 – ⚡ faintly visible.
64*	O10/R33	31	16.04	Pecunem 23 (5/10/2014) 194.
65*	O10/R34	32	17.07	Roma Numismatics 7 (22/3/2014) 432.
66*	O11/R35	38	16.84	CNG EA 173 (26/9/2007) 67 (Christopher Morcom) = Glendining (25/11/1970) 67 (lot of 8). ⁶⁴
<i>Ref.</i> Price 2227. <i>Obv.</i> Dotted border. <i>Rev.</i> <LF> ⚡ (above), seal r. (below).				
67*	O12/R36	28	16.93	IGCH 1410.290 (Mektepini, 1956; ca. 195).
<i>Ref.</i> Price 2229. <i>Rev.</i> <LF> M (above), seal r. (below).				
68*	O12/R37 (1)	32x28	16.54	ANS 1944.100.32140 (E. T. Newell).
69	O12/R37 (2)	30	16.93	BnF Fonds Général 803.
<i>Ref.</i> Price 2230. <i>Rev.</i> <LF> seal r., <TH> M.				
70*	oA/rA	19	4.18	Berlin 18252322 (C. R. Fox, 1873). ⁶⁵
71*	oA/rB	20.5	4.10	Peus 360 (27/4/1999) 211 (KINNS 2002, p. 24, Pl. 5.16).
<i>Ref.</i> Price 2228. <i>Rev.</i> <LF> ⚡.				







⁶³ Philip Kinns noted the appearance of this coin on eBay at the time.

⁶⁴ CNG were unable to make out the controls in left field and as a result considered this coin a contemporary imitation. However, the controls are quite clearly those of this Phokaian issue. Insofar as the controls are indistinct, this appears to be because the reverse is weakly struck rather than because the controls themselves have been imperfectly cut. While the diameter is unusually broad for Series 1, the coin does not otherwise look out of place.

⁶⁵ This is presumably the coin of which there is a plaster-cast in the ANS which Price references.








72*	O13/R38	29	16.35	CNG 99 (13/10/2015) 235 (Dr. Will Gordon) = Paul-Francis Jacquier 41 (16/9/2016) 93 = 40 (16/10/2015) 148.
73*	O14/R39	31	16.24	ANS 1944.100.32141 (E. T. Newell).
74*	O15/R40	32.5	16.94	ANS 1944.100.32142 (E. T. Newell).
75	O15/R41 (1)		16.67	IGCH 1410.291 (Mektepini, 1956; ca. 195).
76*	O15/R41 (2)	30	16.72	CH X 292.160 ('Pamphylia or Cilicia' Hoard, 2000; ca. 190/89).

Phokaia Series 2 (Price 1600-4, New 5-7; 180s)

Ref. Price 1600. Rev. <LF>  (above), seated griffin l. (below).				
77*	O1/R1 (1)	36	16.15	ANS 1944.100.31394 (E. T. Newell).
78	O1/R1 (2)	31	15.85	Elsen FPL 188 (Jan/Feb. 1997) 55.
Ref. Price 1601. Rev. <LF>  (R2-R3),  (R4) (above), seated griffin l. (below).				
79*	O2/R2	36	16.71	BnF 1966.21.
80*	O2/R3	35	16.58	Parsy (31/10/2012) 80.
81*	O2/R4	34	16.76	Triton 18 (5/1/2015) 584 = Stack's Bowers Galleries (7/1/2011) 2040 (Jon Kern, 2005).
-	O?/R?		-	CH X 294 (Pamphylia, 1977; ca. 180-175).
Ref. Price 1604. Rev. <LF>  (above), seated griffin l. (below).				
82*	O2/R5	36	16.72	SNG Greece 4.422.
Ref. Price 1602. Rev. <LF>  ⁶⁶ (above), seated griffin l. (below).				
83*	O2/R6		16.38	Gerhard Hirsch FPL 1 (Jan. 1987) 28.
84*	O2/R7		16.63	Burgan (22/12/1984) 187.
85*	O2/R8	32.5	16.97	CGB.fr 51 (17/11/2011) 177 = Lanz 76 (18/5/1996) 217 = GM 69 (18/11/1994) 180.
86*	O2/R9	37	16.45	IGCH 1773 (Tell Kotchek, 1952; ca. 150-142). BnF R 3973 = Seyrig, <i>Trésors</i> 15.2 (condition: "usé").
Ref. Price 1603. Rev. <LF>  (above), seated griffin l. (below), <TH> ivy leaf.				
87*	O3/R10 (1)	36	16.34	IGCH 1544 (Latakia, 1759; ca. 169). BnF Fonds Général 729 = Seyrig, <i>Trésors</i> 11.43.
88	O3/R10 (2)	32	16.71	Aufhäuser 13 (7/10/1997) 42.


Assos Series 1 (Price 1605-10, New 5-7; ca. 175-165)

⁶⁶ The form of this monogram develops as follows:  (R6),  (R7),  (R8),  (R9).

Ref. Price – (New 5). Rev. <LF>  (above), seated griffin l. (below), <EX> wreath.				
89*	O1/R1	31	16.28	CH IX 517.2 (E. Anatolia, 1991; ca. 150-142). Lanz 58 (21/11/1991) 186.
Ref. Price 1605. Rev. <LF>  (above), seated griffin l. (below), <EX> winged fulmen l. ⁶⁷				
90*	O2/R2 (1)	36	16.79	BnF Fonds Général 730.
91	O2/R2 (2)	34	16.70	CH VIII 433.190 (Ma'aret En-Nu'man, 1980; ca. 162). CNG EA 375 (1/6/2016) 370 (Dr. Will Gordon) = Elsen 93 (15/9/2007) 233 = Auctiones Basel 17 (7/6/1988) 150.
Ref. Price 1606. Rev. <LF>  (above), seated griffin l. (below), <EX> winged fulmen r.				
92*	O2/R3	35	16.50	CH VIII 433.189 (Ma'aret En-Nu'man, 1980; ca. 162). BM 1986,0553.3 = Peus 314 (30/10/1985) 110.
Ref. Price – (New 6). Rev. <LF>  (above), seated griffin l. (below), <TH> star ⁶⁸ , <EX> pileus.				
93*	O2/R4	37	16.91	CH X 308.A220 (Gaziantep, 1994; Autumn 143). CNG 30 (11/6/1994) 53.
Ref. Price – (New 7). Rev. <LF>  (above), seated griffin l. (below), <EX> star.				
94*	O3/R5	36	16.62	Lanz 158 (5/6/2014) 237.
Ref. Price 1608. Rev. <LF>  (above), seated griffin l. (below), <EX> star.				
95*	O4/R6	34	16.65	IGCH 1773 (Tell Kotchek, 1952; ca. 150-142). BnF R 3975 = Seyrig, <i>Trésors</i> 15.3 (condition: “assez bien”).
96	O4/R7 (1)	32	-	CH X 308.A221 (Gaziantep, 1994; Autumn 143).
97*	O4/R7 (2)	34	-	Künker FPL 161 (Nov. 2001) 9.
Ref. Price 1609. Obv. Dotted border. Rev. <LF>  (above), seated griffin l. (below), <above outstretched arm> herm r.				
98	O5/R8 (1)	34	16.73	GM 225 (14/10/2014) 1521.
99	O5/R8 (2)	36	15.85	Glendining (18/4/1955) 275 (Property of a Nobleman = Laval).

⁶⁷ See ANS 1944.100.43780 for the fulmen as a control mark on the autonomous coinage of Assos (Persic hemidrachm, mid-4th century).

⁶⁸ See **Figure 8.a** above for the eight-pointed star as a control mark on the autonomous coinage of Assos (bronze obol, mid-3rd century).

100*	O5/R8 (3)	34	16.81	CH VIII 433.191 (Ma'aret En-Nu'man, 1980; ca. 162). BM 1981,0913.2.
101	O5/R8 (4)	40	16.54	IGCH 1773 (Tell Kotchek, 1952; ca. 150-142). BnF R 3974 = Seyrig, <i>Trésors</i> 15.4 (condition: "médiocre").
Ref. Price 1607. Rev. <LF>  (above), seated griffin l. (below), <EX> griffin head (?) l. ⁶⁹				
102*	O6/R9	38	15.80	Berlin 18252257 (A. Prokesch-Osten, 1875).
103*	O6/R10	35	16.33	CH X 301.135 ('Demetrius I', 2002; ca. 151/0). CNG EA 332 (6/8/2014) 51 = Freeman & Sear List 8 (Fall 2003) 104.
Ref. Price 1610. Rev. <LF> bucranium (above), seated griffin l. (below), <EX> MOPMΩTTOY.				
104*	O6/R11	35	14.25	BM 1893,0604.12 – Very worn.
105*	O7/R11	37	14.45	IGCH 1774.15 (Babylon, 1900; ca. 155). Berlin 18252258 – Damage from hoard context but details are sharp.

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⁶⁹ Price refers to this as a wing.

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