

***ANTIGONOS GONATAS:***  
***COINAGE,***  
***MONEY AND THE ECONOMY***

Submitted by  
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for  
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*In memoriam patris.*



## 0.1 Abstract

*'Antigonos Gonatas: Coinage, Money and the Economy'* is a presentation and systematic analysis of the precious metal coinages in the name of 'king Antigonos'. Most of these issues, including (a) gold staters and silver tetradrachms with the types of Alexander III and (b) silver with individual Antigonid types (tetradrachms, 'Pans' and 'Poseidons'; a few drachmae, 'Pans' and 'Zeus'; pentobols, 'Zeus'), are traditionally assigned to the Makedonian king Antigonos Gonatas (r. 283/277-239 BC). However, their relative chronology and their respective presence in hoards allow for their wider distribution from Gonatas to his later homonym, Antigonos Doseon, and for their production at a single mint, demonstrating thus a strong sense of dynastic continuity among Gonatas' successors (chapter 2). It is argued that the numismatic iconography aligns itself with the main threads of the Antigonid international policy established by Gonatas: the Antigonids, following the example of the Temenids, deliberately emphasised their Hellenic identity and piety, in order to become assimilated to the military and political 'debates' both in mainland Greece and on an international level. The introduction, in particular, of the second Antigonid tetradrachm type, the Poseidon-head, meant the resumption of the naval claims of Monophthalmos and Poliorketes in the Aegean concomitantly to Gonatas' victorious naval battle against the Ptolemaic fleet at Andros (chapters 2.1, 2.4).

The analysis of the numismatic material (chapters 3-6) is a prerequisite for a tentative estimation of its approximate quantity and for a better assessment of its distribution pattern. The disproportion between the low annual production rate of these issues and the Antigonid financial requirements may be explained by the use of other precious metal coinages following the Attic weight standard (chapter 7). It is therefore argued that the exercise by the Antigonids of pro-active economic and administrative control was limited and that the introduction of the Antigonid individual issues was inspired by political alongside economic forces.

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 No. 7: Mørkholm, *ibid.*, pl. 40, no. 602.  
 No. 8: Mørkholm, *ibid.*, pl. 40, no. 603.  
 No. 9: Kos: J. Kroll, 'The late Hellenistic Tetrobols at Kos', *ANSMN* (1964) 81-117, pl. 19.17.  
 No. 10: Kos: Kroll, *ibid.*, pl. 20.19.  
 No. 11: Kos: Kroll, *ibid.*, pl. 23.4.  
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50. Chr. Habicht, 'Epigraphische Zeugnisse zur Geschichte Thessaliens unter der Makedonischen Herrschaft', *Archaia Makedonia* I, Thessaloniki 1970, 265-79, pl. LXXV.

## V. MAP

Pan Head – Poseidon Head Tetrachms: Hoard Distribution.



#### 0.4 List of Abbreviations

Abbreviations of the works cited throughout the thesis are listed below. The secondary literature has been included in the bibliography.

#### I. LITERARY SOURCES

- Aelian. *Takt.* Aelianus, *Taktika*, ed. H. Köchly-W. Rustow, Griechische Kriegsschriftsteller, 1855.
- App. *Illyr.* Appian, *Historia Romana*, ed. P. Viereck-A. G. Roos, vols. I-II, Loeb Classical Library 1939; rev. E. Gabba, 1962.
- Arist. *Oec.* Aristote, *Économique*, ed. B. A. van Groningen-A. Wartelle, Paris: Belles Lettres, 1968.
- Asklepiod. *Takt.* Asclépiodote, *Traité de Tactique*, ed. L. Poznanski, Paris: Belles Lettres, 1992.
- Athen. Athenaeus, *Deipnosophistae*, ed. G. Kaibel, vols. 1-3, Leipzig 1886-90.
- Cicero, *De Div.* Cicero, *De Divinatione*, ed. T. E. Page-E. Cappa-W. H. D. Rouse, transl. W. A. Falconer, Loeb Classical Library 1923.
- Diod. Diodorus Siculus, *Bibliotheca Historica*, ed. F. Vogel-C. T. Fischer, vols. 1-6, Leipzig 1886-90.
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- Frontin. Sextus Julius Frontinus, *Strategematon*, ed. G. Gunderman, Leipzig 1888.
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- Kallim. Callimachus, ed. R. Pfeiffer, vols. I-II, Oxonii 1949-53.
- Liv. Titus Livius, *Ab urbe condita liberi*, ed. W. Weissenborn-M.

- Müller, vols. I-IV, Stuttgart 1966.
- Lucian, *Macrob.* Luciani *Opera*, ed. M. H. Macleod, vol. 1, Oxonii 1972.
- Paus. Pausanias, *Descriptio Graeciae*, ed. W. Jones, Loeb Classical Library, vols. 1918-35.
- Plb. Polybius, *Historiae*, ed. L. Dindorf-T. Büttner-Wobst, vols. I-V, Stuttgart 1962-3.
- Plut. *Mor.* Plutarch, *Moralia*, ed. C. Hubert et al., vols. 1-7, Leipzig 1925-78.
- Plut. Plutarch, from the *Vitae Parallelae*, ed. K. Ziegler, vols. I-III: biographies of Aemilius Paulus (*Aem.*), Agis (*Agis*), Aratus (*Arat.*), Cleomenes (*Cleom.*), Demetrius (*Dem.*), Pelopidas (*Pelop.*), Philopoemen (*Philop.*), Pyrrhus (*Pyrrh.*).
- Polyaen. *Strat.* Polyaeus, *Strategemata*, ed. E. Woelfflin et al., Stuttgart 1970.
- Sextus Empiricus, *Adversus Mathematicos* *Adversus Mathematicos*, ed. H. Mutschmann, Leipzig 1912; rev. J. Mau-K. Janacek, Leipzig 1954.
- Str. Strabo, *Geographica*, ed. H. L. Jones, vols. I-VIII, Loeb Classical Library 1917.
- Suida *Suidae Lexicon*, ed. A. Adler, vols. I-IV, Leipzig 1855.
- Tacit. *Ann.* Cornelius Tacitus, *Annales*, I.1, ed. St. Borszsak, Leipzig 1990; vol. I.2, ed. K. Wellesley, Leipzig 1986.
- Xenophon, *HG* Xenophon, *Historia Graeca*, ed. C. Marchant, vols. 1-2, Oxonii 1900.

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- Dürrbach, *Délos* F. Dürrbach, *Choix d'inscriptions de Délos*, Paris 1921-3.
- FD III *Fouilles de Delphes*, *Épigraphie Grecque*, Paris: de Boccard, vol. III, fasc. 1-4, 1909-.
- Hatzopoulos, *Actes de Vente* see Secondary Literature.
- Hatzopoulos, *Institutions* see *ibid.*
- Hatzopoulos, *Institutions II* see *ibid.*
- Helly, *Gonnoi II* B. Helly, *Gonnoi*, vol. II, Amsterdam: Hakkert, 1973.



- IG* *Inscriptiones Graecae Consilio et Auctoritate Academiae Litterarum Borussicae Editae*, vols. I-XV, Berlin 1873- (editio altera, 1913-).
- IG II<sup>2</sup>* *Inscriptiones Atticae Euclidis anno posteriores*, ed. J. Kirchner, fasc. 1-4 (1913-40).
- Meiggs-Lewis, *GHI<sup>2</sup>* R. Meiggs - D. Lewis, *A selection of Greek historical inscriptions to the end of the fifth century B.C.*, Oxford: Clarendon Press, N. York: Oxford University Press, 1988.
- OGIS* W. Dittenberger (ed.), *Orientis Graeci Inscriptiones Selectae: Supplementum Sylloges Inscriptionum Graecarum*, Hildesheim: Olms, 1960.
- SEG* H. W. Pleket - R. S. Stroud et al. (edd.), *Supplementum Epigraphicum Graecum*, Alphen aan den Rijn: Sijthoff & Noordhoff, 1923-.
- Syll<sup>3</sup>* W. Dittenberger, *Sylloge Inscriptionum Graecarum*, vols. 1-4, Lipsiae 1960.
- Staatsvertr./Staatsv.* H. Bengtson, *Die Staatsverträge des Altertums*, Kommission für alte Geschichte und Epigraphik des Deutschen Archäologischen Instituts, München: C. H. Beck, 1975-.

### III. PAPHYROLOGICAL PUBLICATIONS

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- Rutter, *Edinburgh* N. K. Rutter (ed.), *A Catalogue of ancient Greek coins in the Royal Scottish Museum, Edinburgh*, Edinburgh 1979.
- SNG* *Sylloge Nummorum Graecorum*.
- SNG Aarhus* (Danish Series B) *SNG Aarhus University*, Denmark 1986; see also *SNG Fabricius*.
- SNG Ashmolean* *SNG [Great Britain] 5, Ashmolean Museum Oxford, Macedonia III*, Oxford 1976.
- SNG Blackburn* *SNG [Great Britain] 8, The Hart Collection, Blackburn Museum*, Oxford University Press-Spink & Son Ltd., 1989.
- SNG BYB* *SNG The Burton Y. Berry Collection, 1. Macedonia to Attica*, New York: ANS, 1961.
- SNG Cop* (Danish Series A) *SNG The Royal Collection of Coins and*

- Medals, Danish National Museum, Macedonia 3: Philip III-Philip VI, Macedonia under the Romans, Kings of Paionia*, ed. by H. E. Mathiesen, Copenhagen 1943.
- SNG Delepière* *SNG Bibliothèque Nationale, Cabinet des Médailles, Collection Jean et Marie Delepière*, Paris 1983.
- SNG Deutschland* *SNG Deutschland, Münzsammlung der Universität Tübingen, 2. Heft, Taurische Chersones-Korkyra*, Berlin 1982.
- SNG Dewing* Leo Mildenberg-Silvia Hurter (edd.), *The Arthur S. Dewing Collection of Greek Coins, Ancient Coins in North American Collections*, New York: ANS, 1985.
- SNG Evelpidis* *SNG Rena Evelpidis*, Athènes, IIe partie: Macédoine, Thessalie, Illyrie, Corcyre, Épire, Belgique 1975.
- SNG Fabricius* *SNG (Danish Series A+B) The Fabricius Collection-Aarhus University and Royal Collection of Coins and Medals*, Copenhagen, 1987.
- SNG Fitzwilliam* *SNG [Great Britain] 4, Fitzwilliam Museum: Leake & General Collections, Macedonia-Acarmania*, London 1951. See also Grose, McClean.
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- SNG Manchester* *SNG [Great Britain] 7, Manchester University Museum, The Raby and Güterboek collections*, London 1986.
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- SNG Wulfinf* K. Herbert, *SNG The John Wax Wulfinf Collection in Washington University. Ancient coins in North American collections*, New York: ANS, 1979.
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*formed by Sir Hermann Weber, vols. 1-13, London, 1922-9.*

## ii) PUBLICATIONS OF HOARDS

*CH* *Coin Hoards.*  
*IGCH* M. Thompson-O. Mørkholm-C. M. Kraay, *An Inventory of Greek Coin Hoards*, New York: ANS, 1973.

## iii) SALE CATALOGUES

Aes Rude Aes Rude S. A. Chiasso, Lugano.  
Ahlström B. Ahlström, Stockholm, Sweden.  
Aretusa Numismatica Aretusa, S. A., Lugano.  
Ariadne Ariadne Galleries, inc., N. York.  
Athena Athena, Münzen der Antike, GMBH.  
Aufhäuser Bankhaus Aufhäuser, Münzen und Medaillen.  
Baldwin Baldwin, London.  
Ball Robert Ball Nachf., Berlin.  
Baranowsky M. Baranowsky, Coll. Valerio Traverso di Genova-Mr. Joseph Martini et al., Milan.  
Barthold-Baudey R. Barthold-J. Baudey & M. Pesce-A. Poinsignon, MBS, Paris.  
Berk H. J. Berk, Chicago, Illinois.  
Berliner Münz-kabinet Berliner Münz-kabinet GMBH.  
Blançon G. Blançon Münzhandlung, Hannover.  
Bonhams Bonhams, London.  
Bonhams-Vecchi Bonhams-V. C. Vecchi & Sons, London.  
Bourgey E. Bourgey, Paris: Hôtel Drouôt.  
BPB J. C. Baudey & M. Pesce-R. Barthold, Lyon.  
Banque Populaire du Nord-Crédit de la Bourse Banque Populaire du Nord-Crédit de la Bourse, Paris.  
Braunschweiger Braunschweiger Münzverkehr, Germany.  
Burgan Claude Burgan, Paris.  
Button E. Button, Frankfurt.

Cahn	A. E. Cahn, Frankfurt am Main.
Calico	X. & F. Calico, Barcelona.
Canessa	C. & E. Canessa, Naples.
Casolari-Toderi	Casolari - Toderi, Lugano.
Cederlind	T. Cederlind, Oregon.
Christie's	Christie's, London.
Ciani	L. Ciani, Paris: Hôtel Drouôt.
CNA	Cabinet Numismatique Albuquerque, Paris.
CNG	Classical Numismatic Group, Lancaster, Pennsylvania.
CNR	Classical Numismatic Review, Pennsylvania-London.
Classical Coins	Classical Coins, Class. Num. Actions, New York, New York.
Coin Galleries	Coin Galleries, New York, New York.
Crédit de la Bourse	Crédit de la Bourse, Paris.
Desvougés	A. Desvougés, Paris.
Dombrowski	H. Dombrowski Münzhandlung.
Dorotheum	Dorotheum, Vienna.
Drouôt	Hôtel Drouôt, Paris.
Egger	Brüder Egger, Vienna.
Elsen	J. Elsen, Brussels.
Emporium	Emporium, Hamburg.
Feuardent	Feuardent Frères, Hôtel Drouôt, Paris.
Florange-Ciani	J. Florange - L. Ciani, Hôtel Drouôt, Paris.
Frankfurter Münzhandlung	Frankfurter Münzhandlung, Frankfurt.
Freeman-Sear	Freeman & Sear, CA.
Frey	Helga & P. R. Blaser-Frey, Freiburg im Breisgau.
Gadoury, Monte-Carlo	France-Numismatique-Antika 1-Mint State SAM-Victor Gadoury, Monte-Carlo.
Galata	Galata Coins Ltd., Sacra Moneta, London.
G+H	Münzhandlung Gradl & Hinterland, Nürnberg.
Glendining	Glendining & Co., London.
Gorny	D. M. Gorny (Giessener Münzhandlung), auction-sale catalogue, Munich.
Grabow	Ludwig Grabow, Hamburg.
Habelt	P. Habelt, Berlin.
Hamburger	Leo Hamburger, Frankfurt am Main.

Hariga	M. Hariga, Brussels.
HCR	Historical Coin Review BBS, Quarryville.
Helbing	Otto Helbing, Munich.
Hess	Adolf Hess Nachf., Lucerne.
Hess	Adolf Hess Nachf., Frankfurt am Main.
Hess-Dietrich	A. Hess-E. Dietrich, Zürich.
Hess-Leu	A. Hess-Bank Leu, Luzern.
Hesperia Art	Hesperia Art, Philadelphia.
G. Hirsch	Gerhard Hirsch, Munich.
J. Hirsch	Jacob Hirsch, Munich.
Huston	S. M. Huston, S. Francisco.
Italo Vecchi	Italo Vecchi Ltd., London.
Jacquier	Paul-Francis Jacquier, Kehl am Rhein.
JNFA	Journal of Numismatic Fine Arts, California.
Kurpfälzische Münzhandlung	Kurpfälzische Münzhandlung, Mannheim.
Knobloch	Frederick S. Knobloch, Bronx, New York.
Knopek	Hans-Jürgen Knopek, Köln.
Kölner	Kölner Münzkabinet, Köln.
Kovacs	Frank Kovacs, USA.
Kreisberg-Schulman	A. Kreisberg-M. F. Schulman, New York.
Kress	Karl Kress Münzhandlung, Munich.
Kricheldorf	H. H. Kricheldorf, Stuttgart.
Kroh, Empire Coins	Dennis Kroh, Empire Coins, Holy Hill, Florida.
Künker	F. R. Künker Münzhandlung, Osnabrück.
Lanz Graz	Lanz Graz, Graz.
Lanz Graz 48	Lanz Graz, Vienna.
Lanz	Numismatik Lanz, Munich.
Lepczyk	J. Lepczyk, Michigan.
Leu	Bank Leu A. G., Zürich.
Leu-Spink'87	Bank Leu-Spink & son, Zürich.
Lugano	Marco Olivari-Massimo Rossi, Lugano.
Malter	J. L. Malter, Los Angeles.
Martin	C. J. Martin Coins Ltd., London.
Malloy	Alex Malloy, Inc., South Salem, New York.
Merzbacher	E. Merzbacher Sale Catalogues, München.

<b>MMAG</b>	<b>Münzen und Medaillen A. G., Basel.</b>
<b>Monetarium</b>	<b>Schweizerische Kreditsanstalt, Monetarium, Zürich.</b>
<b>Müller</b>	<b>H.-W. Müller, Solingen.</b>
<b>Myers</b>	<b>Robert A. Myers, New York.</b>
<b>Mygind</b>	<b>Sydney Mygind, London.</b>
<b>MZA</b>	<b>Albrecht &amp; Hoffmann GMBH, Münzzentrum Auktion, Köln.</b>
<b>MZK</b>	<b>Heinz-W. Müller, Münzzentrum Lagerkatalog, Köln.</b>
<b>MZ</b>	<b>Heinz-W. Müller, Münzzentrum, Köln.</b>
<b>NAC</b>	<b>Numismatica Ars Classica, Lugano, Switzerland.</b>
<b>Naville</b>	<b>Naville et Cie., Geneva.</b>
<b>NFA</b>	<b>Numismatic Fine Arts, Los Angeles, California.</b>
<b>NFA Gans FPL</b>	<b>Numismatic Fine Arts, ed. Gans, Catalogue with Fixed Price Numbers, no. 2, New York.</b>
<b>Nicola</b>	<b>L. de Nicola, Rome.</b>
<b>NR &amp; CG</b>	<b>Numismatic Review &amp; Coin Galleries, FPL, New York.</b>
<b>Numifrance</b>	<b>Numifrance, Paris.</b>
<b>Numismatica</b>	<b>Numismatica, Vienna.</b>
<b>Oldenburg</b>	<b>H. G. Oldenburg, Kiel.</b>
<b>Ponterio</b>	<b>Ponterio &amp; Associates, inc., USA.</b>
<b>Clement Platt</b>	<b>M. Clement Platt, Paris.</b>
<b>CNA MBS</b>	<b>Cabinet Numismatique Albuquerque, MBS, Paris.</b>
<b>Peus</b>	<b>Busso Peus, Frankfurt am Main.</b>
<b>Phillips</b>	<b>Phillips, New York.</b>
<b>Phoenix</b>	<b>Coincraft (publ.), Phoenix, London.</b>
<b>Pilarz</b>	<b>H. Pilarz, Köln am Rhein.</b>
<b>Poindessault-Vedrines</b>	<b>B. Poindessault-Josianne Vedrines, Paris.</b>
<b>Poinsignon-Pesce</b>	<b>A. Poinsignon-M. Pesce, Strasbourg.</b>
<b>Proschowsky</b>	<b>Proschowsky, Arne Bruun Rasmussen, Copenhagen.</b>
<b>Ratto</b>	<b>Rodolfo Ratto, Milan or Lugano/Switzerland.</b>
<b>Rauch</b>	<b>Hans-Dieter Rauch, Vienna.</b>
<b>Ritter</b>	<b>Münzhandlung Ritter, Düsseldorf.</b>
<b>Rollin-Feuardent</b>	<b>Rollin-Feuardent, Paris.</b>
<b>Rooke</b>	<b>H. Rooke Galleries, New York.</b>
<b>Rosenberg</b>	<b>S. Rosenberg, Frankfurt am Main.</b>
<b>Sambon</b>	<b>J. Sambon, Florence.</b>



Santamaria	P. & P. Santamaria, Rome.
SB	Schweizerischer Bankverein, Zürich.
Schulten	Schulten & Co., Frankfurt am Main.
Schulman	Jacques Schulman, Amsterdam.
Superior Galleries	Superior Stamp & Coin Company, Superior Galleries, California.
Schlessinger	F. Schlessinger, Berlin: Charlottenburg.
Schulman	J. Schulman, Amsterdam.
Sotheby	Sotheby, Wilkinson & Hodge (1924) or Sotheby & Co. (1969), London.
Spink	Spink & Son Ltd., Spink Coin Auctions, London.
Spink Genève	Spink & Son Ltd., Genève.
Spink-GMG	Spink & Son Ltd. - Galerie des Monnaies Genève, Genève.
Spink New York	Spink & Son Ltd., New York.
Spink Taisei	Spink Taisei, Zürich.
RCCA-SSCC	Rare Coin Company of America-Superior Stamp & Coin Company, Chicago.
Stack's	Stack's, New York.
Sternberg	Frank Sternberg, Zürich.
Superior Stamp & Coin Company	Superior Stamp & Coin Company, Los Angeles, California.
Thieme	C. G. Thieme, Leipzig.
Thirion	Dominique Thirion, Brussels.
Tjetjen	Tjetjen & Co., Hamburg.
Tkalec	Münzauktion Tkalec AG, Zürich.
Toderi	G. Toderi, Numismatica, Florence.
Tradart	Tradart, Geneva.
Vecchi	V. C. Vecchi & Sons, London.
Vedrines	Josianne Vedrines, MBS, Paris.
Vico	J. Vico, Madrid-Barcelona.
Vigne	Jean-Bruno Vigne, Paris.
Vinchon	J. Vinchon, Monte-Carlo or Hôtel Drouôt, Paris.
Waddell	Ed. J. Waddell Ltd., Maryland, New York.
Walla	F. Walla, Vienna.
Weil	A. Weil, Hôtel Drouôt, Paris.
Zschiesche & Koeder	Zschiesche & Koeder, Leipzig.



#### iv) NUMISMATIC COLLECTIONS

ANS	New York, American Numismatic Society.
ANM	Athens, Numismatic Museum.
Ashmolean	Oxford, Ashmolean Museum.
Berlin	Staatliche Museen, Münzkabinet.
Blackburn	Blackburn Museum & Art Galleries. See Principal Published Numismatic Collections.
BNF	Paris, Bibliothèque Nationale.
BM	London, British Museum, Department of Coins and Medals.
Brussels	Brussels, Cabinet des Médailles et de la Bibliothèque Royale Ier.
Albert	
CBNC	Athens, Credit Bank Numismatic Collection.
Edinburgh	Edinburgh, Royal Museum of Scotland. See Principal Published Numismatic Collections (Rutter, <i>Edinburgh</i> ).
Fitzwilliam	Cambridge, Fitzwilliam Museum, Department of Coins and Medals.
Glasgow	Glasgow, Glasgow University, Hunterian Museum.
Göttingen	Göttingen, Archäologisches Institut der Universität.
Hungary, Mayar Nemzeti	Hungary, Mayar Nemzeti Museum, Hungarian National Museum.
Israel, Eretz	Israel, Coll. Eretz Museum.
Kavala	Kavala, Archaeological Museum.
Leiden	Koninklijk Penningkabinet, Rijksmuseum (collection formerly in The Hague).
LJ	Austria, Landesmuseum Johanneum.
Madrid	Madrid, Museo Arqueologico Nacional, Gabinete Numismatico.
Manchester	The Manchester Museum, The University of Manchester.
Marseille	Marseille, Cabinet des Monnaies et des Médailles.
Milan	Milan, Museo Archeologico, Collezione del Comune e del Gabinete Numismatico di Brera, Castello Sforzesco.
Munich	Munich, Staatliche Museen, Staatliche Münzsammlung.
Neuchâtel	Neuchâtel, Cabinet de Numismatique, Musée d' Art et d' Histoire.
Private Collection PRF	Private Collection P. R. F.
Private Collection L. C.	Private Collection L. C.
Royal Ontario Museum	Toronto, Royal Ontario Museum.

Salzburg	Salzburger Museum Carolinoaugusteam.
Stuttgart	Stuttgart, Württembergisches Landesmuseum.
Vienna	Vienna, Kunsthistorisches Museum.
Vienna 2	Vienna, Institut für Numismatik der Universität.
Wales	Wales, National Museum.
Warsaw	Poland, Warsaw, Museum Nadorowe w Warszawie.
Zürich	Zürich, Schweizerisches Landesmuseum, Sammlung der Zentralbibliothek.

## V. JOURNALS

<i>AA</i>	<i>Archäologischer Anzeiger</i> , Berlin: de Gruyter.
<i>AAA</i>	Ἀρχαιολογικὰ Ἀνάλεκτα ἐξ Ἀθηνῶν, Ἀκαδημία Ἀθηνῶν.
<i>ΑΔ</i>	Ἀρχαιολογικὸν Δελτίον τοῦ Ὑπουργείου τῶν Ἐκκλησιαστικῶν καὶ τῆς Δημοσίας Ἐκπαιδεύσεως, vols. 16-, Athens: Hestia, 1960-.
<i>AE</i>	Ἀρχαιολογικὴ Ἐφημερίς. περιοδικὸν τῆς ἐν Ἀθήναις Ἀρχαιολογικῆς Ἐταιρείας, Athens.
<i>AJA</i>	<i>American Journal of Archaeology</i> , Archaeological Institute of America, New York.
<i>AJN</i>	<i>American Journal of Numismatics</i> , American Numismatic Society, New York.
<i>AJPh</i>	<i>American Journal of Philology</i> , Baltimore: The Johns Hopkins Press.
<i>AncW</i>	<i>The Ancient World</i> , Chicago: Ares Publ.
<i>AnnArch de Syrie</i>	<i>Annales Archéologiques de Syrie: Revue d'archéologie et d'histoire syriennes</i> , Damas: Al-Taracki.
<i>Antike Kunst</i>	<i>Antike Kunst</i> , ed. by Vereinigung der Freunde antiker Kunst in Basel, Olten: Urs Graf-Verlag.
<i>AM</i>	See <i>MDAI</i> (Ath).
<i>ANSMN</i>	<i>American Numismatic Society Museum Notes</i> . New York, New York, USA.
<i>ANS NNM</i>	<i>American Numismatic Society Numismatic Notes and</i>

- Monographs*, New York, New York, USA.
- ANS NS* *American Numismatic Society Numismatic Studies*, New York, New York, USA.
- Ἀρχαιολογικὴ* *Ἀρχαιολογικὴ*, University of Athens.
- BCH* *Bulletin de Correspondance Hellénique*, Paris: De Boccard.
- BMCR* *Bryn Mawr Classical Review*, Bryn Mawr: Bryn Mawr College, Pa.
- CJ* *The Classical Journal*, Athens, Ga: University of Georgia.
- CQ* *The Classical Quarterly*, Oxford: University Press.
- CW* *The Classical World*, Pittsburgh: Duquesne University.
- Hesperia* *Hesperia: Journal of the American School of Classical Studies at Athens*, Athens: American School of Classical Studies.
- Historia* *Historia: Zeitschrift für Alte Geschichte*, Steiner, Wiesbaden.
- HSCP* *Harvard Studies in Classical Philology*, Cambridge, Mass. & London: Harvard University Press.
- JDAI* *Jahrbuch des Deutschen Archäologischen Instituts*, Berlin: de Gruyter.
- JHS* *Journal of Hellenic Studies*, London: Society for the Promotion of Classical Studies.
- JLAN* *Journal International d'Archéologie Numismatique*, Athens.
- JNFA* see Sale Catalogues.
- JNG* *Jahrbuch für Numismatik und Geldgeschichte*, Kallmünz: Lassleben.
- JRA* *Journal of Roman Archaeology*, University of Michigan, Department of Classical Studies, Ann Arbor, Michigan.
- Kadmos* *Kadmos: Zeitschrift für vor- und frühgriechische Epigraphik*, Berlin: de Gruyter.
- Klio* *Klio: Beiträge zur alten Geschichte*. Akademie Verlag, Berlin.
- MDAI (Ath)* *Mitteilungen des Deutschen Archäologischen Instituts (Athen. Abt.)*, Mann, Berlin.
- MH* *Museum Helveticum: revue suisse pour l'étude de l'Antiquité classique*, Schwabe, Basel.
- NAC* *Numismatica e antichità classiche: quaderni ticinesi*, Lugano: Artigraf. Gaggini-Bizzozero.

<i>NC</i>	<i>Numismatic Chronicle</i> , London: Royal Numismatic Society.
<i>NCirc</i>	<i>Numismatic Circular</i> , London: Spink.
<i>Nomisma</i>	<i>Nomisma</i> , Association des Cheminôts Numismats, Paris, France.
<i>NZ</i>	<i>Numismatische Zeitschrift</i> , Wien: Num. Gesellschaft.
<i>OAth</i>	<i>Opuscula Atheniensi</i> : Acta Inst. Ath. regni Sueciae, Åström, Lund.
<i>ΠΑΕ</i>	<i>Πρακτικά τῆς ἐν Ἀθήναις Ἀρχαιολογικῆς Ἐταιρείας</i> , Athens.
<i>Phoenix</i>	<i>The Phoenix</i> : the journal of the Classical Association of Canada, Toronto: University of Toronto Press.
<i>RBN</i>	<i>Revue Belge de Numismatique et de Sigillographie</i> , Brussels: Société Royale de Numismatique et de Belgique.
<i>REA</i>	<i>Revue des Études Anciennes</i> , Annales de la Faculté des Lettres de Bordeaux, Bordeaux, France.
<i>REG</i>	<i>Revue des Études Grecques</i> , Paris: Les Belles Lettres.
<i>RN</i>	<i>Révue Numismatique</i> . Paris: Société Française de Numismatique, Centre National de la Recherche Scientifique.
<i>SAN</i>	<i>Journal of the Society for Ancient Numismatics</i> , Santa Monica, California, USA.
<i>SCI</i>	<i>Scripta Classica Israelica</i> : yearbook of the Israel Society for the Promotion of Classical Studies, Jerusalem: Academon.
<i>SM</i>	<i>Schweizer Münzblätter</i> (Gazette Numismatique Suisse). Schweizerische Numismatische Gesellschaft (Société Suisse de Numismatique), Bern, Switzerland.
<i>SNR</i>	Swiss Numismatic Review=Schweizerische Numismatische Rundschau.
<i>ZfN</i>	<i>Zeitschrift für Numismatik</i> , Berlin.
<i>ZPE</i>	<i>Zeitschrift für Papyrologie und Epigraphik</i> , Bonn.



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## 0.5 Preface

The compilation of the coinage of 'king Antigonos' was started at University College London in September 1994, under the supervision of Professor M. H. Crawford. The groundwork for this project was laid with the guidance of my first supervisor alongside Professors Katerini Liampi (Research Centre for Greek and Roman Antiquity, Hellenic National Research Foundation) and K. Buraselis (University of Athens), from whose comments I have benefited throughout this task. Since 1996, Dr. A. Burnett (Department of Coins and Medals, British Museum) has been co-mentoring this project, constantly encouraging and stimulating its writing. To them all I am enormously grateful for generously providing an inspiring *forum* for discussion at all times, and for having been an endless source of stimulation, advice and enthusiasm. Their guidance would have brought this thesis to an end much earlier, but for my reluctance to set a firm limit to this dissertation.

Financial support was provided by the Hellenic Scholarship Foundation and the writing-up of the project was further sponsored by the Alexander Onassis Foundation. The collection of material at the early stages of the dissertation was considerably enhanced by the prompt response of the keepers of all the museum collections and of those directors and archaeologists of Greek *ephoreiai* of antiquities who gave me permission to see, make notes and include material in my doctoral dissertation. To all of them I owe my deepest thanks. The University College London Graduate School financed my visit to numismatic collections at Berlin, Heidelberg, the Vatican and Leiden, for the *in situ* observation and collection of material.

My initial ambition to compile a corpus of the bronze coins alongside the gold and silver was eventually confined to the last two metals by the abundance of the evidence. It is inevitable that the conclusions from the study of the precious metal coinage 'of king Antigonos' do not fully reflect the monetary production in Makedonia during the second and third quarters of the third century and hence cannot be extrapolated to an assessment of the entirety of the monetised economy in this region during this period. It is also likely that the results from the study of the silver coinage will require revision in the light of the reconstruction of the Antigonid bronze issues. Abbreviations common in numismatic monographs, i.e. 'O' for 'Obverse', 'R' for 'Reverse', 'mon.' for 'monogram', 'l.' for 'to the left' and 'r.' for 'to the right', have been employed in addition to those generally in use in Classical studies.

University College London, the Institute of Classical Studies and the British Museum have provided an appropriate academic environment for systematic work on this project. The -nearly endless- research through past sales catalogues was undertaken at the Department of Coins and Medals at the British Museum and was completed in November 1997; coins that have appeared in

sales catalogues after March 1998 have not been considered. Occasionally the Research Centre for Greek and Roman Antiquity at Athens also hosted my project. I would like to thank the director, Professor M. B. Hatzopoulos, both for granting me permission to utilise the Centre's research facilities and archives and for reading and commenting on the final draft of my historical chapters. I also owe a lot to most beneficial discussions with Professors J. K. Davies and G. Le Rider, as well as with G. G. Aperghis, Andy Meadows, P. Paschides and Graham Oliver. G. G. Aperghis, Andy Meadows, Benet Salway, Eva Parisinou-Nicklaus, Michael Metcalfe and Graham Oliver have commented on drafts of parts of my work at various stages, they have improved the style and eliminated a number of errors. I am most indebted to the Librarian of the Institute of Classical Studies, Mr. Colin Annis, and to the library staff, for patiently and considerably facilitating the final stages of my research; also, to the librarian of the Royal Numismatic Society, Mr. Antony Holms, for his help with practical issues and for his encouragement. As for technical matters, the map of the hoards was made with the help of Kleopatra Papaevangelou. Last but not least, my deepest gratitude is due to Giorgos Papaioannou for the effective presentation of the plates. Needless to say that any errors that remain are my own.

The accomplishment of this project would not have been possible without a band of strongly supportive colleagues and friends. In addition to those mentioned above, I am grateful to Elena Isayev, Photini Balla, Elpida Kaimaki, Yannis Papadatos, Jennifer Cargill-Thompson, Lina Georgiou, Anne Alwis, Athanassios Efstathiou, Annabel Brooke, Sophia Diamantopoulou and Spiros Pilos, whose stimulation has been invaluable at critical moments during the writing of this dissertation.

I have reserved the final mention for my parents. I have benefited from my mother's full support throughout this thesis. This was not the case with regard to my father, Themistokles. An economist and lawyer himself, he instilled in me the virtues of systematic and tedious work, he was the first to teach me how to think and was unsurprisingly the one who inspired me to focus on economic history. May this thesis be my tribute to his memory.

London, January 2000.



οἷς γὰρ  
οὐ πέλαγος, οὐκ ὄρος, οὐκ ἀοίκητος ἐρημία πέρας ἐστὶ  
πλεονεξίας,  
οὐδ' οἱ διαιροῦντες Εὐρώπην καὶ Ἀσίαν τέρμονες ὀρίζουσι  
τὰς ἐπιθυμίας,  
πῶς ἂν ἀπτόμενοι καὶ ψαύοντες ἀλλήλων ἀτρεμοῖεν ἐν τοῖς παροῦσι μὴ ἀδικοῦντες...  
ἀλλὰ πολεμοῦσι μὲν αἰεὶ,  
τὸ ἐπιβουλεύειν καὶ φθονεῖν ἔμφυτον ἔχοντες,  
δυεῖν δὲ ὀνομάτων, ὥσπερ  
νομισμάτων,  
πολέμου καὶ εἰρήνης,  
τῷ παρατυχόντι χρῶνται πρὸς τὸ  
συμφέρον...

Plut. *Pyrrh.* 12.3

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'It is Zeus' anathema on our epoch for the dynamism of our economies and the heresy of our economic methods and policies that we should agonise between the Scylla of numismatic plethora and the Charybdis of economic anaemia.

It is not my idiosyncrasy to be ironic or sarcastic but my diagnosis would be that politicians are rather cryptoplethorists. Although they emphatically stigmatise numismatic plethora, they energise it through their tactics and practices.

Our policy should be based more on economic and less on political criteria.

Our *gnomon* has to be a metron between economic, strategic and philanthropic scopes. Political magic has always been antieconomic.

In an epoch characterised by monopolies, oligopolies, monopsonies, monopolistic antagonism and polymorphous inelasticities, our policies have to be more orthological. But this should not be metamorphosed into plethorophobia, which is endemic between academic economists.

Numismatic symmetry should not hyperantagonise economic acme. A greater harmonisation between the practices of the economic and numismatic actions is basic.'

(Statement by the hon. Xenophon Zolotas, Governor of the Bank of Greece and Governor of the Fund for Greece, at the closing joint session, International Bank of Reconstruction and Development, International Monetary Fund, International Finance Corporation, 2.10.1959).

## **1.0 Introduction**

### **1.1 Aims and Methodology**

Finance is admittedly a major chapter in the study of Hellenistic royal economies. Within this, the systematic analysis of the precious gold and silver coinages 'of king Antigonos' is intended to explore the nature of the Antigonid cash economy during the second and the third quarter of the third century BC.

A numismatic 'corpus'/σύνταγμα involves the systematic arrangement of the coins issued by a particular political authority into serial and structural order. For the accomplishment of this project, casts and/or photographs of all the feasibly accessible material (from public and private collections and elsewhere) have to be gathered together. In the first place, their chronology is determined through the establishment of die links and sequences of obverse-reverse die combinations (die-linking technique). Furthermore, insofar as the issue of coins in antiquity reflected a political decision imposed by economic/financial necessity, details of the organisation of their production may elucidate the infrastructure of the issuing authority. Our ultimate aspiration is to reveal information regarding the economic system, in the context of which coins were functional as currency/money; it is this aspect that the approximate estimation of the quantity of the coin issues and the study of their distribution hope to elucidate.

On these grounds, my principal aim in reconstructing the precious metal coinage of 'king Antigonos' is to comprehend the way in which the mints set in operation under this authority functioned and to identify the major issues of the period. This helps us to answer questions such as, whether (or not) the production of the related coinages was continuous; on which occasions/for which purposes the mints operated; where and why the coins produced circulated and what their value at the time was; finally, whether these issues outlasted their initiator, Antigonos Gonatas. Along these principles, the identification of the issuing authority/ies latent in the legend 'king Antigonos' on the two Antigonid tetradrachm types, Pan and Poseidon, and on the few fractions is readdressed. The macroeconomic profile of Antigonid Makedonia during this period will be completed by an attempt to quantify and to contextualise these Antigonid silver issues. Alternatives to the production of this coinage for military purposes will be explored and the chronology and the role of those silver coins issued posthumously in the name of Alexander that are currently assigned to the early reign of Gonatas will be reconsidered. Finally, the geographical

range of these Antigonid issues' distribution will be reassessed. It is recognised that a more detailed analysis of the nature of the regional economy will require the systematic study of the Antigonid bronze coinage, which has been excluded from this thesis.

The numismatic evidence has shown that, rather than belonging to a single ruler, the two individual types in the name of 'king Antigonos' represent a dynastic coinage extending from Antigonos Gonatas to Antigonos Doson. The continuation of Gonatas' silver coin types by his successors demonstrates a strong sense of dynastic continuity in the Antigonid dynasty, comparable to that observed in the Ptolemaic and Seleukid royal families<sup>1</sup>. Distinguishing, however, between the coin issues of the two homonymous 'Antigoni', Gonatas and Doson, echoes tasks familiar from the contemporary epigraphical documentation<sup>2</sup>.

Organising the numismatic material involves an attempt to reconcile the archaeological information, including the style, provenance and respective distribution of these issues, with the existing historical *testimonia*. The numismatic evidence fails to elucidate key issues, such as the ways in which Gonatas financed his army until his nomination in Makedonia, or the process of his establishment in Makedonia and Greece. It also fails to reveal the distribution of royal expenses between military activities and other financial requirements of the state throughout this period. Yet the numismatic iconography reveals the main line of the Antigonid international policy. It also allows us to define the function of these Antigonid issues within the market dominated by the Attic weight standard. Prerequisite to the systematic consideration of the numismatic features of the coinages involved is thus a *synopsis* of the main threads of the Antigonid international policy down to Doson, leaving details for every period to be discussed in the related chapters.

## 1.2 Antigonid Makedonia, 277-221 BC

The Makedonian precious metal issues in the name of 'king Antigonos' postdate the rise of Antigonos Gonatas to the throne and the concomitant establishment of the Antigonid royal dynasty in Makedonia. The transition from the old royal dynasty of the Temenids/Argeads to that of the Antigonids had not been smooth, as the death of Alexander had rendered Makedonia a bone of

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<sup>1</sup> Contra R. Fleischer, 'Hellenistic royal iconography on coins', in Per Bilde et al., *Aspects of Hellenistic kingship*, 28-39, who excludes the Antigonids from this practice.

<sup>2</sup> See, for instance, Chr. Habicht, 'Divine honours for king Antigonos Gonatas in Athens', *SCI* 15 (1986) 131-4; K. Buraselis, 'Παρατηρήσεις στις συνθήκες του βασιλᾶ Ἀντιγόνου μέ τήν Ἐλεύθερα καί τήν Ἱεράπυτνα (Staatsv. III 501, 502)', *AE* (1981) 114-26; G. Reger, 'The political history of the Kyklades, 260-200 BC', *Historia* 43 (1994) 32-69.



contention among various pretenders, not necessarily related to the Temenid dynasty. The 'interregnum' that followed the decapitation of Ptolemy Keraunos, in particular, during a Celtic invasion in 279 BC, was ended only with the ascent of Antigonos Gonatas to the Makedonian throne<sup>3</sup>.

The son of Demetrios Poliorketes had already come onto the political stage in 288 BC, when he was assigned his father's possessions in Greece. He was nominated king after his father's death (284/3 BC), albeit he was not in control of a kingdom<sup>4</sup>. The beginning of his reign in Makedonia is traditionally placed to 277/6 BC by Tarn, who relates it to Gonatas' decisive victory over the Celts at Lysimacheia (277 BC), as a result of his strategically coherent activities in Thrace and the Hellespont area<sup>5</sup>. Reconsideration, though, of the surviving evidence on the duration of his reign might favour its placement between 277/6 and 274/3 BC<sup>6</sup>. At any rate, Gonatas' position was firmly established only after his resistance to the full-scale attack of Pyrrhos, on the latter's return from Italy (274-3/2 BC)<sup>7</sup>. By making Pella his capital and by cultivating the Makedonian traditions of the Temenid era, Antigonos apparently attached priority to the consolidation of the

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<sup>3</sup> A full historical account in Tarn, *AG*, 167-8; Will, *HPMH* I<sup>2</sup>, 103-10; E. Will, 'From the apogee of Lysimachus to the establishment of Antigonos Gonatas (287-276)', in *CAH* VII<sup>2</sup>, 110-7; F. W. Walbank, 'The years of chaos (285-277-6 BC)', in Hammond-Walbank, *Macedonia* III, 239-58. Errington, *Macedonia*, 154-61.

<sup>4</sup> Eus. 1.237 (Schoene); Jacoby, *FGH* 260 F 3.12; Eus. 1.238 (Schoene); Lucian, *Macrob.* 11. M. Chambers, 'The first regnal year of Antigonos Gonatas', *AJPh* 75 (1954) 392; N. G. L. Hammond, 'Appendix 2: The Chronology of the Years 281-276 B.C.', in Hammond-Walbank, *Macedonia* III, 581-3; Errington, *Macedonia*, 162-204.

<sup>5</sup> Diog. Laert. 2.141; P. Trog. *Procl.* 25; Apollodoros (*Philol.* 71, p. 226); Just. 25.1-2; Paus. 1.16.2; *Syll*<sup>3</sup> 398, l. 1-6 (decree of Kos). Tarn, *AG*, 165-6, n. 99, 104; Gabbert, *AG*, 27. On Gonatas' activities in the East, see R. W. Mathisen, 'The activities of Antigonos Gonatas 280-77 BC and Memnon of Heracleia, *Concerning Heracleia*', *AncW* 1 (1978) 74. On his conflict with Antiochos I, see P. Trog. *Procl.* 27; Memnon, *FGH* 434, F 10; Just. 24.1.1; *OGIS* 219; Diog. Laert. 4.39; *OGIS* 748; Buraselis, *HM*, 112-5.

<sup>6</sup> Tarn's date of Gonatas' rise to the throne in 277/6 BC is based on Gonatas' kingship during the 125<sup>th</sup> Olympiad and on the alleged Athenian sacrifices to Gonatas at Athens under Polyektos in 275/4 BC. This date contradicts, however, the literary tradition that Gonatas held the royal title for forty-four years (Medios in Lucian, *Macrob.* 11; Euseb. 1.237), on the one hand, and that he reigned in Greece ten years before he reigned in Makedonia (Euseb. *ibid.*), on the other hand. Tarn reconciles the divergent information by suggesting that Gonatas acquired the royal title since the demise of his father in 284/3 BC. He places, though, Gonatas' 10-year rule in Greece between 287/6, when Poliorketes crossed to Asia, and 277/6 BC (*AG*, 112, n. 3). As the archonship of Polyektos (and hence the official sacrifices of Athens to Gonatas) has shifted from 275/4 (Tarn) to 250/49 or to 247/6 (D. Knoepfler, 'Les relations des cités eubéennes avec Antigone Gonatas et la chronologie delphique au début de l' époque étolienne', *BCH* 119 (1995) 158-9), the alleged beginning of Gonatas' reign in Makedonia in 277/6 BC requires revision. It is worth noting that the causal relationship between the battle of Lysimacheia and Gonatas' rise to the Makedonian throne (Diog. Laert. 2.141-2) need not implicate their direct temporal concomitance and that Gonatas' rule in Makedonia was firmly established only after the demise of Pyrrhos.

<sup>7</sup> Plut. *Pyrrh.* 26; Just. 25.3.5-8; Paus. 1.13.2-3; Diod. 22.11-12. Will, *HPMH* I<sup>2</sup>, 212-9; F. W. Walbank, 'Macedonia and Greece', *CAH* VII<sup>2</sup>, 221-4; F. W. Walbank, 'Antigonos Gonatas: the early years (276-261 BC)', in Hammond-Walbank, *Macedonia* III, 259-67; Gabbert, *AG*, 29-32; Hammond, *State*, 302-7; Errington, *Macedonia*, 163-5.



Makedonian state before laying claim to any area south of Makedonia<sup>8</sup>.

Control of Makedonia provided the Antigonids with a regular source of wealth from taxation, the Makedonian mines and the region's forests (chapter 7). It required, though, the effective orchestration of diverse institutions, villages, cities, poleis, sympolities and ethne<sup>9</sup>. The king's authority was mediated by the Makedonian royal family, the members of the aristocratic families, the Makedonian people (Μακεδόνες of cities, tribes) and/or koinon<sup>10</sup>. Since Amyntas III at least, the Makedonian poleis, in particular, were subject to the king as executive arm of the state<sup>11</sup>. Under Gonatas, the recognition in 243 BC of the Asklepieia at Kos by the cities of Philippi, Amphipolis, Kassandreia and Pella according to the king's will suggests that the institutions of these poleis were at least influenced by the Makedonian king (chapter 5)<sup>12</sup>.

The systematic organisation of the state administration towards the long-term convergence of regional differences within and beyond the Makedonian borders was achieved through a combination of military, political and diplomatic methods with the least expenditure of resources or effort and with the maximum results<sup>13</sup>. With very few exceptions, it is not obvious that Gonatas consistently interfered with the internal affairs of Greek cities, albeit strategically located garrisons insured Antigonid hegemony throughout the mainland<sup>14</sup>. Gonatas exercised his control either via the appointment of the most important magistrates or via the nomination by the commander of the local Makedonian garrison of preferred individuals; alternatively, magistrates favourable to his authority were appointed voluntarily by the members of the poleis. The diversity in the nomenclature of the military commanders, who were in complete charge of their troops and were regarded as the king's representatives in the cities, may be taken to suggest that the principle of the Antigonid 'Greek hegemony' as established by Gonatas practically lay primarily on 'his subtle political control of the eastern Peloponnese, the Isthmos of Korinth, Attica and Northern Euboia.

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<sup>8</sup> M. Andronikos, 'Βεργίνα. Οί βασιλικοί τάφοι τῆς Μεγάλης Τούμπας / Vergina. The royal graves in the Great Tumulus', *AAA* 10 (1977) 1-72; Tarn, *AG*, 175-222; Will, *HPMH* I<sup>2</sup>, 216-9; F. W. Walbank, 'Antigonus Gonatas: The Early Years', in Hammond-Walbank, *Macedonia* III, 267-76. On his policy *vis-à-vis* mainland Greece, see Gabbert, *Greek Hegemony*, 247-59; eadem, *AG*, 33-44.

<sup>9</sup> Hatzopoulos, *Institutions*, 77-216.

<sup>10</sup> R. M. Errington, 'The nature of the Macedonian state under the monarchy', *Chiron* 8 (1978) 77-134; cf. Ed. Levy, 'La monarchie Macédonienne et le mythe d' une royauté démocratique', *Ktéma* 3 (1978) 201-55; Gabbert, *Greek Hegemony*, 36-43; Le Bohec, *AD*, 239-53; Hatzopoulos, *Institutions*, 219-30, 487-96.

<sup>11</sup> Xenophon, *HG*, V.2.12. On royal control over Makedonian poleis at least since Amyntas III, see Hammond, *State*, 386 ff.; Hatzopoulos, *Institutions*, 204-13; A. Giovannini, 'Le statut des cités de Macédoine sous les Antigonides', *Archaia Makedonia* II, Thessaloniki 1977, 465-79.

<sup>12</sup> Hatzopoulos, *Institutions*, 139-49; *Institutions* II, nos. 36, 41, 47, 58.

<sup>13</sup> Gabbert, *Greek Hegemony*, 247-8. Hammond, *State*, 307-315.

<sup>14</sup> The presence of the largest Makedonian garrison and of the most important garrison commander at Korinth, in particular, is due to the fact that Korinth was the cornerstone of Gonatas' policy in Greece. For the Makedonian garrisons in Peiraeus and Attica, see Gabbert, *Greek Hegemony*, 107-39.

To this was added the formal state-to-state diplomatic influence in the Peloponnese and Aitolia<sup>15</sup>. This loose control over Greek political entities, echoing the Greek policy adopted by Philip II after the fall of Olynthos (348 BC)<sup>16</sup>, was allegedly diverted by the Chremonidean War and was resumed only after 250 BC, but it had certainly yielded results by the time of Doso<sup>17</sup>. Along these lines, Polybios' testimony regarding the establishment of 'tyrannies' by Gonatas in peninsular Greece may be regarded as the Greek 'interpretation' of the resumption of this policy of gaining control over the poleis of peninsular Greece<sup>18</sup>.

Secure control over mainland Greece was a prerequisite to and a springboard for the adoption by the Antigonids of a progressively more active international policy *vis-à-vis* the Seleukids in the East and the Ptolemies in the South. Modifications in the *equilibrium* among these three powers often had a direct impact on events in the interior of each kingdom. The establishment of friendly relations with Antiochos I subsequent to the peace of 278 BC, for instance, inevitably confined Gonatas' scope for expansion south of Makedonia<sup>19</sup> and made the potential cooperation of the Antigonid and the Seleukid king a considerable threat for Ptolemy II. At the same time, internal instability was often instigated by rival kings, in order to distract the Makedonian kings from international events. The latent rivalry between the Antigonids and the Ptolemies for naval superiority and for control of the Aegean, for instance, alongside the increasing land power of Gonatas since the death of Pyrrhos culminated in the Chremonidean War between Gonatas and the cities of Southern Greece, presumably at the instigation of Ptolemy II (chapter 3)<sup>20</sup>. Similarly, the encouragement of revolts and political unrest in Southern Greece by the Ptolemies, along with tensions between the Achaian and the Aitolian Confederacies, as well as between each of these and the Antigonids shifted the interest of Gonatas and of his successors from areas vital to the Ptolemaic kingdom. The two critical naval victories of Gonatas over the Ptolemies, at Kos<sup>21</sup> and Andros (246/5 BC)<sup>22</sup>, and the expedition of Antigonos Doso in Karia are

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<sup>15</sup> Gabbert, *Greek Hegemony*, 256-7.

<sup>16</sup> G. T. Griffith, 'The Olynthian War (352-348 B.C.)'—'The Peace of 346 B.C.', in Hammond-Griffith, *Macedonia II*, 325-7; Hammond, *State*, 160-5, 177-87.

<sup>17</sup> Gabbert, *Greek Hegemony*, 77-80. Her suggestion, however, that Gonatas, unlike Doso, neglected the internal organisation of Makedonia and Thessaly because he had competent regents for his successor, Demetrios II, is not convincing. Cf. Le Bohec, *AD*, 363-403, 480-3.

<sup>18</sup> Plb. 2.41.10; 9.29.6.

<sup>19</sup> However, tensions between the two were not avoided later. In fact, the separate peace of Gonatas with Kos and the expulsion of Stratonike by Demetrios II have been assumed to have had an impact on the relations between Seleukids and Antigonids: Beloch, *GG*, IV.1, 566; Buraselis, *HM*, 117, n. 32.

<sup>20</sup> Gabbert, *Greek Hegemony*, 171-2.

<sup>21</sup> Athen. 5.209e; 8.334a = *FGH* 81 F 1; Plut. *Pelop.* 2.4, *Mor.* 545b, 183c; cf. Heinen, *Unters.* 191-2. The suggested dates for the battle off Kos range between 262/1 and 255 BC: F. W. Walbank, 'Sea-power and the Antigonids', in Adams-Borza, *Macedonian Heritage*, 218-20; Buraselis, *HM*, 146-51; F. W. Walbank, 'Antigonos Gonatas: The Naval Situation (261-251 B.C.)', in Hammond-Walbank, *Macedonia III*, 291-3;



inextricably bound with the settlement of affairs in mainland Greece in favour of the Antigonids. The engagement of Gonatas in Southern Greece after Andros certainly allowed Ptolemy III to establish his control over the Aegean<sup>23</sup>. That the motives of individual cities to engage in warfare with the Makedonians were rather shortsighted is a not untypical irony in history.

The political upheaval caused in mainland Greece by the entry of Rome onto the political scene of the Balkans progressively distracted Gonatas' successors from major international military and naval enterprises - with very few exceptions.

During the second and the third quarter of the third century BC, cash was obviously required for the finance of the navy and of the troops engaged in all these intense military activities. At the same time, major building programmes were established already by Gonatas, both in Makedonia and at Delos<sup>24</sup>, dedications were made to Apollo (including that of his flagship after the battle of Kos) and religious foundations were established at Delos in 253 and 245 BC<sup>25</sup>. What the role of the gold and silver coinages in the name of 'king Antigonos' was in financing these activities is worth investigating. The structure and numismatic behaviour of this coinage is now elucidated by a systematic die study, which will be analysed below.

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N. G. L. Hammond, 'Appendix 4: The Battles of Cos and Andros', *ibid.*, 595-600. Reger, *Kos*, 155-77. Cf. chapters 2.4.2, 3.

<sup>22</sup> Trog. *Prol.* 27; Plut. *Pelop.* 2; Plut. *Mor.* 183c, 545b; possibly, Athen. 593a-b; *P. Haun.* 6. F. W. Walbank, 'Antigonos Gonatas: The Naval Situation (261-251 B.C.)', in Hammond-Walbank, *Macedonia III*, 291-3; N. G. L. Hammond, 'Appendix 4: The Battles of Cos and Andros', *ibid.*, 587-95, with earlier bibliography. Further bibliography and discussion in chapters 2.4.3, 5.

<sup>23</sup> Buraselis, *HM*, 270-1.

<sup>24</sup> The covering over of the royal tombs at Vergina/Makedonia has been assigned by Andronikos to Gonatas: Plut. *Pyrrh.* 26.7; Andronikos, *Vergina*, 59-79. On Gonatas' dedications at Delos and on the construction of the Antigonid portico, see Tarn, *AG*, 389-90, n. 61; Courby, *Délos*, 13-45; Coulton, *Stoa*, 59-60, 231; Buraselis, *HM*, 141-9, Smith, *HRP*, 24-5; F. W. Walbank, 'Antigonos Gonatas: The Naval Situation (261-251 B.C.)', in Hammond-Walbank, *Macedonia III*, 292; Ameling et al., *Schenkungen*, 190-6; N. G. L. Hammond, 'Appendix 4: The Battles of Cos and Andros', *ibid.*, 595-6, with earlier bibliography. For the date of the portico at Delos, see Nachtergaeel, *Galates*, 164 ff.

<sup>25</sup> Gonatas dedicated his flagship, for instance, to Apollo after the battle off Kos: W. W. Tarn, 'The dedicated ship of Antigonos Gonatas', *JHS* 30 (1910) 209-22; Buraselis, *HM*, 141-55; Bruneau, *Délos*, 557-64; N. G. L. Hammond, 'Appendix 4: The Battles of Cos and Andros', in Hammond-Walbank, *Macedonia III*, 592-4; Fellmann, *AG*, 82.



## 2.0 Numismatic Evidence: General Considerations

All the gold and silver issues discussed carry on the reverse the simple legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ, reflecting the least developed of the formulae employed by the Antigonids in their royal correspondence<sup>1</sup>. The royal title, adopted by Kassander for his bronze and by Poliorketes for his silver and bronze Makedonian issues, was utilised by Antigonos after the demise of his father (283 BC)<sup>2</sup>.

The reconstruction of the precious metal coinages 'of king Antigonos' necessitates a summary of the academic debate regarding the distinction of the issues struck by either of the two homonymous Antigoni of the third century BC, Gonatas and Doso. So far, the numismatic consensus has been that:

1. The 'posthumous Alexander' tetradrachms end on the introduction of the 'Pan head' tetradrachms, i.e. tetradrachms carrying the head of Pan in the centre of a Makedonian shield on the obverse, in 271/0 BC<sup>3</sup>.
2. The 'transitional Alexander' tetradrachms, that is, tetradrachms retaining the designs of Alexander III, but carrying the legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ, were struck at the end of the Monogram group of posthumous Alexanders<sup>4</sup>.
3. The Pan tetradrachms were introduced in 271 BC, at Amphipolis. The crested helmet symbol and monograms they share with the Makedonian posthumous Alexander tetradrachms suggest the subsequent production of the two issues at the same mint<sup>5</sup>.
4. The 'Poseidon' tetradrachms (i.e. tetradrachms in the name of 'king Antigonos' carrying the head of Poseidon on the obverse) are not related to the Makedonian posthumous Alexander tetradrachms.
5. It is the relation between the Pan and the Poseidon tetradrachms that has raised most controversy. Current opinions range between the introduction of the Poseidons late under Gonatas, parallel to the Pans, and their exclusive assignation to Doso (chapter 2.4.3)<sup>6</sup>.
6. The few and rare fractional denominations, with a head of Pan or Zeus on the obverse and with

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<sup>1</sup> R. M. Errington, 'Macedonian 'Royal Style' and its Historical Significance', *JHS* 94 (1974) 30-1, 37. The king was presented as βασιλεύς Ἀντίγονος when confusion with other kings was unlikely. For an analysis of Antigonos' titulature, see Le Bohec, *AD*, 205-6.

<sup>2</sup> See chapter 1.2.

<sup>3</sup> Mathisen, *Silver Coinages*, 85, 110-4; Price, *Alexander*, 141.

<sup>4</sup> Mathisen, *Silver Coinages*, 95-6; Price, *ibid.*

<sup>5</sup> Mathisen, *Silver Coinages*, 110-4; *idem*, *Pan heads and Poseidon heads*, 31 *contra* Merker, *Silver Coinage*, 46, who suggests Pella as the mint for the Pan series with the helmet symbol.

<sup>6</sup> For a summary of past opinions, see Πασχίδη, *Ποσειδώνες και Αντίγονοι*, 236-40; Mathisen, *Administrative Organisation III*, 46.

Athena Alkidemos l. (i.e. facing left) on the reverse, are related to the Pans rather than the Poseidons. This is determined both by their typology and via their control marks, that is, the winged helmet l. and the letters TI r. (i.e. to the right) on the reverse (see chapter 2.4.4)<sup>7</sup>.

7. It is unclear whether the intermediary king between the two Antigonoi, Demetrios II, should be left without coinage<sup>8</sup>.

8. Common (or similar) monograms on the Pans, the Poseidons and the tetradrachms of Philip V suggest continuity in the production of these issues at the Makedonian mint<sup>9</sup>.

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The systematic study of the related material shows that both individual Antigonid tetradrachm types ('Pans' and 'Poseidons') get more widely distributed from Gonatas to Doson. It is argued that the Pan head tetradrachms were introduced by Gonatas during the Chremonidean war (268/7-261/60 BC) and that both his individual tetradrachm types, Pans and Poseidons, were continued posthumously by his successors, at least until Antigonos Doson. Those struck between the 260s and the mid-240s may be distinguished with greater certainty, but the chronological sequence of those struck between the mid-240s and the end of reign of Antigonos Doson remains uncertain. The silver fractional denominations may be related, for one thing, to Doson's expedition in Karia (227-5 BC) and hence elucidate the chronology of the Pans and the Poseidons that are associated to them. Moreover, rather than denoting specific coin objects, the δημητρίειοι δραχμαὶ mentioned on the accounts of the priests of Beroia from the second half of the third century BC presumably represent the unit of weight valid in Antigonid Makedonia under Demetrios II (rather than I)<sup>10</sup>. Alongside the τετραῖα ἀντιγόνεια mentioned on the inscriptions from the Athenian Asklepieion from the mid-250s to the last two decades of the third century<sup>11</sup>, these δημητρίειοι δραχμαὶ might indicate the continuous production and use of royal Antigonid issues from Gonatas to Doson. Finally, the continuity of the control marks between both the Antigonid silver types and the contemporary Makedonian posthumous Alexanders suggests that the latter may have continued

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<sup>7</sup> Πασχίδη, *Ποσειδῶνες και Αντίγονοι*, 245.

<sup>8</sup> Boehringer, *Chronologie*, 99; Ehrhardt, *Studies*, 79.

<sup>9</sup> Touratsoglou, *DM*, 82.

<sup>10</sup> Hatzopoulos, *Institutions II*, no. 82 I, l. 6, II, l. 14, 21, 40 = *SEG* 40 [1990] 530, with earlier bibliography. Cf. V. Allamani-Souri, 'Ἀπόλλωνι, Ἀσκληπιῶ, Ὑγίειαι. Επιγραφική μαρτυρία για το Ἀσκληπιεῖο της Βέροιας', *ΑΔ* 39 (1984), *Meletai*, 205-31, esp. p. 215-7. Cf. calyx-cups and kylixes inscribed with their weight in Attic drachmae in the 'royal' tomb at Vergina: Andronikos, *Vergina*, 157-9; Price, *Alexander*, 39, n. 1.

<sup>11</sup> Aleshire, *Asklepieion*, 261-3, 269.

after the introduction of the individual Antigonid silver issues.

Gold (AV) and silver (AR) coin types in the name of king Antigonos, transitional posthumous Alexanders ('Alex'), Pan head ('Pan'), Poseidon head ('Pos') and Zeus head ('Zeus'), staters (s), tetradrachms (4D), drachmae (D) or pentobols (5O), were struck during four periods of coin production:

- I. c. 274/3-260/55 BC; i.e. from Gonatas' firm establishment in Makedonia after the demise of Pyrrhos until the capitulation of Athens and the naval conflict between the Makedonians and the Ptolemies off the island of Kos.
- II. c. 252-46/5 BC; i.e. from the revolt of Alexander, tyrant of Korinth until Gonatas' second naval victory over the Ptolemies off the island of Andros.
- III. c. 246/5-229 BC; i.e. from Gonatas' victory at Andros to the demise of his successor, Demetrios II.
- IV. c. 229-1 BC; i.e. during the reign of Gonatas' homonym, Antigonos Doson.

The precious metal issues that were respectively struck in each period may be charted as follows:

PERIOD	AV ALEX S	AR ALEX 4D	AR PAN 4D	AR POS 4D	AR PAN D	AR ZEUS D	AR ZEUS 5O
I	x	x	x		x		
II			x				
III			x	x			
IV			x	x		x	x

Fig. 1. Classification of Types by Periods.

The features and numismatic behaviour of these types will be discussed before the catalogue and commentary for every period.



## 2.1 Types and Iconography

The international political *persona* promoted by Gonatas for himself and for his kingdom may be recovered through the designs on his gold and silver coinage. Iconographic themes already familiar with the Makedonians were adopted and adapted for these issues, so that they also bear contemporary nuances. These Antigonid issues may be distinguished into the following types:

### 1. *Transitional Alexander types, gold and silver, with the legend of king Antigonos*<sup>12</sup>.

Reverting to the coin types of previous kings was not unprecedented in Makedonia. Under the Temenid dynasty, Perdiccas II had struck coins with the types of his predecessor, Alexander I, while the pentedrachm of Archelaus I may be seen as a return to the types of Alexander I<sup>13</sup>. It has also been argued that the Apollo on the silver fractional denominations of Philip II originates in the young diademed head that was introduced as a coin type by Archelaos<sup>14</sup>. Similarly, bronze coins with the types of Perdiccas III were struck under Philip II<sup>15</sup>.

It is therefore not surprising that the Alexander coin tradition, which was retained in most Alexander mints long after the death of the conqueror and the division of his empire, lasted in Makedonia and Thrace longer than in other regions. Just as the gold and silver coin types of Philip II were continued posthumously under Alexander<sup>16</sup>, economic reasons led to the continuation of gold staters and silver tetradrachms in the name of Alexander by Kassander and his sons and to their occasional resumption down to Philip V<sup>17</sup>. The gold staters and silver tetradrachms in the name of Alexander struck posthumously, prior to and during the reign of Gonatas, form part of this

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<sup>12</sup> A posthumous gold stater in the name of Philip II, with the same helmet symbol as that on the Pans and on their contemporary Makedonian posthumous Alexanders, may also belong to the reign of Gonatas. The authenticity of the coin, though, requires confirmation: Lanz Auction 68 (June 1994), no. 124.

<sup>13</sup> M. J. Price, *Coins of the Macedonians*, London: Br. Museum, 1974, 18-21.

<sup>14</sup> U. Westermark, 'Remarks on regal Macedonian coinage', in Le Rider et al. (edd.), *Kraay-Mørkholm Essays*, 301-15; eadem, 'Apollo in Macedonia', in *Opus mixtum*, 149-54; 'The staters of Archelaus. A die study', in Price et al., *Essays Carson-Jenkins*, 17-30; Le Rider, *Monnayage et Finances*, 16.

<sup>15</sup> Le Rider, *Philippe II*, 17; C. A. Hersch, 'An unpublished coin of Philip II of Macedonia from his first issue of bronzes', *AJN* 1 (1989) 33-6; Le Rider, *Monnayage et Finances*, 17, n. 1.

<sup>16</sup> M. J. Price, 'The coinage of Philip II', *NC* 7 (1979) 234-5; M. J. Price, 'Alexander's reform of the Macedonian Regal Coinage', *NC* 142 (1982) 180-90, esp. 188, n. 20; Price, *Alexander*, 38-9; Martin, *Sovereignty*, 271-92; Le Rider, *Monnayage et Finances*, 53, n. 1, 55.

<sup>17</sup> The torch symbol has favoured the assignation of a variety dated to c. 315-294 BC to Amphipolis: Price, *Alexander*, nos. 438-97. A second group is attributed to the reign of Poliorketes: *ibid.*, nos. 498-508. A third group has been assigned to Uranopolis: *ibid.*, nos. 509-23. Lastly, the posthumous Alexanders resumed in Pella under Philip V, presumably for a particular payment: H. Seyrig, 'Monnaies hellénistiques, 5. Philippe V ou les Bottiéens', *RN* 5 (1963) 14-18; Price, *Alexander*, 150-1.

tradition<sup>18</sup>.

The five surviving gold staters in the name of Antigonos Gonatas therefore retain the types utilised by Alexander III on his gold staters, as follows<sup>19</sup>:

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Gold staters:

O: head of Athena r. in crested Korinthian helmet, decorated with coiled snake.

R: Nike standing to l. holding *aphlaston* in outstretched right hand, and mast (*stylis*) in her left hand<sup>20</sup>.

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Price is reluctant to see in the choice of Athena, armed goddess of citadel and city<sup>21</sup>, for the obverse of the Alexander gold staters any latent attempt to appease the Athenians, and one need not consider such an association for the staters struck under Gonatas, either<sup>22</sup>. The symbolic reference through the Nike with the *aphlaston* on the reverse to the naval victory of Salamis during the Chremonidean war might tally with his naval victory over the Ptolemies at Kos. It is also compatible with the incorporation by Gonatas of the Persian wars in his political discourse *vis-à-vis* the Greeks of the South (chapter 2.4.2)<sup>23</sup>.

The continuation of the Alexander types may also be observed on the transitional posthumous Alexander tetradrachms struck in the name of king Antigonos:

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Silver tetradrachms:

O: beardless head of Herakles r.

R: Zeus Aetophoros seated on stool-throne l., holding eagle with outstretched right hand and sceptre with left hand<sup>24</sup>.

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<sup>18</sup> Ibid., 141-9.

<sup>19</sup> On the designs on the gold staters of Alexander and on their interpretation, see Price, *Alexander*, 29-30.

<sup>20</sup> See chapters 2.4.1, 3.2.1.

<sup>21</sup> W. Burkert, *Greek Religion*, Oxford 1985, 140.

<sup>22</sup> Price, *Alexander*, 29.

<sup>23</sup> On the *stylis* held by Nike, see E. Babelon, 'La *stylis*, attribut naval sur les monnaies', *RN*<sup>4</sup> 11 (1907) 1-39 = *Mélanges Numismatiques* 4 (1912) 199; J. Svoronos, 'Stylides, ancres hierae, acrostolia, embola, proembola et totems marins', *JIAN* 16 (1914) 81-152. Cf. chapter 2.4.1.

It may be argued that Herakles on the obverse, in particular, effectively established the connection with the Temenid royal line that had always been a *desideratum* for the Antigonids<sup>25</sup>. This demonstration of respect to the previous Makedonian dynasty (and Alexander, in particular), as well as to Gonatas' ancestors forms part of the same policy as the covering over of the tombs at Aegae, plundered by the Celtic mercenaries under Pyrrhos, and the construction of the portico to his forebears at Delos<sup>26</sup>. The covering over of the tombs at Aegae, in the first place, symbolically demonstrated respect towards the Temenid dynasty. The imposing stoa, hosting approximately twenty statues of Gonatas' *progonoi*, that was constructed during the mid-third century on the North side of the sanctuary of Apollo at Delos, not only stressed, but also publicised and enhanced his legitimacy<sup>27</sup>.

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## 2. *Individual types: silver*

### 2.1 'Pan head tetradrachms, drachma' ('Pans')

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Tetradrachms, drachma

O: head of Pan l., in centre of Makedonian shield.

R: archaising Athena Alkidemos l./r., in high relief, brandishing a thunderbolt, in exergue<sup>28</sup>.

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The combination of the Makedonian shield with Pan on the obverse of the new coinage came to constitute the personal emblem of Antigonos Gonatas. The horned head of Pan l. is depicted with a three-fold drapery (*nebris*) round the neck and with a *pedum* at his shoulder. Allusions to the warrior god's cult may be seen in the iconography adopted for the reverse of bronze coins from

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<sup>24</sup> See n. 20.

<sup>25</sup> Le Rider, *Philippe II*, 367; Ch. Edson, 'The Antigonids, Heracles, and Beroea', *HSCP* 45 (1934) 213-46, esp. 214-6, 220-3. The star symbol on the Makedonian shield may also have been intended to enforce the connection between Temenids and Antigonids.

<sup>26</sup> See chapter 1.2.

<sup>27</sup> Smith, *HRP*, 24-5; Ameling et al. (edd.), *Schenkungen*, 190-3, with earlier bibliography. Cf. chapter 1.2.

<sup>28</sup> See chapters 2.4.2, 3.2.2.



Amphipolis and Thessalonike of the second century BC, carrying a type identical to that on the middle *akroterion* of the pediment above the entrance to the cave of Pan in Thasos. They may also be observed on bronze coins of Philip V<sup>29</sup> and on bronze coinage struck at Pella under the Romans<sup>30</sup>. A rise in the god's popularity in Makedonia during the third century BC, in particular, is suggested by the proliferation of literary references to this god: the epic hymn composed by Aratos in Makedonia, the references to Pan in Suida and the analysis of the 'panic fear' by the Cypriot peripatetic philosopher Klearchos of Soli relate to this period<sup>31</sup>. To these may be added a recently published dedication to Pan at Beroia by Hippokles of an altar, thanking 'Antigonos' for the renewal of the ἀτέλεια granted to his ancestors by Philip II<sup>32</sup>, and the institution by Gonatas of festivals in honour of the same god, such as the Basileia at Pella<sup>33</sup> and the Paneia at Delos in 245 BC<sup>34</sup>. Pan's representation on the individual silver and bronze types of Gonatas forms part of the same context, but the particular historical circumstances of their issue are worth investigating.

The head of Pan on the obverse of the Pan tetradrachms has been related to the god's assumed epiphany at Gonatas' countering of the Celts at Lysimacheia<sup>35</sup>, but there are good reasons for not accepting this *a priori*. The first to attempt such an association was H. Usener, in his commentary on an epigram from Knidos mentioning an 'Antigonos, son of Epigonos'. He rejected Eckhel's initial relation of these coins to the Celtic attack at Delphi<sup>36</sup> and associated the new tetradrachms with the king's personal victory over the Celts at Lysimacheia, to the successful outcome of which Pan had allegedly played a critical role. Usener even suggested the subsequent introduction of a particular cult in honour of Pan and that this cult and the above mentioned literary references to Pan and to the 'panic fear' orchestrated a response to his epiphany at Lysimacheia<sup>37</sup>.

<sup>29</sup> H. Usener, 'Ein Epigramm von Knidos', *Rheinisches Museum N. F.* 29 (1874) 43-7, esp. 43; Gaebler, *AMNG* III.1, 35.34, note, pl. 9.9, with earlier bibliography; 118.3, pl. 22.25, 191.12, note, pl. 35.2).

Doubts may be cast upon the alleged representation of Pan on silver coins of Amyntas II, as these coins do not carry horned heads: Gaebler, *AMNG* III.1, 158.2-3, pl. 29.28-9; *BMC Macedonia*, 168, no. 2. On the assignation of coins with Pan to Amyntas II, see Head, *HN*<sup>2</sup>, 221-2; Svenson, *Darstellungen*, 48; Nachtergaele, *Galates*, 178, n. 231.

<sup>30</sup> Gaebler, *ibid.*, 99.30, 33, pl. 19.23, 25; 100.36, pl. 19.24; Head, *HN*<sup>2</sup>, 244; Tarn, *AG*, 174, n. 19.

<sup>31</sup> Hymn of Aratos: *Vit. Ar.* 3.19, p. I, 86; Suida 'ῥμνους εἰς Πᾶνα'; Clearchos of Soli: *Athen.* 9, p. 389 ff. Usener, *ibid.*, 43-7.

<sup>32</sup> Th. Pazaras-M. B. Hatzopoulos, 'Ἐπίγραμμα ἀπὸ τῆ Βέροια τῶν Ἀντιγονιδῶν', *Τεκμήρια* 3 (1997) 71-77; L. Gounaropoulou-M. B. Hatzopoulos, *Ἐπιγραφές Κάτω Μακεδονίας, Τεύχος Α, Ἐπιγραφές Βεροίας*, Athens 1998, no. 37. Particular thanks are due to Prof. M. B. Hatzopoulos and to P. Paschides, for information and comments on this document.

<sup>33</sup> *IG* II<sup>2</sup>, 1367; Tarn, *AG*, 174, n. 18. Buraselis, *HM*, 145, n. 127.

<sup>34</sup> On the Paneia at Delos, see chapter 1.2.

<sup>35</sup> Imhoof-Blumer, *MG*, 219; Tarn, *AG*, 174; H. Gaebler, *AMNG* III.2, 186; Boehringer, *Chronologie*, 99; Mørkholm, *EHC*, 134; Gabbert, *AG*, 68. F. W. Walbank, 'the Years of Chaos', in Hammond-Walbank, *Macedonia* III, 255-8; Will, *HPMH* I<sup>a</sup>, 105-7, 109-10.

<sup>36</sup> J. Eckhel, *Doctrina nummorum veterum*, pars 1.2<sup>2</sup>, Vindobonae 1794, 124.

<sup>37</sup> H. Usener, 'Ein Epigramm von Knidos', *Rheinisches Museum, N. F.* 29 (1874) 43-7; certain of Usener's

It is on these grounds that Pan has since been interpreted as the protector god of Antigonos Gonatas<sup>38</sup>, presumably just as the hero Perseus was the protector of Philip V and Perseus<sup>39</sup>.

Even though the 'Antigonos, son of Epigonos' mentioned in the epigram from Knidos is no longer identified with Gonatas<sup>40</sup>, the iconography of the Pans has since been interpreted as a deliberate reminder on the part of the king that Pan was not only present at Delphi, but also fought among the Makedonian ranks at Lysimacheia<sup>41</sup>. Yet Pan is absent from the surviving references to this battle. This omission has generally been justified by the chronological distance between the literary sources and the actual events<sup>42</sup>. However, the rise in the popularity of Pan during the third century BC does not suffice to support a particular connection of the god with Lysimacheia or with Gonatas. A dedication to Pan of an altar by Hippokles, thanking 'Antigonos' for the renewal of the ἀτέλεια granted to his ancestors by Philip II, may suggest a relation of the god with Antigonos<sup>43</sup>. Associating, though, the preference of Gonatas for Pan with the god's critical intervention at Lysimacheia remains again highly speculative.

On numismatic criteria, downdating the introduction of the Pan head tetradrachms to 271 BC, R. W. Mathisen already dissociated them from Lysimacheia and regarded them as bearers of a particular ideology rather than as *testimonia* of a contemporary military event (see chapter 2.4.2). In fact, there is no reference to Pan on the bronze coins of the shield/helmet type that were allegedly struck after Lysimacheia: one would expect some allusion to the god, Nachtergaeel argues, on the coins issued immediately after his *epiphaneia*<sup>44</sup>. It is, after all, worth noting that the

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arguments are currently outdated, cf. Habicht, *Gottmenschentum*, 79; Nachtergaeel, *Galates*, 177-9, n. 231; Blümel, *Knidos*, 157j, no. 301.

<sup>38</sup> Tarn, *AG*, 174, n. 19; 226; Gabbert, *AG*, 68.

<sup>39</sup> P. A. MacKay, 'Macedonian tetradrachms of 148-147 BC', *ANSMN* 14 (1968) 15-40; Boehringer, *Chronologie*, 107-10, 116-8; Mettout, *Persée*, 2; Mørkholm, *EHC*, 135-6.

<sup>40</sup> Wilamowitz identified Antigonos with a rich Knidian, in honour of who a gymnasium was erected in front of the gates of Knidos after his death: U. von Wilamowitz-Moellendorf, *Hellenistische Dichtung* II, Berlin 1924, 104-5. Blümel believes that he belonged to the same group of rich Knidians, who in 282 BC lent to the Milesians large amounts of silver: Blümel, *Knidos*, 158. Cf. W. W. Tarn, 'The dedicated ship of Antigonos Gonatas', *JHS* 30 (1910) 209-22, esp. 214-5.

<sup>41</sup> Gaebler, *AMNG* III.2, p. 186.2, note; Tarn, *AG*, 174, n. 20; Will, *HPMH* I<sup>a</sup>, 101-10. Liampi, *MS*, 108-11, with earlier bibliography. Only Imhoof-Blumer diverges from this general belief, arguing that Gonatas did not issue coins before 265 BC, due to his engagement in activities against Pyrrhos: *MG*, 129. Cf. Pritchett, *Greek State at War* III, 33, n. 93. Gabbert points out the uncertainties in dating this coinage and considers Gonatas' victory over the Ptolemies in Kos as an equally possible starting point for his allegiance to the god Pan: *AG*, 68.

<sup>42</sup> Nachtergaeel, *Galates*, 82-7, 177-80. Pan is absent from the literary and epigraphic references to the battle of Lysimacheia (see chapter 1.2). A sudden attack of Gonatas' troops is mentioned in Just. 25.2.3 (in silva taciti se occultarent), but there is no explicit reference to Pan in the text.

<sup>43</sup> See n. 32.

<sup>44</sup> See further discussion and bibliography in Nachtergaeel, *Galates*, 177-9; cf. H. P. Laubscher, 'Hellenistische Herrscher und Pan', *MDAI* (Ath) 100 (1985) 340, n. 41.

F. M. Heichelheim assigns the bronze Makedonian shield/helmet specimen, overstruck on a bronze coin of



projection by Gonatas of Pan as his protector god at so early a stage of his reign would have been incompatible with his conscious efforts to relate himself to the Temenid dynasty, in order to gain the trust and recognition of the Makedonians (see chapter 1.2).

In the absence of firm evidence relating Pan on the Pan head tetradrachms with Lysimacheia, the participation of Gonatas at Thermopylai and the suppression of the Celtic mutineers at Megara during the Chremonidean war emerge as possible moments for the launching of the new coinage. Pan is not explicitly related to the latter incident<sup>45</sup>. In fact, the only reference to Panic fear from this period survives in Pausanias' account of the Celtic attack of Delphi under Brennos, in 279 BC. In the prior unsuccessful attempt of the allied Greek forces to counter the Celts at Thermopylai, Gonatas, still a king without a kingdom, had supported the Greek ranks with five hundred mercenaries<sup>46</sup>. The unprompted terror spread among the Celtic invaders at Delphi was assumed by Pausanias to be coming from the god Pan<sup>47</sup>: ἐν δὲ τῇ νυκτὶ φόβος σφίσιν ἐμπίπτει Πανικός· τὰ γὰρ ἀπὸ αἰτίας οὐδεμιᾶς δείματα ἐκ τούτου φασὶ γίνεσθαι. ἐνέπεσε μὲν ἐς τὸ στράτευμα ἢ ταραχὴ περὶ βαθεῖαν τὴν ἐσπέραν, καὶ ὀλίγοι τὸ κατ' ἀρχὰς ἐγένοντο οἱ παραχθέντες ἐκ τοῦ νοῦ, ἐδόξαζόν τε οὗτοι κτύπου τε ἐπελαυνομένων ἵππων καὶ ἐφόδου πολεμίων αἰσθάνεσθαι, μετὰ δὲ οὐ πολὺ καὶ ἐς ἅπαντας διέδρα ἢ ἄγνοια (Mss., ἄνοια Schubolt)... ἢ τε ἐκ θεοῦ μανία πλεῖστον ἐξεργάσατο ὑπ' ἀλλήλων τοῖς Γαλάταις τὸν φόνον (Paus. 10.23.7-8). οἱ δ' ἐν τῇ χειμερίῳ διαφθαρέντες νυκτὶ καὶ ὕστερον οἱ ἐν τῷ Πανικῷ δείματι ἐγένοντο ὑπὲρ τοὺς μυρίους, τοσοῦτοι δὲ ἄλλοι καὶ ὑπὸ τοῦ λιμοῦ (Paus. 10.23.10). It is a large body of Celts briskly retreating from Delphi that was allegedly destroyed by Gonatas at Lysimacheia<sup>48</sup>.

Evoking the protection of Delphi from the Celts in 279 BC established a link with a major Panhellenic event of the third century, that of the Celtic invasion, whose memory was recalled many times during the third and the second centuries<sup>49</sup>. If Pausanias' account of the events is

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Lysimacheia (head of Athena  $\epsilon$ /ΛΥΣΙ ΜΑΧΕΩΝ; lion  $\epsilon$ .), from the Fitzwilliam museum, to the financial needs raised after the battle: 'Numismatic evidence of the battle of Lysimacheia', *AJPh* 64 (1943) 332-3. The use, however, of bronze coins for military payments is highly unlikely.

<sup>45</sup> Just. 26.2.7; P. Trog. *Prol.* 26. Cf. chapter 2.4.2.

<sup>46</sup> Paus. 10.20.4: βασιλέων δὲ ξενικὰ πεντακόσιοί τε ἐκ Μακεδονίας καὶ ἐκ τῆς Ἀσίας ἴσοι σφίσιν ἀφίκοντο ἀριθμόν...

<sup>47</sup> Usener adds the worship of Pan at the Korykeion andron, at Parnassos, to the same context: Paus. 10.32.7; Usener, *ibid.*, 44, n. 2.

<sup>48</sup> E. Will, 'The formation of the Hellenistic kingdoms', in *CAH VII.1*<sup>2</sup>, 115, who considers the tradition relating to the sack of Delphi to be late and false.

<sup>49</sup> Plb. 2.35.7 (see chapter 2.4.2); 9.32.3-39.7. Hannestad, *Celts*, 17; on the references to the Celtic attack by Polybios, see C. Champion, 'Polybios, Aetolia and the Gallic attack on Delphi (279 BC)', *Historia* 45 (1996) 316-28, esp. 320. On the development of the legends of the battle, see M. Segré, 'La più antica tradizione sull' invasione gallica in Macedonia e in Grecia (280/79 a. Chr.)', *Historia* 1.4 (1927) 18-42; R. Flacelière,



accurate,<sup>50</sup> the emphasis on the divine protection of the sanctuary on the new silver tetradrachms may have been meant to minimise the role of the Aitolians in that battle<sup>51</sup>. The selection of Pan rather than Apollo, whose intervention against the Celts is reported in the most contemporary sources<sup>52</sup>, is justified by the chronological distance of the documentation from this event. It also suggests the introduction of the new coin types at a time when the legends on the sack of Delphi were under development<sup>53</sup>.

An indirect reference to the personal victory of Gonatas over the Celts may still be seen in the subsidiary projection of the divine protection of Delphi in 279 BC: as the Celts no longer constituted a threat for Greece after Lysimacheia, Gonatas presumably meant to underline that it was he who wrote the epilogue in the chapter of the Celtic threat to mainland Greece.

The allusion to Thermopylai is supplemented by other iconographic themes on the new coinage. A Makedonian shield, with seven embossed crescent and six/seven/eight rayed star units (henceforth: 'star/crescents', 'units') arranged around a central emblem and with two or three circles on the edge, frames Pan's *clipeus* on the obverse, for instance. This shield type had been adopted at the end of the fifth/beginning of the fourth century BC by the Makedonian army, in particular the king and his closest *milieu*, as a defensive military weapon, and it soon became a favourite theme in art. As a multifunctional military symbol, also known from archaeological finds<sup>54</sup>, it had great appeal mainly in the Hellenistic Makedonian and Eastern monarchies but also

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'La chronologie du IIIe av. J.-Chr. à Delphes', *REA* 35 (1933) 327; Flacelière, *Aitoliens*, 111; Pritchett, *Greek State at War* III, 31, n. 85.

<sup>50</sup> In 1979 Habicht suggested that Pausanias' sources are pro-Athenian: *Unters.*, 102-7. More recently, he argued that Pausanias does not make serious errors in his historical accounts: *Pausanias*, 84-6, p. xv; 97-8; cf. *idem*, *Athens*, 132-3. He suggested that Pausanias' source was reliable, presumably Hieronymos: *Pausanias*, 85, n. 72, 86, n. 79, 97. Cf. Hornblower, *Hieronymus*, 72-4.

<sup>51</sup> On the other hand, Polybios' recognition of the important role of the Aitolians in that battle, despite his general antipathy to them, confirms his objectivity: C. Champion, *ibid.*

<sup>52</sup> Epiphany of Apollo at Delphi: *Syll<sup>3</sup>* 398, l. 1-6 (decree of Kos). Apollo's epiphany along with Artemis and Athena, Diod. 22.9.5; Just. 24.8.5-12; Suida, s. v. 'ἔμοι μελήσει'; Cicero, *De Div.* 1.81; *FD* III.1.483, l. 6. Dedications to Apollo from Delos: Dürrbach, *Délos*, 298A, l. 85-7, 372B; Habicht, *Athens*, 32-3.

J. G. Fraser argues that Apollo Belvedere in the Vatican represents the god repelling the Celts: *Pausanias*, London 1897, 345-6. Apollo's intervention at Delphi inspired Kallimachos' Hymn to Delos: Pritchett, *Greek State at War* III, 30-2. Cf. H. Pomtow, 'Delphische Neufunde, Zur Delphischen Archontentafel des III. Jhdts. (Neue Soterien- und Amphictyonen-Texte)', *Klio* 14 (1914/5) 265-320, esp. 278; *idem*, 'Die Kultstätten der anderer Götter von Delphi', *Philologus* 71 (1912) 54; Pfister, *RE* (1927) 1223, s. v. 'Soteria'; C. Champion, 'Polybios, Aetolia and the Gallic attack on Delphi (279 BC)', *Historia* 45 (1996) 316-28.

<sup>53</sup> See note 48.

<sup>54</sup> The closest archaeological parallel to this shield is the fragment of one of the shields that allegedly Pyrrhos, king of Epeiros (319-272 BC) dedicated at the sanctuary of Zeus at Dodona in 273 BC, after his victory over Gonatas at the gorge of Aoos (Kleisoura). A second shield of this type has been unearthed in Vegora/Florina, in western Makedonia, and a third one more recently in Albania: S. Dakaris, 'Ανασκαφή τοῦ ἱεροῦ τῆς Δωδώνης', *ΠΑΕ* (1968) 58-9; Liampi, *Meletemata*, 160, n. 14; *eadem*, *MS*, 31, 52-5, pl. 1.2-3, 33.1.

later on in Italy and Rome<sup>55</sup>. The shield now fully occupies the obverse and is introduced as the royal emblem of the Antigonid dynasty, in the same way as the eagle on thunderbolt, the anchor and the forepart of an attacking lion had occurred as symbols on the reverse of silver tetradrachms of Ptolemy I, Seleukos I and Lysimachos respectively<sup>56</sup>. Its initial occurrence on the reverse of bronze coins of Philip II and Alexander III establishes a link with the Temenid dynasty. This link with the Temenids is corroborated by the six/seven/eight-rayed stars (as a dynastic symbol of the Temenids or as a symbol of Makedonia at large), which was introduced by Gonatas as a decorative motif for his larger silver denominations<sup>57</sup>. The star symbol finds an exact parallel on a shield unearthed in Vegora/Florina and resembles those on the shields found at Dodona and at Mit Rahina (Memphis)<sup>58</sup>. It also recalls literary similes, comparing the large numbers of the Celtic invaders with stars<sup>59</sup>.

H. W. Ritter sees in this symbol echoes from the 'anonymous' bronze coinage of Demetrios Poliorketes, carrying a star in the centre of a Makedonian shield on the obverse and a Makedonian helmet on the reverse<sup>60</sup>, and a precedent for the coinage of Philip V: a star occupies the central emblem on the obverse of his silver tetradrachms and bronze issues and the centre of the shield of Athena Alkidemos on the reverse of his silver tetradrachms<sup>61</sup>. The depiction of Pan among seven stars has been regarded by H. W. Ritter as a primary projection of Pan as 'Allgott', which was to become popular in the Roman imperial times<sup>62</sup>.

The shield and its badge as bearers of religious and political ideology<sup>63</sup> call for attention to the political messages latent on the main coin series of Antigonos Gonatas. The frequent occurrence of Makedonian shields in religious contexts, primarily dedicatory or funerary, underline the votive character of this symbol and echo the customary dedication at sanctuaries of shields of the conquered or of distinguished warriors<sup>64</sup>. Shields as archaeological *spolia* have been unearthed

<sup>55</sup> On the shield and its badge as bearers of political ideology, see Liampi, *Meletemata*, 157-71; eadem, *MS*, 25-41.

<sup>56</sup> O. Mørholm, *EHC*, 66, 71, 81.

<sup>57</sup> Diverging from M. Andronikos' interpretation of the star as a dynastic symbol of the Temenids, H. W. Ritter regards the star as a symbol of Makedonia: *Sternsymbolik*, 181-2; 184-8. Katerini Liampi reverts to Andronikos' suggestion, providing archaeological and numismatic argumentation: *MS*, 54.

<sup>58</sup> Liampi, *ibid.*, 32, 35-6, 53-4. Cf. plate 49.2.

<sup>59</sup> Kallim., 4.171-6 (esp. l. 174-6: ὀπίγονοι Τιτῆνες ἀφ' ἐσπέρου ἐσχατόωντος ῥώσωνται, νιφάδεσσιν ἐοικότες ἢ ἰσάριθμοι τείρεσιν...); Nachtergaele, *Galates*, 180-1; for a synopsis of the significance of the stars and for their interpretation, see Ritter, *Sternsymbolik*, 159-205; Hannestad, *Celts*, 19-20, n. 25.

<sup>60</sup> Ritter, *Sternsymbolik*, 161, 166.

<sup>61</sup> Liampi, *ibid.*, 111 ff., pl. 24.

<sup>62</sup> Projection of Pan as 'Allgott': n. 34, 165, n. 6.

<sup>63</sup> Liampi, *ibid.*, 32.

<sup>64</sup> Liampi, *ibid.*, S 3, pl. 1.3; S 4-6, 14-15, 17-18, S 27. The few exceptions are: the shield from Vegora (Liampi, *ibid.*, S 3); the fresco from Boscoreale (*ibid.*, S 7); the relief on the proxeny decree from Gonnoi (*ibid.*, S 11); shields on architectural elements (*ibid.*, S 17, 20-1, 30); miniatures (*ibid.*, S 31-3) and girdles



at the sanctuaries at Olympia, Dodona and Oropos<sup>65</sup>, while their pictorial or sculptural representations occur on the dedication of Aemilius Paulus at Delphi, on the base of a trophy at Delos and on later representations of the altar of Juno<sup>66</sup>. Similarly, the shield from the *nekropolis* at Mit Rahina (Memphis) is paired with decorative motifs from tombs, inspired by the decoration of the Makedonian shield. This projection of this symbol aligns itself with the multiple dedications of weapons at Delphi after the retreat of the Celts in 279 BC<sup>67</sup>. It may have been meant to offset the dedication by Pyrrhos of Epeiros of Makedonian shields at the sanctuary of Zeus at Dodona, after the defeat of the Makedonians at the gorge of Aoos (273 BC; cf. chapter 1.2).

This Makedonian shield, described by Asclepiodotos (*Takt.* 5.1) and Aelianus (*Takt.* 12) as ἀρίστη, on the obverse of the new tetradrachms and bronzes was emphatically distinguished from the Celtic and Persian shields, which, according to Pausanias, were similar<sup>68</sup>. Thus any tentative parallelism of the Makedonians with barbarians was effectively refuted, and Makedonia's role as a 'shield' from the barbarians of the North (an idea which certainly exists in later literature) was internationally advertised instead<sup>69</sup>. Finally, the use of the Makedonian shield as a dynastic symbol on the Antigonid tetradrachms may have prompted Ptolemy II to adopt a Celtic θυρεός as a symbol on his silver tetradrachms. The Celtic shield may have been meant to commemorate Ptolemy's effective resistance to the mutiny among the Celtic mercenaries in Alexandria in 275 BC, in the context of the rebellion of Magas, Ptolemaic representative at Kyrene<sup>70</sup>. This projection of even a minor Ptolemaic victory over the Celts and Kallimachos' reference to Ptolemy II fighting alongside Apollo against the Celts (*Hymn to Delos*, 171-8) might echo the significance attached to the Panhellenic resistance to the Celtic attack of Delphi (279 BC). It might also have been meant to offset the absence of the Ptolemies from it and possibly to create a Ptolemaic victory over the Celts analogous to that of Gonatas at Lysimacheia.

Prior to Gonatas, events related to major sanctuaries had effectively promoted the political claims of Philip II in Greece. The combination of Apollo with the Nike *in biga* on the gold staters

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(*ibid.*, S 34-6).

<sup>65</sup> Liampi, *ibid.*, S 1-2, pl. 1.1-2, S 10, pl. 5.2, 34.1

<sup>66</sup> Liampi, *ibid.*, S 22-4, S 25, S 39 a-b respectively.

<sup>67</sup> On the dedication of the shield of Kydias to Zeus Eleutherios: Paus. 10.21.5; Habicht, *Pausanias*, 84; Hannestad, *Celts*, 15-38, esp. 15-18. Cf. chapter 2.4.2.

<sup>68</sup> Paus. 10.19.4: Αἰτωλοὶ δὲ (sc. ἀνέθεσαν) τὰ τε ὀπισθεν καὶ τὰ ἐν ἀριστερᾷ Γαλατῶν δὴ ὄπλα· σχῆμα δὲ αὐτῶν ἐστὶν ἐγγυτάτω τῶν Περσικῶν γέρρων.

<sup>69</sup> Plb. 9.32.3-7; C. Champion, 'Polybius, Aetolia and the Gallic attack on Delphi', *Historia* 45 (1996) 316-28, esp. 317.

<sup>70</sup> Paus. 1.7.1-2; Kallim., *Hymn to Delos*, 171-8. Nachtergaele, *Galates*, 187-90; H. Voegtli, 'Der Schild des Philadelphos', *SM* 23 (1973) 86-9; A.-W. Ritter, 'Zum Schild auf den Münzen des Philadelphos', *SM* 25 (1975), Heft 97, 2-3; D. Salzmann, 'Überlegungen zum Schild auf den Münzen des Ptolemaios Philadelphos und verwandten Denkmälern', *SM* 30 (1980) 33-9; Mørkholm, *EHC*, 101, n. 2; H. Heinen, 'The Syrian-



struck between Philip's victory over the Phokaians at Krokion Pedion (352 BC) and his victory at Olynthos (348 BC), for instance, apparently advertises his involvement in Panhellenic religious events and/or festivals<sup>71</sup>. The horseman with *kausia* on the silver tetradrachms, allegedly the king himself, was introduced in 356/5 BC, on the occasion of the victory of Parmenion over the Illyrians, of the victory of Philip's horse (ἵππος κέλης) at Olympia and the birth of Alexander<sup>72</sup>. Finally, the palm branch held by the jockey, and the *tainia* on the young head on the obverse of the second silver tetradrachm type have been recently related to his victory over the Phokians during the Third Sacred War or to a new victory of Philip II at athletic games<sup>73</sup>. Projecting his participation in the Olympic games and his role in the protection of Delphi from the Phokians, Philip demonstrated his concern with the political affairs in Central Greece and legitimised his involvement in them. In drawing on themes from the history of Delphi, Gonatas explicitly reverted to the political track beaten by Philip II in order to appeal to the Greeks. The Makedonian international policy of the Antigonids was thus projected as a consistent continuation of that of the Temenids.

Military themes are continued on the reverse. The main figure occupying the field is an archaistic type of warrior Athena, dressed in a high-girdled *chiton*, falling in fine folds with one heavy fall in the middle and with the hem ending in points. A shawl over her shoulders falls in dovetail pleats with two-pointed ends. Athena carries a thunderbolt on her l. arm, poised to strike. Her pose is stiff, she is striding, usually with her l. leg advanced. Seen in partial front or rear view, she sometimes carries an *aegis* across her back. She walks on tiptoe with both feet. In the field to her l., 'Makedonian' helmet; to her r., a monogram<sup>74</sup>.

This type of the warrior goddess has been identified by H. Gaebler with the statue of Athena Alkidemos worshipped at Pella, on the basis of Livy<sup>75</sup>. Athena Alkidemos r. had been introduced as a symbol on the reverse of the royal lifetime tetradrachms of Alexander the Great

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Egyptian Wars and the new kingdoms of Asia Minor', *CAH VII.1*<sup>2</sup>, 417.

<sup>71</sup> Plut. *Alex.* 4. Le Rider, *Philippe II*, 428; M. J. Price, 'The coinage of Philip II', *NC* (1979) 234-5; Price, *Alexander*, 36, 106; Hatzopoulos, *Actes de Vente*, 85-6; G. Le Rider, 'La date des premiers statères d' or de Philippe II', in *Χαρακτήρ*, 261-9; Le Rider, *Monnayage et Finances*, 55-66, with earlier bibliography.

<sup>72</sup> A. B. West, 'The early diplomacy of Philip II of Macedon illustrated by his coins', *NC*<sup>3</sup> 3 (1923) 169-210, esp. 177-81, 210; Le Rider, *Philippe II*, 366-7; Le Rider, *Monnayage et Finances*, 58, 68, with earlier bibliography. On the *kausia*, see A. M. Prestiani-Giallombardo, 'Un copricapo dell' equipaggiamento militare macedone: la kausia', *NAC* 22 (1993) 61-90, esp. 67-8.

<sup>73</sup> Ellis, *Philip II*, 237; Le Rider, *Monnayage et Finances*, 59, 68.

<sup>74</sup> Gaebler, *AMNG* III.1, 185.1; Agnes Baldwin-Brett, 'Athena' Ἀλκιδήμος of Pella', *ANSMN* 4 (1950) 57-8.

<sup>75</sup> Liv. 42.51.2: 'Ipse (i.e. king Perseus) centum hostiis sacrificio regaliter Minervae quam vocant Alcidemon facto'. H. Gaebler, *AMNG* III.2 (1935) 94, note to no. 4; Kalléris, *Macédoniens*, 95, no. 21; Δ. Παπακωνσταντίνου-Διαμαντούρου, *Πέλλα* I, 38, n. 2. Cf. P. Demargne, s. v. 'Athena', *LIMC* II.1, 973, no. 164, with bibliography (but the goddess is not recognised as 'Alkidemos').

struck in Makedonia and later in posthumous issues in Pella. It was utilised as a reverse type for the silver tetradrachms of Ptolemy I and later appears, often in variations, on coins of Agathocles, tyrant of Syracuse, of Demetrios Poliorketes, on certain Italian issues of Pyrrhos, on gold and silver coins of the Seleukid usurper Achaios (220-18 BC), on those of Bactrian and Indo-Parthian kings and on the silver tetradrachms of Philip V<sup>76</sup>. Her presence on the badge of Akarnanian staters has been interpreted as a Makedonian influence<sup>77</sup>.

Spreading from Gonatas through to (at least) Doson, the Pans reveal a development both in the self-representation of the ruler during his reign and in the royal imagery from father to son, just as in other Hellenistic royal coinages<sup>78</sup>. The development in Pan's features from the beardless young ruler *à la mode de* Alexander III to royal portraits with divine through to realistic attributes confirms the role of the new type as a dynastic coinage in Antigonid Makedonia.

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## 2.2 'Poseidon head tetradrachms' ('Poseidons')

Mionnet's initial attribution of these coins to the founder of the Antigonid dynasty, Antigonos Monophthalmos, has been disproved by their occurrence in hoards only from the late third century onwards<sup>79</sup>. The assignation of this second type in the name of 'king Antigonos' to Gonatas or Doson has been a bone of contention among specialists. It may be argued that the iconography favours the assignation of this coinage to the former king. More specifically, the types adopted for the new coinage may be described thus:

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### Tetradrachms

O: Head of Poseidon r., in wreath of marine plants. Dotted border.

R: Apollo holding bow (with string up) with his uplifted right hand, seated l. with crossed legs on prow<sup>80</sup>.

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<sup>76</sup> Agnes Baldwin-Brett, 'Athena 'Αλκίδημος of Pella', *ANSMN* 4 (1950) 57-8.

<sup>77</sup> Liampi, *MS*, 34.

<sup>78</sup> Contra R. Fleischer, who excludes the Antigonids from this practice: 'Hellenistic royal iconography on coins', in Per Bilde et al., *Aspects of Hellenistic kingship*, 28.

<sup>79</sup> Mionnet, *Description* I, 580, 848; Imhoof-Blumer, *MG*, 124, n. 9-10; Merker, *Silver Coinage*, 40-1.



The identification of the bearded god on the obverse with Poseidon rests primarily on the type of the wreath on his head. With the exception, perhaps, of a wreath of reeds on certain obverses, the 'marine' plants used for the wreaths are not identifiable. The sea god was fairly alien to the Makedonian tradition and numismatic iconography until the time of Demetrios Poliorketes, who regarded Poseidon as his patron deity and protector of his fleet<sup>81</sup>. Thus Poseidon, who first appeared on the reverse of the silver tetradrachms struck in the name of Poliorketes in the East after his defeat at Ipsos in 301 BC<sup>82</sup>, was transferred to the reverse of his silver coinage struck at Pella in 292 and in 290 BC and on his bronze issues. On the silver tetradrachms from Pella, Poseidon is initially seated, holding an *aphlaston* with his right hand, while his left hand rests on a trident. On a later issue, he is standing with his right foot on a rock, leaning on his trident. It has been argued that the head of Poseidon was copied on the silver tetradrachms of the first Makedonian region, with Poseidon/Artemis Tauropolos, which have been dated by Touratsoglou to the early second century BC<sup>83</sup>.

The iconographic reference to a deity from a previous coin issue may be seen as a further expression of dynastic continuity, just as, for instance, Zeus Aetophoros on the reverse of the silver coinage of Alexander III recalls the head of Zeus on the gold staters of Philip II<sup>84</sup>. This creative adaptation of a previous coin type not only underlined the naval aspirations of the first two members of the Antigonid dynasty, notably of Demetrios Poliorketes, but also created an iconographic precedent for the obverse of the bronze coinage struck in Makedonia under Philip V<sup>85</sup> and, between 187 and 31 BC, at Amphipolis, Pella and Thessalonike, presumably in memory of the Antigonid naval achievements of the past<sup>86</sup>. The popularity of this type was also more widespread. It has been argued that the obverse type was copied on the coinage of Abdera<sup>87</sup>. A particular type with a wreath composed of many branches may have been copied by the silver pentobols struck at Kos in the early second century BC<sup>88</sup>. In addition, some contemporary allusions to the Antigonid claims for naval sovereignty under Gonatas may be speculated, as Gonatas is compared by Sextus

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<sup>80</sup> See also chapter 2.4.3.

<sup>81</sup> Poseidon Hippios only occurs on the silver coinage of Poteidaia, which was a Corinthian colony (end 6<sup>th</sup>-429 BC): Gaebler, *AMNG* III.2, 191.10-11, pl. 34.23-4. On Poseidon as protector god of Demetrios, see Mørkholm, *EHC*, 78.

<sup>82</sup> Mørkholm, *EHC*, *ibid.*

<sup>83</sup> Touratsoglou, *DM*, 81.

<sup>84</sup> Price, *Alexander*, 30-1.

<sup>85</sup> Gaebler, *ibid.*, 191.10-11, pl. 34.23-4.

<sup>86</sup> Gaebler, *ibid.*, 2, 34.26-7, pl. 9.1-2 (Amphipolis); 94.5, pl. 18.29 (Pella); 121.22, pl. 23.13 (Thessalonike).

<sup>87</sup> H. von Fritze, 'Die autonomen Münzen von Abdera', *Nomisma* 3 (1909) 28-9; Strack-Münzer, *Thrakien*, 15, pl. 3, no. 33.

<sup>88</sup> J. Kroll, 'The late Hellenistic tetrobols at Kos', *ANSMN* 11 (1964) 81-117, esp. p. 83-4. Cf. plate 48.9-11. On Poseidon on other Greek coinages, see Erica Simon, s. v. 'Poseidon', *LIMC* VII.1, 446-79.



Empiricus with Poseidon after the battle of Kos<sup>89</sup>. One might be tempted to speculate that this naval victory of Gonatas over the Ptolemies legitimised his deliberate emphasis on his descentance from Poliorketes via the projection of Poseidon and concomitantly on the renewal of the Antigonid naval tradition in the Aegean.

Unlike Poseidon, who was new to Makedonia, Apollo on the reverse of the new silver tetradrachms formed part of the iconographic repertory of cities, kings and dynasts in the area<sup>90</sup>. He is rendered with long plaits behind his ears falling on his shoulders, and with a longer lock falling on his chest. He is seated cross-legged, three-quarters facing l., on a prow. He is holding a bow (string upwards) with his outstretched r. hand, and his left hand is leaning on the ship.

The selection of Apollo may have been meant to establish a connection between the new tetradrachms and the coinage of representatives of the Temenid dynasty, that is, Philip II, Alexander III and Philip III. The god's posture also recalls the Seleukid coinage starting from Antiochos I from Syria, with Apollo seated on an *omphalos*, holding an arrow in his left hand, while the left hand rests on his bow<sup>91</sup>. If the Poseidons are to be assigned to Gonatas, one might be tempted to see in them Gonatas' political approximation to the Seleukids, who regarded Apollo as their patron god<sup>92</sup>.

Finally, the naval allusion of the prow is also of particular significance. This theme echoes coins of Poliorketes, either his silver and bronze with Nike on prow/Poseidon and with prow/Poseidon respectively or his silver tetradrachms coming from an 'uncertain' Makedonian mint, possibly Thessalonike or Kassandreia<sup>93</sup>. The prow has also encouraged the comparison of these coins to the octobols and tetrobols struck at Euboian Histiaia at the end of the fourth century<sup>94</sup> and it has been copied on the reverse of the coinage of the Akarnanian Confederacy and on the

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<sup>89</sup> Sextus Empiricus, *Adversus Mathematicos* I, 276. Buraselis, *HM*, 163, n. 182; 165-6. For the date of the battle of Kos, see chapter 3. For the existence of a cult of Poseidon under Dason, see Le Bohec, *AD*, 224.

<sup>90</sup> Olga Palagia, 'Apollo allein bewaffnet', in *LIMC* II.1, 196-7, pl. 57-66; Ulla Westermarck, 'Apollo in Macedonia', in *Opus Mixtum*, 149-54; 'Remarks on Regal Macedonian Coinage', in Le Rider et al., *Kraay-Mørholm Essays*, 301-15; 'The Staters of Archelaus. A die study', in Price et al., *Essays Carson-Jenkins*, 17-30.

<sup>91</sup> E. Babelon, *Les rois de Syrie, d' Arménie et de Commagène*, Paris 1890, p. 43; E. Bickerman, 'Sur les batailles navales de Cos et d' Andros', *REA* 40 (1938) 380; L. Lacroix, 'Copies des statues sur les monnaies Seleucides', *BCH* 73 (1949) 169-74, pl. III-IV, esp. 158-76; Le Bohec, *AD*, 55, n. 1; Mørholm, *EHC*, 113. Cf., for instance, Newell, *WSM*, p. 21, no. 239B.

<sup>92</sup> The first group of the Antigonid festivals at Delos, Antigoneia and Stratonikeia, have been dated to 253 BC; the second group, Paneia and Sotereia, took place in 245 BC, presumably after the battle of Andros. Both have been related to the intensified antagonism between the Ptolemies and the Antigonids for sovereignty over the Aegean: Buraselis, *HM*, 142-4. For the association of Gonatas with Apollo, cf. Mathisen, *Pan heads and Poseidon heads*, 32.

<sup>93</sup> Newell, *DP*, 123-4, no. 138, pl. 14.5-8.

<sup>94</sup> R. Weil, 'Histiaea-Oreos', *ZfN* 1 (1874) 189; Picard, *Chalcis*, 176; Le Bohec, *AD*, 55, n. 2.

Roman *aes grave*, which is contemporary with the silver quadrigati<sup>95</sup>. The combination of this god with the prow on the new coinage deserves attention. The annual feasts organised in honour of Apollo at Delos in c. 253 and in c. 245, in addition to the dedication to Apollo of his sacred trireme at Delos, in the Neorion or 'Hall of Bulls'<sup>96</sup>, after Antigonos' victory over the Ptolemies near the island of Kos<sup>97</sup>, have been interpreted by Mathisen as clues to this association. To judge from the two mosaics from Thmuis in Egypt showing a bust of a woman, presumably Berenike II, perhaps as Agathe Tyche, in Hellenistic military attire, crowned with the prow of a ship, this was a theme of contemporary topicality<sup>98</sup>. The strong symbolism of sea power, victory, wealth, and abundance on these mosaics apparently constitutes the respondent in the political 'debate' between Ptolemies and Antigonids for control of the Aegean, of which the Poseidons formed an integral part.

### 2.3 Fractional denominations

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#### Zeus Drachmae, Pentobols

O: Laureate head of Zeus r. in wreath.

R: Athena Alkidemos brandishing thunderbolt l. Her shield held upright, but without *aegis* and *gorgoneion*. In field l., winged helmet; r., monogram<sup>99</sup>.

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<sup>95</sup> W. Schwabacher, 'Some unknown federal coins of the Akarnanians', in Kraay-Jenkins, *Essays Robinson*, 219-21, pl. 62 (Akarnanian coinage); Crawford, *RRC*, 42, n. 2 (Roman coinage). Rather than favouring a later date for the Poseidons, the prow copied on the Akarnanian coinage of the late third century might reflect the adoption by the Akarnanians of an explicitly philomakedonian policy during the last quarter of the third century, to the detriment of the Aitolians: Will, *HPMH* I<sup>2</sup>, 351; F. W. Walbank, 'Demetrius II (239-229 B.C.)', in Hammond-Walbank, *Macedonia III*, 333-6. For other parallels, see Le Bohec, *AD*, 225-6.

<sup>96</sup> Athen. 5.209e (Moschion): Παρέλιπον δ' ἐκὼν ἐγὼ τὴν Ἀντιγόνου ἱερὰν τριήρη, ἣ ἐνίκησε τοὺς Πτολεμαίου στρατηγούς περὶ Λεύκολλαν τῆς Κώας. ἐπειδὴ (Mss., ὅπου δὴ Meineke) καὶ τῷ Ἀπόλλωνι αὐτὴν ἀνέθηκεν. W. W. Tarn, 'The Dedicated Ship of Antigonos Gonatas', *JHS* 30 (1910) 209; Mathisen, *Pan heads and Poseidon heads*, 32, n. 28.

The name of the Hall (of Bulls) might allude to Demetrios Poliorketes, the bull being the sacred animal of his patron deity and protector, Poseidon: Demetrios' earliest portrait with bull's horns and Poseidon with bull's horns occur on the smaller denominations issued at Ephesos, dated to c. 300-294 (Newell, *DP*, nos. 53-8). His portrait, with diadem and bull's horns, is also depicted on the obverse of a series of coins minted at Pella c. 292/1, with Poseidon on the reverse (Newell, *ibid.*, nos. 74-6).

<sup>97</sup> Mathisen, *Pan heads and Poseidon heads*, 29-32.

<sup>98</sup> On the mosaics, see I. Koenen, 'The Ptolemaic king as a religious figure', in Bulloch et al., *Images and Ideologies*, 27, figs. 2a-b, with earlier bibliography.



The presence of Athena Alkidemos on the reverse of these drachmae favours their association with the first type of the individual silver coinage with the name of king Antigonos, that is, the 'Pan head tetradrachms'. The bearded head on the obverse of these drachmae is distinct from that on the Poseidon head tetradrachms, and it is crowned with a different type of wreath, made from large leaves similar to ivy, and berries. Depending on the identification of the wreath as made of laurel leaves or of marine plants, the god on the obverse has been respectively interpreted as Zeus or Poseidon: F. Imhoof-Blumer believed that the constituent plant of the wreath is not ivy and opts for its general identification with a marine plant. By the process of elimination, he thus identifies the god with Poseidon rather than Dionysos<sup>100</sup>. I. L. Merker adopts Mionnet's description of the wreath as a laurel wreath and of the god's identification with Zeus<sup>101</sup>, on the grounds of the stylistic similarity of the head with that of Zeus on contemporary coins of Epeiros and of the type of wreath, which is distinct from that on the Poseidon head tetradrachms<sup>102</sup>.

The winged helmet l. on the reverse field of these drachmae is paired with the symbol on the l. reverse field of the fourth period of issue of the Pan head tetradrachms. This allows us to consider the two issues as contemporary (see chapter 2.4.4).

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To recapitulate, the analysis of the iconography on the silver transitional and individual issues in the name of Antigonos reveals that the constituent threads of the Antigonid royal ideology are inextricably bound with the Makedonian and Temenid tradition, on the one hand, and, on the other hand, with the history of the two major Panhellenic sanctuaries, Delphi and Delos. The Alexander types were continued, establishing continuity between the old Temenid and the new Makedonian dynasty. As for the individual silver issues, the combination of Pan with the Makedonian shield, with Athena Alkidemos and with the helmet on Gonatas' individual silver tetradrachms, effectively advertised the Makedonian role in the defence of Greece, primarily as part of the Panhellenic resistance to the Celts at Delphi and later that at Lysimacheia: unlike the Ptolemies, their military opponents for control over Southern Greece, the Antigonids proved themselves active participants in Greek religious and political affairs. It may therefore be argued that the iconography of the Pans was selected on the same ideological principles as the coinage of

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<sup>99</sup> See also chapters 2.4.4, 6.3.

<sup>100</sup> Imhoof-Blumer, *MG*, 124-5; Gaebler, *AMNG* III.2, 187.5, pl. 33.26. Head considers that the head on the silver drachms is of earlier style than that on the Poseidon head tetradrachms: Head, *HN*<sup>2</sup>, 231-2.

<sup>101</sup> Mionnet, I, 581, 583.

<sup>102</sup> Merker, *Silver Coinage*, 40, n. 4.



Philip II, and that it was meant to project more effectively Makedonian aspirations on peninsular Greece. The selection of a Panhellenic event with a wide impact legitimised the continuation of this coin type long after the demise of its initiator.

The Poseidon head tetradrachms, on the other hand, pick up a peculiarly Antigonid political line: they were presumably meant to revive naval pretensions *vis-à-vis* the 'Koinon of the Islanders' and the Aegean that had been raised by the founders of the Antigonid dynasty, Antigonos Monophthalmos and Demetrios Poliorketes. It may, in fact, be argued that the Ptolemaic aspirations for naval superiority, including the control and security of the Ptolemaic possessions in Thrace, rendered this reaction a necessity. Finally, the divergent iconography of the Zeus head silver drachmae from the main Pan series relates this issue to the Antigonid naval aspirations in Karia under Antigonos Doson.

## 2.2 Relative Chronology

The internal structure of the related specimens is elucidated by their metrological features, die-axes, style of lettering and control marks. These may be individually analysed as follows:

### 2.2.1 Metrology

The Attic weight standard, introduced by Philip II for the Makedonian royal gold coinage and by Alexander III for the silver<sup>1</sup>, is generally observed by the new Antigonid issues. Period I presents a great variety in denominations, comprising gold staters, silver tetradrachms with both Alexander and individual Antigonid (Pan head) types, and a silver Pan drachma. Periods II and III include tetradrachms only, the former Pans, the latter Pans and Poseidons. A greater diversity in both denominations and types is restored in period IV, comprising silver Pan and Poseidon tetradrachms, Zeus drachmae and pentobols. The silver pentobols, in particular, coming from dies known from the Zeus drachmae, constitute the only divergence from the Attic weight standard. Their direct metrological relationship with the Egyptian weight standard, as 'Egyptian weight drachmae'<sup>2</sup>, indicates their use for transactions in a market where this weight standard was the norm. This might indicate the issue of the fractional coinages during period IV, associated with Doso's Karian expedition in the East, in the context of the ongoing conflict between Seleukids and Ptolemies over control for this area in the third century BC<sup>3</sup>.

The weight standard aimed at seems to have been approximately around 8,65-8,60 g for the gold staters and c. 17,05-17,01 g for the silver tetradrachms with the Alexander types of the first period. The tetradrachms with Antigonos' individual types are slightly heavier than their Alexander type counterparts. In the first place, peaks for the Pan head tetradrachms range at c. 17,15-17,01 g for period I, c. 17,15-16,91 g for period II, c. 17,1-16,86 g for periods III and IV. Similarly, the weights of the Poseidon head tetradrachms vary between 17,15 and 16,81 g in period III and between 17,1 and 16,96 g in period IV. Finally, the silver drachma of the first period weighs 4,02 g; the norm for those of the last period lies between 3,95 and 3,60 g, and that

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<sup>1</sup> M. J. Price, *Coins of the Macedonians*, London: Br. Museum, 1974, 22-3; Le Rider, *Philippe II*; 407; Price, *Alexander*, 41-6; Mørkholm, *EHC*, 41-3.

<sup>2</sup> Kroll, *Agora*, 11.

<sup>3</sup> Will, *HPMH I*<sup>2</sup>, 366-71. Silver pentobols of Egyptian weight were also struck at Athens, but Kroll places them in a historical context involving direct Ptolemaic participation in the Athenian political affairs for at least three years, that is, during the Chremonidean war: *Agora*, 10-11. The engagement of Antigonids and Ptolemies in different economic markets and the rivalry between them render the Antigonids' issue of the Zeus pentobols during the Chremonidean war improbable.

for the smallest silver fractions is c. 2,46 g (figs. 2-3; cf. figs. 11, 14, 17, 20).

The few fractional denominations fail to elucidate the nature of the economic system applied in Antigonid Makedonia at the time. A single silver Pan drachma survives from the first period, no fractions survive from the second and third periods and few smaller denominations have been recorded from period IV. This presumably indicates the supplementary nature of the individual Antigonid issues to a monetary system where the Alexander types remained the norm in both large and smaller denominations (cf. chapter 2.4.4). The more extensive use of bronze coins in everyday transactions has been suggested as a plausible alternative<sup>4</sup>.

In short, with the exception of the Zeus pentobols of period IV, the Attic weight standard is consistently applied throughout the individual Antigonid issues. The heavier weight of the earliest Pan head and Poseidon head tetradrachms is presumably explained by their need to compete <sup>with</sup> the well established royal and civic coinages in the international market and by the particular ideological burden they carried at the moments of their respective introduction (see chapters 2.1, 2.4.2-3). Similarly, the average weight of the new Poseidon head tetradrachms struck in the third period is slightly higher than that of their Pan head counterparts.

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<sup>4</sup> On the circulation of Antigonid bronzes in Athens, see Kroll, *Agora*, 36-7, 51-2, 166-7, 169, 205. Kroll assigns the remarkable spread of Antigonid bronzes in Attika to benefactions accompanying Gonatas' grant of freedom to the Athenians in 255 BC.



AV		AR 4D								AR D		
Weight (g)	Athena/Nike	Weight (g)	Her./Zeus	Pans I	Pans II	Pans III	Pos III	Pans IV	Pos IV	Weight (g)	Pans I	Zeus IV
8.65-8.61	1	178-17.76					1			4.35-4.31		18
8.6-8.56	3	17.44-17.41				1				4.30-4.26		
8.55-8.51	1	17.40-17.66					1	1		4.25-4.21		1
		17.3-17.26		1	1	1	2			4.20-4.16		1
		17.25-17.21			1		3	1		4.15-4.11		
		17.2-17.16		17	1	4	15		2	4.10-4.06		2
		17.15-17.11		32	9	6	25	4	3	4.05-4.01	1	
		17.1-17.06		47	8	42	46	6	8	4.00-3.96		
		17.05-17.01	1	23	13	19	43	42	7	3.95-3.91		
		17.0-16.96		25	13	31	40	19	5	3.90-3.86		3
		16.95-16.91		14	10	12	20	31	3	3.85-3.81		2
		16.9-16.86	1	7	3	7	17	12		3.80-3.76		3
		16.85-16.81		6	5	5	15	7		3.75-3.71		2
		16.8-16.76		9	2	6	3	5		3.70-3.66		3
		16.75-16.71		4	1	2	8	6		3.65-3.61		1
		16.7-16.66		4	2	2	6	2		3.60-3.56		2
		16.65-16.61		3	2	3	2	2		3.55-3.51		4
		16.6-16.56		1	2		4	3		3.50-3.46		
		16.55-16.51		3	1	2	2			3.45-3.41		
		16.50-16.46		5		1	4	2		3.40-3.36		1
		16.45-16.41				2		1		3.35-3.31		1
		16.40-16.36		1	2	4		2		3.30-3.26		
		16.35-16.31			1	2		4		3.25-3.21		
		16.3-16.26	1	2			3	2		3.20-3.16		
		16.25-16.21		2			2			3.15-3.11		
		16.2-16.16		2	1	1	1			3.10-3.06		
		16.15-16.11		1	1			1		3.05-3.01		
		16.10-16.06	1	2			1			3.00-2.96		
		16.05-16.01		1	1	1			1	2.95-2.91		
		16.00-15.96						1		2.46-2.41		2
		15.95-15.91					1					1
		15.90-15.86					1					
		15.85-15.81					1					
		15.80-15.76										
		15.75-15.71										
		15.70-15.66			1							
		15.10-15.06			1							
		14.95-14.90			26							
		14.3-14.26				1						
		14.25-14.21						1				
		13.80-13.76						1				
		12.5-12.01		1								
						1	1					
5	Specimens		4	213	26	156	268	68	29	Specimens		29

Fig. 2. Metrology. Periods I-IV: A Summary.



- Weight (g)
- 17.8-17.76
- 17.44-17.41
- 17.40-17.66
- 17.3-17.26
- 17.25-17.21
- 17.2-17.16
- 17.15-17.11
- 17.1-17.06
- 17.05-17.01
- 17.0-16.96
- 16.95-16.91
- 16.9-16.86
- 16.85-16.81
- 16.8-16.76
- 16.75-16.71
- 16.7-16.66
- 16.65-16.61
- 16.6-16.56
- 16.55-16.51
- 16.50-16.46
- 16.45-16.41
- 16.40-16.36
- 16.35-16.31
- 16.3-16.26
- 16.25-16.21
- 16.2-16.16
- 16.15-16.11
- 16.10-16.06
- 16.05-16.01
- 16.00-15.96
- 15.95-15.91
- 15.90-15.86
- 15.85-15.81

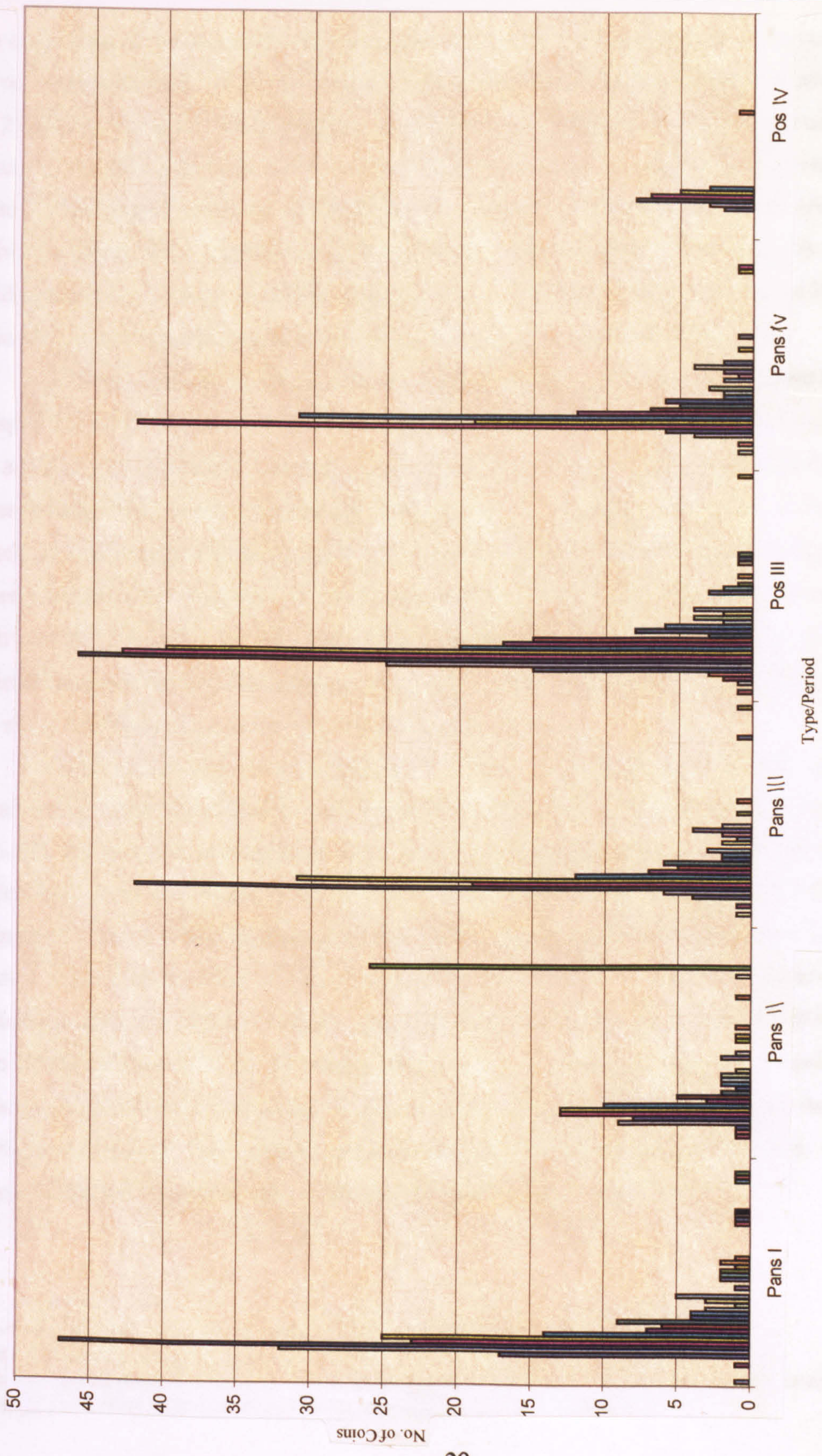


Fig. 3. Metrology. Periods I-IV: Variations in Weights.



### 2.2.2 Die-Axes

The orientation of the dies might ultimately help us identify the location and time of production of the coinages discussed. In the absence of records of die-axes for the posthumous Alexanders of the 270s-260s, the loose dies of the gold staters and silver tetradrachms in the name of Alexander III and of the first individual silver issues 'of king Antigonos' can not be considered in a wider context<sup>5</sup>. A general tendency to adjust the dies around 12 h may be observed for Gonatas's individual issues, even if great variety is still preserved in the orientation of the axes of period I. Unlike period III, the Pans have been aligned around 12 h more consistently than the Poseidons in period IV. Most of the known silver drachmae have also been aligned around 12 h.

Different attitudes in the adjustment of the dies may be observed for different monograms (chapter 2.2.4). The dies combined with monogram 9 in period I, for instance, are aligned around 6 h and 12 h. Monogram 10 is struck by loose dies, and the initial tendency to adjust the dies to 12 h for monogram 11 is later abandoned. With the exception of nos. 17, 20 and of the letters TI, which are consistently adjusted around 12 h, all the other monograms of period III sign coins with loosely aligned dies. In period IV, there is a conscious attempt of all the mint officials to adjust their dies at 12 h or 3 h for the Pans. With the exception of the coins signed by a second mint official alongside the main monogram, which are adjusted to 12 h or 3 h, many Poseidons and all the silver drachmae of the same period come from loose dies.

Of particular interest is the alignment of the die-axes in certain 'special' groups. The loose arrangement of the dies in gold staters and in the *kalathos* groups of the first period (nos. 145-51), for instance, distinguishes them from their counterparts from period III (nos. 101-5), which have been consistently aligned around 12 h. The conscious alignment of the Xi group around 12 h and 6 h also suggests a special issue. The assignation of the last two groups to the loosely aligned third period of Pans, favours their identification as celebratory issues rather than their production at a different mint(s). It is also worth noting that more than half of the Pans, but also nearly two thirds of the Poseidons, of the last two periods are aligned around 12 h. The special care in the alignment of the Poseidons of the third period, in particular, may have been due to the use of thinner flans, which must have required a careful placing of the dies. This further supports that the Poseidons were a celebratory issue (chapters 2.4.3, 7.3)<sup>6</sup>.

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<sup>5</sup> See de Callatay, *Axes*, 49, n. 181.

<sup>6</sup> On the careful placing of dies on thinner flans, see G. MacDonald, 'Fixed and loose dies in ancient coinage', in *Corolla Numismatica*, 178-88, esp. 180.



### 2.2.3 Style of Lettering

The diverse letterforms on the reverse of the precious metal coinages with the legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ suggest the parallel long-term employment of various die-cutters in the Makedonian mint. The main features may be outlined as follows: (1) the prevailing Alphas are those with straight bars ('straight' Alphas, ie. chapter 3.2.1, no. 1), even if Alphas with convex or broken bars occur on Makedonian inscriptions during the second half of the third and the first half of the second century<sup>7</sup>; (2) the horizontal hastae of Sigmas range from straight ('straight' Sigmas, cf. chapter 3.2.1, no. 4), to 'slightly splayed' ('slightly splayed' Sigmas, chapter 3.2.1, no. 116) and 'splayed' ('splayed' Sigmas, chapter 4.1.1, no. 4); (3) Nu's vertical bars are uneven (chapter 3.2.1, nos. 1-6) or even (chapter 4.1.1, no. 3); (4) Omegas, 'floating' (chapter 3.2.1, no. 5) or on the same level as the other letters (chapter 3.2.1, no. 144), are characterised by horizontal hastae which are either 'open', distant from each other, or 'closed'.

Carefully laid out legend letters, with an invariably straight Alpha, a Nu with even vertical hastae, and with a 'slightly splayed' Sigma, occur on the gold staters, but, due to the limited space, the last letters tend to be cut off the well engraved and centred flans. Their uniform style indicates their production within a short period. The different engraving attitude on the silver transitional Alexander tetradrachms, where Nus with shorter right hastae, invariably 'splayed' Sigmas, and floating Omegas are the norm, dissociates them from their gold counterparts. The small size of the flans, further limited by the dotted border on the reverse, determines the careful engraving of nos. 1 and 4-6, but some letters are inevitably left out of the unsuccessfully centred flans. A more relaxed use of space may be observed on no. 2, with no dotted border and with amply spread legend letters. The great diversity and the hastily engraved, angular characters on most specimens contrast with the generally elaborate figure of Zeus and suggest that the replacement of the legend on the posthumous Alexander tetradrachms took place under pressure rather than resulting from a carefully planned political decision.

The diverse legend letters on the Pans suggest the cooperation of many artists in the production of a large issue. Period I is characterised by uniform legend letters. Only occasionally does a bowed alpha replace that with straight hastae<sup>8</sup>. The right bar of Nu is generally shorter, with few exceptions<sup>9</sup>, the Sigmas are straight<sup>10</sup> and the Omegas are closed<sup>11</sup>. The remarkably

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<sup>7</sup> Hatzopoulos, *Institutions*, 51.

<sup>8</sup> Chapter 3.2.1, nos. 11, 89, 103, 109, 112-5, 118-9, 124, 127, 136-8.

<sup>9</sup> Nos. 63-4, 67-8, 99-100, 110, 122, 124-30, 133, 135, 149.

<sup>10</sup> Nos. 39, 43, 45, 49, 57, 65, 88-9, 103, 105-6, 113, 147-8.

<sup>11</sup> Except nos. 59-60, 91.

uniform engraving of Period II, with large angular and splayed characters, suggests a single engraver for this brief issue: the hastae of Alpha and Sigma are invariably straight, Nu is characterised by even bars and Omega is closed. Period III, on the other hand, is characterised by greater variation and by generally large characters. Alpha is generally straight, Omikron is larger and Omega is invariably closed<sup>12</sup>. The horizontal hastae of Nu are of the same size, while 'splayed' Sigmas are as frequent as 'straight' ones. On two special groups, characterised by the letter Xi and by a trident symbol as control marks on the reverse, in particular, slightly 'splayed' Sigmas are the rule. Finally, small and elaborate letters prevail during the fourth period, including the silver drachmae associated with the winged-helmet variation of Pan head tetradrachms. The vertical hasta of Ypsilon tends to be shorter, and Omega is generally open. The limited space for the legend letters on the Poseidon head tetradrachms predetermines the general tendency for small, elaborate characters for the second type in the name of king Antigonos. Groups 1-4, sharing secondary monograms with the Pan head tetradrachm series, are characterised by angular characters, 'straight' Alphas, 'splayed' Sigmas, a Nu with an occasionally shorter r. vertical hasta and by a floating, open Omega, which significantly improve on the rest of the series. The curved hastae of Lambda on no. 11 may have been due to a mistake of the die cutter and place these groups at the beginning of the new type. The uniform characters on the rest of the Poseidons, with floating Omegas and 'splayed' Sigmas, indicate their brief production. Finally, the characters on contemporary epigraphic documents reveal that the mainstream epigraphic tendencies are not always followed on contemporary coinage. Alphas with convex or broken bars common in the 250s, for instance, are never adopted on Antigonid coinage<sup>13</sup>, whereas the larger Omikrons, the 'splayed' Sigmas and the Nus with even vertical bars occur on the issues of the 250s.

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<sup>12</sup> Except nos. 52-3, 90-2, 95-6.

<sup>13</sup> Hatzopoulos, *Institutions*, 51.

#### 2.2.4 Control Marks

The organisation of the mint(/s) in Makedonia early in the reign of Gonatas may be reconstructed from the symbols, monograms and letters on the reverse of the gold and silver issues in the name of 'king Antigonos'. Control marks, namely symbols and monograms, have been allegedly utilised 'for accounting purposes, representing the various officials responsible for the mint operations, the amount or source of metal being minted, the date of issue or a combination of these'<sup>1</sup>. Their position on the contemporary posthumous Alexander tetradrachms has determined their classification by R. W. Mathisen into four categories: group identifier (design/letter) l. and primary/secondary/supplementary control mark (normally monograms) on the r. and beneath the throne. According to Mathisen, the secondary control mark represented the turning of the metal into coin, while the primary control mark represented an annual (civic) office. Finally, the Group Identifier presumably represented the official responsible for the royal revenues in Hellenistic Makedonia, τὰ βασιλικά<sup>2</sup>, rather than the mint itself.

In contrast to the transitional Alexanders, the consistent placement of a symbol on the l. and of a monogram on the r. of the reverse of the new Pan head silver type indicates greater stability in the structure of the mint or more rigid control over die engravers (see chapter 2.4.2). The control marks are reduced to two on the Pans and on the silver drachmae and to one or two on the Poseidons<sup>3</sup>. Obverse links among reverses carrying different monograms betray the simultaneous independent co-operation of those represented by these monograms with the main mint official signing with the main symbol l. on the reverse. Thus, up to three employees independently from each other co-operated with the main mint official for the Pans, and often one assisted the main officer for the Poseidon series<sup>4</sup>. A similar structure on the precious coinages of Philip V and Perseus confirms the continuity in mint administration under the last two Antigonids: according to Touratsoglou, three officials almost always co-operated, two of whom were permanent<sup>5</sup>.

Our classification of the gold and silver Antigonid issues has been determined by the following combinations of control marks:

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<sup>1</sup> Mathisen, *Administrative organisation* I, 27.

<sup>2</sup> Mathisen, *Administrative organisation* I, 10-1. No specific term survives regarding the financial administrator in Makedonia: Hatzopoulos, *Institutions*, 433-4.

<sup>3</sup> Mathisen, *Administrative organisation* III, 44-6.

<sup>4</sup> Boehringer, *Chronologie*, 100.

<sup>5</sup> Touratsoglou, *Circulation*, 71, 'list of monograms on coins of Philip V, Perseus and the Macedonians'. Cf. A. Mamroth, 'Die Silbermünzen des Königs Philipps V. von Makedonien', *ZfN* 40 (1930) 277-303.



Page  
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as  
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**Period I**

**Gold**

**Staters with types of Alexander III**  
Wreath l.

**Silver**

**Tetradrachms with types of Alexander III**  
(obverse linked to the Monogram Group of posthumous Alexanders, cf. chapters 2.4.1-2, 3)  
Monograms 1-4.

**Pan Head Tetradrachms**

**Athena Alkidemos l.**

Crested helmet l. - monograms 5-7 r.

Crested helmet l. - monogram 8 r.

Crested helmet l. - monogram 9 r.

Crested helmet l. - monogram 10 r.

Crested helmet l. - monogram 11 r.

Monogram 5 l. - no monogram r.

Monogram 11 l. - no monogram r.

Monogram 9 l. - no monogram r.

**Athena Alkidemos r.**

*Kalathos/bakchos*-ring l. - monogram 12 r.

*Kalathos/bakchos*-ring l. - monogram 13 r.

**Fractional Denominations**

**Pan Head Drachma**

Crested helmet l.-monogram 9 r.

**Period II**

**Silver**

**Pan Head Tetradrachms**

Crested helmet l. - monogram 14 r.

Crested helmet l. - monogram 9 r.

Crested helmet l. - monogram 11 r.

Crested helmet l. - monogram 15 r.

Crested helmet l. - monogram 18 r.

Crested helmet l. - monogram 20 r.

Crested helmet l. - TI r.

**Period III**

**Silver**

**Pan Head Tetradrachms**

Trident l.

- Crested helmet l. - monogram 17 r.
- Crested helmet l. - monogram 11 r.
- Crested helmet l. - monogram 15 r.
- Crested helmet l. - KT r.
- Crested helmet l. - monogram 18 r.
- Crested helmet l. - IT r.
- Crested helmet l. - TI r.
- Crested helmet l. - no monogram r.
- *Kalathos/bakchos*-ring l. - monogram 19 r.
- *Kalathos/bakchos*-ring l. - monogram 20 r.
- X l. - monogram 22 r.

**Poseidon Head Tetradrachms**

- Monogram 24
- Monogram 25 - monogram 9
- Monogram 25 - monogram 11
- Monogram 25 - M
- Monogram 25 - monogram 22
- Monogram 25
- Monogram 26

**Pan head tetradrachms**

- Winged helmet l.
- Winged helmet l. - KT r.
- Crested helmet l. - KT r.
- Crested helmet l. - TI r.
- Crested helmet l. - monogram 11 r.

**Poseidon head tetradrachms**

- Monogram 25 - TI beneath star r.
- Monogram 25 - ΘI beneath star r.
- Trident l. - monogram 22 r.
- Letters IE l. - trident r.

**Period IV**

**Fractional Denominations  
Zeus Drachmae**

- Winged helmet l. - TI r.
- Zeus Pentobol
- Winged helmet l. - TI r.

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Fig. 4. Control Marks: A Summary.



## 1. Symbols

The transitional Alexander gold and silver types, carrying a single control mark, diverge from this norm. The laurel wreath held by Nike on the gold staters associated with the Monogram group of posthumous Alexanders now occurs l. on the reverse and, alongside the *aphlaston* on Nike's hand, suggests a naval victory (chapter 2.4.1). Its fixed position is opposed to the varied positions of the monograms on the transitional silver Alexander tetradrachms in the name of king Antigonos.

Three different symbols occur left on the reverse of the Pans: the crested ('Makedonian') helmet<sup>6</sup>, which is the most common one and is temporarily replaced by a winged helmet, a *kalathos*/'bakchos-ring', and a trident. In the first period, the *pilos/konos* on the new Pan head tetradrachms, with a high helmet bowl separated from the *stephane*, with medium cheek flaps and with a long, thin crest<sup>7</sup> replaced the *pilos/konos* with a lower helmet bowl also on the contemporary posthumous Alexanders. A *pilos/konos* with a small bowl and cheek flaps and with a long thin crest<sup>8</sup>, and that with an elaborate crest holder<sup>9</sup> are combined with most monograms of the first period. The various helmet types, alongside the densely obverse linked groups, confirm the co-operation of more artists during this period.

The second period is characterised by helmets with thin crests and short cheek pieces. The most common variation is that with a smaller but fuller and conical bowl and with a long, richer crest reaching the cheek flaps<sup>10</sup>. A second variety with a smaller bowl and with a long, thin crest developing close to the bowl occurs on a few specimens<sup>11</sup>.

The greater variation in the helmets of the third period of the Pans presumably suggests the co-operation of various engravers. In addition to a brief resumption of the elaborate crest holder and to the type with the small bowl and with a long thin crest developing very close to the bowl, from the second period, a bell-shaped medium bowl, with long cheek flaps, with a rich crest and a thick *stephane*, which had occurred once on the second period (chapter 4, no. 47) occurs on many specimens<sup>12</sup>. A helmet with a round bowl and with the cheek flaps on the edges of the

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<sup>6</sup> P. Dintsis, 'Über die Bezeichnung ΚΟΝΟΣ im Reglement von Amphipolis', *Archaia Makedonia IV*, Thessaloniki 1986, 171-182.; id., *Helme*, 67-72, pl. 29, Appendix 3, nos. 169, 173, 175, 171. Dintsis (ibid., 76, n. 12) does not consider this type of helmet exclusively Makedonian, unlike I. L. Merker, *Silver Coinage*, 45 ff. Cf. Touratsoglou, *DM*, 80.

<sup>7</sup> See, for instance, chapter 3.2.1, nos. 7-13 (mon. 10) 41-6, (mon. 12) 91-3, 101-9, 111-21, 132.

<sup>8</sup> Ibid., nos. 20-1, 26-7, (mon. 10) 37-8, 47-50, 69-76, 78-80, 82, 95-8, 110, 125-6, 128-31, 134-45.

<sup>9</sup> Ibid., nos. 31-3, 58-9, 93, 99.

<sup>10</sup> See chapter 4.1, nos. 1-11, 13-17, 21-46, 49-61.

<sup>11</sup> Ibid., nos. 12, 18-20, 47.

<sup>12</sup> Chapter 5.1, nos. 19-20, 24, 27-39, 54-5, 57, 60-3, 65, 73-4, 77-8, 81-5.

*stephane* also occurs on a few specimens<sup>13</sup>. A helmet with a very thin bowl and with a *stephane*, medium cheek flaps and with a thick long crest is also common<sup>14</sup>. Finally, a variation with a round bowl and with the cheek flaps on the edges of the *stephane* also occurs during this period<sup>15</sup>. The *pilos* with a round bowl is characteristic of the silver coins of Antigonos Gonatas with his portrait; it also occurs on coins of Pyrrhos, Philip V, and Perseus.

Finally, the fourth period of the Pans is monopolised by more elaborate helmet types, winged (nos. 1-13) or crested (nos. 14-49), with a high bowl, a thin *stephane* and very short cheek flaps.

Few Pan groups carry a symbol other than the Makedonian helmet. The cylindrical object, decorated with two rows of triangles, distinguishes groups 45-7 and possibly 24-5 of the first and third periods respectively and has been interpreted as a *kalathos* or 'bakchos-ring'<sup>16</sup>. The divergence of these groups from the mainstream helmet symbol may be due to their issue either at a different mint or in order to celebrate a special event (see chapter 3.2.2).

A second divergence from this common practice is observed on a group from the third period of Pans: a trident-head l. occurs as a symbol l. on the reverse of a small but distinct group: the head of Pan does not match stylistically the dies utilised during the same or other periods and approximates Celtic images instead. The trident-head resembles that with a shorter middle prong on the posthumous Alexanders which are tentatively assigned by Price to Pella between 325 and 315 BC, and less that on the posthumous Alexanders struck at Korinth, dated by Price to c. 220-15 BC<sup>17</sup>. The trident is also similar to that on the Poseidons, which is larger and with a longer handle. Finally, the eight-rayed star on the reverse of the Poseidons has been related by R. W. Mathisen to the stars decorating the Makedonian shield on the obverse of the Pans, establishing a connection between the two types<sup>18</sup>.

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<sup>13</sup> Ibid., nos. 13-16, 22, 64, 80-4, 87-8.

<sup>14</sup> Ibid., nos. 17, 21, 23, 40-53, 56, 68-9, 75.

<sup>15</sup> 6-7, 71-3, 78-9.

<sup>16</sup> J. D. Beazley, 'Bakchos-rings', *NC* 1 (1941) 1-7; Kroll, *Agora*, 28-9.

<sup>17</sup> Price, *Alexander*, nos. 221-4, pl. 25, nos. 263-5 (Pella); nos. 697, 699 (Korinth). Margaret J. Thompson, 'The mints of Lysimachos', in Kraay-Mørkholm, *Essays Robinson*, 163-82. On the significance of the trident as a symbol and on its occurrence on coins from Karia, Syria and Crete, see Mathisen, *Pan heads and Poseidon heads*, 34, n. 35.

<sup>18</sup> Mathisen, *Pan heads and Poseidon heads*, 33.



## 2. Monograms

The Group Identifiers respectively of the silver transitional Alexanders ('Alex'), Pans ('Pan'), and Poseidons ('Pos') are combined with one (or more) of the following monograms:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Alex																										
Pan																										
Pos																										

Fig. 5. Concordance of Monograms on the Tetradrachm Types 'of King Antigonos'.

The transitional Alexander tetradrachms, carrying monograms 1-4 on various positions of the reverse, have been placed by R. W. Mathisen at the end of the Monogram group of posthumous Alexanders from Pella, to which they are obverse linked<sup>19</sup>. The discontinuity in the style and in the control marks on the Monogram group and on the transitional posthumous Alexanders, the absence of a symbol or of a second monogram and the hasty engraving of the legend letters on the latter, are explained by the precarious situation at Pella in the second half of the 270s. The monogram shifts from left of the throne on the first two specimens to the exergue on the remaining four: the first position echoes the Helmet group and the latter the Monogram group of posthumous Alexanders (cf. chapter 3.2.1).

The common monograms on the Antigonid issues have been taken to indicate either their parallel or their consecutive production. R. W. Mathisen, for instance, regards the monogrammed Makedonian posthumous Alexanders and the Pans as concomitant<sup>20</sup>. Y. Touratsoglou, on the other hand, recognises the silver Makedonian 'autonomous' civic issues and the royal issues prior to the defeat of Perseus at Pydna (168 BC) as contemporary<sup>21</sup>.

<sup>19</sup> Mathisen, *Silver Coinages*, 103-8; Price, *Alexander*, 141.

<sup>20</sup> Mathisen, *Silver Coinages*, 98-9, table 12; 110-14; *Administrative organisation III*, 44-6.



	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
I	X	X	X	X	X	X	X	X	X													
II					X		X			X	X	X										
III					X		X				X		X	X	X	X		X	X	X	X	X
IV							X											X			X	

Fig. 6. Monograms on the Pans and on the Poseidons arranged by Periods.

The chronological distribution of these monograms reveals that they mainly cluster on the coins of the first and second periods. Nine and five out of the twenty-six monograms occur in the first and second periods respectively, as opposed to eleven in the third and three in the fourth period. Combinations among the letters M, E, P, Y, Π, T may be recognised on monograms 5-8 (period I), 11-12 (periods I-II), 15-18 (period II). Similar compilations spread over more periods, while the long use of certain monograms elucidates the relative chronology of the Pans. No. 11, for instance, runs through all four periods of the Pans. Finally, no. 9 on the first three periods is similar to no. 15, which links the second and the third period of Pan tetradrachms.

Monograms 24-6 are distinctive for the Poseidons. A few specimens carrying alongside the main monogram no. 9, 11 or 22, known from the Pans, establish a link between the two series (fig. 7).

Monograms shed light upon the administration of the Makedonian mints under Gonatas and his successors. The long use of certain compilations, such as no. 11, favours their identification with permanent mint officials rather than with different mints, vein outputs, years of issue or annual magistrates and establishes firm links among the posthumous Alexander, Pan and Poseidon silver issues<sup>22</sup>. This continuity in the operation of the principal Makedonian mint after the rise of Gonatas to the throne is demonstrated, for instance, via the monograms shared between the Pans and the posthumous Alexanders. In fact, six of the monograms on the Pans occur on the approximately contemporary Makedonian posthumous Alexander groups; some also occur on the silver issues of Philip V and Perseus. These monograms have been taken to indicate the consecutive production of these issues, but the loose dating of some related hoards alternatively allows for their simultaneous production (see chapters 2.3, 2.4.2-3)<sup>23</sup>. Similarly, monogram 11 is represented once on the

<sup>21</sup> Touratsoglou, *Circulation*, 71-2; Hatzopoulos, *Institutions*, 253-4.

<sup>22</sup> Mathisen, *Administrative organisation I*, 10-11, 44-6.

<sup>23</sup> On the dating of the hoards of posthumous Alexanders and Pan head tetradrachms, see Mathisen, *Silver Coinages*, 82-5; Mathisen, *Pan heads and Poseidon heads*, 29-31; Price, *Alexander*, 141-2; cf. chapter 2.3.4.

Poseidons, while monogram 9, known from the first two periods of the Pans, appears on many Poseidons during the third period. However, the identification of monograms with names common in Makedonia is deliberately avoided in the present work, in view of the subjective nature of such suggestions<sup>24</sup>.

Certain monograms might alternatively refer to the Makedonian administrative divisions: one might be tempted to recognise in the letters M and E, which occur on many of the above mentioned monograms, the first letters of the term: 'μερίς'. M. B. Hatzopoulos recently assigned the division of Makedonia into μερίδες to as early as the reigns of Philip II and Alexander III. He proposed that the complexity of the Makedonian coinage under the last Antigonids (comprising silver and bronze royal issues, silver and bronze issues labelled ΜΑΚΕΔΟΝΩΝ, silver and bronze issues labelled ΑΜΦΑΞΙΩΝ, ΒΟΤΤΕΑΤΩΝ and of the first district (ΜΑΚΕΔΟΝΩΝ ΠΡΩΤΗΣ), bronze issues of the capitals of the districts, Pella, Thessalonike and Amphipolis)<sup>25</sup> reflected the composite and variegated nature of the Makedonian state before the Roman conquest. He dates, however, this multiplicity after the confinement of Makedonia to its European possessions, that is, after the expedition of Doso to Karia (227 BC)<sup>26</sup>. The presence of the first two or three letters of the term 'μερίς' on the Antigonid silver coinage (see, for instance, monograms 5-8, 12, 15-17) might be argued to confirm the division of Makedonia into districts since Gonatas and possibly to indicate the partial, at least, involvement of the administration of the districts into the striking of new coinage or into the supply of silver. This might have set a precedent to the Makedonians' minting activity independently from that of the last two Antigonids during the second century BC. For lack of other evidence, though, this suggestion remains conjectural.

The study of the monograms is also detrimental to the incorporation of the Poseidons in the numismatic production under the Antigonids. Since the principal monogram, no. 25, does not occur on the contemporary posthumous Alexanders or Pan head tetradrachms or on any of the local Makedonian or Thessalian bronze coins, it has been assigned to a different mint or issuing authority. In fact, all the characters of the name ΜΑΓΝΗΤΩΝ have been recognised in it by F. Imhoof-Blumer, who suggests the issue of this type at the Makedonian residence in Thessaly, at Demetrias<sup>27</sup>. Epigraphic and other doubts have also been cast on Mathisen's alternative deciphering of this monogram as distinctive of Demetrios II (chapter 2.4.3)<sup>28</sup>.

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<sup>24</sup> Identifications of monograms with names have been proposed by Mathisen, *Administrative organisation* III, 46.

<sup>25</sup> Touratsoglou, *Circulation*, 71-2.

<sup>26</sup> Hatzopoulos, *Institutions*, 248-60; 432-3.

<sup>27</sup> Imhoof-Blumer, *Akarnanien*, 39, n. 47; idem, *MG*, 127.

<sup>28</sup> Mathisen, *Pan heads and Poseidon heads*, 34. Touratsoglou, *DM*, 80-1. Cf. Ashton, *Review*, 10.



I propose that there is no need to exclude the Poseidon head tetradrachms from the main Antigonid mint, given that they share monograms with the posthumous Alexander and Pan series (fig. 7). These indicate the partial, at least, supervision of the new type by experienced officials from the main Makedonian mint. The absence of the crested helmet from this series need not support its assignation to a different mint and the transfer of experienced mint officials to it for, after all, various group identifiers had been simultaneously utilised both for posthumous Alexanders and for some Pan varieties. Monogram 25 may be taken instead to indicate a special issue rather than a different mint (chapters 2.4.3, 2.5), not least as this monogram is reminiscent of the symbol of Group 24 from period III, denoted as celebratory. This is further favoured by the temporary replacement of the main monogram by a trident or by its supplement with the letters TI and IE, or with TI and ΘI (on one example accompanied by a star) on a very small issue.

The concordance of monograms on these Antigonid silver (posthumous Alexander and individual) tetradrachm types and on those of Philip V and Perseus may therefore be outlined as follows:

GROUP	MON. 9	MON. 11	MON. 13	MON. 16	MON. 18	MON. 22
-------	--------	---------	---------	---------	---------	---------

**Posthumous Alexanders**

Omikron-Kappa	X			X	X	
Triton						X
Grape					X	X
Helmet		X		X		X
Monogram			X			

**'ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ'**

**'Pan'**

Period I	X	X	X			
Period II	X	X		X		
Period III		X			X	X
Period IV		X				

**'Pos'**

Period III	X	X				X
Period IV						



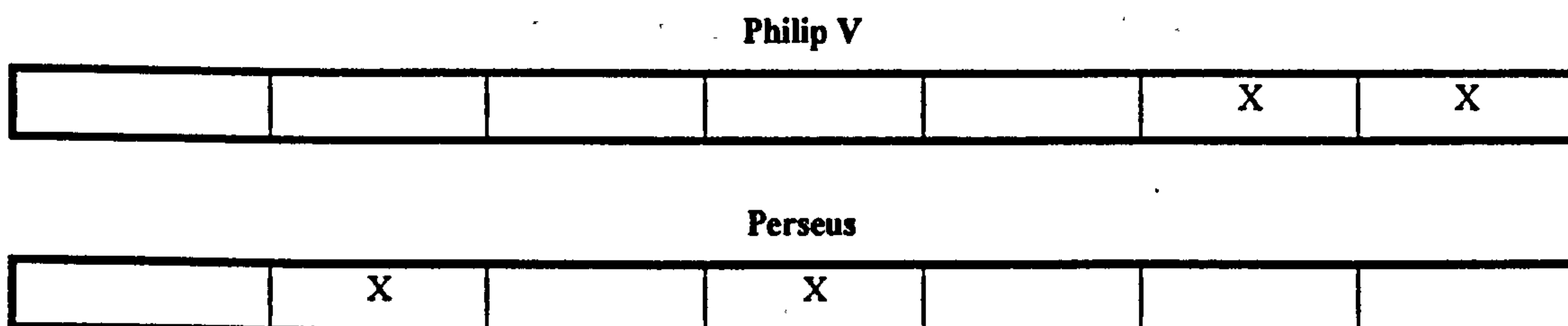


Fig. 7. Makedonian Royal Silver. Common Monograms on the Tetradrachms of 'Alexander', 'king Antigonos', Philip V, Perseus.

It is remarkable that monograms 9, 11 and 22 link the Poseidons not only with the Pans but also with the posthumous Alexander tetradrachms. This not only confirms continuity in the administration of the main Makedonian mint but also calls for a revision of Mathisen's *a priori* conviction that the posthumous Alexander tetradrachms ceased with the introduction of the Pan head tetradrachms. Similarly, monogram 22 links the Pan head and the Poseidon head tetradrachms with the silver coinage of Philip V. The late style of the obverse, though, favours the dissociation of the Poseidon head tetradrachms from the Pan head series and their assignation to a later date instead.

The correction by the die cutter of monogram 22 to no. 11 on a Poseidon tetradrachm (chapter 5.1.2, no.119) suggests that this monogram was only temporarily utilised.

### 3. Letters

The monograms r. on the reverse of the individual types of Antigonos Gonatas are occasionally substituted by letters, as shown in fig. 8. Leaving X aside, which occurs as group identifier l. on the reverse of a small Pan group from the third period, the most common letter combination is TI. The temporary reversal of these letters on two reverse dies in period III identifies them with the acrophonic letters of two different names, rather than forming part of the same name. The combination of TI and KT with a winged helmet respectively for the Zeus drachmae and Pan tetradrachms reveals the structure of the mint during the temporary adoption of a different group identifier.

In contrast to the Pans, the circumstantial presence of certain letters on the Poseidons favours their identification with annual years or magistrates rather than with long-term mint officials during the fourth period. The letters TI beneath the monogram of a few Poseidon head

tetradrachms, for instance, bind the Pan head and the Poseidon head tetradrachms together. A star symbol occurs r. on the reverse of these coins and of that signed with ΘΙ beneath the main monogram<sup>29</sup>. Finally, the letters IE occur beneath the prow on a small issue, with a trident on the reverse.

**Pan 4D**

PERIOD	X	TI	KT	IT	ΘΙ	IE
II		X				
III	X	X				
IV		X				

**Zeus D**

IV		X		X		
----	--	---	--	---	--	--

**Pos 4D**

III						
IV		X	X		X	X

Fig. 8. Concordance of Letters on the Individual Silver Coinage of 'King Antigonos'.

By and large, the control marks establish not only the internal structure of the precious issues under Gonatas but also links among them. Parallel to the Pans with the helmet symbol, which met the bulk of the financial requirements of the state, some small groups with unusual control marks may be interpreted as celebratory issues rather than coming from a different mint. In fact, the complex structure of the main mint as revealed by the monograms and symbols on the Pans does not necessitate the production of these special issues, or of the Poseidon tetradrachms, at a different location. This is further supported by the subsidiary monograms that link the Poseidons with the Pans (see chapter 2.5).

<sup>29</sup> Mathisen, *Pan heads and Poseidon heads*, 33.



## 2.3 The Coin Hoards

Forty-seven hoards have so far come to light with precious metal coins in the name of king Antigonos, one with a gold specimen, the rest with silver. They have been listed here in the approximate chronological and geographical order proposed by Y. Touratsoglou<sup>1</sup>. Reasons for any divergences from his catalogue are given in the discussion of the hoards whose detailed contents are available. The dates for these hoards have been determined by the latest coins included in them and a further definition of their nature as 'deposition' or 'circulation' hoards is also attempted, whenever possible. More specifically, a hoard taken to reflect the circulation pool of the time it was buried is conventionally defined as a 'circulation hoard', whereas a 'deposition hoard' consists of specimens withdrawn from the circulation pool, as a result of a demonetisation process or as 'savings'. 'Deposition' hoards, being deliberately selective, are not representative of proposals of contemporary issues in the same way as 'circulation' hoards. A hoard summary, including the proposed dates, appears at the end of this chapter (fig. 9). The transitional silver Alexander tetradrachms are not represented in the hoards and are thus excluded from this discussion.

### (i) Gold

#### 1. Poteidaia/Kassandreia, 1984: *CH* VIII (1994) 276.

*c. 240-180 BC*

This hoard, now dispersed in trade, comprised approximately 150 gold coins, of Philip II, Alexander III and Philip III, Antigonos Gonatas and Lysimachos<sup>2</sup>. The latest staters are those of Alexander III and Antigonos Gonatas. Most of the posthumous Alexanders from the mint of Amphipolis, 54 out of 56, come from the same obverse and possibly from the same reverse die. They belong to a rare issue of gold staters, associated with silver tetradrachms of the Mu group, from the early reign of Gonatas. The remaining two coins come from the same pair of dies and may be related to silver tetradrachms of the Monogram group, from the same period (cf. chapters 2.4, 2.4.2). Equally remarkable is the gold Alexander stater whose control marks, a star and a dog on the reverse, link it with a silver tetradrachm from the *Meydançikkale*, 1980 hoard. This

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<sup>1</sup> *DM*, 75-107.

<sup>2</sup> To the 147 coins, photographs of which were sent by M. J. Price to G. Le Rider, the latter added one more specimen in the publication: Le Rider, *Potidée*, 89-96, pl. VIII; cf. Price, *Alexander*, 58. To these one might add a distater of Alexander III, recorded in *CH* VIII (1994) 276, and the gold stater with the name and royal title of Antigonos, mentioned in Price, *Alexander*, 142, pl. CLVIII.D, but not in *CH* VIII (1994) 276.



tetradrachm is assigned by Price to a group struck at an uncertain mint between 240 and 180 BC<sup>3</sup>.

The posthumous Lysimachi and the Alexander stater with the star-and-dog symbols on the reverse indicate 281 BC and 240-180 BC as respective *termini, post* and *ante quem*, for the burial of this hoard, which may be dissociated from the payments to Celtic mercenaries in gold (see chapter 2.4)<sup>4</sup>. The very good condition of all the specimens and the exclusive presence of gold coins may indicate the hoard's depositional nature.

## (ii) Silver

Tabulated here by findspot and date of loss or concealment and characteristics of the Antigonid coinage represented in each are the forty-six hoards with Antigonid silver coins struck between the second and the third quarter of the third century BC. The chronological sequence of these hoards as established by Touratsoglou is generally retained in the index<sup>5</sup>, and the various burial dates that have so far been proposed for each hoard are recorded. All dates are BC.

### INDEX

Hoard	Burial (reference)	AR coins	Pan 4D	Pos 4D	Zeus D
Phayttos, c. 1956	264 (c.); 260-40; 250	61	2		
Scotussa area, (pre-) 1989	260 (c.); 250-30	25	25		
Verge ('Perge'), 1955 <sup>6</sup>	250-30 (c.)	386	1		
Hija sè Korbit, 1982	250-25; 227-5	618	18		
Karditsa (Palaiokastro), 1929	250 (c.)	30	5		
Pherai, 1937-8	250-	591+	7		
Eretria, 1937	245; 235 (c.)	572+	5		
S. Asia Minor, 1976	246	235+			
Meydançikkale, 1980	240-35	5215	3		
Tell Sukas (Gabala), 1958	240 (c.)	10	1		
Sophikon, 1893	230-20 (c.); 225-00	950, c.			3
'Thessalonike', 1978	230	70	50		
Makedonia, 1960s	225-00	16+	12		
Kassandraia, 1985-7	225 (c.); 227-5	12	3		
Thesprotia, 1992	225-00	86	45	5	
Troas/Mysia, (pre-) 1947	220-10 (c.)	220+	100, c	50, c	
Sardeis, 1911	220-14 (c.)	55	1		
Syria?, 1962	220 (c.)	15+			1

<sup>3</sup> On the gold stater, see Le Rider, *Potidée*, 93.140; on the silver tetradrachm, see Davesne-Le Rider, *Meydançikkale*, 2496; Price, *Alexander*, 345.2821A.

<sup>4</sup> Le Rider, *Potidée*, 94; cf. chapters 2.4, 2.4.1.

<sup>5</sup> See n. 1.

<sup>6</sup> The findspot of this hoard, Verge (near Serres), has been recorded as 'Perge' in *IGCH*.

Syracuse, Achradina, 1899	215-2	300-400	11+	
Korinth, environs, 1938	215 (c.)	400, c	1	
Enna, environs, 1966	212 (c.)	100, c	1 (ef)	
S. Asia Minor, 1963	210-0 (c.)	120+	9	
N. Syria, 1960	210 (c.)	18	1	
Edremit (Adramytteion), 1954	210 (c.)	19+	1	
Morgantina, 1982	210 (c.?)	280+/294+?)	2	
Gordion, 1951	205-0 (c.)	114	1	2
Gordion, 1961	205 (c.)	100	1	
Pergamon, 1960	201 (c.)	22		1
Oylum Höyüğü, 1989	200-195	134		2
Delta, 1927-8	200-180 (c.)	24	10	
Makedonia?, 1927-8	200-180 (c.)	23+	23+	
Asia Minor, 1972	200 (c.)	100+	1	
S. Asia Minor, 1970	200 (c.)	148	12	
Aleppo envir., (Beroia), 1896	190 (c.)	150+	?	
'Pisidia', 1963	190 (c.)	400, c.	1	1
Mektepini, 1956	190 (c.)	752+	8	
Thessaly, 1977	190	254+	1	
Drama, 1989	187-68	1	1	
Asia Minor, c. 1947	187 (c.)	11+		1
Urfa (Edessa), 1924	185-60	200, c.	5	1
SW Thessaly, 1977	175	AR 450+	4	
Larissa (allegedly Sitochoro), 1968	165 (c.)	2500-3000	3	6
Asia Minor, 1947/8	160	?		
Balkh, 1974?	150	150+		
Aleppo environs, c. 1930	138 (c.)	35+	5	
North of Larissa, 1985	75	1260+	11	4

## 1. Individual Hoards

The hoards are listed here by burial date, taking into consideration the internal evidence provided by the Antigonid precious metal coinages.

### 1. Verge (Perge), 1955: *IGCH* 455.

*c.* 260-30 BC

The Pan tetradrachm and that of Antiochos I, from Hecatompulos of Artacoana (280-60 BC), determine the chronology of this hoard, which also comprises posthumous issues of Lysimachos and Makedonian posthumous Alexander tetradrachms. Revising Varoucha's initial date to 250-30 BC, presumably on the basis of a Chian drachma of uncertain date, Bauslaugh suggested 260 BC



as a *terminus ante quem* for this hoard<sup>7</sup>. There is no need, however, to accept Mathisen's redating to 275-0 BC. In fact, it is his *a priori* conviction that the posthumous Alexander tetradrachms ceased on the introduction of the Pan head tetradrachms in the late 270s that has led him to update the Verge hoard and concomitantly the Pans to the same date (cf. chapter 2.4.2). Most recently, Touratsoglou reverted to Varoucha's date, between 250 and 230 BC, with no further argumentation<sup>8</sup>.

As the posthumous Alexander tetradrachms may have continued under Gonatas (see chapters 2.4.2, 2.4.5), the good condition of the Pan tetradrachm favours a date close to the introduction of the new type, between 260 (rather than 250) and 230 BC.

## 2. Phayttos, c. 1956: *IGCH* 159.

260-30 BC

The 'heterogeneous' Athenian tetradrachm, the two fresh Pan tetradrachms, coming from identical dies, and the posthumous Alexanders are the latest in the hoard. The coins of Seleukos I and Antiochos I distinguish this find from *IGCH* 162, 168, *CH* III (1977) 43, to which it is approximated via the Alexanders and the Lysimachi<sup>9</sup>.

This hoard need not be considered in the context of the revolt of Alexander of Epeiros in 264 BC, as has been suggested<sup>10</sup>. Varoucha's dating to c. 260 BC has been accepted by Nicolet-Pierre and Kroll and has been slightly lowered by Touratsoglou to between c. 250 and 230 BC<sup>11</sup>. The large and fractional, silver and bronze, royal and civic, denominations included in it presumably represent the circulation pool at the time of burial. The better preservation of O17 on the specimens from Phayttos might indicate that this hoard is slightly earlier than or in any case roughly contemporary with *Scotussa area*, (*pre-*) 1989, including specimens from the same obverse.

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<sup>7</sup> I. Varoucha, 'Chronique des fouilles et découvertes archéologiques en Grèce en 1956', *BCH* 81 (1957) 497, pl. IX.13; R. Bauslaugh, 'The posthumous Alexander coinage of Chios', *ANSMN* 24 (1979) 6; *IGCH* 455.

<sup>8</sup> Touratsoglou, *DM*, table III.

<sup>9</sup> T. R. Martin, 'A third-century BC hoard from Thessaly at the ANS (*IGCH* 168)', *ANSMN* 26 (1981) 54-7.

<sup>10</sup> Heinen, *Unters.*, 177 *contra* P. R. Franke, 'Zur Geschichte des Antigonos Gonatas und der Oitaioi', *Jahrbuch des deutschen Archäologischen Instituts mit dem Beiblatt Archäologischer Anzeiger* 72 (1958) [1959] 38-62.

<sup>11</sup> I. Varoucha, 'Chronique des fouilles et découvertes archéologiques en Grèce en 1956', *BCH* 81 (1957) 497-8, pl. IX-X; Nicolet-Pierre-Kroll, *Athenian Tetradrachm Coinage*, 26; Touratsoglou, *DM*, table III.



3. Pherai, 1937-8: *IGCH* 168 ('Larissa environs')<sup>12</sup>.

c. 250-40 BC

The latest tetradrachms - 'heterogeneous' Athenian (c. 250-20 BC), posthumous Lysimachi from Kyzikos (no. 562), alongside those of Gonatas and Eumenes I- agree with Martin's date to c. 250-45 BC for this very important find, which has been reconstructed from trade and, yet probably incomplete, illustrates the contemporary circulation pool<sup>13</sup>. A slightly earlier date to c. 260 BC has been proposed by H. Nicolet-Pierre and J. Kroll, who consider the coin of Eumenes to be earlier<sup>14</sup>.

There is no reason to accept Martin's alternative date of c. 220 BC, as the later hoards with similar content (tetradrachms of Eumenes and Aitolia) only indicate a *terminus ante quem* for the respective coinages. Secondly, *Eretria, 1937*, with which the present hoard has been compared, is to be dated to c. 245 BC (see below). Finally, the reconstruction of the Antigonid silver tetradrachms favours the association of the silver drachmae of 'king Antigonos' with later Pan head tetradrachms rather than with those from our hoard.

4. Karditsa (Palaiokastro), c. 1929: *IGCH* 162.

c. 245-0 BC

The burial of this hoard has been emended from c. 250 BC (*IGCH*) to c. 245-40 BC, as the two tetradrachms of Antiochos II belong to the second half of his reign but are in an excellent condition. The hoard includes the earliest Poseidon tetradrachm known from hoard contexts<sup>15</sup>, but this need not point to a later date for the hoard: it is purely on the assumption that the Poseidons were struck under Dason that Touratsoglou dates this hoard to c. 227-5 BC<sup>16</sup>. On the contrary, the inclusion of the last Pan group from the second period of issue might also favour the earlier date. Finally, the presence of bronze coins alongside the silver favours its consideration as a circulation hoard<sup>17</sup>.

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<sup>12</sup> Sic Nicolet-Pierre - Kroll, *Athenian Tetradrachm Coinage*, 25.

<sup>13</sup> The absence of foreign civic coins other than Athenian silver has raised suspicions that the hoard is incomplete. T. R. Martin discards the tetradrachm from the Aitolian League as intrusive: *ibid.*, 54-7; *Sovereignty*, 50.

<sup>14</sup> Nicolet-Pierre - Kroll, *Athenian Tetradrachm Coinage*, 26. On the coin of Eumenes I, see Westermark, *Philetairos*, 21.

<sup>15</sup> Nicolet-Pierre - Kroll, *Athenian Tetradrachm Coinage*, 29; Πασχίδη, *Ποσειδῶνες και Αντίγονοι*, 241.

<sup>16</sup> Touratsoglou, *DM*, 79.

<sup>17</sup> T. R. Martin, 'A third-century BC hoard from Thessaly at the ANS (*IGCH* 168)', *ANSMN* 26 (1981) 54.

5. Scotussa area, (pre-) 1989: *CH* VIII (1994) 283.

c. 245-0 BC

As this hoard, dispersed in trade, consists exclusively of a homogeneous group of Pans from the first period, it can not determine their internal sequence. The date of c. 260 BC suggested by the editors may be emended through the proximity of its contents to the *Eretria*, 1937 hoard of c. 245 BC (chapter 3.2.1).

6. Eretria, 1937: *IGCH* 175.

c. 245 BC

The fractional denominations of the Euboian Confederacy represented here favour the burial of this hoard in c. 245 BC or thereafter<sup>18</sup>. This date has been further supported by the Ptolemaic coins with no date (249/8 and 246/5 BC)<sup>19</sup>, and by the very worn Pi style Athenian tetradrachms<sup>20</sup>. Touratsoglou reverts to Wallace's date of c. 235 BC, without argumentation<sup>21</sup>.

A burial date of c. 245 BC is confirmed by the large proportion of silver Ptolemaic tetradrachms and by the excellent condition of the Rhodian didrachms. In the first place, the impressive number of Ptolemaic coins, which constitute the one quarter of the hoard, may tentatively be assigned to the conscious withdrawal of these lighter coins from circulation subsequent to the retreat of the Ptolemies from the Aegean after the battle of Andros<sup>22</sup>. Of the seven Rhodian didrachms, three belong to Ashton's series 3, carrying on the reverse a rose above a magistrate's name and beneath the letters P-O. The magistrates [AN]ΤΙΠΤΑΤ(ΡΟΣ) on nos. 367-8 and ΑΡΙΣΤΟΝΟΜΟΣ on no. 369 (with prow) have been dated by R. Ashton to c. 265-50 BC<sup>23</sup>. The excellent condition of this last coin, in particular, approximates the deposition of this hoard to the time when this specimen was minted.

8. Sardeis, 1911: *IGCH* 1299.

246- BC

This deposition hoard, from the base of the cult statue of Artemis at Sardeis, does not have a

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<sup>18</sup> Picard, *Chalcis*, 153-63. Alternative dates for this hoard c. of 220-10 BC and c. of 235 BC had been suggested respectively by I. Varoucha and by W. P. Wallace: Varoucha, *Epitymbion*, 670-2; W. P. Wallace, *The Euboian League and its Coinage*, ANS NNM 134 (1956) 47-9.

<sup>19</sup> Davesne-Le Rider, *Meydançikkale*, 298.

<sup>20</sup> Nicolet-Pierre - Kroll, *Athenian Tetradrachm Coinage*, 1-35, esp. 24.

<sup>21</sup> Touratsoglou, *DM*, tables III, VI.

<sup>22</sup> See chapters 1.2, 6.0.



significant impact on the internal sequence of the Pan tetradrachms<sup>24</sup>. The very well preserved silver coins of Antiochos II, assigned by E. T. Newell to Apamea, alongside the similarity in content with *Meydançikkale*, 1980 favour its burial soon after 246 BC<sup>25</sup>.

9. Tell Sukas (Gabala), 1958: *IGCH* 1528.

c. 245 BC

The pseudo-Alexanders of Arados with no date, struck between 259 and 243/2 BC, have encouraged H. Seyrig to suggest a *terminus ante quem* c. 243 BC for this circulation lot<sup>26</sup>. The absence of Poseidons might indicate the burial of this hoard before the circulation of the second tetradrachm type in the name of Antigonos in this area. Its date may therefore be slightly emended to c. 245 BC.

10. Meydançikkale, 1980: *CH* VIII (1994) 308.

c. 240-35 BC

The dating of this hoard to c. 240-35 BC by A. Davesne and G. Le Rider has been based on the Aradian Alexander tetradrachms, and has been confirmed by the coexisting Ptolemaic, Seleukid and Attalid issues. The exclusively royal issues, alongside the concurrence of coins on both the Ptolemaic and the Attic weight standard may either have been due to the burial of the hoard in Kilikia Tracheia, an area disputed by Seleukids and Ptolemies alike, or suggest the depositional nature of this hoard<sup>27</sup>.

A. Davesne and G. Le Rider treat this hoard as if it illustrated the circulation pattern,

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<sup>23</sup> Ashton, *Colossus*, 83-4.

<sup>24</sup> Bell, *Sardis*, v-vii; A. Johnston, 'The Greek Coins', in T. V. Buttrey - Ann Johnston - K. M. MacKenzie - M. L. Bates - J. A. Charles, *Greek, Roman and Islamic coins from Sardis*, Cambridge, Massachusetts-London: Harvard University Press, 1981, 2-4. On the site, see Butler, *Sardis*, vol. I.1 (1910-14), Leyden 1922, 76. On the depositional nature of temple hoards, see Tullia Linders, 'Fallen money and broken crowns - or when is a coin not a coin?', in *Florilegium Numismaticum*, 255-8.

<sup>25</sup> The assignation of these coins to Apameia has been questioned by A. Houghton: *Seleucid Empire*, nos. 415-43. On the burial date of this hoard, see G. Le Rider, 'Les trouvailles monétaires dans le temple d'Artemis à Sardes (IGCH 1299 et 1300)', *RN* 33 (1991) 71-88, pl. VII, contra Newell, *WSM*, 184 (230-23 BC), H. Seyrig, 'Monnaies Hellénistiques', *RN*<sup>6</sup> (1963) 23, n. 1, 42 = *Scripta Numismatica* (1986) 27, 46 (220-14 BC), Boehringer, *Chronologie*, 68, Beilage 2 (c. 220 BC). See also P. R. Franke, 'Inscriptliche und Numismatische Zeugnisse für die Chronologie des Artemis-Tempels zu Sardis', *MDAI* (Ath) 76 (1961) 203-7.

<sup>26</sup> P. J. Riis, 'L' activité de la Mission Archéologique Danoise sur la côte phénicienne en 1958', *AnnArch de Syrie* VIII-IX (1958-9) 125-6, fig. 7.A-B. On the pseudo-Alexanders from Arados, see Price, *Alexander*, 414-6.

<sup>27</sup> Davesne-Le Rider, *Meydançikkale*, 221-30.



despite the presence in this find of specimens both on the Attic and on the Ptolemaic weight standard. This is justified by the findspot of this hoard at Kilikia Tracheia, that is, on the border between the Seleukid and the Ptolemaic realm<sup>28</sup>.

13. Kassandreia, 1985/7: *CH VIII* (1994) 322.

c. 225 BC

The content of this hoard, primarily composed of tetradrachms of Antiochos Hierax, points to a date c. 225 BC. The hoard includes three Pan and two Poseidon tetradrachms of the third and fourth periods.

14. Hija së Korbit, 1982: *CH VIII* (1994) 299.

c. 225 BC

The tetradrachms of Eumenes, 'Antigonos' (Pan head) and Hierax are the latest in this very important hoard, whose burial has been lowered from c. 250-25 to c. 227-5 BC<sup>29</sup>. Paschides, however, is not convinced by Davesne-Le Rider's date to 225 (rather than 235 BC) for this hoard<sup>30</sup>, underlining that the worn coins of Hierax come, in fact, from the king's earliest issues from Lampsakos, while Boehringer dates the hoard to c. 230 BC<sup>31</sup>. It is worth noting that most of the coins are of Eastern origin<sup>32</sup>. The co-existence of specimens on both the Attic and the Ptolemaic weight standard in this hoard from the Western Balkans may be taken to indicate the hoard's depositional nature (see illustr. 1).

15. Thesprotia, 1992: Touratsoglou, *DM*, 75-86.

227-5 BC

This hoard has been dated by Y. Touratsoglou to c. 227-5 BC. Its composition exclusively of royal tetradrachms on various weight standards might imply its depositional nature<sup>33</sup>.

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<sup>28</sup> *Ibid.*, 225-6, 239-40.

<sup>29</sup> On past suggestions, see Touratsoglou, *DM*, table V.

<sup>30</sup> Davesne-Le Rider, *Meydançikkale*, 336, n. 279.

<sup>31</sup> Πασχίδη, *Ποσειδῶνες καὶ Ἀντίγονοι*, 243, n. 30. Boehringer, *Hierax*, 43, table 2.

<sup>32</sup> N. Ceka, 'Der Münzschatz von Hija e Korbit', in Eggebrecht et al., *Albanien*, 261, but the alleged formation of the hoard during the war of 280-74 between Pyrrhos and Gonatas is unsupported by any evidence. Cf. Shpresa Gjongecaj, 'Thesari Hija së Korbit', *Iliria* 1 (1985) 167-209.

<sup>33</sup> See also, Ashton, *Review*, 9-10; Callataÿ, *Review*, 296-9.



16. Sophikon, 1893: *IGCH* 179 = *CH* VIII (1994) 316.

c. 230-20 BC

The coin of Ptolemy III of year B = 245/4 and the very fresh Aitolian tetradrachm have led Hélène Nicolet-Pierre and J. Kroll to accept a date of c. 230-20 for this severely corroded underwater find, which has been taken to illustrate the circulation pattern at that period<sup>34</sup>.

17. Korinth, environs, 1938: *IGCH* 187.

220-15 BC

The deposition of this pot hoard c. 220-15 BC is determined by the tetradrachm of Seleukos III<sup>35</sup>, and it is not contradicted by the rest of its content: the fresh Aitolian tetradrachm (c. 220 BC), the moderately worn Rhodian didrachms of the series 3, alongside the prevailing Athenian Pi style tetradrachms are not incompatible with this date<sup>36</sup>. It may be argued, as in the *Eretria, 1937* hoard, that the absence of Ptolemaic coins later than Ptolemy Philadelphos, noted by Davesne<sup>37</sup>, need not indicate an earlier burial date but, rather, reflects the retirement of the Ptolemies from the Aegean after their naval defeat at Andros and the concomitant withdrawal of their lighter silver tetradrachms from the circulation pool (246/5 BC)<sup>38</sup>. The silver Zeus drachma of this hoard is therefore not incompatible with a date around the 220s.

22. Edremit (Adramytteion), 1954: *IGCH* 1302.

c. 210 BC

H. Seyrig dates this unpublished hoard around 210 BC. He also notes that the hoards with coins following the Attic weight standard found in the interior of Anatolia are dated before 188 BC<sup>39</sup>.

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<sup>34</sup> Nicolet-Pierre - Kroll, *Athenian Tetradrachm Coinage*, 31; *CH* VIII (1994) 316 (suggested date: 225-00 BC). For a catalogue of the known coins, see J. N. Svoronos, 'Εύρημα Σοφικού 'Επιδαυρίας', *JIAN* 2 (1899) 289-96, pl. I; idem, *JIAN* 10 (1907) 35-46, illus.; idem, *Athènes*, pl. 28. See also, Newell, *WSM*, index VI: Hoards; Newell, *ESM*, 25, 51, 76, 131; S. P. Noe, 'the Corinth Hoard of 1938', *ANSMN* 10 (1962) 34; Hackens, *Antidorum Peremans*, p. 71-2. Cf. Hazzard, *Ptolemaic Coins*, 32-3.

<sup>35</sup> S. P. Noe, 'The Corinth hoard of 1938', *ANSMN* 10 (1962) 32.

<sup>36</sup> Nicolet-Pierre - Kroll, *Athenian Tetradrachm Coinage*, 32.

<sup>37</sup> A. Davesne, 'Les Ptolemées', in Davesne-Le Rider, *Meydançikkale*, 298.

<sup>38</sup> G. Reger, 'The date of the battle of Kos', *AJAH* 10 (1985) [1993] 155-77, esp. 169-70; idem, 'The political history of the Kyklades, 260-200 BC', *Historia* 43 (1994) 32-69; K. Sheedy, 'The origins of the Second Nesiotic League and the defence of Kythnos', *Historia* 45 (1996) 423-99.

<sup>39</sup> H. Seyrig, 'Monnaies Hellénistiques', *RN*<sup>6</sup> V (1963) 26, note 1. H. Seyrig's list of varieties at the ANS has not been consulted.

23. Gordion, 1951: *IGCH* 1406.

*c. 210 BC*

The two coins of Antiochos III, dated to c. 215-05 BC, the Alexander tetradrachm from Arados with an inscribed date, from 218/7 BC, and the many Lysimachi point to the burial of this deposition hoard c. 210 BC<sup>40</sup>. The test punches and gashes on most of the heavily corroded coins indicate that the hoard includes coins retired from circulation. This weakens the degree to which this hoard can determine the introduction of the Poseidons, which, according to Chr. Ehrhardt, are preserved in an excellent condition (cf. chapter 2.4.3)<sup>41</sup>.

24. Gordion, 1961: *IGCH* 1405.

*c. 205 BC*

The tetradrachms of Arados from c. 217-6 BC, the dated Pamphylian Alexanders of years 13 and 14 of the local era (209/8 and 208/7 BC respectively), alongside the tetradrachm of Antiochos III from Laodikeia point to a date c. 205 BC for this deposition hoard<sup>42</sup>. All the specimens are heavily corroded.

25. S. Asia Minor, 1963: *IGCH* 1426.

*c. 210-200 BC*

With the exception of a coin from Side, this hoard consists exclusively of royal issues. The Alexander tetradrachms of Aspendos year 2, Perge year 13, and Arados year 44, allow for a date of c. 210-200 BC for this hoard, which has been dispersed in trade<sup>43</sup>. Two Pan tetradrachms from the first period and the tetradrachm of Lysimachos are the earliest in the hoard. Unless they form part of the earlier hoard with which they were found mixed, their inclusion in the hoard may reflect a demonetisation process.

26. N. Syria, 1960: *IGCH* 1533.

*213-05 BC*

The tetradrachm of Antiochos III from Tarsos and the pseudo-Lysimachos struck at Byzantion

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<sup>40</sup> Cox, *Gordion*, 1-19, pl. I-VIII. Boehringer opts for a slightly later date, c. 200 BC: *Chronologie*, 69.

<sup>41</sup> Ehrhardt, *Studies*, 77.

<sup>42</sup> D. H. Cox, 'Gordion Hoards III, V and VII', *ANSMN* 12 (1966) 33-55, pl. III-XXI. Boehringer, *Chronologie*, 69 prefers a date between 210 and 205 BC. Cf. Touratsoglou, *DM*, pl. III (210-0 BC).

<sup>43</sup> Boehringer, *Chronologie*, 69, 155-7, pl. 25-6.



confine the burial of this hoard between 213 and 205 BC, that is, in the beginning of reign of Antiochos III<sup>44</sup>.

27. Syria, 1959: *IGCH* 1535.

213-05 BC?

This hoard may form part of the *N. Syria, 1960* hoard. Its composition exclusively of royal issues might indicate its depositional nature<sup>45</sup>.

28. Syria?, 1962: *IGCH* 1531.

c. 225-0 BC

Chr. Boehringer takes the fresh Poseidon head tetradrachm and that of Antiochos Hierax from Alexandria Troas to suggest a burial date c. 225-0 for this hoard<sup>46</sup>.

29. Asia Minor, 1972: *CHI* (1975) 73.

c. 200 BC

The date suggested by Touratsoglou for this hoard, now dispersed in trade, around the end of the third century, is confirmed by the tetradrachms of Antiochos Hierax and of Attalos I, which are included in the photographs on file at the British Museum<sup>47</sup>.

30. S. Asia Minor, 1970: *CHI* (1975) 74.

c. 200 BC

The latest coins are: a tetradrachm of Antiochos III, an imitation of a coin from Antioch (c. 208 BC), a tetradrachm of Byzantion with no acrophonic of the city (c. 205 BC), and the pseudo-Alexander from Pergamon (c. 202-188 BC). The contents of the hoard, with four specimens of Antiochos III, with issues of Seleukos II and III but with no Pamphylian Alexanders, led H. Seyrig to suggest the initial formation of the hoard c. 220-15 BC, with the later addition of more recent pieces<sup>48</sup>.

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<sup>44</sup> Seyrig, *Trésors*, 22-4, pl. 9.

<sup>45</sup> Boehringer, *Chronologie*, 158-61, esp. 159.9-11, pl. 27-9.

<sup>46</sup> Boehringer, *Chronologie*, 153-4, pl. 23-4; id., *Hierax*, 43, table 2 (ca. 220 BC).

<sup>47</sup> Touratsoglou, *DM*, table III.

<sup>48</sup> Seyrig, *Trésors*, 13-20, pl. 1-8.

31. Oylum Höyüğü, 1989.

200-195 BC

The Alexander tetradrachms from Aspendos and Perge carrying dates (Aspendos years A-B, Perge year 19) and the drachma from Marathos (year 35) point to the burial of this circulation hoard between 200 and 195 BC<sup>49</sup>.

32. Delta, 1927-8: *IGCH* 1701 = Makedonia, 1927-8: *CH* VIII (1994) 356.

200-180 BC

Only indirect information survives from this hoard, which has been dispersed in trade. A Pan head tetradrachm with a trident symbol is included in the ten Pans recorded at *IGCH*<sup>50</sup>.

34. Pergamon, Asklepieion, 1960: *IGCH* 1303.

c. 200 BC

Considering this lot to represent a dedication at the Asklepieion, Boehringer takes the Alexander tetradrachms from Pergamon (before 200 BC), the coin from Perge (year 15, 205-4 BC) and of Antiochos III (c. 215 BC) to indicate the burial of this pot hoard c. 200 BC<sup>51</sup>. All the coins have been severely corroded.

35. 'Pisidia', 1963: *IGCH* 1411.

190-89 BC

This hoard of approximately 400 coins has been recorded by *IGCH* as comprising three lots, all unearthed in 1963. Accepting a burial date c. 190-89 BC for the first two, Boehringer considers them in the context of the Antiochic war (192-89 BC)<sup>52</sup>.

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<sup>49</sup> E. Özgen-A. Davesne, 'Le trésor de Oylum Höyüğü', *TCMAA* 45-72, pl. III-IV.

<sup>50</sup> The tetradrachms available in New York and C. T. Seltman's partial list have not been included in this study.

<sup>51</sup> Boehringer, *Chronologie*, 69, 162-71; id., *Hierax*, 43, table 2 (201 BC). On the withdrawal of coins from temple hoards from circulation, see n. 24.

<sup>52</sup> On the first two lots, see Boehringer, *Chronologie*, 70; 172-5 ('Pisidia, 1963', last coins: Aspendos year 18 (193/2 BC), Perge year 29 (191-0 BC), Antiochos III at Tarsos & Nisibis (c. 195 BC)); ibid., 176-9 ('Asia Minor, 1963', last coins: Pergamon after 200 BC, Side c. 200 BC, Antiochos III at Antiocheia/Orontes, c. 197 BC); information on the third lot has been drawn from A. Spaer.



36. Mektepini, 1956: *IGCH* 1410.

190-88 BC

This pot hoard determines the date of middle Hellenistic coins. It has been dated to c. 190 BC, on the basis of the following specimens: Arados year 64, Perge year 29, Aspendos year 19, Phaselis year 18, Alabanda-Antiocheia c. 205, Rhodes 48, Byzantion 8 Lysimachi with trident, Antiochos III at Antioch<sup>53</sup>.

38. Drama, 1989: *CH* VIII (1994) 403.

187-68 BC

This tomb hoard, comprising a single Antigonid silver drachma alongside a tetradrachm from Thasos and thirty bronze coins, has been dated by Y. Touratsoglou to 187-68 BC.

40. Asia Minor, c. 1947: *IGCH* 1451.

c. 187 BC

O. Mørkholm's date c. 187 BC for this hoard, now dispersed in trade, has presumably been based on the tetradrachms of Antiochos III.

43. Larissa ('Sitochoro', near Pharsalos), 1968: *IGCH* 237.

c. 165 BC

This hoard is crucial in determining the introduction of the Athenian New Style coinage and of that of the First Meris. It comprises a wide range of coins, including a full record of tetradrachms of Perseus later than 172 BC, tetradrachms of the First Meris, tetradrachm varieties of Lysimachos issued after 168 BC and imitations of Rhodian drachmae struck at Thessaly. The contents of this clearly depositional hoard and the absence of Athenian New Style tetradrachms or of Seleukid issues later than Seleukos IV have led Price to suggest c. 165 BC for its burial<sup>54</sup>. Touratsoglou generally accepts this date, but he distinguishes two lots for this hoard, the former dated to c. 187 BC and the latter dated to c. 168/7 BC. The late burial date of this hoard does not determine the

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<sup>53</sup> Olçay-Seyrig, *Mektepini*, 3-4; Boehringer, *Chronologie*, 69-70; id., *Hierax*, 43, table 2 (190-88 BC).

<sup>54</sup> M. J. Price, 'The Larissa, 1968 Hoard (*IGCH* 237)', in Le Rider et al., *Kraay-Mørkholm Essays*, 2; M. Karamessini-Oikonomidou, 'Θησαυρός νομισμάτων ἐκ Θεσσαλίας 1968', *AE* (1970) [1971] 13-26; 'Νομισματικό Μουσείο Ἀθηνῶν', *ΑΔ* 31 (1976) Chronicle, 4-5. On the controversial burial date of this hoard, see Crawford, *Coinage and Money*, 121-2; Touratsoglou, *Circulation*, 36, n. 12; Hatzopoulos, *Institutions*, 250-5.

date of the rather worn Pans and Poseidons of the third period, which are included in this hoard.

44. Asia Minor, 1947/8: *CH* VII (1985) 99.

*c. 160 BC*

A date to c. 160 BC has been proposed for this hoard, including Makedonian and Thessalian coins of Amyntas III, Philip II, Alexander III (Karia, Mesembria, Aspendos, Rhodes, Temnos), Philip III, Demetrios Poliorketes and Antigonos Gonatas, Thrace and Karia<sup>55</sup>.

46. Aleppo environs, c. 1930: *IGCH* 1562.

*133/0- BC*

The very fresh tetradrachms of cities of the East place the deposition of this hoard, which is dispersed in trade, soon after 133/0 BC<sup>56</sup>.

47. North of Larissa, 1985: *CH* VIII (1994) 517.

*c. 75 BC*

This hoard with civic and royal, large and smaller denominations has been dated to c. 75 BC and has been dispersed in trade. The distinction by Touratsoglou, however, of two lots, formed respectively in c. 270 and c. 75 BC, has not been based on any other evidence than the content of this hoard, and, in particular, on the good state of the Pan tetradrachm with Athena r.<sup>57</sup> This may alternatively indicate the hoard's depositional nature.

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On the whole, the hoards accessed and analysed in order to define the numismatic behaviour of the precious coinages of Antigonos Gonatas establish the *termini ante quos* for the Pans and the Poseidons respectively around c. 260 BC for the Pans and c. 245 BC for the Poseidons. These dates have been determined by the *Phayttos*, 1956 hoard, for the first type and by the absence of the Poseidons in *Eretria*, 1937, as opposed to their presence in *the Karditsa*, (*Palaiokastro*), 1929 hoard, with Pans of the second period, for the second type. The dates of the

<sup>55</sup> *NCirc.* (1949) 176-9.

<sup>56</sup> Seyrig, *Trésors*, 87-8, pl. 32.

<sup>57</sup> Touratsoglou, *DM*, pl. VI, note 1; Πασχίδη, *Ποσειδῶνες καὶ Ἀντίγονοι*, 241.



related hoards have been largely determined by external evidence, from contemporary royal and civic coinages. The distinction between 'deposition' and 'circulation' hoards has been made possible through the accumulation in hoards of coins of the first two Ptolemies in peninsular Greece and in the Aegean after the Ptolemaic defeat off Andros (cf. chapter 7.3). Similarly, the exclusive presence of royal issues, the absence of bronze coinages and the findspot of certain hoards on the border between the Seleukids and the Ptolemies might be taken as clues to the definition of certain hoards as 'depositional'. At the same time, the Pans and the Poseidons determine the internal sequence of certain hoards: the chronology of the most significant *Eretria*, 1937 hoard, with Pans but no Poseidons, to c. 245 BC, for instance, inevitably downdates *Scotussa*, (pre-) 1989, with which it is similar in content. The internal sequence of period IV is established with less certainty, as most of the hoards with the related varieties are depositional. It is worth noting that it is specimens of the first period that occur, severely corroded, in hoards of the late third century in the East. Finally, the presence of the drachmae in hoards may be taken to indicate their production in Greece, but this is not incompatible with their intended use in Asia Minor. The underwater find at Sophikon, in particular, may be taken to mark the itinerary of the Antigonid fleet to the East during the Karian expedition.

#### HOARD SUMMARY<sup>58</sup>

NO.	HOARD	IGCH, CH ETC.	PROPOSED BURIAL	PANS: LG (CM)	POS: LG (CM)	ZEUS: LG (CM)	C / D
1	Verge ('Perge'), 1955	455	-260 (c.)	I.3 (5)			
2	Phayttos, 1956 (c.)	159	260-30 (c.)	I.3 (5)			C
3	'Pherai', 1937-8	168	250-40 (c.)	III.22 (TI)			C
4	Karditsa (Palaiokastro), c. 1929	162	245-0	II.21 (TI)	?		C
5	Scotussa area, (pre-) 1989	CH VIII (1994) 283	245-0 (c.)	III.26 (22)			C?
6	Eretria, 1937	175	245 (c.)	III.26 (22)			D

<sup>58</sup> The numbers in Latin characters conventionally represent the period of issue, arabic numbers represent group numbers. The monograms on the reverse are mentioned in brackets, and the symbol is only mentioned when it is different from the crested helmet symbol. The winged helmet runs the series of the drachmae and some of the latest Pan tetradrachms. LG = latest group; CM = control marks. C = 'circulation' hoard; D = 'deposition' hoard.

7	S. Asia Minor, 1976	CH III (1977) 41	246				
8	Sardeis, 1911	1299	246-(c.)				
9	Tell Sukas (Gabala), 1958	1528	245 (c.)				
10	Meydançikkale, 1980	CH VIII (1994) 308	240-35	III.11 (16)			C/D?
11	Thessalonike, 1978	CH V (1979) 36	230				
12	Makedonia, 1960s	CH I (1975) 72	225-00				
13	Kassandreia, 1985-7	CH VIII (1994) 322	225 (c.)	IV.2 (wh - KT)			D
14	Hija së Korbit, 1982	CH VIII (1994) 299	225 (c.)	IV.7 (12)			D
15	Thesprotia, 1992	Touratsoglou, DM	225 (c.)	IV.2 (wh- KT), IV.5 (TI), IV.10 (12)	III.40 (27)		D
16	Sophikon, 1893	179	230-20 (c.)			IV.18 (TI)	C
17	Korinth environs, 1938	187	220-15 (c.)				
18	Troas/Mysia, (pre-) 1947	1301	220-10 (c.)				
19	Syracuse, Achradina, 1899	2230	215-2				
20	Enna environs, 1966	2232	212 (c.)				
21	Morgantina, 1982	CH VIII (1994) 329	210 (c.?)				
22	Edremit (Adramytteion), 1954	1302	210 (c.)				
23	Gordion, 1951	1406	210 (c.)	III.14 0			D
24	Gordion, 1961	1405	205 (c.)	I.4 (5)			D
25	S. Asia Minor, 1963	1426	210-00	IV.11 (12)			?
26	N. Syria, 1960	1533	213-05 (c.)	IV.36			D
27	Syria, 1959	1535	213-05 (c.)		IV.12 (27)		D
28	Syria?, 1962	1531	225-0		IV.16 (trident-24)		?
29	Asia Minor, 1972	CH I (1975) 73	200 (c.)				
30	S. Asia Minor, 1970	CH I (1975) 74	200 (c.)				
31	Oylum Höyüğü, 1989	TCMAA, 45-	200-195		IV.16		?



		72, pl. III-IV			(trident-24)		
32	Delta, 1927-8	1701	200-180 (c.)				
33	Makedonia?, 1927-8	469	200-180 (c.)				
34	Pergamon, 1960	1303	200 (c.)		III.30 (27)		D
35	'Pisidia', 1963	1411	190/89 (c.)		III.23 (ch-)		
36	Mektepini, 1956	1410	190 (c.)		III.36 (27)		?
37	Aleppo envir. (Beroia), 1896	1539	190 (c.)				
38	Drama, 1989	CH VIII (1994) 403	187-68			IV.18	
39	Thessaly, 1977	CH V (1979) 42	190				
40	Asia Minor, c. 1947	1451	187 (c.)				
41	Urfa (Edessa), 1924	1772	185-60				
42	SW Thessaly, 1977	CH VI (1981) 35	175				
43	Larissa ('Sitochoro', near Pharsalos), 1968	237	168-7	III.22 (TI)	III.39 (25)		D
44	Asia Minor, 1947/8	CH VII (1985) 99	160				
45	Balkh, 1974?	CH II (1976) 88	150				
46	Aleppo environs, c. 1930	1562	133/0 (c.)				
47	North of Larissa, 1985	CH VIII (1944) 517	75 (c.)	I.46 (14)			D

Fig. 9. Hoard Summary.

## 2.4 Absolute Chronology

It is necessary to explore the background of numismatic production prior to Gonatas' rise to the throne, in order to shed light on the context in which the coinage in the name of king Antigonos was introduced. The political and economic circumstances of the introduction of issues in the name of 'king Antigonos', initially with Alexander types and later with Gonatas's individual types, require consideration. In fact, it may be argued that the introduction of the individual types in the name of 'king Antigonos' (both the Pan- and the Poseidon-heads) is related to international politics *vis-à-vis* the Ptolemies, II and III. Elements from the iconography of the coinage as bearer of royal ideology, combined with the internal structure of the coins and with the hoard evidence, are all relevant to this discussion.

New posthumous Alexander gold staters and silver tetradrachms are currently believed to have been minted between the demise of Poliorketes and the introduction by Gonatas of individual issues in order to meet his financial needs in Makedonia (chapter 2.1). The silver tetradrachms with the legend ΑΛΕΞΑΝΔΡΟΥ on the reverse that were produced within this period<sup>1</sup> are characterised by large modules. They have been distinguished by R. W. Mathisen through particular features on the obverse, such as very large and well-proportioned portraits, in high relief, which tend to fill the high meniscus flans; also, through the progression from a lion mane with a double row of short, downward-pointing spikes towards that with looser, downward-hanging locks. Mathisen's tentative arrangement of these Makedonian posthumous Alexanders on the basis of hoards, style and monograms<sup>2</sup> has been updated by M. J. Price, who takes the uncertainties in the classification of these coins as a reflection of the political instability during the *interregnum* after Poliorketes' death. Eleven different varieties have been distinguished altogether, six of which are presently dated to the reign of Antigonos Gonatas. These I list below, according to the names and numbers assigned to them by Mathisen and Price<sup>3</sup>:

1. 'Omikron-Kappa' [532-545], named after the monogram beneath the throne; 281/0 (M); c. 285 (P).
2. 'Triton' [524-530], with a Triton blowing a trumpet and holding a sceptre in the l. reverse field; 279/8 (M).
3. 'Mu' [604-619], with a monogram after the throne and monogram combinations in the l. field; 276/5 (M).
4. 'Grape' [574-603], with a bunch of grapes always in the l. reverse field; 275/4 (M).

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<sup>1</sup> On the occurrence of the royal title on the reverse of gold and silver posthumous Alexanders, see Price, *Alexander*, 32-3.

<sup>2</sup> Mathisen, *Silver Coinages*, 79-123, pl. 17-22.

<sup>3</sup> The numbers in brackets correspond to the numbers in M. J. Price's catalogue of Alexanders: Price, *Alexander*, 141-2. All dates are BC. Mathisen's suggestions are indicated by '(M)', Price's by '(P)'. For a list of the new hoards which were published after Mathisen's publication, see Price, *ibid.*



5. 'Xi' [572-3]; 274/3 (M).
6. 'Helmet' [621-632], the largest group, named after the Makedonian helmet it bears on the reverse l. field; 273/1, Amphipolis (M); 275-270, Pella (P).
7. 'Bipennis' [569-70], 288/83, Pella (M, P).
8. 'Monogram' [550-63], with several monograms, die-linked to a reverse inscribed as ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ. 274/3, Pella (M).
9. Var. [867-8]: 'uncertain' but possibly of North Greek origin in style and provenance (P).
10. Group [564-8], present in the Armenak hoard, with Makedonian traits of style (P).
11. Var. [809], regarded by M. J. Price as probably Makedonian in origin, with parallel gold issues ([808] -Skione hoard-, [807]).

A few gold staters are paired via their control marks with two varieties of these posthumous Alexander tetradrachms (plate 48.2). To the five gold coins listed by R. Mathisen M. J. Price adds one specimen, related to a silver tetradrachm from the Monogram group<sup>4</sup>. The number of known Makedonian staters from this category has been significantly increased by the content of the *Poteidaia/Kassandreia, 1984* hoard (chapters 2.3, 2.4.1): nos. 17 and 18 of this hoard correspond to silver Alexander tetradrachms from the Monogram group, while nos. 19-72 may be related to the Mu group of posthumous Alexander tetradrachms struck during the early reign of Gonatas. Accepting Mathisen's interpretation of the Makedonian gold staters as payment by Gonatas to Celtic mercenaries, Price assigns the stylistic differences between the two issues to the simultaneous functioning of two mints in ca. 276/5 BC and adopts Mathisen's assignation of the former group to Pella and of the latter to Amphipolis. It may be argued that the more elaborate transitional staters with the legend of king Antigonos were also struck at Amphipolis, presumably after the staters attached to the Mu group.

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The attempts of Mathisen and Price to date the above mentioned posthumous Alexander issues have been based on the following three *a priori* assumptions:

- (1) that Gonatas utilised these posthumous Alexander staters for the payment of Celtic mercenaries;
- (2) that Gonatas' individual coinage was introduced in 272/1 BC, after the death of Pyrrhos, which left Gonatas the only claimant to the Makedonian throne, and prior to the Chremonidean war;
- (3) that Gonatas' introduction of his individual issues put an end to the posthumous gold and silver Alexander coinage.

A critical appraisal of these three assumptions is likely to elucidate the political and

historical context within which the individual types of Antigonos were introduced.

### 1. *Gold staters and Celtic mercenaries*

The historical frame for the production of the gold staters in the name of Gonatas might be worthy of further investigation. The issue of posthumous Alexanders and the introduction of the gold posthumous Alexander staters in the name of Antigonos in the 270s has been related by R. W. Mathisen to the request of the Celtic mercenaries employed by Gonatas to be paid in gold. His case is based primarily on Polyaeos' account of the initial agreement of Gonatas to pay each of his Celtic mercenaries for the battle against Antipater Etesias χρυσοῦν μακεδονικόν (Polyaen. *Strat.* 4.17 ff.). Mathisen further supports his suggestion by pointing to the presents in gold which, according to Polybios, the citizens of Byzantion gave to the Celts in order to prevent them plundering their land<sup>5</sup>, and the grant of gold by the people of Herakleia to the Byzantines within the same context<sup>6</sup>. Mathisen is followed by Price and Le Rider, who is also tempted to relate the findspot of the *Poteidaia*, 1984 hoard to the ten-month siege of this city, known as Kassandreia in the Hellenistic period, by Gonatas immediately after the battle of Lysimacheia and to its final capture with the aid of 2000 mercenaries by the pirate Ameinias (Polyaen. *Strat.* 4.6.18)<sup>7</sup>.

Cogent as this historical context may seem, it does not necessarily confirm the exclusive association of the gold specimens with the payment of Celtic mercenaries in the first half of the 270s. A request for a particular type of payment, for one thing, does not necessarily entail that Gonatas would have succumbed to the demands of his mercenaries and issued coins in the metal requested: it is the employer of mercenaries who in the end determines the form of transaction. The establishment of a causal relationship between the production of gold staters in Makedonia and the payment of Celtic mercenaries is also weakened by the absence of these specimens from hoards of the early third century from Asia Minor, where the Celts allegedly migrated in the early 270s<sup>8</sup>.

Furthermore, the estimated number of gold staters issued in this period would not have sufficed for the payment of the Celtic mercenaries employed by Gonatas early in his reign. To

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<sup>4</sup> Mathisen, *Silver Coinages*, p. 89-90, 95-6, pl. 18.11-2, 21.32-3, 21.5; Price, *Alexander*, 141, 145.562.

<sup>5</sup> Plb. 4.46: κατὰ μὲν οὖν τὰς ἀρχὰς ἐν ταῖς ἐφόδοις αὐτῶν τὰς κατὰ Κομοντόριον τὸν πρῶτον βασιλεύσαντα δῶρα διετέλουν οἱ Βυζάντιοι διδόντες ἀνὰ τρισχιλίουσ καὶ πεντακισχιλίουσ, ποτέ δὲ καὶ μυρίουσ χρυσοῦσ, ἐφ' ᾧ μὴ καταφθεῖρειν τὴν χώραν αὐτῶν.

<sup>6</sup> Memnon of Herakleia, *FGH* IIIb, F 434 Nr. 297-607, 11 (19).

<sup>7</sup> Mathisen, *Silver Coinages*, 102-3, n. 29; 118; Price, *Alexander*, 142; Le Rider, *Potidée*, 94. On the participation of Celts in the Makedonian army, see C. B. Welles, 'Gallic Mercenaries in the Chremonidean War', *Klio* 52 (1970) 477-90; Hannestad, *Celts*, 15-38, esp. 16-20; Cunliffe, *Celts*, 81-2.

<sup>8</sup> On the absence of these tetradrachms from hoards, see Price, *Alexander*, 141.



the three military occasions pointed out by Mathisen, in which Celtic mercenaries served under Gonatas, that is, the countering of Antipater Etesias, the siege of Kassandreia after Lysimacheia in 276 BC, and the rivalry between Gonatas and Pyrrhos for the Makedonian throne in 274 BC, one may also add the Chremonidean war, given the mutiny of Celtic mercenaries at Megara during the siege of Athens by Gonatas<sup>9</sup>. A clue to the amount of their payment is provided by Polyaeos, according to whom the overall amount due from Gonatas to the Celtic mercenaries for the battle against Antipater Etesias rose to thirty talents. Given that each soldier was initially to receive one gold stater after the battle, with a gold : silver *ratio* of c. 1 : 10, the c. 9000 staters which would come from the thirty talents would pay off approximately 9000 soldiers.

Each gold stater is believed to have represented the wages of a soldier for a minimum period of one month<sup>10</sup>. However, the financial needs raised by the continuous enlistment of Celts for a full ten-month war period would have required the issue of a considerably higher number of gold staters. In fact, it is highly dubious whether the amount of gold which could potentially be coined from the known obverse dies would have sufficed for the payment of the Celts in gold for relatively long periods. The six posthumous gold staters so far known come from five different obverse dies. Assuming the potential production of approximately ten to thirty thousand specimens from each obverse die, one is left with a speculative number of fifty to a hundred and fifty thousand gold staters struck from the five Makedonian posthumous Alexander obverse dies. This amounts to 166,6 to 500 talents of gold. These would have sufficed for approximately eleven monthly payments of 9000 mercenaries, that is, for only one ten-month war period. An increased demand for gold staters would partly have been met with already existing coinage, such as gold Philippi, Alexanders, Demetrii or Lysimachi, as only one third of the known needs for gold coins could have been covered by the posthumous Alexander staters struck during this period<sup>11</sup>. If the Celtic mercenaries demanded payment in gold, one might speculate that they may not have been employed continuously in the Makedonian army.

On the other hand, there is admittedly no reason to discard the evidence for the Celts' appreciation of other forms of wealth, in order to support further Mathisen's argument<sup>12</sup>. In fact, rather than illustrating a response to a particular request by mercenaries, the gold issues of

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<sup>9</sup> P. Trog. *Prol.* 26; Just. 26.2; C. B. Welles, 'Gallic mercenaries in the Chremonidean War', *Klio* 52 (1970) 477-90; Heinen, *Unters.*, 170-2.

<sup>10</sup> Griffith, *Mercenaries*, 293; Launey, *Armées* I, 495-6; *Armées* II, 759-60. G. Le Rider takes a gold stater to represent the monthly wages of a soldier, pointing out that the Celts were not unfamiliar with the level of wages in the Greek world: Le Rider, *Potidée*, 94, n. 7.

<sup>11</sup> Mathisen, *Silver Coinages*, 102-3. G. Le Rider, in particular, is tempted to see in the content of the *Poteidaia*, 1984 hoard an illustrative sample of the gold coins in which Celtic mercenaries were paid in the 270s: Le Rider, *Potidée*, 84.

<sup>12</sup> Just. 25.1.5: 'Sed Galli expositum grande auri argentique pondus admirantes atque praedae ubertate sollicitati infestiores quam venerant revertuntur...'; Diod. 22.9.4.



this period may relate to local preferences instead. The presents of the Byzantines to the Celts, for one thing, need not indicate any particular preference of the Celts for gold, for transactions in this metal were the general rule in the Black Sea area<sup>13</sup>. Nor is the issue of gold staters incompatible with earlier royal practices in Makedonia, whose abundant resources justified the production of coins in this metal<sup>14</sup>. Suffice it to note the large numbers of gold staters in the name of Philip II and Alexander III that were struck during their respective reigns as well as posthumously<sup>15</sup>, alongside the epigraphic evidence confirming transactions in gold in Makedonia as late as 239-29 BC. In fact, deeds of sale from Amphipolis confirm that purchases of houses and of land were held in gold as late as the mid-third century BC<sup>16</sup>, while the manumission document from Beroia reports payments in the same precious metal for the manumission of slaves in 239-29 BC<sup>17</sup>. There is therefore no need to see in these gold posthumous Alexander staters in the name of king Antigonos a *sui generis* phenomenon, worthy of particular interpretation (cf. chapters 7.0, 7.3).

The dissociation of the gold staters from payments to the Celtic mercenaries is further supported by the gold stater with the star and dog symbols from the *Poteidaia, 1984* hoard. This is related by G. Le Rider to a silver posthumous Alexander tetradrachm from *Meydançikkale, 1980*, with the same control marks. This tetradrachm belongs to a group which is assigned by Price to an uncertain mint and is dated to 240-180 BC<sup>18</sup>. The gold stater may allow for a later burial date for the *Poteidaia, 1984* hoard, with 240-180 BC serving as a plausible *terminus ante quem* for the above-mentioned posthumous Alexander gold staters and for the transitional issue of king Antigonos.

It may be argued that the issue of gold staters was not incompatible with the intense military activities and the subsequent higher financial needs of the 270s and 260s, hence they need not be confined to payments *vis-à-vis* mercenaries of a particular ethnic group. Their issue may have been enabled after Gonatas gained control of the gold mines in the North Aegean, particularly those of the Pangaion, and they may have continued in use until much

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<sup>13</sup> O. Mørkholm, 'Some reflections on the production and use of coinage in Ancient Greece', *Historia* 31 (1982) 297, 299 notes that gold was preferred in trade around the Black Sea; he also notes the move of the economy towards a monometallic monetary system based on silver, with the exception of the Black Sea area and that of the Easternmost satrapies of the Seleukid Empire. Cf. Ed. Schönert-Geiß, 'Die Wirtschafts- und Handelsbeziehungen zwischen Griechenland und der nördlichen Schwarzmeerküste im Spiegel der Münzfunde (6.-1. Jh. v. u. Z.)', *Klio* 53 (1971) 105-117.

<sup>14</sup> E. N. Borza, 'The natural resources of early Macedonia', in Adams-Borza, *Macedonian heritage*, Washington 1982, 1-20, esp. 8-10; idem, *In the Shadow of Olympus*, 53-5; Billows, *Kings and Colonists*, 7, n. 23; Hammond, *Macedonia I*, 12-18; Hammond-Griffith, *Macedonia II*, 69-91.

<sup>15</sup> Le Rider, *Philippe II*, 129-198 (Pella), 202-252 (Amphipolis); 255-284; 401-434 (discussion); id., 'The coinage of Philip II and the Pangaion Mines', in Hatzopoulos-Loukopoulou, *Philip of Macedon*, 48-57; id., *Monnayage et Finances*, 49-66; for Alexander's Makedonian gold, see Price, *Alexander*, 144-5, 148. For Alexander's lifetime gold coinage from Makedonia, cf. Troxell, *Studies*, 65-100-128, pl. 20-25.

<sup>16</sup> Hatzopoulos, *Actes de Vente*, 38-54, 75-86; idem, *Institutions II*, 102-5, nos. 88-91.

<sup>17</sup> Hatzopoulos, *Institutions II*, 108-10, no. 93, l. 9-10, 21-2.



later.

## 2. *The Beginning of Antigonos' Individual Coinage*

The introduction of the individual issues of the king Antigonos has recently been shifted to 272/1 BC<sup>19</sup>. The new legend both on the transitional Alexanders and on Gonatas' individual types, ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ, constitutes the ideological turning point of the king, who now explicitly declares his royal authority. The precise date of these specimens will be discussed below, in the related chapters (2.4.1-2, 3.2.1).

## 3. *Posthumous Alexander silver tetradrachms parallel to the Pan head tetradrachms?*

A greater flexibility in the date of the posthumous gold staters has an inevitable impact on current opinions *vis-à-vis* their contemporary varieties of posthumous Alexander tetradrachms, particularly those which are directly associated to the gold. In fact, the alleged issue of these gold specimens after c. 276/5 BC has been taken to limit the production of the Mu and Monogram group of Alexander tetradrachms between 276/5 and 272/1 BC, on the assumption that the posthumous Alexander varieties ceased after the introduction by Gonatas of his individual types in 272/1 BC<sup>20</sup>.

Within these chronological limits, R. W. Mathisen, followed by M. J. Price, assigns the Mu, Grape, Xi and Helmet groups to Amphipolis, after the Omikron-Kappa and Triton groups. He is tempted to interpret the adoption of a naval symbol, the triton, on the reverse of the last as reminiscent of a naval victory before 276/5 BC. The Bipennis and Monogram groups are assigned to a different mint, Pella, when under Gonatas' control during his rivalry with Pyrrhos in 274-2 BC.

However, seeing that the serial order of the posthumous Alexander tetradrachms is in many cases not firmly corroborated by the hoard evidence, the suggested reconstruction may be met with a number of objections. In fact, their occurrence in Makedonia and not in hoards from Asia Minor dated to the 270s, such as the *Armenak*, 1927 hoard<sup>21</sup>, is *prima facie* incompatible with a period of large movements of Celtic mercenaries to the East.

The end of the Alexander silver types and their replacement with those of Antigonos Gonatas in 272/1 BC is in fact deprived of any physical confirmation; the disconnection of the

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<sup>18</sup> Cf. chapter 2.3.

<sup>19</sup> Mathisen, *Silver Coinages*, 110-8.

<sup>20</sup> Mathisen, *Silver Coinages*, 107-8; Price, *Alexander*, 141.

gold staters from the payment of Celtic troops also allows for a later date for the gold specimens in the name of Antigonos. On the other hand, the issue of posthumous Alexander tetradrachms parallel to individual royal types is not uncommon. It is testified, for instance, in Pergamon as late as c. 210/190 BC, and on the gold staters of Alexander type but with the legend of Mithradates II from Bithynia (c. 255-20 BC). The absence of these posthumous Alexander varieties from hoards from Asia Minor dated to the 270s is particularly remarkable, given as well the possible presence of Antigonid troops in Karia, as attested from a document as early as 268 BC (cf. chapter 2.4.2). Finally, the inclusion of a single coin of Antiochos I in the *Kilkis, 1961*, the *Jabukovac, (pre-) 1920* and the *Verge ('Perge'), 1955* hoards respectively (IGCH 445, 447 and 455) may attest not only a later date for the hoards *per se*. It may also indicate the continuation of use, if not also of issue, of the posthumous Alexander tetradrachms within the 260s, that is, during the Chremonidean war.

In the first place, the presence of these Makedonian posthumous Alexander varieties in a number of hoards from peninsular Greece dated between c. 260 and 225 BC is not incompatible with a date of these coins in the 260s. In fact, insofar as the internal structure of the posthumous silver Alexander tetradrachms is not firmly determined by the hoard evidence, the reconstruction of this coinage remains tentative. The admittedly conventional stylistic criteria on which Mathisen's reconstruction is based, such as the progression in the size of the modules or the stylistic development of the lion mane, as opposed to the stylistically divergent reverses of the transitional Alexander tetradrachms, allow for alternative suggestions for the date of certain groups<sup>22</sup>. Symbols such as the triton in the Triton group, which is regarded by Mathisen as an allusion to a naval victory, may alternatively be, for instance, indicative of naval preparations in view of or during the Chremonidean war. The Triton specimen from *Thessaly, 1983* might thus indicate a later date for this hoard, dated by Price before 271 BC<sup>23</sup>, not least as Demetrias, the Makedonian royal residence in Thessaly, might in fact have served as a νεώριον for the Makedonian navy during the 260s BC. Moreover, similarities in symbols and monograms between the posthumous Alexanders and the Pan head tetradrachms may be taken to suggest either sequence in their issue or their parallel production. Such is the case for the helmet, for instance, that occurs as a symbol on the reverse field of both the posthumous Alexanders and the Pan head tetradrachms. Similarly, the monogram of the Bipennis group approximates that of the *Athena r.* Pan head variety and also occurs on bronze coinage with the monogram of Pyrrhos on the obverse, dated by Price to 273/2 BC<sup>24</sup>: the mint official who signed the posthumous Alexander group presumably continued to hold his office after the departure of Pyrrhos from Makedonia.

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<sup>21</sup> Price, *ibid.*

<sup>22</sup> Mathisen, *Silver Coinages*, 80; cf. chapter 2.4.

<sup>23</sup> Price, *Alexander*, 58, 141.



The prolific production of posthumous Alexander coinage may plausibly tally, partly at least, with the provisional preparations for the war between the Makedonian king and the Greek cities of the South in the 260s. The international acceptance of the posthumous Alexander tetradrachms may in fact have provided a very good reason for their continued issue during the Chremonidean war, perhaps parallel to the Pan head tetradrachms.

Particularly remarkable in the flow of gold and silver tetradrachms with the types of Alexander III is the introduction of coins with the personal name of Antigonos and his royal title. The circumstances of this change are worthy of a further investigation.

#### **2.4.1 Gold staters and silver tetradrachms with the types of Alexander III in the name of Antigonos**

The rarity of both the gold and the silver posthumous Alexanders in the name of Antigonos has been taken by Mathisen to indicate their short duration and their function as transitional issues from the production of posthumous Alexander tetradrachms to the introduction by Gonatas of individual types in Makedonia.

In the first place, five gold Alexander staters with the name and the royal title of Antigonos on the reverse survive, coming from five different obverse dies. They are currently assigned to Antigonos Gonatas rather than Monophthalmos, who is now left without coins in his name<sup>25</sup>. Their initial attribution by Mionnet to Monophthalmos<sup>26</sup> was challenged by E. T. Newell, who favoured their assignation to Gonatas on the following criteria: 'Their comparatively late style, their monograms, and their symbols occur on the contemporaneous Makedonian issues of Gonatas'<sup>27</sup>. Without arguing against Mionnet, and despite some scholars' reservations in accepting Newell's arguments<sup>28</sup>, Mathisen, followed by Price, regards them as issues of Gonatas struck in supplement to the Philip and Alexander staters already in circulation, for the payment of Celtic mercenaries<sup>29</sup>.

Given this controversy, a reappraisal of the evidence relating to these specimens is clearly desirable. Seeing that the surviving Antigonid gold specimens come from the same number of obverses as the contemporary posthumous Alexander staters, the amount of gold

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<sup>24</sup> Price, *Alexander*, 141.

<sup>25</sup> Mørkholm, *EHC*, 59, 77. The reluctance of Monophthalmos to strike coins in his name has been interpreted as a deliberate policy, in view of the international popularity of the Alexander coinage and secondly because much of the treasure he got hold of must have been in Alexander coins already: Billows, *Antigonos*, 218, n. 82, 259, 292.

<sup>26</sup> Mionnet, *Description*, Suppl. 3, 244, 587, XI, 1, followed by Head, *HN*<sup>2</sup>, 229; Gaebler, *AMNG* III.2, 179, n.

<sup>27</sup> *DP*, 14, n. 1.

<sup>28</sup> Gaebler, *ibid.*

<sup>29</sup> Mathisen, *Silver Coinages*, 103, n. 29-30; Price, *Alexander*, 141-2. Cf. Griffith, *Mercenaries*, 68-79.



Antigonid staters which could potentially be produced by five obverse dies is analogous to those in the name of Alexander (chapters 2.4, 7). The absence of obverse links between the two categories has led to their alleged production in two distant chronological moments or in two different mints, the wreath on the reverse field I. representing the second Makedonian mint for the gold staters under Antigonos<sup>30</sup>.

The elaborate style, the high relief and the careful and regular engraving of the legend letters on these issues are in accordance with the general care in the production of gold coins. Rather than limiting this gold issue to the payment of Celtic mercenaries (chapter 2.4.1), these features indicate that these staters could have been a response to increased military needs or even a commemoration of an outstanding event. This suggestion is further supported by the divergence of the control marks of these staters from those on their posthumous Alexander counterparts. In fact, the replacement on the reverse of the wreath, which is normally held by Nike, by the *aphlaston* is a significant iconographic divergence of these specimens from the traditional Alexander gold staters. The *aphlaston*, which has been interpreted as the *semaphoros* (σηματοθέσιον) of the largest and most ornate ships (στρατηγίδες)<sup>31</sup>, alludes to the striking of these coins on the occasion of a naval battle, and possibly in commemoration of a naval victory. The wreath symbol I. on the reverse is better justified in this context than as a symbol of a different mint.

The royal title on the reverse points to one of the three kings called 'Antigonos', namely Monophthalmos, Gonatas or Doson. This leads us to consider three different periods for the issue of these staters: in the first place, the period between 305 and 301 BC, that is, after the official assumption of the royal title by Antigonos Monophthalmos after his son's victory over the fleet of Ptolemy I at Salamis and before his demise at the battle of Ipsos<sup>32</sup>. Otherwise, that between 283 and 239, after the death of Poliorketes and the assumption of the royal title by Gonatas until the end of the latter's reign, offers a second alternative. Finally, should a relation to Doson be considered, the Karian expedition (227-5 BC) offers a most appropriate context for this issue.

Could these coins be associated with Antigonos Monophthalmos? Their attribution to a period of only five years may *prima facie* not be incompatible with their rarity. They are, however, stylistically more elaborate and distant not only from those gold staters produced at

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<sup>30</sup> R. W. Mathisen relates the posthumous Alexander staters of the Mu and Monogram group to the silver in the name of Alexander struck in Pella in 274 BC and those in the name of Antigonos to the transitional silver tetradrachms in the name of Antigonos. On the other hand, Price favours the issue of the respective series in two different mints: *Alexander*, 141; cf. chapter 2.5.

<sup>31</sup> E. Babelon, 'La stylis, attribut naval sur les monnaies', *RN* 11 (1907) 1-39 = *Mélanges Numismatiques*, 199; J. Svoronos, 'Stylides, ancres hierae, aphlasta, stoloï, akrostolia, embola, proembola et totems marins', *JIAN* 16 (1914) 81-152, esp. 120-30; Casson, *Ships and seamanship*, 110-1. Cf. chapter 2.1.

<sup>32</sup> A more detailed analysis on the political significance of the assumption of the kingship by Monophthalmos and Poliorketes in E. Gruen, 'Coronation of the Diadochoi', in Eadie-Ober (edd.),



the main mints in Asia Minor during the reign of Monophthalmos, but also from those struck in the name of Poliorketes<sup>33</sup>. The helmet type, Athena's plastically rendered features, the hairstyle, the neck curve and the horizontal wrinkles on her neck contribute to a more natural result. This distinguishes them from their Asian equivalents and approximates them to the gold Alexander staters issued in Amphipolis in the early fourth century and during the early reign of Antigonos Gonatas<sup>34</sup>. The style of Athena's locks on the obverse is also more elaborate than those on the contemporary posthumous Alexander staters, which are related to the Mu and Monogram group of silver tetradrachms.

If the staters are to be assigned to Monophthalmos, the victory of Poliorketes at Salamis in 306 BC emerges as the most opportune *terminus post quem* for the introduction of the new gold specimens: the Antigonids may indeed have justified the royal title on these gold staters through this victory. Nothing, though, in the iconography alludes to the very event of the coronation of the Diadochoi. The replacement of the wreath by the *aphlaston* under Monophthalmos is also problematic, for the *aphlaston* does not occur on his son's silver tetradrachms earlier than c. 291-0 BC<sup>35</sup>. An early iconographic adjustment of the Alexander gold types might, after all, seem incompatible with the conscious effort of the Diadochoi, particularly the Antigonids, to preserve the Alexander tradition<sup>36</sup>.

Further clues to the date and place of production of these gold staters are provided by the hoard evidence. A stater with the legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ forms part of the *Poteidaia, 1984* hoard (chapter 2.3). Its occurrence in Makedonia and its absence from hoards found in Asia Minor favour a Makedonian provenance for these specimens, even if the circulation of gold and silver coins in antiquity was not as limited as that of the bronzes. Moreover, the stater's uncirculated condition and remarkably high relief might indicate the chronological and topographical proximity of its production to the date and place of burial of the hoard. Insofar as 281 BC has been fixed as a *terminus post quem* for the *Poteidaia, 1984* hoard<sup>37</sup>, the gold stater in the name of king Antigonos cannot have been struck much earlier,

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*Essays Starr*, 259-60; Billows, *Antigonos*, 155-9.

<sup>33</sup> Cf., for instance, Price, *Alexander*, 225-34, pl. VI.1527A, 1536, 1552, 1556-9, 1561-3, 1568-74 (Abydos); 271, pl. XVII.L30 (Magnesia ad Maeandrum); 424-5, pl. XII.3340 (Aradus); 436, pl. XII.3456 (Sidon); 409, pl. XI.3257 - 8 (Ake). For the gold staters under Poliorketes, cf. Newell, *DP*, 19 - 20, pl. I.3, 7-10.

<sup>34</sup> The Makedonian fabric of the coins is suggested by their stylistic similarity to the Alexander staters issued towards the end of the fourth century BC; cf. Troxell, *Studies*, 100-6, pl. 20-5. For the gold staters of Gonatas' early reign: Mathisen, *Silver Coinages*, 89, 95, pl. XVIII.11-12, XXI.31, 33, 35; Price, *Alexander*, 141-2.

<sup>35</sup> On the silver tetradrachms of Poliorketes at Pella, Poseidon seated on a rock holds an *aphlaston* with his outstretched r. hand and a lotus-tipped sceptre with his l. hand: Newell, *DP*, 83-87, pl. VII.5-6.

<sup>36</sup> Billows, *Antigonos*, 218, n. 82, 259, 292. The introduction of a new coin type by Ptolemy I between 321 and 319 BC, based on Alexander's silver types, is justified by his different attitude to the preservation of the unity of Alexander's empire; for the new types, cf. Mørkholm, *EHC*, 63-4; Hazzard, *Ptolemaic Coins*, 23-4, fig. 37.

<sup>37</sup> Le Rider, *Potidée*, 94; cf. chapter 2.3.



hence its attribution to Monophthalmos is not plausible.

The assignation of the gold staters either to Monophthalmos, on the one hand, or to Gonatas or Dason, on the other hand, might slightly be facilitated by the chronological distance between the first and the last two kings and by their control over different areas. It is indeed more difficult to distinguish between Gonatas and Dason. The assignation of these gold staters to Dason is certainly neither impossible nor incompatible with the date of *Poteidaia*, 1984, including a gold stater from this variety. It might, however, be weakened by the gradual tendency in the Balkans towards a monometallic currency based on silver during the third century BC<sup>38</sup> and by the fact that the last recorded transaction in gold from Makedonia is dated to 239-29 BC<sup>39</sup>. On the other hand, the allusion to the god Pan through the replacement of the *aphlaston* by Pan's *syrix* in specimen 5, from the British Museum (chapter 3.1), might favour the assignation of these coins to Gonatas, during whose reign Pan's cult flourished in Makedonia (chapter 2.1). Following Newell, one may regard the gold staters in the name of king Antigonos as a continuation of the gold posthumous Alexander staters struck in Makedonia, during the reign of Antigonos Gonatas. We are now left with the task of defining when and for what purposes they were struck.

The order of the legend on the gold staters, ΒΑΣΙΛΕΥΣ Ι.-ΑΝΤΙΓΟΝΟΥ ρ., may have influenced the arrangement of the legend on the two silver tetradrachms with the Alexander types (chapter 3.2.1, group 1, nos. 1-2) and on certain Pan head silver tetradrachms, no. 151 from period I (274/3-260/55 BC) and nos. 101 and 105 from period III (246-229 BC), with Athena Alkidemos ρ. and a *kalathos* ι. on the reverse (chapter 3.2.2, groups 44-6 and chapter 5.3, groups 24-6, respectively). The haste in the engraving of the legends of the transitional Alexander tetradrachms in the name of Antigonos may differentiate the circumstances of their issue from the introduction of the gold staters and of the Pan head tetradrachms; the last two may along these lines be regarded as contemporary.

The combination of the *aphlaston* with the wreath as indicators of a naval victory might more substantially contribute to the dating of these staters. For one thing, the battle of Lysimacheia did take place on the coast and close to Gonatas' fleet, but no naval activities are mentioned in relation to it<sup>40</sup>. This limits our choice between the two major naval conflicts between the Antigonids and the Ptolemies during the reign of Gonatas, that off Kos (dated between 262/1 and 255 BC) and the one off Andros (246/5 BC)<sup>41</sup>. The association of Pans

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<sup>38</sup> Mørkholm, *EHC*, 4-6. It is worth noting, for instance, that three of the forty-five hoards from the third century that are recorded at *IGCH*, 865-6 and 1369 (= *CH* VIII, 324), and two of the fourteen recorded at *CH* VIII, nos. 300 and 312, are securely dated to the second half of the third century BC.

<sup>39</sup> Hatzopoulos, *Institutions* II, 108-10, no. 93.

<sup>40</sup> That the battle took place on a coast is suggested by Justin: '...ad litus conuertuntur (sc. Galli). Ibi dum naves incautius diripiunt, a remigibus et ea exercitus parte, quae eo cum conjugibus et liberis confugerant, nihil tale metuentes trucidantur' (25.2.6). Cf. Nachtergaeel, *Galates*, 179, n. 231.

<sup>41</sup> Cf. chapters 1.2, 3.0, 5.0.



with a reversed legend order to both naval battles, of no. 151 to the first period of issue and of nos. 101-2 to the third period of Antigonid tetradrachms, fails to relate the striking of the Antigonid gold staters to either event. It might be argued that the battle off Kos is only vaguely favoured by the dedication at Athens in c. 250 BC to Athena Nike of stelai *in memoriam* of the Celtic invasion at Delphi by Herakleitos, from the deme of Athmonai. This dedication may have been preceded by the gold staters in the name of Antigonos, carrying Athena on the obverse and Nike on the reverse (chapter 2.1)<sup>42</sup>.

It may be argued that either of these victorious naval battles enabled Gonatas to revive the debate regarding the Antigonid claims over the Aegean and to legitimise his presence in the area, as a worthy successor of his father. The same occasion may have accounted for the rearrangement of the legend on the above-mentioned Pan head tetradrachms. In fact, the outstandingly good quality of the engraving both on the gold staters and on the *Pan head/Athena r., kalathos* tetradrachms<sup>43</sup> and the similarity of the carefully and regularly engraved legend letters suggest that the gold staters and the *Pan head/Athena r., kalathos* tetradrachms were not only contemporary but also made by the same hand: the employment of a major artist for these celebratory issues is not incompatible with the intellectual environment in the Makedonian court during the reign of Gonatas<sup>44</sup>, and the impact of either battle may, after all, have reinforced this decision.

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Even though the date of introduction of the Alexander-type silver tetradrachms in the name of king Antigonos is obscured by their absence from hoards, it is certainly not unrelated to the frame already provided by the structure of the main Makedonian mints during the issue of the posthumous Alexander tetradrachms. Their initial allocation to Antigonos Monophthalmos<sup>45</sup> was challenged by E. T. Newell, who favoured their assignation to Antigonos Gonatas, on the grounds of their typically Makedonian fabric and of the fact that Monophthalmos never gained control of Makedonia<sup>46</sup>.

However, certain of Newell's observations are not confirmed by the systematic

<sup>42</sup> IG II<sup>2</sup> 774 = *Syll*<sup>3</sup> 401; S. Tracy, 'Two Attic letter cutters of the third century, 286/5-235/4 B.C.', *Hesperia* 57 (1988) 303-22, esp. 304, pl. 85-7; Habicht, *Unters.*, 71, n. 18. Dinsmoor favoured a date long after the victory over the Celts for this decree; Nachtergaele suggests a date during the period of Athenian independence, cf. Nachtergaele, *Galates*, 180-1, n. 237; Mikalson, *Religion*, 164, with earlier bibliography.

<sup>43</sup> Chapter 3.2.2.

<sup>44</sup> Tarn, *AG*, 223-56; Erskine, *Hellenistic Stoa*, 75-95; Gabbert, *AG*, 69-70.

<sup>45</sup> Mionnet, *Description*, Suppl. III, 244. Following Mionnet, Head assigns these coins to a Peloponnesian mint, struck under Demetrius Poliorketes in the name of his father Antigonos in c. 303 BC: Head, *HN*, 229, fig. 140.

<sup>46</sup> *DP*, 14, n. 1.



reconstruction of the coinage in the name of Gonatas<sup>47</sup>. Nevertheless, his relation of these transitional silver specimens to the Makedonian posthumous Alexanders struck during the reign of Gonatas is confirmed by their obverse link with the Monogram variety<sup>48</sup>; the latter has been taken by Lee Avdoyan, a student in Margaret Thompson's Columbia seminar of Spring 1971, as the last of a series issued in Makedonia under Pyrrhos. The transitional Alexanders have been taken to represent the first issue of Antigonos on regaining Makedonia from Pyrrhos of Epeiros, by Newell and, more recently, by Lee Avdoyan<sup>49</sup>. This suggestion is followed by R. W. Mathisen in his systematic die study of the Makedonian posthumous Alexander tetradrachms. On the other hand, I. L. Merker assigns this coinage 'very early in the reign of Antigonos Gonatas', that is, according to Hyla A. Troxell, shortly after 276 BC<sup>50</sup>.

Particular features of this coinage suggest that it was struck in the first period of coin production in Makedonia under Gonatas, raising the probability that it constituted the inaugural silver issue in the name of Antigonos Gonatas after the demise of Pyrrhos, which left him as the unacclaimed heir to the Makedonian throne. The progression of wear on their obverse die, in the first place, with a developing die break off Pan's nose which is repaired in the last two specimens, and the monogram they share with the Alexander variety, place them towards the end of the posthumous Alexander varieties of the Monogram group. Mathisen dates them to a late stage in the production of the Makedonian posthumous Alexanders and assigns them to Pella, but the remaining uncertainties regarding the sequence of the latter render their attribution to a specific mint difficult<sup>51</sup>.

The divergences in the depiction of Zeus on the reverse are not incompatible with the flow of the posthumous Alexander tetradrachms issued in Amphipolis; they may be taken to suggest the issue of certain posthumous Alexander varieties within a shorter period<sup>52</sup>. The

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<sup>47</sup> Monogram 1 on these coins, for instance, which Newell believed to also occur on the coins of Antigonos Gonatas with his individual types and on Alexanders with Alexander's name, and he assigned to Pella, is in fact absent from the silver coinage with Antigonos' individual types.

<sup>48</sup> Hyla A. Troxell, 'The Peloponnesian Alexanders', *ANSMN* 17 (1971) 41-94, esp. 75, n. 68, pl. XIX.2; Mathisen, *Silver Coinages*, 95-6, pl. XX.27; Price, *Alexander*, 141, 145.563, pl. CLVIII.E). H. Gaebler prefers their assignation to Monophthalmos rather than Gonatas (*AMNG* III.2, 179.3).

Troxell (*ibid.*) reports three posthumous Alexander tetradrachms from the same obverse die as the transitional Alexanders in the name of Antigonos, with the same reverse markings, but coming from different reverse dies. On the coin from London, cf. Price, *Alexander*, 144, no. 553, pl. XXXIII.

<sup>49</sup> These suggestions are reported in Hyla A. Troxell, 'The Peloponnesian Alexanders', *ANSMN* 17 (1971) 41-94, esp. p. 76, n. 68, pl. XIX.2; Mathisen, *Silver Coinages*, 104-5, n. 32.

<sup>50</sup> Merker, *Silver Coinage*, 39; Hyla A. Troxell, 'The Peloponnesian Alexanders', *ANSMN* 17 (1971) 75, n. 47.

<sup>51</sup> Mathisen, *Silver Coinages*, 95-6, pl. 20.27-8, 21.29 (judging by the looser locks of the mane on the lion's scalp on the obverse).

<sup>52</sup> The figure on the first reverse is stylistically reminiscent of the Helmet group (Price, *Alexander*, nos. 625; 629a-b, 521-2 (legs of stool)); the second, of the Uranopolis, the Triton and the Monogram group (Price, *ibid.*, nos. 522, 531, 546, 553, 606, 620, 625); the third and fourth, of the Omikron-Kappa, Monogram and Grape group (Price, *ibid.*, nos. 532a-b, 534; 572, 578, 617, 622 (figure and legs of stool), 629b; 637, 639); the fifth resembles earlier issues from Amphipolis, dated between the 290s and the 270s.



sceptre of Zeus is always carefully rendered, with a lotus-tipped ending similar to that on the silver tetradrachms of Poliorketes from Pella in no. 2 (cf. chapters 2.1, 3.2.1)<sup>53</sup>.

Despite the good quality of the Zeus on most of these coins, the irregular and rapidly engraved legend letters indicate their hasty production; the attribute ΒΑΣΙΛΕΩΣ in the legend sets the acquisition by Gonatas of the royal title (yet without a kingdom), after the death of his father in 283/2 BC, as a plausible *terminus post quem* for their issue<sup>54</sup>. The order of the legend is reversed in the third die combination: the name of the king is transferred from the r. to the l. and his title is on the r. rather than on the l. There is a tendency towards a more careful engraving of the legends, with smaller characters fitting into the small flans.

Finally, the various combinations of the letters E and K, which constitute the monograms on the reverse of these coins, relate them to the Omikron-Kappa and to the Monogram group of the Makedonian posthumous Alexanders.

The dotted border on the obverse and reverse (except the reverse of the second die combination, which is without a dotted border) also indicates care in the engraving, echoing perhaps that on two specimens of the *Athena r./kalathos* variety with the legend ΒΑΣΙΛΕΩΣ on the l. and ΑΝΤΙΓΟΝΟΥ on the r. on the reverse, but the fact that the Alexander tetradrachms are off-centre differentiates them from the carefully centered Pan head issues, possibly as a result of the smaller flans for these posthumous Alexander tetradrachms or of a less advanced minting technique, presumably at an earlier stage of the functioning of the mint.

A date early in the reign of Gonatas for the transitional Alexander tetradrachms is confirmed by the parallel of early issues of the Diadochoi and Epigonoi, with the Alexander types but in their names. The early silver issues of Lysimachos, Poliorketes and king Areus of Sparta<sup>55</sup>, for instance, might form an analogy, alongside those in the name of Antiochos I (281-261) from Antioch and the Alexander silver coinage in the name of Seleukos I, struck at Pergamon between 279 and 271 BC<sup>56</sup>.

Tentative changes in the order of the legend may have taken place in Gonatas' inaugural issues. The legend initially echoes that on the silver tetradrachms of his father, with his name on the r. and with his royal title on the l., but it conforms on the last three specimens to the contemporary posthumous Alexander tetradrachms, with the name of Alexander on the l. The last form of the legend is not only retained in the individual issues of Gonatas, but it may

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<sup>53</sup> Newell, *DP*, 83.74-5, pl. VII, 5-6.

<sup>54</sup> They need not have been introduced after 277 BC, as is suggested by Mathisen and Price, for Antigonos had already acquired the title of king after the death of his father in 283 BC, prior to his official rise to the Makedonian throne; see chapter 1.2. Cf. M. B. Chambers, 'The first regnal year of Antigonos Gonatas', *AJPh* 75 (1954) 392 ff.

<sup>55</sup> Lysimachos: M. Thompson, 'The Mints of Lysimachus', in *Essays Robinson*, 163-82; Mørkholm, *EHC*, 81, nos. 176-7. Poliorketes: Newell, *DP*, p. 18-9, 22-3, 60-1, 70-5, 80, 101-3; Mørkholm, *EHC*, 778. Areus of Sparta: Grunauer-von Hoerschelmann, *Lakedaemonier*, 2.

<sup>56</sup> Alexanders in the name of Antiochos I from Antioch: Newell, *WSM*, nos. 931-2. Alexanders in the name of Seleukos I at Pergamon: *ibid.*, nos. 1531-6.

also have functioned as a prototype for that on the rare silver tetradrachms with Alexander types but in the name of king Areus (plate 48.A)<sup>57</sup>. The inaugural silver coinage in the name of Antigonos may therefore be dated with some certainty between Gonatas' recovery of Pella from Pyrrhos in 272 BC and the demise of Areus on the battlefield in 265 BC.

A possible relation of these tetradrachms with the transitional gold staters and with the *Pan/kalathos, Athena r.* tetradrachms, however, is not particularly favoured, despite the name 'Antigonos', which runs the reverse of all these specimens. The relation of the gold staters with these silver tetradrachms has been put forward by Newell, Gaebler and Mathisen<sup>58</sup>, on the analogy of the association of the posthumous Alexander gold staters to the Monogram group of Alexander tetradrachms. This is challenged by the absence of common control marks between the Antigonid transitional gold staters and tetradrachms and the posthumous Alexanders and, secondly, by the contrast between the hasty legends on the transitional tetradrachms, on the one hand, and the elaborate characters on the reverse of the transitional staters, on the other hand. Moreover, the naval allusion latent in the *aphlaston* on the reverse of the gold specimens does not have any parallel in the silver tetradrachms in the name of Antigonos. In a similar way, the occurrence of a dotted border on both the Alexander and the *Athena r., kalathos* variety is offset by their divergence in control marks, in their striking technique and in the quality of their engraving. The Alexander tetradrachms in the name of Antigonos may therefore be dissociated from the gold staters and from the *Athena r., kalathos* tetradrachms. The former might mark an earlier incident, such as Gonatas' unacclaimed recovery of the Makedonian throne after the demise of Pyrrhos, whereas the last two might celebrate a naval victory or other major event.

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<sup>57</sup> Hyla A. Troxell, 'The Peloponnesian Alexanders', *ANSMN* 17 (1971) 41-94, esp. p. 75-6, n. 68, pl. XIX.2; Grunauer-von Hoerschelmann, *Lakedaemonier*, 2.

<sup>58</sup> Newell, *DP*, 14-15, n. 1; Gaebler, *AMNG* III 1, 17.1-3, pl. XXXII.21-2; Mathisen, *Silver Coinages*, 94-6. pl. 20.27-8; 21.29.



## 2.4.2 The Introduction of the Pan Head Tetradrachms

The Pan head tetradrachms constitute the core of the numismatic production under Gonatas, and they have long been believed to have been launched as currency subsequent to his rise to the Makedonian throne. Only recently have attempts to achieve a more accurate date for their introduction shifted from remarks on the iconographic allusions on the coinage to tentative observations of its internal structure and to the evidence of the hoards. The first epiphany of Pan at Delphi against the Celts in the 270s<sup>1</sup> and the reference to τετραχμα Ἀντιγόχεια in the inscriptions from the Athenian Asklepieion<sup>2</sup> flag 279 and 256/5 BC as respective *termini, post* and *ante quem*, for the launching of the new silver coinage.

In numismatic terms, R. W. Mathisen's systematic study of the posthumous Alexander tetradrachms minted in Makedonia in the 280s and in the 270s resulted in the shift of the introduction date of the Pan head tetradrachms from the battle of Lysimacheia (277 BC) to after the death of Pyrrhos and the widespread recognition of Gonatas as king of Makedonia. The suggested causal relation of this coinage with the increased financial needs for the Chremonidean war supported this date further<sup>3</sup>.

The restoration of the iconographic allusions on the new tetradrachms and their systematic reconstruction (chapters 2.1, 3.2.1) allow for a revision of past scholarship regarding their introduction, leading the way to new suggestions<sup>4</sup>. Having dissociated the coins from the allegedly contemporary events alluded to in their iconography, a different methodology is required for a more accurate definition of the launching by Gonatas of his individual types. A clearer outline of the internal structure of the coinage may facilitate its more precise dating, in the light of the wider context, that is, (a) archaeological evidence; (b) the hoards; (c) other coinages; (d) the bronze coins; (e) literary, epigraphic and other references. Finally, an investigation into the political and economic setting *vis-à-vis* the launching of the new coinage may shed new light on the function of its iconography within the given historical context.

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<sup>1</sup> Chapter 2.1.

<sup>2</sup> *IG II<sup>2</sup>*, 1534B, l. 231, 266, 272, 279; S. V. Tracy, 'Five letter-cutters of Hellenistic Athens (230-130 B.C.)', *Hesperia* 47 (1978) 267, l. 5, 11, 15-16: ca. 215 BC; cf. Habicht, *Studien*, 34 ff.; Aleshire, *Asklepieion*, 250-305, 325.

<sup>3</sup> Mathisen's suggestion is a development of Lee Avdoyan's dating of the Helmet group and of the Pan head tetradrachms to after 272 BC, in Margaret Thompson's Columbia Seminar of Spring 1971: Hyla A. Troxell, 'The Peloponnesian Alexanders', *ANSMN* 17 (1971) 75, n. 68. Price has reservations in accepting the striking of the new coinage as late as 272/1 BC: *Alexander*, 141. For a summary of past views, see Πασχίδη, *Προσειδώνες και Αντίγονοι*, 236, n. 5, 238, n. 6.

<sup>4</sup> See n. 1.



## 1. *Internal Structure*

A clearer picture of the possible relation of this coinage to other contemporary royal issues and secondly to the historical context emerges from a brief outline of its structure. The Pan tetradrachms fall stylistically into four main periods. The first period tallies with obverses of a 'plain style', with a schematic and flat depiction of the young head of Pan, and presumably all coming from one engraver. The obverses of the next two periods become more personified: Pan's features and the 'star/crescents' are plastically rendered in period II and become more mature in the third period (chapters 4.1, 5.1). Finally, to a fourth period may be dated some elegant, plastically rendered Pans with projecting chin and eyebrows, and deeply hidden eyes, which fit in with the 'expressive' style of the last quarter of the third century (chapter 6).

The bulk of these tetradrachms carry Athena l., alongside the crested helmet symbol l. on the reverse. The first period ends with four die combinations of a poor quality, with a monogram l. on the reverse instead of the helmet (chapter 3.2.2, nos. 140-4). The only small denomination coinage from this period is a silver drachma with the same types as the silver tetradrachms and with monogram 9. Finally, the small series of the fourth period with a winged instead of a crested helmet is associated with a few drachmae with a winged helmet l. and with the letters TI r. on the reverse (chapter 6.2).

The Pan tetradrachms with the helmet symbol were presumably meant to finance military enterprises. However, certain small issues of high artistic quality have been identified as 'special' via their distinct control marks. In the first place, a few silver tetradrachms with Athena r. on the reverse, absent from hoards, have been assigned to the first period, presumably celebrating a major event (chapter 3, nos. 145-51)<sup>5</sup>. A second, particularly elaborate group, with a Makedonian shield decorated by 'units' with three concentric 'crescents' and with the legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ around the badge, has been assigned to the third period (chapter 5.3, nos. 101-5). The change in the direction of the *pedum* on the obverse of this group, as well as on a Pan group with a trident symbol and on that with the letter X l. on the reverse might coincide with military achievements of the king during the third period, such as the recapture of Korinth or the battle of Andros.

Assigning this coinage, in its given structure, to its appropriate historical context involves a closer examination of the first period of the Pan head tetradrachms. Their stylistic divergence from the 'dramatic style' of the 270s and their good quality suggest the introduction of the new coinage within the context of the Chremonidean war. As shown elsewhere (chapters 2.2.4, 3.2.2), thirty-five obverse dies were in use during this period, all combined with nine monograms.

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<sup>5</sup> Touratsoglou assumes from their absence from hoards their early issue and short duration: *DM*, 71.



## 2. *The wider context*

### (a) *Archaeological evidence*

The absence of isolated specimens from systematic excavations of sites is not puzzling, for few silver tetradrachms are generally found in excavations<sup>6</sup>.

A dating for this coinage in the late 270s BC might be supported archaeologically by the strikingly similar decoration on the known fragments of the Makedonian shields belonging to this period, i.e. the fragment from Dodona, that from Vegora and that from Mit Rahina, with the decoration on the obverse of the Pan head tetradrachms (chapter 2.1; plate 49.1-2)<sup>7</sup>.

### (b) *Hoard*s

As far as the earliest hoards with Pan head tetradrachms in Makedonia and Thessaly are concerned, *Phayttos*, 1956 and *Verge ('Perge')*, 1955, with posthumous Alexander and Pan head tetradrachms, are respectively dated to c. 260 and c. 260-230 BC (chapter 2.3, fig. 9; chapter 3, fig. 11b). In fact, the early date suggested by Mathisen for the earliest hoard with Pan head tetradrachms, the *Verge ('Perge')*, 1955 hoard (*IGCH* 455), does not stand on firm ground: Mathisen initially accepted that the Pan head tetradrachms were issued at the beginning of Gonatas' reign, in order to update this hoard from the 260s to 275-0 BC<sup>8</sup>. He shifted upwards the dates of the two coins which might have been issued after the 270s, that of Antiochos I and the Pan head tetradrachm. He then used the same hoard in order to redate the Pan head tetradrachms to the late 270s. Their introduction to the 270s is therefore based on a circular argument. Finally, a Pan head tetradrachm with Athena r. included in the first lot of *Thessaly*, 1994 (*CH* VIII (1994) 517) has led Touratsoglou to date this lot to c. 270 BC, presumably echoing Imhoof-Blumer's conviction regarding the stylistic anteriority of the rare variation with Athena r. on the reverse to the varieties with Athena l., but with no firmer

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<sup>6</sup> Remarkable is the absence of Makedonian silver coins from the main excavations at Athens between 264 and 261: K. Lönnqvist, 'Studies on the Hellenistic coinage of Athens: the impact of Makedonia on the Athenian money market in the 3<sup>rd</sup> century BC', *Papers and Monographs of the Finnish Institute at Athens*, vol. VI (1997) 119-212, but the general rarity of silver tetradrachms in securely dated archaeological contexts weakens the lowering of the date of the inscription of the Inventory V of the Asklepieion at Athens from 261/0 BC (Ferguson) to the 250s.

J. Kroll suggests that 'most of the war currency in Athens was Macedonian' after 261 BC in and around Athens. On the circulation of Antigonid bronzes in Athens, see chapter 2.2.1.

<sup>7</sup> Liampi. *MS*, 4-5, 52-5, S 2-3.

<sup>8</sup> Chapter 2.3.

supportive evidence<sup>9</sup>. A lower date for the *Athena r.* variety inevitably deprives the high date for this lot of any firm ground (chapter 2.3, fig. 9).

The testimony of the hoards is therefore not conclusive. Their reappraisal points to a tentative *terminus ante quem* of approximately 260 BC<sup>10</sup>.

(c) *Other silver coinages*

The difference between the monograms of the transitional Alexander tetradrachms in the name of king Antigonos and his individual issues weakens their direct association. However, the former are obverse linked to the Monogram variety of posthumous Alexander tetradrachms, with which they share a monogram, and monograms of the latter also occur on the Helmet and Omikron-Kappa variety of posthumous Alexander tetradrachms.

A corpus of the posthumous Alexander tetradrachms is still desired, but the systematic reconstruction of the silver issues of Antigonos Gonatas calls for a revision of Mathisen's case. Mathisen's remarks on the structure of the Pan head tetradrachms derive from his study of the posthumous Alexander tetradrachms struck in Makedonia in the 270s. The end of the posthumous Alexanders and the inauguration of Gonatas' individual issues in Amphipolis in approximately 271 BC is supported by the common monograms on the Helmet group of both the posthumous Alexanders and of the Pan head variety, which are thus interpreted as indicators of their concomitant production. Finally, the omission of the helmet, which regularly occurs as a symbol l. on the reverse of their vast majority, and the transfer of monograms 5, 9 and 11 from the r. to the l. instead is assigned to the occupation of the mint official represented by the crested helmet with the Helmet group of the posthumous Alexander tetradrachms; it is on these grounds that Mathisen places those tetradrachms at the beginning of the Pan head issues.

There appears to be some inconsistency in Mathisen's explanation of the absence of the helmet on a small number of Pan head tetradrachms. This he does by positing the occupation of the main mint official with the Helmet Alexander group at the time of the issue of the Pan head tetradrachms and also by assigning two specimens of poor quality to the beginning of the new types. However, the ideological burden of the new coinage launched

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<sup>9</sup> Touratsoglou, *DM*, pl. VI, n. 1.

<sup>10</sup> S. Schmidt, 'A group of Early Hellenistic Pottery from a Well in Eretria', *Επιστημονική Συνάντηση για την Ελληνιστική κεραμική*. Χανιά, 6-13 Απριλίου 1997, 82; P. Ducrey-S. Schmidt, 'Les activités de l'École Suisse d'archéologie en Grèce 1996', *Antike Kunst* (1997), Heft 2, 103-7, with further bibliography on the at least partial destruction of Eretria by Gonatas around 265 BC. On the two hoards with similar content, see P. G. Kalligas, 'Ανασκαφή στην Ερέτρια 1981', *AE* 122 1983 (1985) 113-6; Mando Karamessini-Oikonomidou, 'Δύο νομισματικοί θησαυροί από την ανασκαφή στην Ερέτρια', *AE* 122 1983 (1985) 137-47.



allegedly after the death of Pyrrhos would have required tetradrachms of a generally good quality. In fact, it may be argued that, rather than suggesting continuity between the two series, the monograms shared by the Makedonian posthumous Alexanders and by the Pan head tetradrachms may just as well imply their parallel issue, particularly as certain of the hoards discussed by Mathisen in his study of the posthumous Alexander tetradrachms are not incompatible with a later date (cf. chapters 2.2.4, 2.3, 2.4).

Finally, the Chremonidean War need not be considered the only occasion appropriate for the introduction by Gonatas of his royal types. Financing the army and the fleet in view of the battle at Lysimacheia, and later those involved in the naval conflicts off Kos and Andros against the Ptolemies also caused an increased need for currency.

(c) *Bronze coins*

Even though the study of the bronze coins in the name of Antigonos Gonatas is beyond the scope of this thesis, it may be said, albeit provisionally, that, unlike the *kalathos* or the letter X of the *Athena r.* variety, which are not attested in bronze specimens, the Makedonian helmet of the *Athena l.* variety occurs as a symbol on the reverse of many bronze specimens struck under Gonatas. A more detailed typological study of the Makedonian helmet on the silver and on the bronze specimens is likely to enhance our knowledge of their chronology.

(d) *Literary, epigraphic and other testimonia*

Further indications may be provided by literary and epigraphic *testimonia*. An argument *ex silentio* may be conducted for the date of introduction of the Pan head tetradrachms by appeal to the philosopher Zeno's comparison of Attic and Alexandrine tetradrachms, dated c. 265 BC: Zeno concludes that they both have the same value, even though the former are roughly and carelessly cut, whereas the latter are more attractive and well centred.

Ἐφασκε δὲ (sc. Ζήνων) τοὺς μὲν τῶν ἀσολοίκων λόγους καὶ ἀπηρτισμένους ὁμοίους εἶναι τῷ ἀργυρίῳ τῷ Ἀλεξανδρινῷ· εὐοφθάλμους μὲν καὶ περιγεγραμμένους καθὰ καὶ τὸ νόμισμα, οὐδὲν δὲ διὰ ταῦτα βελτίονας. τοὺς δὲ τούναντίον ἀφωμοίου τοῖς Ἀττικοῖς τετραδράχμοις εἰκῇ μὲν κεκομμένους καὶ σολοίκως, καθέλκειν μέντοι πολλάκις τὰς κεκαλλιγραφημένας λέξεις (Diog. Laert. 7.18 = v. Arnim, *SVF* I 81 = Wilamowitz, *Antigonos* 119).

Knoepfler identifies the ἀργύριον Ἀλεξανδρινόν with the coinage with the types



(generally) of Alexander, irrespective of mints. The comparison between the Attic tetradrachms and their Alexander counterparts in this passage, dated to c. 265 BC, has been justified by Knoepfler by the fact that the posthumous Alexanders, both municipal and royal, had reached the peak of their reputation by 270-265, even though they presented signs of wear<sup>11</sup>.

Notable is the absence of reference to the Pan tetradrachms, as representing the new valid Makedonian coinage. Knoepfler considers that the Alexander tetradrachms (an international and well established issue) would have been more appropriate for comparison than the new royal issue, but it may be argued that the better quality and presumably the higher value of the fresh coinage would have rendered it equally suitable for a comparison with the Attic tetradrachms, particularly as they also followed the Attic weight standard. The omission of the Pans may be random or to an extent justified by the more limited circulation of the newly introduced royal issues, compared to the Alexander and the Attic tetradrachms; it might, however, raise the suspicion that the Pans had not been introduced, or, at least, were not widely in use in the Athenian market by 265 BC.

In fact, the specific references to τετραχμα Ἀντιγόχεια in the inventories from the Athenian Asklepieion, in 256/5 BC, 251/0, 250/49, 249/8 and 215 BC constitute the earliest firm epigraphic testimony of Gonatas' individual types<sup>12</sup>. That the inventory of 256/5 BC is the first surviving record from the Asklepieion after the Chremonidean war deprives this reference to the τετραχμα Ἀντιγόχεια from any value in determining the chronology of the individual Antigonid issues. This deliberate assignation of a specific variety of tetradrachms to Antigonos justifies their identification with his main individual issues, for, for one thing, the continuing references to τετραχμα Ἀντιγόχεια as late as 215 BC are incompatible with the short duration of the very rare transitional issue with the Alexander types but with the legend of king Antigonos on the reverse. Furthermore, the earliest date for the Poseidon head tetradrachms, which were also possibly struck under Gonatas, is 246 BC (chapter 2.4.3). It is also worth noting that the types selected for the typical bronze issue of Gonatas, with the head of Athena/Pan with trophy, are variations of those on his tetradrachms<sup>13</sup>. The remaining candidates for the issues mentioned in the inscriptions from the Asklepieion are the Pan head tetradrachms, which had therefore been introduced by 256/5 BC.

With these limitations in mind, we are left to consider three possible occasions for the introduction of the Pans between 278 BC and 256 BC, that is, 272/1, 268/7 and 265/4 BC. The rise of Gonatas to the Makedonian throne after the demise of Pyrrhos and his preparations

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<sup>11</sup> D. Knoepfler, 'Tétradrachmes attiques et argent 'alexandrin' chez Diogène Laërce, première partie', *Museum Helveticum* 44.4 (1987) 241 (text); idem, 'Tétradrachmes attiques et argent 'alexandrin' chez Diogène Laërce, deuxième partie', *Museum Helveticum* 46 (1989) 193-230. On the Athenian context, see also Erskine, *Hellenistic Stoa*, 90.

<sup>12</sup> See above, n. 2.



for the Chremonidean war have so far been taken to justify the inauguration of the new coinage in 272/1 BC; on the other hand, the small number of the obverse dies from the first period, their absence from important numismatic contexts of the 260s and the low dates of the earliest hoards with Pan head tetradrachms allow for their introduction even during the Chremonidean war.

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### *The historical context*

The international political scene in the reign of Gonatas was dominated by his rivalry with Ptolemy II and III. The conflicting vested interests of both Gonatas and the contemporary Ptolemies in the Aegean made a clash inevitable. The Ptolemaic strategy had two main trends: on the one hand, the Ptolemies instigated and supported revolts of the Greeks on the mainland against Gonatas, in order to distract the Makedonian king from the Aegean; the Chremonidean War *per se* was an expression of this policy. On the other hand, official demonstrations of wealth and power emphatically underlined the Ptolemies' attachment to thalassocracy: penteteric processions were organised in Alexandria from 280-75 onwards<sup>14</sup> and honorary silver decadrachms were struck in honour of Arsinoe Philadelphos posthumously (268 BC)<sup>15</sup>, followed by gold octodrachms and silver tetradrachms in her name in c. 261/0 and by gold octodrachms and tetradrachms glorifying the dynasty a little earlier in the 260s<sup>16</sup>. Finally, the dispatch to Gonatas of a large fish and green figs by Patroklos, Ptolemy's admiral during the Chremonidean war, presumably in the context of the naval battle between Gonatas and the Ptolemies off Kos, outwardly revealed the importance that both the Antigonids and the Ptolemies attached to thalassocracy: 'ἡ γὰρ θαλαττοκρατεῖν ἡμᾶς φησι Πάτροκλος ἢ τῶν σύκων τρώγειν'<sup>17</sup>.

<sup>13</sup> *SNG Cop*, 1205-13; Gaebler, *AMNG* III.2, 187.6-188.11, pl. XXXIV.4 (obv.) - XXXIV.6 (rev).

<sup>14</sup> P. Fraser saw in these processions successive penteteric celebrations which continued into the reign of Philadelphos, the one described by Kallixeinos, dating from c. 280-75 BC, being the first of the series: Fraser, *Ptol. Alex.*, I, 231-2; 'Two Hellenistic Inscriptions from Delphi', *BCH* 78 (1954) 49-67, esp. 57-8, n. 3; Rice, *Procession*, 107 (interpretation of grand procession of 280-75 BC as a veiled warning to Gonatas of the importance of Greece and of the revitalised Corinthian League to Ptolemy, presented as liberator of the Greek cities), 186, 190-1; Will, *HPMH* I<sup>2</sup>, 197 ff. Cf. Charlotte Wikander, 'Pomp and Circumstance, The Procession of Ptolemaios II', *Oath* 19 (1992) 143-50; Gehrke, *GH*, 200.

<sup>15</sup> On Arsinoe's death in 268 BC, cf. E. Grzybek, *Du calendrier macédonien au calendrier ptolémaïque, problèmes de chronologie hellénistique*, Heft 20, Basel: F. Reinhardt, 1990, 103-12; Hazzard, *Ptolemaic Coins*, 4.

<sup>16</sup> Mørkholm, *EHC*, 102-3; Hazzard, *Ptolemaic Coins*, 4-7, 29-33, 75-81; Hyla A. Troxell, 'Arsinoe's Non-Era', *ANSMN* 28 (1983) 35-70; J. N. Svoronos, *Τὰ νομίσματα τοῦ κράτους τῶν Πτολεμαίων*, Athens 1904-8, vol. I, 64-74, nos. 408-85.

<sup>17</sup> The anecdote is recorded by Phylarchos: Athen. 8.334a = *FGH* 81 F 1. Buraselis, *HM*, 159 ff. Cf. F. W. Walbank, 'Sea-power and the Antigonids', in Adams-Borza, *Macedonian Heritage*, 213-5; F. W. Walbank, 'Antigonos Gonatas: The Naval Situation', in Hammond-Walbank, *Macedonia* III, 291, n. 6.



In peninsular Greece, the wide impact of the Celtic invasion at Delphi is demonstrated by the plethora of manifestations of gratitude on behalf of many Greek political organisations and by the introduction at Delphi of a special celebration in their honour, the Soteria<sup>18</sup>. The 'rescue of the Greeks' from the Celts in 279 BC recalled similar patterns from the Persian wars, and an analogy developed between the Celts of the third century BC and the Persians of the fifth century. Pausanias, for instance, claims that the Celts at Delphi imitated Persian military tactics (10.19.11). He also argues that the number of Greeks who fought against king Xerxes at Thermopylai was comparable to those who opposed the Celts (10.20.2-5). Finally, Polybios recognises the combination of these two events in Greek history as contributing to the idea of the common cause of the 'freedom of the Greeks': 'καὶ γὰρ τοὺς τὴν Περσῶν ἔφοδον ἐπὶ τὴν Ἑλλάδα καὶ Γαλατῶν ἐπὶ Δελφοὺς εἰς μνήμην καὶ παράδοσιν ἡμῖν ἀγαγόντας οὐ μικρὰ μεγάλα δ' οἶομαι συμβεβλήσθαι πρὸς τοὺς ὑπὲρ τῆς κοινῆς τῶν Ἑλλήνων ἐλευθερίας ἀγῶνας' (2.35.7).

That the Persian legend served as a prototype for the development of the Delphic legend is shown by the fact that many of the victors' acts imitated previous acts performed during the Persian Wars: the dedication at the Delphic sanctuary of enemy arms by the Aitolians, for instance, echoes that of the Athenians after Marathon<sup>19</sup>. Moreover, the conclusion of the defensive treaty between the Lakedaimonians, the Athenians and their respective allies in 268/7 BC was legitimised through appeal to similar effective coalitions of the Greeks in the past, presumably those during the Persian and the Lamian Wars<sup>20</sup>. A return to the themes of the political discourse after the Persian wars may also be seen in the revived efforts of the allied Greeks to preserve the κοινὴν τ[ῶν] Ἑλλήνων ἐλευθερίαν and ὁμόνοιαν on the eve of the Chremonidean war<sup>21</sup>.

It may be argued that the impact of the Persian Wars was further revived and transformed in the historical memory of the Greeks in relation to their growing opposition to

<sup>18</sup> Kos: decree ordering special offerings at Delphi and in Kos (April/July 278): *Syll*<sup>3</sup> 398. Aitolians: dedications at Delphi, of a) enemy arms: Paus. 10.19.4, b) trophy and image of armed Aitolia: Paus. 10.18.8, c) statues of most of their generals, images of Artemis and Athena, two images of Apollo: Paus. 10.15.2, d) erection of monument at Thermon. Athens: painted portrait: Paus. 1.3.5; dedication of shield of Athenian Kydias to Zeus Eleutherios: Paus. 10.21.5. Patrae: statue of Apollo from the spoils taken from the Celts: Paus. 7.20.6. Delphi: Introduction of Soteria. Lise Hannestad, 'Greeks and the Celts: The Creation of a Myth', in Per Bilde et al., *Centre and Periphery*, 15-38, esp. 15-8. The head of Apollo on the obverse of silver coins struck in Rome between 275 and 270 BC might also illustrate the wide impact of the Celtic attack on Delphi on the western Mediterranean; on the coins, cf. Crawford, *RRC*, table V, nos. 18, 19. Development of the myth of sack of Delphi in Italy during the second century BC: Flacelière, *Aitoliens*, 102. See also chapter 2.1.

<sup>19</sup> Paus. 10.19.4: ὄπλα δὲ ἐπὶ τῶν ἐπιστυλίων χρυσᾶ, Ἀθηναῖοι μὲν τὰς ἀσπίδας ἀπὸ τοῦ ἔργου τοῦ Μαραθῶνι ἀνέθεσαν. Αἰτωλοὶ δὲ τὰ τε ὄπισθεν καὶ τὰ ἐν ἀριστερᾷ Γαλατῶν δὴ ὄπλα... Cf. Habicht, *Athens*, 143-4.

<sup>20</sup> *IG* II<sup>2</sup>, 687 = *Staatsvertr.* III.476 = *Syll*<sup>3</sup> 434/5, l. 9-16: 'ἐπειδὴ πρότερον...καὶ τὰς πατρίους ἐκάστοις πολιτείας'. Cf. Habicht, *Athens*, 144.

<sup>21</sup> *Ibid.*: ὑπὲρ τῆς κοινῆς τ[ῶν] Ἑλλήνων ἐλευθερίας; l. 33: ὅπως ἂν οὖν κοινῆς ὁμονοίας γενομένης τοῖς Ἑλλησι.



Gonatas in the early 260s. The allusions to 'τοῖς κ]αταλύειν ἐπιχειροῦντας τοὺς τε νόμους καὶ τὰς πατρίους ἐκάστοις πολιτείας' and to 'τοὺς νῦν ἡδίκηκότας καὶ παρεσπονδηκότας τὰς πόλεις' in the Chremonidean Decree of 268/7 BC presumably refer to the Makedonian king, whereas Ptolemy II is presented as 'σπουδάζων ὑπὲρ τῆς κοινῆς τ[ῶν] Ἑλλήνων ἐλευθερίας'<sup>22</sup>.

This turning of the Greek cities to the Ptolemies against Gonatas had been anticipated by honours paid to pro-Ptolemaic citizens in the 270s and early 260s. With regard to Athens, in particular, for which more evidence survives, the decree in honour of Laches' father Demochares (271/0), who had played a leading role in the revolt against Demetrios Poliorketes in 287/6<sup>23</sup>, and the dedication in the Stoa of Zeus Eleutherios at Athens of the shield of Leokritos, one of the liberators of Athens from the Antigonid garrison at the Mouseion in 287 BC<sup>24</sup>, may be regarded as parts of the anti-Makedonian atmosphere of the 270s. Finally, the tribute paid by the Athenians to Kallias, son of Thymochares, of Sphettos, a 'democrat' who had consistently favoured Ptolemy II, who had been in his service in 270/69 BC and who provided the Athenians with military aid, money and corn from the Ptolemies<sup>25</sup>, fits the same pattern.

The enmity towards the Antigonids found eloquent ways of expression in patterns drawn from the Persian wars. A fish and green figs were sent by Patroklos to Gonatas, for instance, just as the Skythians had sent to Dareios during the Skythian expedition a bird, an arrow and a frog<sup>26</sup>. After the end of the Chremonidean war, the Athenian Glaukon, explicitly attached to Ptolemy II, received honours both from the Koinon of the Hellenes at Plataiai as 'champion of Greek independence and unity'<sup>27</sup>, and from Ptolemy III at Olympia<sup>28</sup>. Finally, the Troizenian version of the Themistokles decree may also be a product of the same historical context<sup>29</sup>. All these incidents, paired with the dedication of an armed Aitolia on Celtic and

<sup>22</sup> *IG* II<sup>2</sup>, 687 = *Staatsvertr.* III.476 = Dittenberger, *ibid.*, l. 15-6, 33; 19. Cf. Habicht, *Athens*, 143-4. See also Erskine, *Hellenistic Stoa*, 90-5.

<sup>23</sup> Plut., *Mor.* 850f-851f.

<sup>24</sup> Paus. 1.26.2; Jessen, s. v. 'Eleutherios', *RE* V 2 (1905) 2348-9; K. Buraselis, 'Γλαύκων Ἐτεοκλέους Ἀθηναῖος μετηλλαχῶς, Παρατηρήσεις στην επιγραφή BCH 1975, 53-3', *AE* 1982 (1983) 158, n. 5. The exact date of the dedication is not known.

<sup>25</sup> Kallias had led the revolt against Poliorketes in 287/6 BC: T. L. Shear, *Kallias of Sphettos and the revolt in Athens in 286 BC*, *Hesperia*, Supplement 17, Princeton, N. J., 1978, 3-4, l. 40-78 = *SEG* 28 (1978) 60, 11.19 ff., 40 ff., 49 ff., 66 ff.; Habicht, *Unters.*, 48, 85; Gabbert, *Greek Hegemony*, 146-7; K. Buraselis, 'Ambivalent Roles of Centre and Periphery: Remarks on the Relation of the Cities of Greece with the Ptolemies until the end of Philometor's Age', in Per Bilde et al., *Centre and Periphery*, 252-3. This decree is comparable to that in honour of Phaidros, Kallias' brother, who was on good terms with Poliorketes but at least neutral to Gonatas in 255 BC (*IG* II<sup>2</sup> 682 = *Syll*<sup>3</sup>, 409).

<sup>26</sup> Cf. n. 17.

<sup>27</sup> Cf. n. 22.

<sup>28</sup> *Syll*<sup>3</sup> 462; K. Buraselis, 'Γλαύκων Ἐτεοκλέους Ἀθηναῖος μετηλλαχῶς, Παρατηρήσεις στην επιγραφή BCH 1975, 52-3', *AE* 1982 (1983) 136-9; Habicht, *Athens*, 155-6, n. 122.

<sup>29</sup> The appropriation of the 'freedom of the Greeks' by the Ptolemies in the 3d c. BC is suggested by a



Makedonian shields at Delphi in commemoration of their resistance to the Celts<sup>30</sup>, may be taken to suggest that it is also the Makedonians, together with the Celts, that now tended to be identified with the Persians.

The growing opposition of the Greeks to the Makedonians culminated in the Chremonidean War (268/7-262/1 BC) and in the final capitulation of Athens to the Makedonian king. The retreat of the Lakedaimonian troops to the Peloponnese after the unsuccessful mutiny of the Celtic mercenaries against Gonatas at Megara (Just. 26.2.7), followed by the retreat of the Ptolemaic fleet, and finally the death of king Areus I at Corinth in 265/4 BC constitute a major turning point in the war<sup>31</sup>. During the second phase, the Ptolemies systematically avoided direct military opposition to the Antigonids on land; Sparta's minimised support of the besieged Athens was offset by the orchestration of minor revolts and mutinies, in order to distract Gonatas from the destruction of the Attic *chora*. The temporary treaty of Gonatas with Athens ended with a second invasion of Attika and with the final capitulation of the city (Paus. 3.6.6; Polyæn. 4.6.20).

A major factor is the role of Central Greece during the Chremonidean War: revolts and general reaction to Gonatas effectively distracted the Makedonian king from the siege of Athens. The increased prestige and dramatic expansion of influence of the Aitolians (from the Ionian Sea to the Malian Gulf and to Euripos) after their effective opposition to the Celts at Delphi entitled them to control the Delphic Amphictyony between 280 and 190 BC<sup>32</sup>. Their opposition to the Makedonian king may have resulted partly, at least, from the conflict of their interests as pirates with his naval activities and from his co-operation, at least prior to his gaining of the throne, with pirates from the Black Sea<sup>33</sup>. However, they generally avoided

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number of inscriptions, cf. Meiggs-Lewis, *GHI*<sup>2</sup>, 23, l. 14-16, *BCH* 99 (1975) 53, 22-4; *Syll*<sup>3</sup> 390 = *Staatsvertr.* 476, l. 81; N. Robertson, 'The decree of Themistokles in its contemporary setting', *Phoenix* 36 (1982) 31-2. A. Erskine sees an influence of the Stoic School in the concepts of *homonoia*, *eleutheria* and *douleia* in the Chremonidean decree and in the inscription honouring Glaukon, but he can not ignore their origin in ideas of the fourth century BC: *Hellenistic Stoa*, 94-5.

<sup>30</sup> Paus. 10.18.7; A. J. Reinach, 'Un monument delphien. L' Étolie sur les trophées gaulois de Kallion', *JAN* 13 (1911) 177-240; Liampi, *MS*, 139-40, n. 392 (M 90-1).

<sup>31</sup> On the death of Areus, see P. Trog. *Prol.* 26: Ut defectores Gallos Megaris (sc. Antigonos) delevit regemque Lacedaemonium Area Corinthi interfecit; Plut. *Agis*, 3.4; Diod. 20.29.1. W. W. Tarn dates the event to 265 BC ('Telokles and the Athenian archons of 288/7-262/1 BC', *JHS* 40 (1920) 150-9), whereas the next year is favoured by P. Cloché ('La politique extérieure de Lacédémone depuis la mort d' Agis III jusqu'à celle d' Acrotatos, fils d' Areus Ier', *REA* 48 (1946) 29-61, esp. 52 ff.). A critical presentation of the sources and bibliography in Heinen, *Unters.*, 170, 174-5. Cf. Chr. Ehrenberg, s. v. 'Sparta', *RE* IIIA (1929), col. 1423 ff.

<sup>32</sup> On the effective countering of the Celts by the Aitolians at Delphi, see Flacelière, *Aitoliens*, 93, 104-7. Expansion of Aitolians: Flacelière, *Aitoliens*, 191 ff.; institutional aspects of expansion: Larsen, *GFS*, 202. Aitolian version of Celtic attack at Delphi: C. Champion, 'Polybius, Aetolia and the Gallic attack on Delphi (279 BC)', *Historia* 45 (1996) 316-8.

<sup>33</sup> On the co-operation of Antigonos with pirates, see, for instance, Polyæn. 4.16.18; P. Trog. *Prol.* 25; cf. *SEG* 24 (1969) 154, the decree for the strategos Epichares. Cf. Hammond-Walbank, *Macedonia* III, 259, 279, n. 3, 283-9; Gabbert, *Greek Hegemony*, 240-4; Heinen, *Unters.*, 157 ff.



direct opposition to the Makedonians<sup>34</sup>. The absence of the Aitolians from the supporters of the Chremonidean Decree is apparently offset by their conclusion of a defensive treaty with the Athenians, presumably during the first phase of the war<sup>35</sup>.

This opposition between Aitolians and Makedonians is illustrated in the participation of the Aitolian allies in (as opposed to the absence of the Makedonian allies from) the *pylaiai* of the Delphic Amphictyony at least during the first part of the third century<sup>36</sup>. The disappearance of the Thessalians from the Amphictyonic records, for instance, is assigned to the reconquest of Thessaly by Gonatas, in approximately 278/7 or 277/6 BC<sup>37</sup>. The opposition of the Aitolians to the Makedonian king possibly accelerates in the mid-260s, following the probable destruction of Eretria by Gonatas in 265 BC, when the Aitolians honoured an Eretrian, possibly Menedemos<sup>38</sup>. Finally, in 264/3 BC, three Aitolians, Nikophon, Euryos and Theodoros, are mentioned as *proxenoi* at Histiaia<sup>39</sup>.

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The shifts in the balance of power between the Antigonids, the Ptolemies and the Central Greeks may highlight the right context for the introduction by Gonatas of his individual coin types. A date of c. 271 BC may lead one to interpret the Pan head tetradrachms as coinage preparing for the Chremonidean War. This date is *prima facie* not incompatible with the later dates of the hoards, but one might wonder whether recalling the Delphic legend after his victory over Pyrrhos would have been of any particular significance. This suggested start of the new coinage in c. 271 BC is perhaps further weakened by the few obverse dies utilised during the first period of issue, assuming the exclusive issue of Pan head tetradrachms after their introduction. In other words, if the Pan head tetradrachms started in c. 272/1 BC to replace the Makedonian posthumous Alexander tetradrachms, as argued by

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<sup>34</sup> Flacelière, *Aitoliens*, 180.

<sup>35</sup> *IG IX<sup>2</sup>*, part 1, no. 176. D. Knoepfler dates the treaty between 268 and 266 BC. He assigns the absence of evidence regarding any active participation of the Aitolians during the first phase of the war to the rarity of sources from the first half of the third century: 'Les relations des cités Eubéennes avec Antigone Gonatas et la chronologie delphique au début de l' époque Étolienne', *BCH* 119.1 (1995) 137-56, esp. 150-2.

Before the conclusion of the treaty, an Athenian embassy was sent to the Aitolians: *Staatsvertr.*, 470 a 4. D. Knoepfler dates it to the beginning of the Chremonidean war, pointing out that the Athenians would have had difficulty in sending the embassy after the beginning of their siege by Gonatas: *ibid.*, esp. 151, n. 83. It may be argued, however, that the various distractions Antigonos had to tackle during the siege of Athens and the concomitant retirement of Makedonian troops would have allowed time for the dispatch of an Athenian embassy to the Aitolians even during the Chremonidean war.

<sup>36</sup> F. Lefèvre, 'La chronologie du III<sup>e</sup> siècle à Delphes d' après les actes amphictyoniques (280-200)', *BCH* 119.1 (1995) 161-208, esp. p. 166, n. 16, *contra* the assumed friendship between the Aitolians and the Makedonians: Flacelière, *Aitoliens*, 180-91.

<sup>37</sup> D. Knoepfler, *ibid.*, 170, no. 14.

<sup>38</sup> F. Lefèvre, *ibid.*, 171, no. 18-9. Habicht, *Athens*, 143, n. 80 considers the siege of Eretria to have been earlier.



Mathisen, the thirty-five obverse dies of the first period would have financed the eight years of the war. The annual production of 4.33 obverse dies during the Chremonidean War thus estimated is lower than the annual issue of 20 or 25 obverse dies of posthumous Alexander tetradrachms in the preceding period<sup>40</sup>, for instance, not least given that the financial needs for the Chremonidean War would have been no smaller than those during his struggle to establish himself in the Makedonian throne.

The single drachma associated with the early Pans carrying monogram 9 on their reverse might tempt one to relate the introduction of the Pans with a time when Gonatas laid claim to Asia Minor. His early presence in Karia is suggested by a new inscription announced from Kaunos. This inscription is the only known decree of a city in Asia Minor mentioning a regnal date of an Antigonos; it is dated to 'the fifteenth regnal year of king Antigonos' (ΒΑΣΙΛΕΥΟΝΤΟΣ Ἀντιγόνου ἔτει πεντεκαίδεκά[τ]ω[ι]), that is, according to P. Frei and C. Marek, to 268/7 BC<sup>41</sup>. If the new document refers to Gonatas and if this is confirmed in the final publication of the inscription, one might regard the Pans as contemporary with this early presence of Gonatas in Karia; the single surviving drachma from this period, however, does not support effectively this association.

The beginning of the new silver coinage during the Chremonidean war in 268/7 BC, is indeed justified by the increased financial needs of the Antigonids in view of the siege of Athens and of the naval preparations against the Ptolemies. Even if it is debated whether Gonatas built a fleet in order to challenge Egypt or whether, forced by the opposition of the Greeks, he built a fleet during the war in order to restore the *status quo* in the Aegean<sup>42</sup>, he is known to have invaded Attika with a military force, followed by ships (στρατιᾶ-ναυσίν, Paus. 1.1.1; πεζῶ-ναυσίν, Paus. 3.6.4)<sup>43</sup>.

The importance of this war might lead one to assume the, at least partial, initial coverage of the finances of the Chremonidean War on the Antigonid side with posthumous Alexander tetradrachms (cf. chapters 2.4.1, 7); the introduction of new silver coin types and the abundant production of silver and gold coins by Gonatas' rival, Ptolemy II, in the 260s

<sup>39</sup> Syll 492; F. Lefèvre, *ibid.*, 177, n. 64.

<sup>40</sup> Mathisen, *Silver Coinages*, 116-7, table 16.

<sup>41</sup> P. Frei-C. Marek, 'Die karisch-griechische Bilingue von Kaunos: eine zweisprachige Staatsurkunde des 4. Jahrhunderts v. Chr.', *Kadmos* 36.1 (1997) 1-89. The dating is based on (a) the similarity of the writing to a decree of Stratonikeia, dated after 268 BC, that is, after the Seleukid era; (b) the fact that Monophthalmos dated his years from the death of Philip Arrhidaios in November 317 BC.

<sup>42</sup> H. Heinen and Ed. Will see in the construction of an Antigonid fleet the cause of the Chremonidean war (Heinen, *Unters.*, 100; Will, *HPMH* I<sup>2</sup>, 219-21), whereas Chr. Habicht interprets it as a result of the outbreak of the war (*Unters.*, 62-3, n. 79.); F. W. Walbank, 'Sea-power and the Antigonids', in Adams-Borza, *Macedonian Heritage*, 219-20. The ships, however, with which Gonatas sailed in order to receive his father's urn in the Kyklades (Plut. *Dem.* 55) and his aid to Pyrrhos (Just. 17.2.13) suggest that Gonatas apparently held at least some minor fleet in Greece after 288/7 BC: Buraselis, *HM*, 152 ff. Cf. chapter 3.0.

<sup>43</sup> Heinen, *Unters.*, 167-9.



might provide a useful yardstick for the higher financial needs during their military conflict<sup>44</sup>. The Pans would have thus functioned as a supplement to the existing silver coinage. Might one lower their beginning even further?

The outbreak of the second phase of the war in approximately 265/4 BC is worth considering: the siege of Athens was still under way and the Spartan front was significantly weakened after the death of king Areus, but the Ptolemaic fleet under Patroklos was still in the Aegean. A demonstration of power in a presumably contemporary procession in honour of Ptolemy in Alexandria in c. 265/4 may have influenced the Greek cities in favour of Ptolemy<sup>45</sup>. Finally, the revolt of the Celtic mercenaries at Megara during the siege of Athens in 265 BC could have offered Gonatas the opportunity to recall his role in countering the Celts both during their invasion in Delphi and later, in his personal victory at Lysimacheia<sup>46</sup>.

Gonatas' authority in Southern Greece was rendered precarious by revolts in Central Greece during the second phase of the Chremonidean war. The growing enmity of the Aitolians to Gonatas, in addition to the revolt of Alexander the Molossian and to his invasion of Makedonia apparently dictated the temporary treaty between the Makedonian king and Athens. It is presumably within this context that Patroklos arrogantly stressed to Gonatas the importance of thalassocracy and that the major victory of the Makedonian king over the Ptolemaic fleet off Kos took place.

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(iii) *Iconography and policy*

An understanding of the political settings ought to illuminate the ideological function of the Pan head tetradrachms and help to define the date of their introduction. Was the selection of the particular types for the silver tetradrachms of Antigonos Gonatas significant? Which occasion would have been most appropriate for Gonatas to introduce his individual types, and so replace the existing coin tradition? It has already been shown that the introduction of the Pan head tetradrachms immediately after the accession of Gonatas is not corroborated by any contemporary evidence other than the silver coins themselves (chapter 2.1). Whether Gonatas was then in control of the Makedonian mines and forests, or whether he was in a position to issue coinage in the city soon after his recovery of Makedonia, remains uncertain<sup>47</sup>.

The combination of Pan with the stars on the obverse of the Pan head tetradrachms is

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<sup>44</sup> See n. 16.

<sup>45</sup> See n. 14.

<sup>46</sup> On the Celtic mutiny at Megara, see Paus. 3.6.5. On Gonatas' role against the Celts at Delphi and at Lysimacheia, see chapter 2.1.

<sup>47</sup> Cf. chapters 1.2, 7.



an allusion to the Celtic invasions in Greece and, as such, constitutes an eloquent example of the ideological use of invasions for the confirmation of Greek identity. The star units on the Makedonian shield recall literary parallelisms of the large numbers of the Celtic invaders with stars, as in Kallimachos' hymn 4 to Delos<sup>48</sup>. Pan, worshipped by Athenians and later by Antigonids and Ptolemies alike<sup>49</sup>, recalls both the warrior god's *epiphaneia* recorded by Pausanias in the Celtic attack on Delphi under Brennos, in 279 BC, after the unsuccessful countering of the Celts by the allied Greek forces at Thermopylai (chapter 2.1), and his intervention in the battle of Marathon in 490 BC, after which Pan had received great honours in Athens. In fact, Hdt. 6.105, copied by Paus. 1.28.4 and 8.54.6, records Pan's *epiphaneia* to the ἡμεροδρόμος Pheidippides and his promise to come and fight with the Athenians at Marathon. Pan is also mentioned in the introduction of Herodotos to the narrative of the Persian defeat at Salamis and at Psyttaleia<sup>50</sup>.

The divergences in the literary accounts of the resistance to the Celtic attack at Delphi presumably result from their chronological distance from the event and illustrate the manipulation of the retreat of the Celts by diverse political entities<sup>51</sup>. The emphasis attached to the divine protection of the sanctuary from the Celtic threat was presumably meant to minimise the role of the Aitolians against the Celts, which was recognised by Polybios. The placing of Pan, rather than Apollo, on the obverse of the silver coins suggests a chronological distance from the event of the Celtic invasion and shows that it is the Athenian version of the battle, as preserved by Pausanias, that Gonatas tried to appropriate<sup>52</sup>. The fact that it was the account of Herodotos on the Persian wars that served as a prototype for Pausanias suggests that by the time of Pausanias the parallelism between the Celtic wars and the Persian wars was a commonplace.

In view of the culminating Greek opposition to the Makedonian rule, the Delphic legend was dynamically rephrased, though potentially not in favour of Gonatas. Patterns of the Persian wars were thus manipulated in the 260s in order to legitimise the Makedonian claims to mainland Greece and to the Aegean. By placing particular emphasis on the critical role of Makedonia in the Gallic invasions in the same way as Athens in the fifth century BC

<sup>48</sup> Kallim. 4.171-6, esp. l. 174-6; see chapter 2.1.

<sup>49</sup> Dedications to Pan: Fraser, *Ptol. Alex.*, 562, 586. Terracotta heads present Ptolemies (I (posthumous), II and IV) as Pan: Svenson, *Darstellungen*, 47-8, Kat. Nr. 57, pl. 22; Kat. Nr. 59, pl. 22; Kat. Nr. 87, pl. 54. A Paneion was also constructed at Alexandria probably by Ptolemy II: Fraser, *Ptol. Alex.*, 26; 29-30, n. 209.

<sup>50</sup> Str. 9.21 (p. 398); *AJA* 7 (1903) 286; A. J. Reinach, 'Un monument delphien. L'Étolie sur les trophées gaulois de Kallion', *JIAN* 13 (1911) 177-240, pl. 5; Borgeaud, *The Cult of Pan*, 286. On parallels between the epiphanies during the battle of 480 BC with that of the sack of Delphi: P. Roussel, *BCH* (1931) 100-3; Nachtergaeel, *Galates*, 82-292.

<sup>51</sup> On the surviving tradition and on the historicity of the literary accounts of the sack of Delphi, see Flacelière, *Aitoliens*, 93-106; Nachtergaeel, *Galates*, 82-106, 175-205.

<sup>52</sup> See chapter 2.1.



had projected her contribution to the defeat of the Persians, Gonatas legitimised his claim to parts of mainland Greece and the Aegean against the Ptolemies.

The ideological references latent in the new coin types, the Pan head tetradrachms, fit in indeed with the revival of the Persian wars in the historical memory of the Greeks during the Celtic wars of the 270s and 260s<sup>53</sup>. They constitute Gonatas' eloquent reply to the attempts of the Greeks to draw a parallel between the Makedonians and the Persians, by showing the Celts as parallel to the Persians.

The appropriation of the Delphic and Persian legends by the Makedonians on these coins and the projection of a recent major chapter of Greek history from which the Ptolemies were absent confirmed the Makedonians' Greek identity in opposition to their rivals. Moreover, the Makedonian shield framing the obverse of the coins may have been meant to underline that the epilogue in this chapter was written by Gonatas in Lysimacheia: the end to the Celtic invasions in Greece was marked by his personal victory over the Celts, subsequent to which Gonatas' royalty was recognised in Makedonia, his 'spear-won land'<sup>54</sup>.

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### *Concluding Remarks*

To recapitulate, the initially accepted dates for the introduction by Gonatas of his new coin types, 279-256/5 BC, may be lowered to between 268/7 and 265/4 BC. It has been shown that the introduction of the coins in 277 BC, after the battle of Lysimacheia and Gonatas' elevation to the royal throne, does not stand on firm ground. The ideological burden of the coinage and particularly the allusions to the Persian and the Celtic wars suggest its introduction at a time of a vivid dialectic interaction between the two legends, presumably in response to an implicit identification of the Makedonians with the Celts by the Greeks of the South: the appropriation and adaptation of the Delphic legend to that of the Persian Wars, latent in the projection of the image of Pan on the obverse of the new Makedonian coins, effectively legitimised the participation of the Makedonians in the Greek world and prevented their tentative parallelism with barbarians, Persians or Celts.

This leads one to associate the introduction of individual types by Antigonos Gonatas with his political activities *vis-à-vis* the Greeks of the South. The inauguration of the Pan head

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<sup>53</sup> Paus. 10.19.11: 'Ταῦτα ἐμοὶ δοκεῖν ἐνομίσθη τοῖς Γαλάταις ἐς μίμησιν τοῦ ἐν Πέρσαις ἀριθμοῦ τῶν μυρίων, οἱ ἐκαλοῦντο 'Αθάνατοι'; 10.20.2-5: 'Πάρεστιν δὲ, ὅστις ἐθέλοι καὶ ἀνταριθμῆσαι τοὺς ἐπὶ βασιλέα Ξέρξην ἐς Πύλας καὶ τοὺς τότε ἐναντία Γαλατῶν ἀθροισθέντας'.

<sup>54</sup> For the theory of the 'spear-won land' in the Hellenistic period and for further examples on the development of such theories from the Seleukid Empire, cf., for instance, F. W. Walbank, 'Monarchies and monarchic ideas', in *CAH VII* .1<sup>2</sup>, 66; E. G. Turner, 'Ptolemaic Egypt', *ibid.*, 122; n. 5; J. K. Davies, 'Cultural, social and economic features of the Hellenistic World', *ibid.*, 296, n. 238.



tetradrachms was an essential part of the political discourse developed in view of or during the Chremonidean war. The Pan head tetradrachms may be regarded as generally contemporary with the Chremonidean decree, in which the latent enmity to Gonatas is defined by support of Ptolemy II, who is now presented as 'protector of the common freedom of the Greeks', and possibly in some relation to the treaty between the Aitolians and the Athenians. It is at that moment that the absence of the Ptolemies from the defence of Greece from the Celts in the early 270s would have been worth pointing out.

The significance of the iconography of the coinage thus shifts: rather than in direct relation to contemporary events, it acquires a special ideological burden later<sup>55</sup>. One might, in fact, be tempted to date the new coinage during the first phase of the war, between 268/7 and 265/4 BC; a revival of the Celtic legend on the eve of the new war and particularly on the occasion of the revolt of the Celtic mercenaries at Megara may have inspired the issue of the new coinage. This date agrees with the clues provided by the numismatic, archaeological, literary and epigraphical evidence and is justified by the increased financial needs of the Makedonian state for the military operations both in mainland Greece and in view of the naval juxtaposition between Antigonids and Ptolemies for control over the Aegean. The introduction of the individual coinage of Gonatas at this stage involves the initial - partial, at least - coverage of the Chremonidean war with other coinage, presumably posthumous Alexander coinage struck in Makedonia.

The Delphic allusions on the Pan head tetradrachms and the wide impact of the Celtic invasions in the Greek world justified the continuation of these types after the death of Gonatas, throughout the opposition between the Ptolemies and Antigonids in the Aegean. The defensive character of both the Makedonian shield on the obverse and of the Makedonian helmet on the reverse of these coins is reminiscent of later literary identifications of Makedonia as a 'shield' of Greece from barbaric invasions from the North<sup>56</sup>. It is only the redistribution of the political cards at the time of Philip V, and the emergence of Rome as the

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<sup>55</sup> The developing analogy between the Persian/Celtic legend of 'barbaric invasions' in the Greek world might also offer an interpretation for the crescent, which occurs as a symbol I. on the reverse of the Mu variety of Makedonian silver posthumous Alexander tetradrachms. The crescent occurs as a symbol on silver drachmae of Philip II, from Amphipolis, c. 355-49/8: Le Rider, *Philippe II*, 380, no. 110. This may be taken as an echo of that on the silver Athenian owls subsequent to their victory over the Persians: Starr, *Athenian Coinage*, 10-12; Kraay, *Archaic and Classical Greek Coins*, 64-5, pl. 11.187; Wartenberg, *After Marathon*, 6; N. Moutsopoulos-G. Dimitrokallis, *Η Ελληνική ημισέληνος/Le croissant grec*, Athens 1988, 73-81, 111-5.

Crescent as symbol of Marathon or Salamis: Seltman, *Athens*, 102-4; J. P. Six, 'Monnaies grecques, inédites et incertaines', *NC* 15 (1895) 176 (Marathon); H. Sorge, 'Der Mond auf den Münzen von Athen', *JNG* 2 (1950/1) 7-13 (Salamis). Contra Starr, *ibid.*, 11-12, Franke-Hirmer, *GM*, 89 (crescent as ornament). One might therefore be tempted to date the Mu group to the time when the parallelism of the Chremonidean with the Persian wars was well under way.

<sup>56</sup> Plb. 9.35.3: ὅτι γὰρ αἰεὶ ποτ' ἄν ἐν μεγάλοις ἦν κινδύνοις τὰ κατὰ τοὺς Ἕλληνας. εἰ μὴ Μακεδόνας εἶχομεν πρόφραγμα καὶ τὰς (τῶν) παρὰ τούτοις βασιλέων φιλοτιμίας. τίς οὐ γινώσκει; C. Champion, 'Polybius, Aetolia and the Gallic attack on Delphi', *Historia* 45 (1996) 316-28, esp. p. 323-4.



new threat to the Antigonid kingdom, that necessitated the adaptation of the numismatic iconography to the new circumstances and dictated the replacement, on the last silver tetradrachms struck under the Makedonian kings, of Pan by the hero Perseus, the protector god of king Philip V and of his son, on the badge of the Makedonian shield<sup>57</sup>.

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<sup>57</sup> For bibliography on the coinage of Philip V and Perseus, see chapter 2.5.

### 2.4.3 The Introduction of the Poseidon Head Tetradrachms

Much ink has been spilt indeed in order to determine the circumstances in which the Poseidon head tetradrachms were introduced. Leaving aside Mionnet's initial assignation of this coinage to Antigonos Monophthalmos, which has been disproved by the presence of these coins in hoards of the 240s or 220s, our choice is confined to the two kings named 'Antigonos', Gonatas and Doson (cf. chapter 2.1). Until 1960, F. Imhoof-Blumer's assignation of both types to Antigonos Gonatas was universally accepted. His suggested sequence of the related coinage was as follows: Pan/Athena r., after Lysimacheia (277 BC) - Poseidon/Apollo on prow, trident, immediately after Kos (then dated to 265 BC) - Pan/Athena l., Poseidon/Apollo on prow, later issues under Gonatas<sup>1</sup>. B. V. Head, who had initially related these coins to Doson's Karian expedition (227 BC), soon complied with F. Imhoof-Blumer's dating of this coinage to the reign of Antigonos Gonatas, and H. Gaebler, following W. W. Tarn, suggested that both series continued down to Doson<sup>2</sup>. In 1960, I. L. Merker reverted to B. V. Head's original assignation of the Poseidon head tetradrachms to the Karian expedition of Antigonos Doson. Doubts have been cast on his argumentation by Chr. Ehrhardt, K. Buraselis and later by R. W. Mathisen<sup>3</sup>. Mathisen, in particular, reassigns the Poseidons to Gonatas and argues that one or other of these tetradrachm types may have continued under Demetrios II and Doson. A little earlier, Chr. Boehringer had concurred that the Poseidons were struck by Doson, but he implied that the Pans continued under Demetrios II<sup>4</sup>.

The debate has been renewed in the 1990s. In 1994, the chronological and geographic arrangement of all the known hoards with Pan head and Poseidon head tetradrachms led Y. Touratsoglou to relate the introduction of the latter type to Doson's military payments subsequent to the Karian expedition<sup>5</sup>. Diverging from this view, P. Paschides proposed most recently the beginning of the Poseidon head tetradrachms immediately after Gonatas' naval victory over the Ptolemies near Andros, in 245 BC<sup>6</sup>. The need for a numismatic corpus for the respective issues, however, has been widely recognised as a prerequisite for a definitive discussion of this issue<sup>7</sup>.

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<sup>1</sup> Imhoof-Blumer, *Akarnanien*, 39, n. 17; *MG*, 123-31.

<sup>2</sup> Gaebler, *AMNG* III.2, 187; Tarn, *AG*, 463-4.

<sup>3</sup> Ehrhardt, *Studies*, 75-81; Buraselis, *HM*, 163, n. 182, 164; Mathisen, *Pan heads and Poseidon heads*, 29-35, who leaves it open whether the Pans ceased or continued after Gonatas.

<sup>4</sup> *Chronologie*, 99, 153.

<sup>5</sup> Touratsoglou, *DM*, 59-65.

<sup>6</sup> Πασχίδη, *Ποσειδῶνες και Αντίγονοι*, 235-58.

<sup>7</sup> Boehringer, *Chronologie*, 99: 'Noch immer sind eine Anzahl weiterer Fragen zu den Münzserien der beiden Antigoniden unbeantwortet geblieben, Fragen, die erst durch ein Corpus der Makedonischen Prägungen von Gonatas bis Doson gelöst werden können'; Picard, *Chalcis*, 66, n. 5; Mathisen, *Administrative Organisation* III, 46; Le Bohec, *AD*, 53, n. 1; Πασχίδη, *Ποσειδῶνες και Αντίγονοι*, 250; Liampi, *MS*, 110.



Past attributions of this coinage have been based on one or more of the following criteria: (i) the evidence of the hoards; (ii) the style of the coins and the internal numismatic evidence; (iii) the iconography. Underlying all these divergent reconstructions has been the uncertainty in the chronology of the two naval conflicts between the Antigonid and the Ptolemaic fleet, off Kos and Andros respectively, for control of the Aegean. A careful examination of each of these factors in the light of the systematic die study of the related coinages is likely to place the introduction of the Poseidon tetradrachms into a better perspective.

(i) *The evidence of the hoards*

The first to consider the hoard evidence in order to date the introduction of the Poseidon head tetradrachms in relation to the Pan head series was Dorothy M. Cox. In her discussion of the content of the *Gordion, 1951* hoard (cf. chapter 2.3), she accepts that both tetradrachm types in the name of 'king Antigonos' were inaugurated under Gonatas and continued down to Doson. She dates accordingly the worn Pan tetradrachm of this hoard to the late reign of Gonatas and the two Poseidons, both in excellent condition, to the time of Doson<sup>8</sup>. A consideration of three hoards, the *Larissa environs, 1937-8*, the *Eretria, 1937* and the *Gordion, 1951*, led I. L. Merker in 1960 to conclude that the Poseidons not only postdate the Pans, but also that they must belong to Doson. He utilises the introduction of the Poseidon tetradrachm type *per se* as a criterion for dating the battle of Andros within the context of the Karian expedition (227-5 BC)<sup>9</sup>. His consideration of a very limited sample of hoards<sup>10</sup> is emended by R. W. Mathisen's study of thirty-three hoards. This has yielded c. 250 and 220 BC as respective *termini ante quos* for the Pans and for the Poseidons. Mathisen considers that the twenty-year gap (on his chronology) between the introduction of the new coinage and its occurrence in hoards is analogous to the presence of the Pans in hoards later than their issue. He fails, however, to determine conclusively the beginning of the Poseidons.

Through a global overview of the geographical and chronological distribution of all the known hoards, Y. Touratsoglou reassigns the Poseidons to Antigonos Doson. He suggests that the Pans were hoarded between 260 and 200 BC in the Balkans and between 220 and 200 BC in Asia Minor, Middle and Near East, whereas the Poseidons appear in hoards of the East after 220 BC but that they rarely occur in the Balkans, and then only after 227-5 BC. He thus relates the Poseidons

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<sup>8</sup> Cox, *Gordion*, 1-19, esp. p. 8.

<sup>9</sup> Merker, *Studies*, 70-143; Merker, *Silver Coinage*, 32-52.

<sup>10</sup> Cf. Ehrhardt, *Studies*, 76-8, who also points out that the excellent condition of the Poseidon head tetradrachms from the *Gordion, 1951* hoard, dated to c. 205-0 BC, would have entailed their immediate

to Doson's military expenditure for the Karian expedition. Doubts as to his suggestions have been raised most recently by P. Paschides, who associates the absence of Poseidons from hoards of the East before the 220s with the lack of large military enterprises before the Karian expedition. He redates the earliest hoard with Poseidon head tetradrachms, unearthed at Karditsa in 1929, to c. 245-0 BC, on the basis of the tetradrachms of Antiochos II. He also considers an earlier date for a few other hoards, but he ultimately concurs that the hoard evidence cannot determine the introduction date of the Poseidon head tetradrachms<sup>11</sup>.

It is admitted that the hoards only provide a *terminus ante quem* for the launching of the second tetradrachm type in the name of Antigonos, c. 245-0 BC. Even though the low representation of Pans and Poseidons in hoards weakens any conclusions exclusively based on the hoard evidence, the *terminus post quem* for the introduction of the second Antigonal tetradrachm type may be further limited to c. 246/5 BC. For the chronology of the latest hoard with Pans and without Poseidons from the Balkans, *Eretria, 1937*, from which I. L. Merker *ex silentio* has drawn a *terminus post quem* to c. 235 BC for the Poseidons, has now been updated on the basis of new evidence to c. 245-0 BC; that is, within the context of the battle of Andros (cf. chapter 2.3). The introduction of the Poseidons is therefore confined with greater certainty between c. 246/5 and 240 BC.

Finally, a thorough look into the geographic distribution of the Poseidons reveals that neither the Poseidons nor the Pans are represented in the Eastern hoards dated between 240 and 220 BC. It is worth noting that *Meydançikkale, 1980* (c. 240-35 BC), the only hoard of the East with Pans (and no Poseidons) from this period<sup>12</sup>, does not affect the introduction date of either variety (cf. chapter 2.3). The introduction of the Poseidon head tetradrachms within that period would therefore not have been reflected in the hoard patterns of the East (see chapter 7.2).

(i) *Style and internal numismatic evidence*

The first attributions of the Poseidons to an issuing authority focused on the style and on their relation to the Pans. The prevailing argumentation provided by F. Imhoof-Blumer may be summarised in the following points: F. Imhoof-Blumer accepts B. V. Head's remarks on the similarity in style and fabric between the Poseidons and the coins struck by Philip V and by the

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withdrawal from circulation. See chapter 2.3.

<sup>11</sup> See note 6. An earlier date is suggested, for instance, for *Hija sè Korbit, 1982* (see chapter 2.3), but the depositional nature of this hoard limits its usefulness in determining the introduction date of the Poseidons.

<sup>12</sup> Cf. chapter 2.3.



first *μερίς* of the Makedonians, but he prefers to approximate the Apollo on the prow on the reverse to the time of Demetrios Poliorketes rather than to Philip V. Also on stylistic grounds, he dates the Poseidons before the Pans with Athena I. and he suggests the naval victory of Gonatas off Kos, then dated to c. 265 BC, as an appropriate context for this issue. He takes the iconography of the silver drachmae, with the bearded head r. on the obverse and with Athena Alkidemos I. on the reverse, to illustrate the transition from the Poseidons to the Pans under Gonatas. Even though the futility of any stylistic arguments for the dates of these coins has been pointed out by I. L. Merker<sup>13</sup>, Touratsoglou reverts to Head's initial stylistic approximation of the Poseidons to the silver tetradrachms of ΜΑΚΕΔΟΝΩΝ ΠΡΩΤΗΣ, in order to support the late introduction of the second tetradrachm type 'of king Antigonos'<sup>14</sup>.

More important in determining the introduction of this coinage is the internal numismatic evidence, via which some relationship between the Pan head and the Poseidon head series may be detected. A trident symbol occurs, for instance, on the reverse of both certain Pan and some Poseidon varieties (chapter 5.1.1, nos. 1-4 and chapter 6.1.2, nos. 61-5, respectively). Moreover, monograms 9, 11, 22 and the letters TI are engraved r. on the reverse of some Pan tetradrachms and r. of the main monogram on certain Poseidons. It is on the basis also of these common control marks, taken as internal links between the two individual series in the name of 'king Antigonos', that F. Imhoof-Blumer assigns both types to Gonatas. He approximates the silver tetradrachms with the trident symbol on the reverse to the silver coinage of Demetrios Poliorketes, rather than to the Antigonid bronzes carrying on the reverse a Pan erecting trophy<sup>15</sup>. The significance of these common control marks is underplayed by those who assign the Poseidon type to Antigonos Doson, notably I. L. Merker<sup>16</sup> and Y. Touratsoglou<sup>17</sup>. It has been argued above, however, that the presence of these varieties in later hoards only provides a *terminus ante quem* for the respective issues, rather than conclusively determining their introduction date. R. W. Mathisen, on the other hand, takes these common control marks (and the star symbol on the reverse of a Poseidon head tetradrachm, chapter 6.1.2, no. 56 in our catalogue) to indicate the chronological proximity of both types. Moreover, he suggests that the disparity in the ratios of (a) the duration of the respective issues (Pans : Poseidons, 6+ : 1 years), and of (b) their sizes (Pans : Poseidons, 12-13 : 6 specimens) renders the introduction of the Poseidons under Doson unlikely. He therefore concludes that the Poseidons start under Gonatas and hence coincide with some Pan head

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<sup>13</sup> *Silver Coinage*, 40.

<sup>14</sup> *DM*, 81.

<sup>15</sup> Imhoof-Blumer, *MG*, 127-8.

<sup>16</sup> Merker, *Silver Coinage*, 49.

<sup>17</sup> Touratsoglou, *DM*, 80.



varieties<sup>18</sup>. Paschides most recently, also allowing for the accidental coincidence of monograms on the two types, considered the numeric analogy of the monograms on the respective series and certain internal monogram and letter links between them, in order to conclude that the Poseidons must have been introduced under Antigonos Gonatas<sup>19</sup>.

Prerequisite to the investigation of internal and external links between the two individual Antigonid issues is a brief outline of the internal structure of the Poseidons. The second tetradrachm type in the name of king Antigonos is a generally homogeneous issue, coming from twenty-five obverse dies of excellent engraving quality. Five of the earliest groups, with archaising figures of Apollo, are signed with a second monogram or letters to the r. of the main monogram of the issue: monograms 9, 11 and 22 and the letter M occur on the first issue of Poseidon head tetradrachms. A gradual transition from the archaising figures of Apollo on the reverse of the first groups to the more natural ones on the rest of this first issue may be observed on the tetradrachms with a single monogram, from the same period. A distinct group, characterised by corpulent heads on the obverse, spreading beyond the flans, and by tall and straight figures of Apollo on the reverse, may belong either to the end of this issue or to the beginning of the next lot of Poseidons.

To a different period have been tentatively assigned coins, on the obverses of which the beard of Poseidon is rendered in curvilinear forms. The tall and thin figures of Apollo on the reverse are harmonically paired with the elaborate prows and with the small and carefully laid out legend letters. Unlike the secondary letters and monograms assigned to the first issue, which are engraved r. of the main monogram, the letters TI and ΘI are laid out beneath the main monogram. The star on specimen 56 and the trident on the last group of the series may have been allusions to the Karian expedition and may thus encourage the association of the second lot with the fourth period of Antigonid issues<sup>20</sup>. Two secondary control marks figure alongside the main symbol on the trident group, monogram 25 to the r., and the letters IE to the l. of the trident on the last two specimens. There seems to be no chronological association between this group and the *Pan-with-trident* variety.

The internal sequence of the two individual silver tetradrachm types struck under Antigonos corroborates some relationship between the Pans and the Poseidons. In the first place, a trident symbol occurs on groups from both series. Secondly, it may be argued that the monograms

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<sup>18</sup> Mathisen, *Pan heads and Poseidon heads*, 32-4.

<sup>19</sup> See n. 6, esp. 244-50.

<sup>20</sup> The star symbol might be reminiscent of that on the coinage of Philip II: Le Rider, *Philippe II*, 135, no. 59; idem, *Monnayage et Finances*, 50 (first series of gold staters); Le Rider, *Philippe II*, 49, 370-3; idem, *Monnayage et Finances*, 33-4 (silver). The trident symbol has been taken by Touratsoglou to denote a naval enterprise: *DM*, 81-2. Cf. chapter 2.2.4.



shared by the Pans and the Poseidons are not due to pure coincidence. It has been shown that the monograms on the Pans represent officials responsible for different branches of the same mint rather than annual officials (cf. chapter 2.2.4). Turning to the Poseidons and leaving aside the principal monogram, which is not paralleled by any of the control marks on silver or bronze (Antigonid) coins from within or outside Makedonia (except possibly the symbol on no. 102 of the Pans from period III), one may focus on the secondary monograms and letters, which occur on the Poseidons alongside the main monogram. Of those, nos. 9, 11 and the letters TI are among the main control marks of the Pans: the first occurs in the first two periods of the Pans, the second runs through the whole series, and the letters TI sign specimens of the last three periods (cf. chapter 2.2.4). It would be hard to imagine that the occurrence of these particular monograms on the second type with the legend 'ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ', the Poseidons, is fortuitous. Rather this betrays the involvement of some of the principal officials of the main mint, in which the Pans were produced, in the launching, at least, of the new type.

The 'hypothetical' remarks put forward by Paschides in regard to these common monograms therefore require consideration, insofar as they are supplemented by internal numismatic *testimonia*. In the first place, monogram 22 occurs on the third period of Antigonid issues, both on Group 26 of the Pans (chapter 5.1.1, nos. 106-9), and on Group 31 of the Poseidons (chapter 6.1.2, nos. 60-3). The few coins signed with this monogram, and the correction of this monogram to no. 11 on specimen 119 from period III, suggest the brief engagement of this mint official in this issue and indirectly confirm that it is the regular officials of the main Makedonian mint who, at least initially, were in charge of the new issue. The signature of monogram 11 on a single specimen is opposed to the presence of no. 9 on eight die combinations from period III. This is of particular interest if combined with the absence of monogram 9 from the third period of Pans. Paschides argues that the assignation of the Poseidons to Doson would entail the recalling of the official with monogram 9 to office 25-35 years after his first employment. He opts for the assignation of the Poseidon head tetradrachms with monogram 9 to the time of Gonatas, instead.

The employment of a homonymous official under Doson was admittedly also possible, but the absence of this monogram from the control marks on the silver tetradrachms of Philip V would then suggest a brief employment then<sup>21</sup>. Moreover, the assignation of the Poseidons with monogram 9 to the third period effectively accounts for the discontinuity of this monogram on the Pans after the second period: it is simpler to assume the assignation to this experienced official of

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<sup>21</sup> On the monograms on the silver tetradrachms of Philip V, see A. Mamroth, 'Die Silbermünzen des Königs Philippos V. von Makedonien', *ZfN* 40 (1930) 277-303, esp. p. 277; Touratsoglou, *Circulation*, 'list of monograms on coins of Philip, Perseus and in the name of Macedonians'. On the monograms on the silver coinage of Perseus, see also Touratsoglou, *ibid.*; A. Mamroth, 'Die Silbermünzen des Königs



the new Poseidon issue before his retirement. The official signing with monogram 11 was only briefly diverted to the new issue; he nearly immediately returned to the Pans.

Paschides offers the same interpretation for the letters TI, which occur on the Poseidons, on the Pans, and on the few silver Zeus drachmae. These tetradrachms and drachmae have been related to the Karian expedition of Antigonos Doson (cf. chapters 2.2.4, 2.4.2-4, 6.1.1, 6.1.3), and the second issue of the Poseidons may form part of the same context.

### (iii) *Iconography and policy*

The naval pretensions made by the combination of the bearded Poseidon head on the obverse with Apollo on the prow on the reverse of the second tetradrachm type in the name of king Antigonos, have been analysed in relation to the iconography (chapter 2.1). These point to the introduction of the new tetradrachm type subsequent to one of the following three occasions: the two naval victories of Gonatas over the Ptolemies, off Kos (dated between 262/1 and 255 BC) and near Andros (246/5 BC) offer the two alternatives (chapters 3, 5). Doson's Karian expedition (227-5 BC), the first recorded Antigonid naval enterprise in the East after Gonatas, is also worthy of consideration (chapter 6).

Past attempts to associate the Poseidons with one of these occasions have developed alongside the ongoing debate for the establishment of the chronology of these historical events. F. Imhoof-Blumer, who assigned both tetradrachm types to Gonatas, related the Poseidons to the battle of Kos, then dated to 265 BC, and argued that they were earlier than the Pans with Athena I. He thus deprived, however, Demetrios II and Antigonos Doson of silver issues. In his doctoral dissertation, I. L. Merker developed Dorothy B. Cox's remark that the Pans with Athena I. in fact antedate the Poseidon type. Diverging from Cox, who assigns both types to a period from Gonatas through to Doson, Merker begs to associate the naval connotations in the iconography of the Poseidons with the battle of Andros, which, however, he considers within the context of the Karian expedition (227-5 BC). He thus reverts to B. V. Head's initial tentative association of the Poseidons with Doson<sup>22</sup>. Through the study of a small sample of hoards, further developed in an article published in 1960, he expands Head's argumentation, based on fabric and style, in the following respects:

(i) The iconography of the Poseidons relates to the battle of Andros.

(ii) The accepted dates for *Eretria*, 1937 and for *Gordion*, 1951 point to the introduction of the

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Perseus', *ZfN* 38 (1928) 1-28, esp. p. 1; Mettout, *Persée*, pl. II. Cf. Mørkholm, *EHC*, 163-6.



Poseidons between c. 235 and c. 210-0 BC.

- (iii) Doson's Karian expedition offers an appropriate background for an important naval conflict.
- (iv) The Poseidons and the chronological context in Pompeius Trogus are not incompatible with a date of the battle of Andros under Doson. The reference to Andros in relation to Gonatas in Plutarch is a mistake for Kos.
- (v) Therefore, the battle of Andros is to be dated to the reign of Gonatas' later homonym, Antigonos Doson.

The debate has been continued in the 1980s. Redating the battle of Andros to 246/5 BC in the light of new evidence, K. Buraselis conclusively dissociated this naval conflict from Doson's Karian expedition, thus disproving an essential point of Merker's association of the Poseidons with Antigonos Doson. Buraselis also argued that the iconography of the Poseidons is better associated with Gonatas rather than Doson. Firstly, Apollo is not related to Doson but rather to Gonatas. He argued that the Apollo-on-prow was an allusion to the battle of Kos and that Poseidon on the obverse was not only a return to the numismatic tradition of the Antigonids, but also connected with the parallelism of Antigonos (probably Gonatas after Kos) with Poseidon in Sextus (see chapter 2.1)<sup>23</sup>. In 1985, independently from Buraselis' remarks, a reappraisal of the known hoards, of internal numismatic evidence and of the iconography led R. W. Mathisen to relate the Poseidons to the battle of Andros, which he dated to the late 240s, as indicated by Pompeius Trogus<sup>24</sup>.

Even if the battle off Andros (246/5 BC) has been dissociated from the Karian expedition (227-5BC), the alleged earliest presence of the Poseidons in hoards of the 220s has caused Y. Touratsoglou to suggest a causal relationship between the introduction of this type and the military expenditure for the Karian expedition, and to downdate for this purpose the *Karditsa*, 1929 hoard to the 220s (chapter 2.3). Reconstructing this view, P. Paschides focuses on the following points:

- (i) He repeats Mathisen's methodological reservations in relating the new type with the military expenditure for an imminent expedition.
- (ii) He argues that the connotations of naval sovereignty on the new coinage do not tally with the motives and results of the naval enterprise to Karia, after which the Antigonid sovereignty in the area was neither pursued nor achieved.
- (iii) On the other hand, he stresses that the new iconography is compatible with the impact of the Antigonid naval victory off Andros, as put forward by Buraselis. He suggests that the 'messages' of the new iconography (that is, the declaration, at least, of Gonatas' control of the

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<sup>22</sup> See n. 9.

<sup>23</sup> Buraselis, *HM*, 163.

<sup>24</sup> Mathisen, *Pan heads and Poseidon heads*, esp. 33-5.



Aegean and of his recapture of Korinth in 246 BC, as well as some influence on Delos) may have been put out on the peak of Gonatas' Aegean policy. The loose control of Greece through Korinth, Peiraeus, Chalkis and Demetrias and the elimination of Ptolemaic influence in the Aegean were indeed a reality for the Antigonid realm after the defeat of the Ptolemaic fleet near Andros<sup>25</sup>.

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To recapitulate, the introduction date of the Poseidons is determined by their internal structure. In the first place, the last Balkan hoard with Pans but with no Poseidons, *Eretria*, 1937, and the earliest hoard with both tetradrachm types, *Karditsa*, 1929, limit the date of the introduction of the Poseidons to between c. 246/5 BC and 240 BC. Moreover, the control marks shared between the Pans and the Poseidons not only link the two types but also indicate the introduction of the Poseidons during the third period of issue of the Pans; that is, after the battle of Andros. The iconographic connotations of naval sovereignty on the Poseidons must have acquired particular gravity on the peak of Gonatas' military and political achievements against the Ptolemies. Both tetradrachm types may have continued to be used through to Antigonos Doson.

The political message latent in the new tetradrachm type is inextricably bound up with the politics of the period. The Poseidons obviously relate Gonatas' naval achievements over the Ptolemies with the Antigonid Aegean tradition and present Apollo as protector of his flagship and hence of the Antigonid fleet. Thus Apollo, alongside Poseidon, is presented as having given Gonatas the naval victory at Andros. It has been shown that reference to the Celtic attack at Delphi had been made on the Pans (chapter 2.4.2). The Poseidons, alongside the new vase festivals introduced by Gonatas at Delos after Andros, the Soteria and the Paneia, were expressions of his piety to Apollo at the god's other major sanctuary. In fact, the unusual names of these two vase festivals, 'Soteria' and 'Paneia', were presumably meant emphatically to underline Pan's role in the Panhellenic resistance to the Celts at Delphi and indirectly to remind one of Gonatas' role in this resistance, alongside the Aitolians<sup>26</sup>.

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<sup>25</sup> See. n. 6, esp. p. 250-5.

<sup>26</sup> The gods honoured at the Soteria have been identified with the Theoi Soteres, Zeus Soter and Athena Soteira. The Paneia have been assigned to Pan, popular in Makedonia and at Delos. Tarn identifies the new festivals with 'Apollo of Delos and the gods associated with him': *AG*, 380. E. Will relates them with Pan's alleged role at Lysimacheia: *HPMH* I<sup>2</sup>, 323, cf. chapter 2.4.2. Walbank relates these names with Pan's popularity in Makedonia and with his representation on the Pan head tetradrachms (Hammond-Walbank, *Macedonia* III, 592-5). Finally, Buraselis assumes Pan's epiphany at the battle of Andros, *mutatis mutandis* to Pan's epiphany at Lysimacheia: *HM*, 145. Will, *HPMH* I<sup>2</sup>, 323.



It may be argued that this renewed emphasis at Delos on the Celtic attack at Delphi and the reestablishment of the links with the Antigonid Aegean policy and Delos were the two sides of the same mainstream Antigonid policy *vis-à-vis* mainland Greece and the Aegean. Both the Delian foundations and the Poseidon head tetradrachms, respectively directly and indirectly, formed part of Gonatas' repost to the potentially antimakedonian stance of the Aitolians. The initiative of the latter in transforming the annual Soteria at Delphi into what was effectively a Panhellenic festival aimed at the Panhellenic acknowledgement of their control of Delphi (chapter 2.1). Gonatas' expressions of piety at a different major Greek sanctuary were presumably aimed at effectively preventing the Aitolians' possible manipulation of his abstention from the Delphic celebrations into a potential identification of the Makedonians with barbarians.

#### 2.4.4 Fractional Denominations

The internal sequence of the silver tetradrachms of 'king Antigonos' may, at least partly, be determined by the few silver fractions issued by the same authority. These include a drachma with the types of the Pan head tetradrachms; thirty-two drachmae with the head of Zeus on the obverse and with Athena Alkidemos I. on the reverse, alongside a winged helmet and the letters TI on either side of Athena (chapter 2.1). Finally, an anomalous denomination is represented by two Zeus specimens, coming from a pair of dies known from the drachmae (chapter 6.3, nos. 77a-b).

The Pan drachma, with a crested helmet alongside monogram 9 on the reverse, is stylistically associated to the Pan tetradrachms of the 'plain style' (chapters 2.4.2, 3.0). The Zeus drachmae, however, are no longer to be associated with the Poseidons. In contrast to F. Imhoof-Blumer, who considered them as marking the transition from the Poseidons to the Pans with Athena I., R. W. Mathisen relates these fractions to the Pans. He identifies the bearded head on the obverse with Zeus rather than Poseidon and he relates these coins via their control marks, the winged helmet symbol I. on the reverse and the letters TI on the r., to a small group of Pan tetradrachms instead. He assigns these Pans and the Zeus drachmae to a brief period in the reign of Gonatas, but he does not proceed to any further chronological definition<sup>1</sup>.

A *terminus ante quem* for these issues is provided by the *Sophikon*, 1893 hoard, dated to c. 230-20 BC; two of the three drachmae included in this hoard are in good condition. I am inclined to suggest that it is the silver drachmae that, at least partly, determine the internal sequence of the Pan head tetradrachms, insofar as they may be regarded as contemporary with the Pan head variety carrying a winged helmet symbol identical with that on the drachmae (chapter 2.1). Their limited numbers, however, discourage their consideration as part of a monetary system structured exclusively on individual types of king Antigonos. The replacement of the Pan head-on-shield by the head of Zeus in the iconography of the obverse also requires consideration. Finally, equally important are the two silver specimens weighing 2,46 and 2,27 g, respectively, the second of which is plated. In the first place, their obverse die link with the silver drachmae indicates the chronological proximity of these two denominations. The reduced weight of these coins and their direct metrological relationship to the Ptolemaic silver tetradrachms, weighing 14,25 g, favour their identification as silver pentobols, that is, as drachmae of Egyptian weight<sup>2</sup>. They find a metrological parallel in the two pentobols of handsome design but of an anomalous denomination compatible with the Ptolemaic weight standard, from the Athenian Agora. J. Kroll places these pentobols, and a few tetrobols on the same standard, in a historical context involving direct

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<sup>1</sup> Imhoof-Blumer, *MG*, 124, 127; Mathisen, *Pan heads and Poseidon heads*, 40, 44-5.



Ptolemaic participation in Athenian affairs. He therefore suggests their introduction at the outset of the Chremonidean war and favours their striking for purposes of military pay<sup>3</sup>.

Given that the production of silver drachmae was far more common in Asia Minor than in Greece<sup>4</sup>, these fractional denominations may be related to Antigonid naval or military enterprises in the East. An appropriate context for this small issue is perhaps offered by three occasions: an early presence of Gonatas in Karia, implied by a new inscription from Kaunos, currently dated to c. 268 BC (chapter 2.4.2), a possible involvement of Gonatas in the Third Syrian (Laodikean) war (246-1 BC)<sup>5</sup> and Antigonos Doson's expedition to Karia in 227-5 BC. The association of the Pan drachma with Group 10 of the Pan variety through identical designs, style and control marks might indicate the striking of the Pan drachma on the first occasion, but it is difficult to base such assumptions on a single coin. Moreover, until this inscription is fully published, the evidence for Gonatas' involvement in Karia in the early 260s remains uncertain. Gonatas' participation in the Laodikean war is not an impossible alternative, but it is not firmly supported by the existing evidence. Furthermore, the representation of Zeus on the obverse would seem to be incompatible with Gonatas' identification with Poseidon in later literature. The Karian expedition of 227-5 BC therefore remains at present the only appropriate and reasonably well documented naval enterprise in the East. The rivalry between the Seleukids and the Ptolemies for control over these areas, in particular, explains the temporary issue of an unusual denomination compatible with the Ptolemaic standard, alongside drachmae of the Attic standard, under Antigonos.

The engagement of the Antigonids in military activities in Asia Minor is corroborated by the exceptional denominations on the Ptolemaic standard. The temporary launching of pentobols might reflect the political and military overlaps between Seleukids and Ptolemies on the coast of Asia Minor and thus confirm the association of these small Antigonid denominations with the promotion of the Antigonid interests in Asia Minor.

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<sup>2</sup> On the identification of the pentobols with drachmae of Egyptian weight, see Kroll, *Agora*, 11.

<sup>3</sup> Kroll, *Agora*, 10-11. Cf. chapter 2.2.1.

<sup>4</sup> See, for instance, Margaret J. Thompson, *Alexander's Drachm Mints 1. Sardes and Miletus*, ANS NS 16, New York 1983; eadem, *Alexander's Drachm Mints 2. Lampsacus and Abydos*, ANS NS 19, New York 1991.

<sup>5</sup> Buraselis, *HM*, 119 ff., 172-6.

## 2.5 Mints

The analysis of the silver Antigonid ultimately aims at identifying the royal mints under Antigonos Gonatas. The issues that require consideration here include, how many mints may be distinguished for the precious metal coinage in the name of 'king Antigonos', for how long they operated, and whether (or not) their operation was continuous. Finally, can these mints be located? And, last but not least, how can numismatic evidence shed light upon their internal structure?

Continuity and change in the mint organisation in Makedonia under Gonatas can only be properly assessed in the light of earlier practices in the area. The precious coinage of Philip II and the lifetime coinage of Alexander III in Makedonia have been assigned to three Makedonian mints<sup>1</sup>, the main one being traditionally identified with Amphipolis<sup>2</sup>. The coinage in the name of Alexander III was continued posthumously under Philip Arrhidaeus and Kassander, presumably at the same mints. The Makedonian silver coinage with the individual types and name of Demetrios Poliorketes presumably comes from two mints (alongside others in the Balkan peninsula, in Asia Minor and in Cyprus), and possibly from a third one, labelled by Newell as 'uncertain Makedonian'<sup>3</sup>. It is the posthumous gold and silver issues in the name of Alexander that set the direct precedent for the coinage struck in Makedonia during the *interregnum* and under Gonatas. R. W. Mathisen proposes the production of the gold staters at two mints. According to his analysis, the bulk of the silver coinage is assigned to the main Makedonian mint, which he identifies with Amphipolis; a few issues are attributed to a second mint, Pella<sup>4</sup>. Finally, the mint of the silver coinage of the last two Antigonids remains uncertain<sup>5</sup>.

How does the internal structure of the precious metal coinages struck under Gonatas fit into this mint tradition? In the first place, the stylistic homogeneity of the transitional gold staters in the name of Antigonos favours their attribution to a mint distinct from that of the posthumous

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<sup>1</sup> Le Rider, *Philippe II*, 325-32; Price, *Alexander*, 85-9; M. J. Price, 'The coinage of Philip II', *NC* 19 (1979) 234-40; Le Rider, *Monnayage et Finances*, 26-31.

<sup>2</sup> Newell, *Demanhur*, 67; Bellinger, *Essays*, 44, n. 37; Price, *Alexander*, 86, n. 4; Troxell, *Studies*, 17.

<sup>3</sup> Newell, *DP*, passim; Mørkholm, *EHC*, 78-81.

<sup>4</sup> Mathisen, *Silver Coinages*, 101-2, 104-10.

<sup>5</sup> On attempts to reconstruct the respective coinages, see A. Mamroth, 'Die Silbermünzen des Königs Philippos V. von Makedonien', *ZfN* 40 (1930) 277-30; P. A. MacKay, 'Macedonian tetradrachms of 148-7 B.C.', *ANSMN* 14 (1968) 5-13; Boehringer, *Chronologie*, 107-10, 116-8. A. Mamroth, 'Die Silbermünzen des Königs Perseus', *ZfN* 38 (1928) 1-28; Mettout, *Persée*; P. R. Franke, 'Zur Finanzpolitik des makedonischen Königs Perseus während des Krieges mit Rom 171-168 v. Chr.', *JNG* (1957) 31-50, pl. II-IV; Mørkholm, *EHC*, 135-6; N. G. L. Hammond, 'The defeat of the Macedonian army and the Roman settlement (197-196 B.C.)', in Hammond-Walbank, *Macedonia III*, 460-8.



Alexander staters, which are themselves associated with the posthumous Alexander tetradrachms struck under Gonatas<sup>6</sup>. Alternatively, I would argue that the wreath on the reverse of the transitional staters points to their striking under particular circumstances (chapter 2.4.1). The few surviving specimens, paired with the absence of control marks, may be taken to suggest that this was a one-off issue, for a particular payment or celebration.

The reconstruction of the monograms on the precious-metal coinage of Philip V and Perseus, on the other hand, has led Touratsoglou to conclude that three officials almost always co-operated, two of whom were permanent<sup>7</sup>.

As for the transitional silver Alexanders, the obverse link between them and the silver posthumous Alexanders might point to the striking of both at the same mint. However, the presence of a single monogram differentiates them from these contemporary posthumous Alexanders, which regularly carry three monograms on the reverse.

It is the combination of the Makedonian shield with this type of helmet that has led to the assignation of these issues to the main Makedonian mint<sup>8</sup>. The crested helmet I. on the reverse of most of the Pans relates this tetradrachm type to the Helmet group of the Makedonian posthumous Alexander tetradrachms and to the shield/helmet Antigonid bronze coins<sup>9</sup>. At the same time, the typological variations of the crested helmet suggest the long duration of the Pans. The absence of the helmet from groups 42-4 of the first period is offset by the transfer to the left of monograms 5, 10 and 12, which establish a connection with the Pan-heads. A winged helmet temporarily substitutes the crested helmet in period IV. Rather than indicating the striking of these coins at a different Makedonian mint, this replacement may suggest their issue on a particular occasion. In fact, the Karian expedition of Antigonos Doson might have offered Gonatas' homonym the opportunity to distinguish himself from his predecessor and to adopt temporarily a different symbol on the reverse (chapters 2.4.2, 6.1.2).

Small issues with different symbols on the reverse may equally well have been struck at different mints or at the main Makedonian mint. A variation with Athena facing r. and with a *kalathos* I. on the reverse has been assigned to the mint of Athens by I. L. Merker, who interpreted the obverse link of this variety with the *Athena I.* series as a die transfer to the new mint<sup>10</sup>. Chr. Boehringer, on the other hand, reverts to the attribution of the right-facing Athena to the beginning

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<sup>7</sup> Touratsoglou, *Circulation*, 71, 'list of monograms on coins of Philip V, Perseus and in the name of the Macedonians'.

<sup>8</sup> Merker, *Silver Coinage*, 45-6; Ritter, *Sternsymbolik*, 165, n. 7.

<sup>9</sup> See pl. 48.2, 14.

<sup>10</sup> Merker, *Silver Coinage*, 47-9.



of the main Makedonian mint, originally proposed by Imhoof-Blumer and H. Gaebler<sup>11</sup>.

The second Pan group with distinct control marks consists of four tetradrachms with the letter X on the l. and with monogram 22, later corrected to 23, on the r. These have been assigned by Merker to a third Makedonian mint, located at Chalkis. Finally, a third Pan group with a trident symbol l. on the reverse has been assigned by Merker to Korinth<sup>12</sup>. Mathisen's alternative relation of this group with the battle of either Kos or Andros is rejected by Touratsoglou. He prefers to associate it with the Poseidons with a trident on the reverse, interpreting the trident as a general symbol of sea-power<sup>13</sup>.

The different symbols, however, do not form a sufficient basis for the attribution of these varieties to different mints, given that posthumous Alexander tetradrachms with various group identifiers had already been minted at the main Makedonian mint under Gonatas<sup>14</sup>. The relation of the *kalathos* or 'bakchos ring' to the Eleusinian rituals, for instance, does not effectively justify *per se* the supposition of a new Antigonid mint at Athens and a concomitant obverse transfer from the main mint to it, as suggested by I. L. Merker. On the other hand, the small size but high quality of this issue, alongside its distinct rarity, may be taken to suggest its production at the main Makedonian mint in commemoration of a particular occasion. Similarly, the inclusion of the letter X among the control marks of the posthumous Alexander tetradrachms struck at Uranopolis, in addition to a similar monogram on the so-called 'Xi group' of the posthumous Alexander tetradrachms, need not *a priori* exclude the striking of the corresponding Pan-heads in Makedonia<sup>15</sup>. The occurrence of monogram 23 with a Poseidon head obverse with a trident on the reverse might suggest the supervision of both types by the same official. Moreover, the small size of the Pan-head groups without a helmet symbol does not suggest the parallel function of both mints in order to cover financial needs. After all, the stylistic similarity of O14 and O15 with O02 in the third period betrays the production of these dies by the same die cutter. There is therefore no reason to reject Chr. Boehringer's identification of a single Makedonian mint for all the Pans<sup>16</sup>, in which he assigned the special groups to exceptional circumstances.

On ideological grounds, Merker's belief that mints operated beyond Makedonia under

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<sup>11</sup> *Chronologie*, 100, n. 9.

<sup>12</sup> Merker, *Silver Coinage*, 49-50.

<sup>13</sup> Mathisen, *CW* (1983) 113; Touratsoglou, *DM*, 80.

<sup>14</sup> Mathisen, *Silver Coinages*, 79-123, esp. 86-96, 81 (table 1); *Administrative Organisation I*, 10-1; Price, *Alexander*, 141-2.

<sup>15</sup> On the issues of Uranopolis, see Chr. Ehrhardt, 'A catalogue of issues of tetradrachms from Amphipolis, 318-294 BC', *JNFA* 4 (1976) 85-9, esp. 87-8; Price, *Alexander*, 139-40, pl. 32.511-4. On the 'Xi' group of Makedonian posthumous Alexanders, see Price, *Alexander*, 141, 146.



Gonatas is incompatible with the nature of the king's hegemony over Greece: for the production of royal coinages in Greek cities of the Antigonid realm to the detriment of local issues is unsupported by the existing evidence<sup>17</sup>. There is no reason to assume that Gonatas or any of his successors in Makedonia exercised such an authority *vis-à-vis* Greek political organisations, either. Purchase of silver from the royal mines may simply have been unprofitable for the cities. This may have accounted for their preference for 'international' coinages, whether royal Makedonian or others.

It is worth investigating whether the second tetradrachm type of Antigonos, the Poseidon head, was struck at a different mint. The absence of its main monogram from the Pan-heads or from the related posthumous Alexanders, as well as from the Antigonid bronze coinage, might *prima facie* favour this possibility, but a different monogram is poor evidence for discarding an issue from the main mint. The Makedonian fabric of the Poseidon head tetradrachms favours their production in Makedonia, as suggested by R. W. Mathisen, rather than at the Thessalian Demetrias (see chapter 2.2.4)<sup>18</sup>. The monogram links with the Pans via monograms 9, 11 and 22, which occur alongside the main monogram, might even suggest the production of the Poseidons at the main Makedonian mint rather than the temporary transfer of some of its officials elsewhere. These links between the Pans and the Poseidons associate them in terms of the location and time of production. Moreover, the twenty-four Poseidon obverse dies suggest a larger issue than the special Pan groups. The periodical issue of this, presumably celebratory, type might thus be confirmed (cf. chapters 2.4.3, 7.3)

Locating mint(/s) in Makedonia has been met with scepticism by M. J. Price and by Hyla Troxell, in their respective treatises of the precious coinage of Alexander III. The adoption by the former of inverted commas for uncertain earlier attributions to mints suggests his awareness that these allocations are subjective; the latter deliberately avoids this discussion altogether<sup>19</sup>. The Makedonian posthumous Alexanders that set the direct precedent to the Pans have been assigned by R. W. Mathisen to two mints, Amphipolis and Pella, on the assumption that an official from the main mint oversaw at Pella a small issue with a monogram 1. One must admit, however, that the

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<sup>16</sup> Boehringer, *Chronologie*, 100.

<sup>17</sup> J. J. Gabbert concludes that Gonatas honoured the tradition of the autonomy of the Greek polis so long as it did not violate his primary goals: Gabbert, *Greek Hegemony*, 251-9. On the impact of sovereignty on royal numismatic policies, see Martin, *Sovereignty*, 5, n. 2, 13, 196-203. Howgego, *Ancient History from Coins*, 39-49, 59-60.

<sup>18</sup> Mathisen, *Pan heads and Poseidon heads*, 32.

<sup>19</sup> Price, *Alexander*, 36, 85-131; Troxell, *Studies*, 17-8.



alleged transfers of dies and officials to different mints and the theory of 'moving mints' further stress the conventional nature of attributions of issues to specific locations, particularly during the Hellenistic period<sup>20</sup>.

The structure of the Pans suggests their production at the principal Makedonian mint: the crested helmet and common monograms establish continuity with the posthumous Alexanders struck at Amphipolis, according to R. W. Mathisen and M. J. Price<sup>21</sup>. There is no reason for the same mint not to have occasionally hosted special issues, in commemoration of important events. This is suggested by the obverse link between the *kalathos* group and the main *Helmet* group. If a location has to be proposed, Mathisen's identification of the main Makedonian mint with Amphipolis is supported by the proximity of this city to the mines of Pangaion<sup>22</sup>. This is further favoured by the occurrence of one of the principal monograms on the Pans, no. 11, on the reverse of silver coins from Thasos<sup>23</sup>. It is not necessary to assign the special Pan groups to a different mint, in order to confirm Mathisen's distinction of two Makedonian mints for the posthumous Alexanders of the 280s and 270s. In fact, Mathisen's consideration of the Pan group with the trident symbol as celebratory may be expanded on all these special issues<sup>24</sup>. The suggested celebratory nature also of the Poseidons might allow for their minting at the principal Makedonian mint (cf. chapters 2.4.3, 7.3); their alternative production at Pella is a possible, but not necessary, hypothesis.

The operation of a single mint at the Eastern half of the Antigonid kingdom is not only determined by the concentration of metal resources in the Eastern half of Makedonia, it may also reflect the impact of Pyrrhos' capture of Pella in 273<sup>1</sup>BC. This, together with Alexander's invasion of Makedonia during the Chremonidean war, demonstrated that the western part of the realm was vulnerable. It is on these grounds that the establishment of the royal treasury at Pella ought rather to be dated after the consolidation of the Antigonids in the area<sup>25</sup>. Some relation between mints and treasuries has been speculated by M. B. Hatzopoulos, who favours the

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<sup>20</sup> O. Mørholm, 'The 'behaviour' of dies in the Hellenistic period', in *INC Berne Proc.* (1982) 209-14; idem, 'Some reflections on the production and use of coinage in ancient Greece', *Historia* 31 (1982) 290-305; idem, 'The life of obverse dies in the Hellenistic period', in *Studies Grierson*, 11-21.

<sup>21</sup> Mathisen, *Silver Coinages*, 101-10. Price, *Alexander*, 141-2. Cf. chapter 2.2.4, fig. 7.

<sup>22</sup> Mathisen, *Macedonian Silver*, 114-8, with earlier bibliography. On the Makedonian mines, see chapters 1.2, 7.

<sup>23</sup> *SNG Cop*, 1054.

<sup>24</sup> *CW* (1983) 113; Touratsoglou, *DM*, 80.

<sup>25</sup> The literary sources presented by Hatzopoulos for Pella as the royal treasury date from the period of the Roman conquest: Liv., 44.6.2, 10.1; Plut. *Aem.* 23.6. Cf. Hatzopoulos, *Institutions*, 256, n. 6.



existence of a royal treasury, among other cities, also at Amphipolis<sup>26</sup>.

To conclude, the internal structure of the Antigonid silver coinage reflects changes conferred upon the traditional mint organisation in Makedonia subsequent to the *interregnum*. The common symbols and monograms on the Pans and the Poseidons and on Alexander staters and tetradrachms, posthumous and transitional, suggest their long, concomitant or parallel, production at the same Makedonian mint. Greater independence is speculated in the production of Gonatas' individual silver issues, which are normally signed by two officials, as opposed to the three officials signing the posthumous Alexanders. The independent co-operation of approximately three officials with the main one, signing with the Makedonian helmet, demonstrates the shift of emphasis to co-ordinated work among different branches of the same mint under the Antigonids.

The reduction of the signing officials to two under Gonatas and the disappearance of the primary mint official from certain posthumous Alexanders and from the Pan-heads serves as a clue to increased fiscal centralisation in Makedonia under Antigonos Gonatas<sup>27</sup>.

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<sup>26</sup>*Institutions*, 256, n. 6. On Aemilius Paulus' request to more than one cities for the transport of the royal monies to Amphipolis in 167 BC, see Liv. 45.29.1.

<sup>27</sup> Mathisen, *Administrative organisation* III, 44-6. No specific term survives regarding the financial administrator in Makedonia: Hatzopoulos, *Institutions*, 433-4.

### 3 - 6 Catalogue & Commentary: Gold and silver issues 'of king Antigonos'

The material in the catalogue is arranged by reverse die symbols and monograms, numbered consecutively. Figures 12, 15, 18a-b and 24, following the catalogue, show the complex die linkage in schematic form for every period.

Abbreviations of museum collections and auction catalogues may be found in the related list. Records of weights from auction catalogues are generally noted in brackets with the specimens related; in the cases of divergence, the smallest weight is retained, assuming some loss of weight as a result of a cleaning process. The die-axes of the coins, which I have personally examined, have been provided, and the die-axes recorded in listings, published and unpublished, have been reproduced. With regard to the classification of the issues, the obverses linking two or more groups of the same period are considered only with the first group in which they occur. The virtual number of obverses in the other groups is represented in brackets, as follows: [number of obverse dies-obverse dies linked to previous groups].

Some additional notes must be made regarding conventions that were followed in the descriptions of the Pan head tetradrachms. For our convenience it was regarded best to adopt a conventional numbering for the 'star/crescents' ('units'), for the 'spaces' between the 'star/crescents', and for the numbers of rays on each star. Our numbering starts basically from the first 'star/crescent', 'space' or 'star'/ray' after 12 h and continues clockwise (fig. 10). The best preserved specimens from all die combinations are illustrated, otherwise a symbol ('°') is inserted.

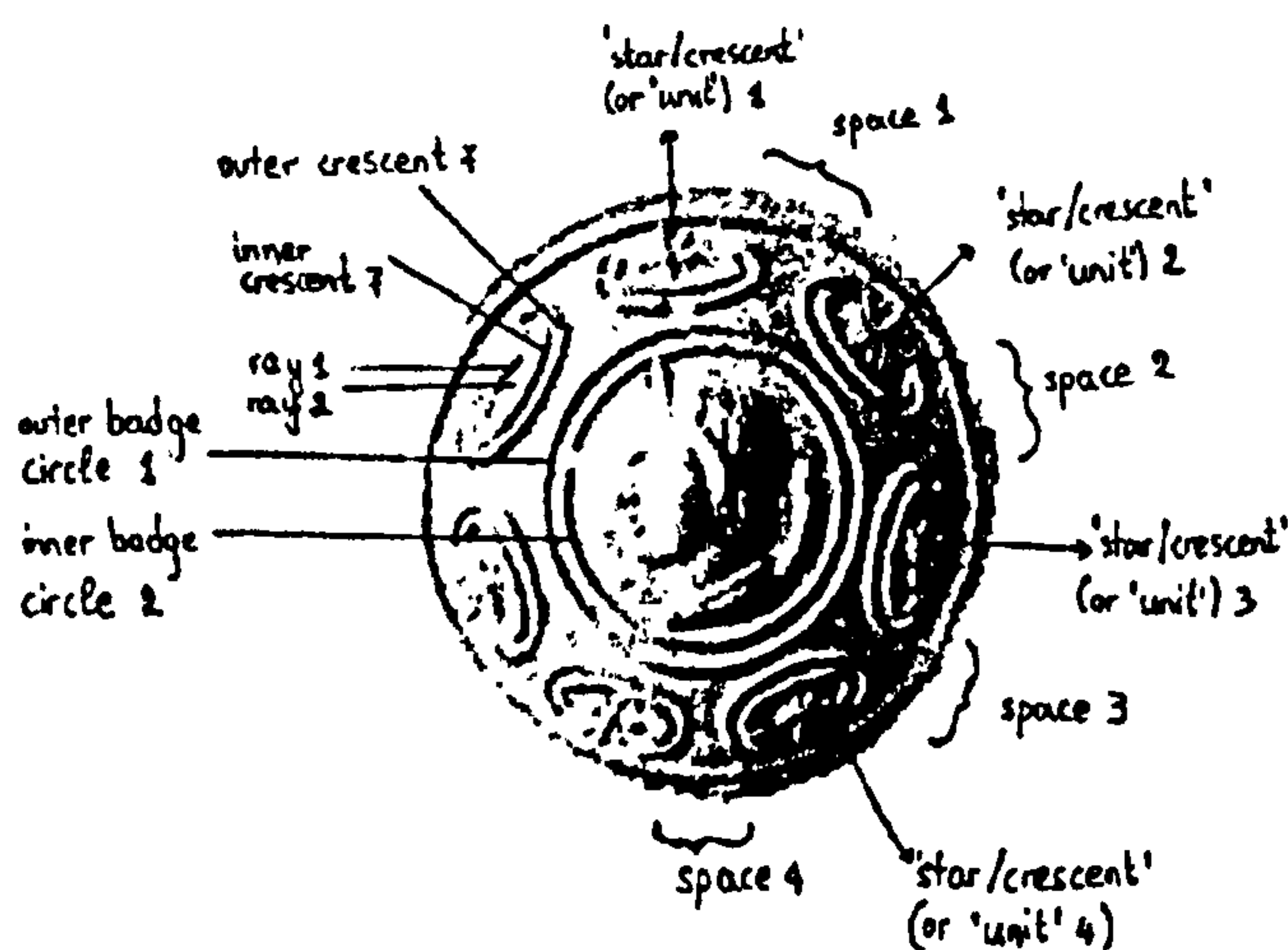


Fig. 10. Pan head tetradrachms: conventional numbering of 'star/crescents', 'spaces', 'rays'.



**KEY TO ABBREVIATIONS IN CATALOGUE**

<b>CATALOGUE</b>		<b>COIN CONDITION</b>	
<b>FPC</b>	<b>Fixed Price Catalogue</b>	<b>B</b>	<b>Broken</b>
<b>FPL</b>	<b>Fixed Price List</b>	<b>C</b>	<b>Chipped</b>
<b>L</b>	<b>List/Liste</b>	<b>Cr</b>	<b>Crystallised</b>
<b>BBS</b>	<b>Buy or Bid Sale</b>	<b>P</b>	<b>Pierced</b>
<b>MBS</b>	<b>Mail Bid Sale</b>	<b>Pl</b>	<b>Plated</b>

### 3.0 Period I: The Chremonidean War and the Battle off Kos (274/1–260/255 BC)

#### ‘Plain Style’

The demise of Pyrrhos and the concomitant establishment of Gonatas to the Makedonian throne inaugurated a critical period in both Central Greek and international politics in the 260s<sup>1</sup>: a coalition between Sparta, the kings and the allies on the one hand, and Athens and the allies, on the other hand, for all time (ἐς τὸν ἅπαντα χρόνον), announced by the Chremonidean decree, led to the Chremonidean war (cf. chapters 1.2, 2.4.2)<sup>2</sup>. This allegedly defensive treaty between Athens and Sparta has been regarded as complementary to two un preserved unilateral treaties between each of the cities and Ptolemy II, which established firmly a triple alliance (*Dreiecksbund*) between Ptolemy II, Athens, Sparta and their respective allies. The instigation of this alliance by the main rival of Gonatas for control of the Aegean, Ptolemy II Philadelphos, may be presumed rather than proved, but the enemy implied in the decree can only be Antigonos Gonatas<sup>3</sup>.

The reconstruction of the Chremonidean war is far from enhanced by the fragmentary nature of the existing documentation. At a certain point, Gonatas may have invaded Attica with a military force, followed by ships (Paus. 1.1.1, 3.6.4; cf. chapter 2.4.2)<sup>4</sup>. As a consequence of the Chremonidean decree, Patroklos and his fleet come to aid the Athenians (Paus. 1.1; 1.7; 3.6.4); he

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<sup>1</sup> On the death of Pyrrhos, see Plut. *Pyrrh.* 34. Cf. Lévêque, *Pyrrhos*, 622-31; Garoufalas, *Pyrrhus*, 124-41; Hammond, *Epirus*, 557-88.

<sup>2</sup> The dates and duration of the Chremonidean War are controversial. 268/7 and 265/4 BC have been suggested as possible dates for the archonship of Peithidemos, during whose office the Chremonidean decree was voted in Athens. Habicht, Heinen and Osborne opt for the first date: Habicht, *Unters.*, 95-112, 133 ff.; Heinen, *Unters.*, 95 ff.; Osborne, *Naturalisation II*, 165-6, n. 750. Cf. S. V. Tracy, ‘A fragmentary inscription from the Agora praising Ephebes’, *Hesperia* 59 (1990) 543-7, esp. 545; For the policy of the Lakedaimonians, see P. Cloché, ‘La politique extérieure de Lacédémone depuis la mort d’ Agis III jusqu’ à celle d’ Acrotatos, fils d’ Areus Ier (suite et fin)’, *REA* 48 (1946) 39-60; Hammond-Walbank, *Macedonia III*, 278-80; Green, *Alexander to Actium*, 147-8. On the other hand, Janice J. Gabbert recently reverted to Meritt’s date of Peithidemos to 265/4 BC: Gabbert, *Greek Hegemony*, 163-4; eadem, ‘The Anarchic dating of the Chremonidean War’, *CJ* 82 (1986) 230-5; eadem, *AG*, 46-8, n. 43; eadem, *Response*, 34. Cf. B. D. Meritt, *The Athenian year*, Berkeley 1961, 223; idem, ‘Mid-Third Century Athenian Archons’, *Hesperia* 50 (1981) 78-99, reconstructed by Aleshire, *Asklepieion*, 250 (inventory V, l. 5), 293-301. Reviewing Gabbert’s recent book on Gonatas, Reger redates the beginning of the war to the summer 268 BC, on the basis of the very important decree of Epichares and of the revolt of Eretria by 268 BC: Reger, *Review*, 17, n. 18-9, with further bibliography. The archonship of Antipatros is dated with greater certainty to 262/1 BC (Apollodorus, *FGH* 244, F 44 (fragment of Philodemus, Περὶ τῶν Στωικῶν); Paus. 3.6.6; Polyæn. 4.6.20). J. D. Morgan’s announced revision of the third-century Athenian calendar is likely to revive this discussion: ‘The calendar and the chronology of Athens’, *AJA* 100 (1996) 395.

<sup>3</sup> Heinen, *Unters.*, 119, 133-9; F. Walbank, ‘Antigonos Gonatas: the early years’ in Hammond-Walbank, *Macedonia III*, 267-80.

<sup>4</sup> Heinen, *Unters.*, 170-1, 191.



is followed by the arrivals of Areus and the Lakedaimonians πανδημί (Paus. 3.6.1; Just. 26.2.1)<sup>5</sup>. The reluctance of both the Peloponnesian and the Ptolemaic forces to confront Gonatas in a pitched battle resulted in the successive retreat of the Lakedaimonian and Ptolemaic troops and inaugurated the second phase of the war, in which diplomacy played a major role<sup>6</sup>. A mutiny of the Celtic mercenaries of Gonatas at Megara and the revolt of Alexander the Molossian in Epeiros, for instance, were meant to distract from the Attic *chora* Gonatas, who, on his arrival at Athens, περιεκάθητο τὰς Ἀθήνας καὶ τῆς εἰσόδου τῆς εἰς τὴν πόλιν τὰ συμμαχικὰ εἴργεν<sup>7</sup>. While the Aitolians sent an embassy to Euboia presumably in order to appropriate the Euboians and to turn them against Gonatas, Alexander the Molossian invaded Makedonia<sup>8</sup>. The concordance of these events, however, only postponed the final capitulation of Athens to the autumn of 261 BC, on condition, as Pausanias argues, that a garrison would be placed at the Mouseion<sup>9</sup>.

The capitulation of Athens may have been preceded or followed by the one of the two known naval conflicts between the Antigonid and the Ptolemaic fleet during this period, near Leucolla of Kos. The battle of Kos has been recently redated to 262/1 BC (rather than between 260 and 254 BC) by G. Reger, who suggested that the Chremonidean war marked the end of the Ptolemaic aggressive policy towards Greece. His argumentation against Buraselis' date of the battle to c. 255 BC may be summarised in the following:

- 1) The prodigious sprouting of parsley from the τριάρμενος Antigonid flagship 'Isthmia' after a naval battle has been related by scholiasts with the battle of Kos<sup>10</sup>. The date of this battle must be at an even year in our calendar, possibly 262 or 260 BC.
- 2) The dedication of the foundation Antigoneia to the triad Apollo-Artemis-Leto need not be associated with a naval battle.
- 3) The naval battle, the dedication of the Antigonid τριάρμενος to Apollo and the Athenian petitions to Antigonos (ἐπιστόλια παρακλητικὰ) are compatible both with 261 and with 255/4 BC.

<sup>5</sup> Heinen, *Unters.*, 177-9.

<sup>6</sup> Just. 26.2.7, P. Trog. *Procl.* 26, on the causal relationship between the failure of the Celtic mutiny and the retreat of the Lakedaimonians; Paus. 3.6.5-6, on Patroklos' encouragement to Areus to attack Gonatas first, promising that he would then follow with an attack on the other side; Just. 26.2.8, on the retreat of Patroklos.

<sup>7</sup> Paus. 3.6.5: περικαθημένου δὲ Ἀντιγόνου τὰς Ἀθήνας καὶ τῆς εἰσόδου τῆς εἰς τὴν πόλιν τὰ Ἀθηναίων συμμαχικὰ εἴργοντος...

<sup>8</sup> Paus. 3.6.5-6.

<sup>9</sup> Paus. 3.6.6; Polyæn. 4.6.20. The archaeological evidence admittedly plays a significant role *vis-à-vis* our knowledge with regard to this period; see, for instance, J. MacCredie, *Fortified Military Camps in Attica*, Hesperia Supplement 11, Princeton: ASCSA, 1966. To the existing hoards from Attica during this period one may add *CH* IV, 32, a hoard comprising twenty Ptolemaic coins found 'near Sounion (in fact, at Sounion)'. Information on this find is on file at the British Museum.

<sup>10</sup> Plut. *Mor.* 676 D-E. G. Reger, 'The date of the battle of Kos', *AJAH* 10 (1985) [1993] 155-77, esp. 157, *contra* Buraselis, *HM*, 141-4, 146-51, 162.



- 4) The three inscriptions from Delos mentioning peace can not refer to international peace in 255 BC.
- 5) The alleged dedication of the monuments of the ancestors and of the portico soon after 255 BC is circular and is with difficulty related to a military Ptolemaic defeat.
- 6) Reger opposes the important military activities in the Kyklades in the 260s to the temporary waning of the Ptolemaic power and resurgence of the Antigonid influence before 260 BC. He also considers the relations of Kos to the Thessalian *Koinon*, which was controlled by Gonatas, and the absence of a Ptolemaic *nesiarkhos* at Kos after 260 BC, in order to propose a date within the Chremonidean war. Yet a date between 260 and 254 BC might be preferred: for one thing, Plutarch would not have confused two naval battles, unless they belonged to the same historical chapter. Secondly, the decline of the Ptolemies' interests in the Aegean after their defeat off Kos and the concomitant capitulation of Athens would deprive the battle of Andros of an appropriate context, leaving as well the revolts or the maintenance of the Makedonian garrison at the Mouseion unjustified.

Gonatas' naval victory off Kos established a link with the Aegean policy of his ancestors, Antigonos Monophthalmos and Demetrios Poliorketes. The dedication of the portico of his ancestors at Delos may have been part of Gonatas' celebration of this naval battle<sup>11</sup>, whose impact is reflected upon the divine honours paid to the Makedonian king by the cities of Ios, Kos and Rhamnous in c. 255 BC<sup>12</sup>.

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The transition from the Alexander types to the silver individual types of Antigonos Gonatas takes place during this first period of mint activity. The Antigonid silver issues start with a small group of transitional silver tetradrachms retaining the Alexander types, which may only approximately be dated between c. 274 and 255 BC. Monograms constituted by various combinations of the letters E and K occur l., between the legend and the figure of Zeus, or beneath

<sup>11</sup> See chapter 1.2.

<sup>12</sup> *IG XII Supplement* 168 (Ios); B. Petrakos, 'Ανασκαφή Ραμνούντος', *ΠΑΕ* (1989) [1992] 31-4, no. 15, l. 2-10 = *SEG* 41, 75 (Rhamnous). Habicht, *Gottmenschentum*, 65-73 (Ios); idem, *Studien*, 15-7; idem, *Athen*, 155-6; idem, 'Divine honours for king Antigonos Gonatas in Athens', *SCI* 15 (1986) 131-4; idem, *Athens*, 164, n. 58-9, 165, 167; Mikalson, *Religion*, 160-7; Harnestad, *Celts*, 19 ff. Habicht relates the *ἱσοθέους τιμὰς* to Gonatas with the king's benefaction towards a civic community rather than with his general policy, in order to reconcile these honours with Gonatas' philotyrranic policy in the Peloponnese. However, as the systematic study by Gabbert of the epigraphic material belies Gonatas' favour to tyrannic regimes, one may plausibly see in these honours the appeal of Gonatas' international naval victories over the Ptolemies: Gabbert, *Greek Hegemony*, 247-59; eadem, *AG*, 33-44.



the throne of Zeus (cf. chapter 2.2.4, fig. 5). It has already been argued that the few gold staters with the legend of Antigonos presumably celebrated Gonatas' naval victory over the Ptolemies off Kos (chapter 2.4.1).

An innovative act within the 260s was the introduction of a new type, carrying the king's legend (chapter 2.4.2). The new series begins with the head of a young Pan in profile view in the centre of a Makedonian shield with elliptical star/crescents, of a large diameter. The schematic head of Pan on all the obverses of this period clearly belongs to the 'plain style' that reigned in the coin portraiture of the Epigonoi from the 270s onwards. Shallow, elongated curves are combined with reduced, simplified and compact forms; the eyes are natural and the face is rendered in soft and curvilinear forms, which result in a fine and less emotional characterisation.

The stylistic features of Pan are smoothly combined with the archaising Athena on the reverse, whose near-frontality and extreme simplicity echo the Severe style of the Classical age. Much emphasis is attached on the composition of verticals and horizontals, and the folds of the drapery are flat and nearly linear. The noble simplicity of the face on the obverse and the solid stance of the archaising Athena on the reverse may be regarded as effective expressions of the general tendency towards a tradition-quoting idealisation, just as an Alexander head of the Classicistic style was deliberately chosen in 317/6 BC to go with the archaising Athena on the silver tetradrachms of Ptolemy I<sup>13</sup>. The fixed type of Athena and the regular, generally similar, legend letters suggest the chronological proximity of the groups struck during the first period, even though the few reverse links do not confirm an intense minting activity.

Through the progression from eight-rayed to six-rayed stars, from tall to short and crude Athenas, from larger to smaller Makedonian helmets, the specimens of this category may be distinguished into forty-six rather loosely defined groups, with very few reverse links. The vast majority of those with Athena l., thirty-nine out of forty-three, belong to the 'helmet series', with a crested Makedonian helmet on the reverse l. Their division into groups is facilitated by the monogram which occurs r. on the reverse; the crested helmet is combined with nine monograms altogether in this period (fig. 6, nos. 5-13).

On the reverse of the last four groups of Pans, with a monogram already known from the 'helmet series', no. 5, 9 or 11, is transferred from the r. to the l. and a blank is left on its original place.

The early silver tetradrachms with the king's individual types end with a special issue, carrying Athena r. on the reverse and different control marks on either side: a *kalathos* (or 'bakchos ring') l. and a monogram r. The three monograms of this issue are different from those

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<sup>13</sup> Brown, *Royal portraits*, 26, 38; 48, figs. 11a-b, 12a-b.

of the 'helmet' series. The only fraction of this issue, a silver drachma with the same types as the tetradrachms and with a crested helmet l. and with Monogram 9 r. on the reverse, is stylistically associated to Group 11 of the silver tetradrachms.

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All the coins 'of king Antigonos' during this period were struck on the Attic weight standard. Variations in weight are outlined as follows:

1. Gold staters: weight table

8,65-8,61 g	1
8,60-8,56 g	3
8,55-8,51 g	1

2. Silver tetradrachms with Alexander types: weight table

17,05-17,01 g	3
16,90-16,86 g	1
16,30-16,26 g	1
16,10-16,06 g	1

3. Pan head tetradrachms: weight table, fig. 11. The numbers above the columns represent the respective groups, as they have been recorded in the catalogue below. Chipped and pierced coins have been excluded from our calculations.

4. Pan head drachma: weight table

4,05-4,01 g	1
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The weight standard aimed at seems to be around 8,60-8,56 g for the gold staters and c. 17,05-17,01 g for the silver tetradrachms with the Alexander types, but in the absence of more specimens any conclusions for either category remain conjectural. More illuminating are the more numerous silver Pan tetradrachms: although there is considerable variation in the weights (figs. 6, 11), a rough peak at around 17,15-17,01 g is fairly consistent throughout this issue. The Pans are slightly heavier than the transitional Alexander tetradrachms. Many coins are significantly below this level, presumably due to their long use. In technical terms, it is remarkable that, unlike the posthumous Alexanders, most of which have been struck off-centre, the Pans of the first period are generally well-centred, notwithstanding the difficulty imposed by the iconography itself for the



minting of the *Pan-on-shield* type. Moreover, the high quality of the tetradrachms from this period justifies the large number of pierced coins<sup>14</sup>. In fact, most of the pierced tetradrachms come from Group 24, whose engraving quality is admittedly exceptional.

Many specimens from this period have been found in hoards (figs. 11a-b). Their vast majority belongs to the 'helmet series'. Specimen 5j from *Thesprotia, 1992*, the only coin without a crested helmet and with monogram 7 l. found in a hoard context, and that with Athena r. from the *North of Larissa, 1985* hoard are the only exceptions. Determining the introduction date of the Pans inevitably leaves aside *Thesprotia, 1992, Gordion, 1961, Mektepini, 1965* and *S. Asia Minor, 1963*, whose deposition date is far from the introduction of the new silver tetradrachm types. Even so, the poor state of the Pan tetradrachm from *Verge ('Perge'), 1955*, presumably a 'savings' hoard, indicates, for one thing, that the first Pans were well into circulation by the time the hoard was buried. Similarly, *Eretria, 1937* is the only hoard with a very worn coin from the first group, but it cannot establish a firm chronological peg due to its late burial. No. 2 from Group 1, with monogram 5, is poorly preserved and not cleaned, but the obverse of no. 137 is in a comparatively good condition. These specimens are more worn than the Pans of the 'realistic/portrait' style, with which they occur (chapter 2.3).

Even though the hoards do not conclusively establish the introduction date of the Pans, they shed light on the relative chronology of certain groups. Group 3, for instance, including the specimen from *Verge ('Perge'), 1955*, is obverse linked with Groups 7, 18, 33 and 34. Moreover, the good condition of the illustrated Pans from period I from the hoard found at Scotussa before 1989 suggests the chronological proximity of groups 4 and 8, with O09. At the same time, Groups 5, 10, 20 and 36, with O10 and O11, must also be chronologically close. A relatively early date is also speculated for Group 14, found in *Phayttos, c. 1956* and in *Scotussa, (pre-) 1989*. Groups 23, 31 and 39 are obverse linked via O17. The obverses of Group 36, which occur already in the *Eretria, 1937* hoard, dated to c. 245 BC, must also be early.

Current hoard evidence shows that the specimens from the first period are those with the longest and widest circulation. The presence of such specimens in *Gordion, 1961, S. Asia Minor, 1963* and in *Syria, 1970*, from the last decade of the third century, and in *Mektepini, 1956*, from the early second century, undoubtedly contrasts with the absence of mid-third century hoards with Pans in Asia Minor (chapter 7.2). The specimen from *Gordion, 1961* is very worn. The two Pans

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<sup>14</sup> Pierced tetradrachms (or attempted piercing): nos. 1a, 87c; 88a, 89d, 113a. As piercing for decoration was common on coins, there is no need to identify these pierced coins with Pans withdrawn from the circulation pool at Athens, as does K. Lönnqvist, 'Studies on the Hellenistic Coinage of Athens: The impact of Macedonia on the Athenian Money Market in the 3<sup>rd</sup> century B.C.', in J. Frösén (ed.), *Early Hellenistic Athens, Symptoms of a Change*, Helsinki 1997, 119-45, esp. 125-6; T. Linders, 'Fallen Money and Broken Crowns—or When is a Coin Not a Coin?', in *Florilegium Numismaticum*, 255-8.

from *S. Asia Minor, 1963* are in a good condition and the only illustrated Pan from this period from *Syria, 1970* is more worn than its later counterparts. The broad transmission of the early Pans is also confirmed by the broken, chipped and tested specimens that belong to this period<sup>15</sup>.

NO.	HOARD	CAT. NO.	GROUP NO.	OBVERSE NO.	MON. NO./LETTERS
1	Poteidaia, 1984	5a	2	01	-

Fig. 11a. Period I: Gold Specimens in Hoards.

NO.	HOARD	CAT. NO.	GROUP NO.	OBVERSE NO.	MON. NO./LETTERS
1a	Eretria, 1937	2	1	01	5
1b	Eretria, 1937	137	38	11	11
2	Verge (Perge), 1955	12a	3	06	5
3a	Scotussa area, (pre-) 1989	15b-c, 19	4	09	5
3b	Scotussa area, (pre-) 1989	21c	5	11	7
3c	Scotussa area, (pre-) 1989	42b	13	17	9
3d	Scotussa area, (pre-) 1989	60c	17	19	9
3e	Scotussa area, (pre-) 1989	67c	19	09	9
3f	Scotussa area, (pre-) 1989	103d	31	05	11
3f	Scotussa area, (pre-) 1989	107a	31	05	11

<sup>15</sup> Broken tetradrachm: 48b. Chipped tetradrachms: 8a (6h/8 h), 24a, 58a. Test cuts have been performed on nos. 18a, 68a, 136a.



4	Phayttos, 1956, c.	39a-b	13	17	9
5	Pherai, 1937-8	75b	20	22	9
6a	Thesprotia, 1992	20a	4	10	5
6b	Thesprotia, 1992	21b, 22b	5	11	7
6c	Thesprotia, 1992	48a	14	18	9
6d	Thesprotia, 1992	58a	17	19	9
6e	Thesprotia, 1992	71	20	21	9
6f	Thesprotia, 1992	76b	20	22	9
6g	Thesprotia, 1992	80b	20	24	9
6h	Thesprotia, 1992	96	29	25	11
6i	Thesprotia, 1992	104	31	05	11
6j	Thesprotia, 1992	117a	34	07	11
6k	Thesprotia, 1992	129, 130	37	10	11
6k	Thesprotia, 1992	143a	42	29	11 l.
7a	Gordion, 1961	18	5	09	5
8a	Meydançikkale, 1980	36c	12	16	9
8b	Meydançikkale, 1980	81	21	25	9
9	Mektepini, 1956	60d	17	19	9
10a	S. Asia Minor, 1963	110	31	05	11
10b	S. Asia Minor 1963	127c	37	10	11
11	N. Syria, 1970?	33b	10	14	9
12	A. Minor/Syria, 1970	126b	36	10	11
13	North of Larissa, 1985	151e	46	35	13

Fig. 11b. Period I: Silver Specimens in Hoards.





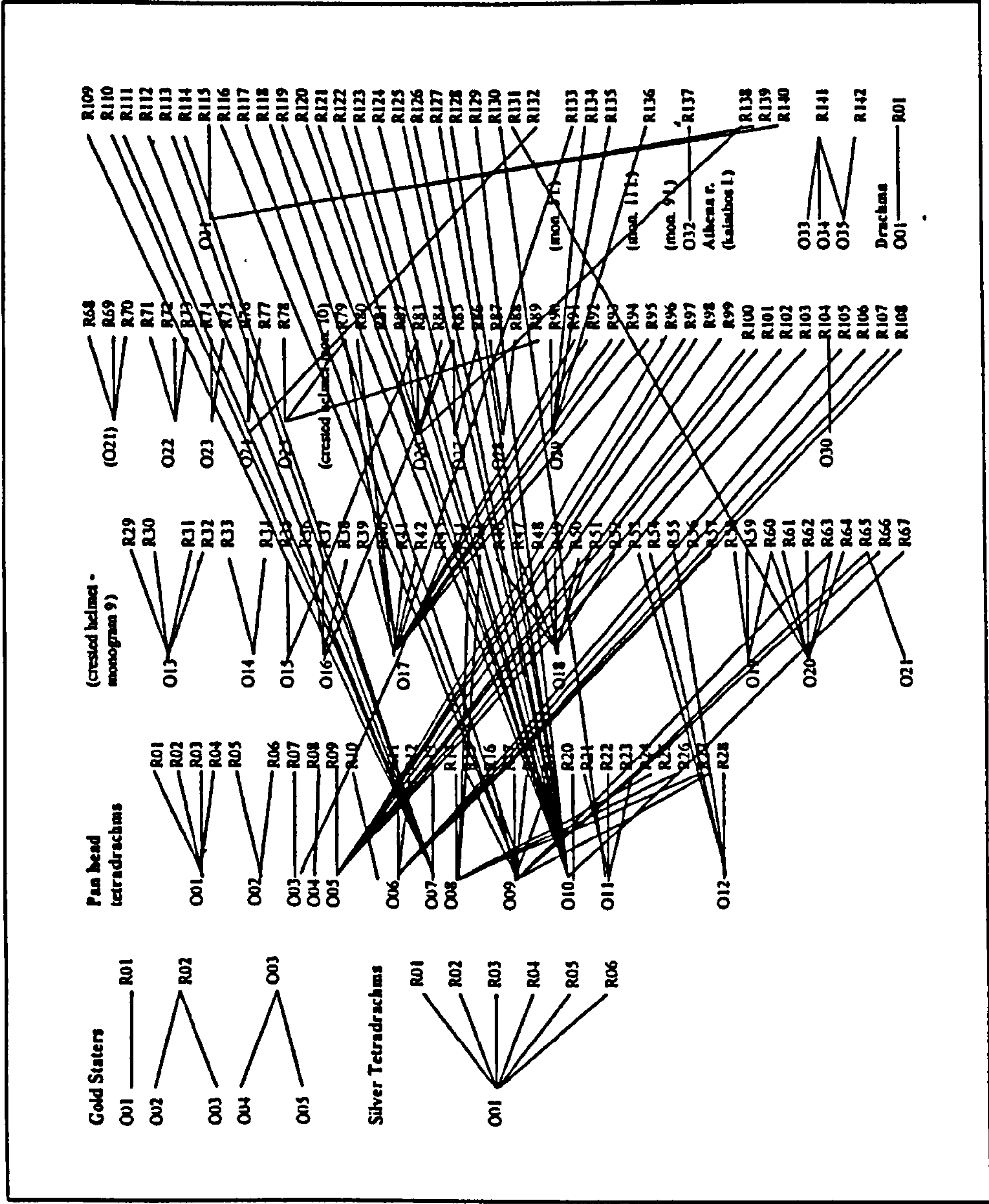


Fig. 12. Period I: Diagram of Die Links.

MINT A

3.1

Gold (AV)

Staters with Types of Alexander III

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Head of Athena r. in bowl of crested Korinthisan helmet, serpent wriggling r.; curved lock starts from hair, behind the ear, and hangs to front. Delicate pendent earring.</i>  <i>R: ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ. Nike standing frontally with head to l., holding aphlaston with her slightly uplifted r. hand and stylis with her l. hand. In field l., below, wreath.</i></p> <p><b>Group 1</b></p> <p>Specimens: 5                      Obverses: 5            Die combinations: 5              Reverses: 3</p>					
1. 001	R01	a. De Luynes, 1689	8,57 g	-	-
2. 002	R02	a. Vienna: Gaebler, <i>AMNG</i> III.2, 179.1, pl. XXXII, 21 obv.	8,63 g	-	
<p><i>R (a): legend: ΒΑΣΙΛΕΩ[Σ] ΑΝΤΙΓΟΝ[ΟΥ].</i></p>					
3. 003	R02	<i>O: Athena without earring.</i> a. Paris: BNF 1326 (Mionnet, <i>Description</i> , Suppl. 3, 244, 587, XI, 1; Gaebler, <i>AMNG</i> III.2, 179.1, pl. XXXII, 21 rev.; <i>CH</i> VIII (1994) 276)	8,57 g	-	-
4. 004	R03	<i>R: Legend ΒΑΣΙΛΕΩΣ farther from Nike. Wreath similar to that in no. 2.</i> a. Glasgow 1: MacDonald, <i>Hunterian</i> , 336, 1, pl. XXIII.14.3	8,54 g	9 h	1,5 cm
<p><i>O (a): flaw off r. end of neck.</i>  <i>R (a): r., break].</i></p> <p><i>O: Athena without earring and without ornament above hair locks on helmet bowl.</i>  <i>R: As above. Wreath of different type (laurel?).</i></p>					
5. 005	R03	a. BM 1899-1-1-1; ex <i>Poteidaia</i> , 1984 ( <i>CH</i> VIII (1994) 276; Price, <i>Alexander</i> , 141, 145.562 <sup>16</sup> , pl. CLVIII.D; C. T. Seltman, <i>NC</i> <sup>4</sup> 9 (1909) 269)			

<sup>16</sup> No gold specimens with the types of Alexander but with the name of Antigonos coming from the hoard stated here have been traced in recent sales catalogues. Hence the inconsistency between Price's record of a single gold stater in the name of Antigonos from the *Poteidaia*, 1984 hoard (*Alexander*, 58, 242) and the report of fifty-six staters 'of Antigonos Gonatas' in *CH* VIII (1994) 276, might be explained as a reference to posthumous gold staters with the name and title of Alexander, but currently dated to the reign of Antigonos Gonatas.

Sixty-eight Makedonian posthumous Alexander staters are comprised in G. Le Rider's publication of 148 gold staters from this hoard: *Potidée*, 90, pl. VIII.18-23. Fifty-six of those, nos. 17-18 and 19-72,



O No	R No	Provenance	Weight	Axis	Diameter
			8,57 g	7h	-
[O (a): flaw off neck. R (a): up l., flaw from nose through to uplifted r. hand].					

Five obverse dies are combined with three different reverses, yielding five different die combinations of transitional gold staters in the name of 'king Antigonos'. On the obverse, Athena's hair locks are few, wavy and uneven, with a diagonal hair lock running from the helmet through to her neck. Moreover, her less bulky helmet and her mild and natural features distinguish these gold staters from those associated to the Mu group of posthumous Alexanders, which are rendered with a bulky helmet, three or four parallel spiral locks and with rather heavy cheeks. The more elaborate style of the transitional staters 'of king Antigonos', paired with the different control marks on the reverses of the respective series, allows for the production of these staters at a different mint or chronological moment. Their disconnection from the alleged payment of Celtic mercenaries allows for their assignment to a later date, presumably in order to celebrate an event such as Gonatas' victory over the Ptolemies off Kos (cf. chapters 2.4.0-1).

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## 3.2

### Silver (AR)

#### 3.2.1 Tetradrachms with Types of Alexander III

O No	R No	Provenance	Weight	Axis	Diameter
<i>O: Head of Herakles r. in lion's scalp. Dotted border.</i> <i>R: ANTIFONOYI, ΒΑΣΙΛΕΩΣ r. Zeus seated l. on throne, holding eagle with r. hand, sceptre with l. hand. Letters regular. Dotted border.</i>					
<b>Group 1</b>					
Specimens: 4			Obverses: 1		
Die combinations: 2			Reverses: 2		

belong indeed to the Makedonian groups assigned by R. W. Mathisen to the early reign of Gonatas. Cf. Mathisen, *Silver Coinages*, 95 (nos. 17-18); 89, table 5 (nos. 19-72). Cf. chapters 2.3, 2.4.1, 7.2.

O No	R No	Provenance	Weight	Axis	Diameter
1. 001	R01	<i>Monogram 1 under throne.</i> a. Berlin 147 (ex Stewart's sale 1838-No 307 13-13-0); A. von Sallet, 'Erwerbungen des Königlichen Münzkabinetts in den Jahren 1890-1897', <i>ZfN</i> 21 (1898) 202, pl. IV.2 b. Classical Coins 5 (9.12.1988) 72 [O (a, b): off-centre. (b): flaw from off nose to edge of dotted border. R (b): flaw in exergue].	16,30 g 17,02 g	11 h -	2,85 cm -
2. 001	R02	a. CBNC60 5679 (ex Gertzos coll.) b. Brussels; Gaebler, <i>AMNG</i> III.2, 179.3, pl. XXXII.22. [R (b): horizontal scratch on eagle; r., die break on first A].	17,04 g	7 h	2,40 cm
		***      ***      ***			
		O: <i>Similar.</i> R: ΒΑΣΙΛΕΩΣ ρ., ΑΝΤΙΓΟΝΟΥ Ι. Group 2 Specimens: 4      Obverses: [1-1] Die combinations: 4      Reverses: 4			
3. 001	R03	R: <i>Monogram 3 l.</i> a. Ritter L 19 (11.1983) 163; Spink-Christie's 119 (4.3.1997) 395; Sear 6784. [O (a): test cut on edge (7 h). Scratch on face, across neck and chin. R (a): scratch across foot].	16,09 g	-	-
4. 001	R04	a. ANM 1 (Iliou Melathron) [O (a): small flaw off forehead; l., flaw alongside nose].	16,89 g	4 h	3,15 cm
5. 001	R05	R: <i>Monogram 1 in field l.</i> a. BM 2, Bank Collection, 1034 (Head, <i>HN</i> , 229, fig. 140 = C. T. Seltman, 'A Synopsis of the Coins of Antigonus I and Demetrius Poliorcetes', <i>NC</i> (1909) 268, pl. XX.6 = B. V. Head, <i>Coins of the Ancients</i> , London 1895 <sup>4</sup> , pl. 31.12). [O (a): off-centre. In field up, die break on dotted border, vertical flaw on lower lock of mane; angular flaw between two mane locks and border. Retouched on forehead; new flaw from nose upwards. R (a): off-centre].	17,04 g	12 h	3,02 cm
6. 001	R06	R: <i>l, beneath eagle, monogram 3 erased.</i> a. Schlessinger (4.2.1935) 13 (Hermitage, 4.2.1935) 758 = B. M. Yakountchikoff, <i>Rare and unpublished Greek coins</i> , St. Petersburg 1908, no. 27; Hyla A. Troxell, 'The Peloponnesian Alexanders', <i>ANSMN</i> 17 (1971) 75, n. 68. [O (a): development of flaw from nose upwards. R (a): off-centre. NB: Module smaller].			



All the transitional silver tetradrachms in the name of the new king came from a single obverse die, which had been combined earlier with reverses of the Monogram group of Makedonian posthumous Alexander tetradrachms<sup>17</sup>. In the absence of these transitional Alexander tetradrachms from securely dated hoard contexts, this obverse link, in addition to the recut die on specimen 5, places the transitional issues at the end of the Monogram group of posthumous Alexanders. The obverse is characterised by Mathisen as 'handsome', with 'well proportioned features', whereas the reverses are 'wholly different from that of the remainder of the Monogram group'<sup>18</sup>. The diversity in the style of Zeus and in the legend letters indicates the production of these tetradrachms within a longer time span (cf. chapters 2.1, 2.4.1). Various combinations of the letters E and K yield monograms 1-4, the only control mark on this issue (chapter 2.2.4). Their various positioning, initially beneath the throne and later in field 1., echoes their position at the Helmet group and later at the Monogram group. This variation presumably reflects some instability in the mint organisation at an early stage. The transitional Alexander tetradrachms share no common control marks with the Pan series.

The legend order on the first two silver Alexander tetradrachms, with ΒΑΣΙΛΕΩΣ 1. and ΑΝΤΙΓΟΝΟΥ ρ., diverges not only from the general practice on the last four die combinations of transitional Alexanders, but also from that of the posthumous Alexanders and of most Pan head tetradrachms (chapter 3.2.2). The initial arrangement of the legend echoes that on the early stages of the reign of Demetrios Poliorketes<sup>19</sup>. It may therefore illustrate Antigonos' attempt to follow practices established by his father. The order of the legend is also similar to that on the transitional gold staters in the name of king Antigonos and to that on the Pan head tetradrachms with Athena ρ. and with a *kalathos*/'bakchos ring' symbol 1.

With the exception of the second and the last tetradrachms, the surviving specimens are off-centre. The unsuccessful attempt of the die-cutters to fit the dies to the rather small flans favours the early issue of these coins. A test cut has been performed on specimen 3 (9 h), in order to confirm its authenticity.

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<sup>17</sup> Mathisen, *Silver Coinages*, 95-6; Price, *Alexander*, 141.

<sup>18</sup> *Ibid.* Cf. chapter 2.4.1.

## 3.2.2

## Individual types: Pan Head Tetradrachms

## I. Athena Alkidemos I.

## Crested helmet I.

The 'helmet series', with a crested Makedonian helmet l. on the reverse field, is the most prolific of the Pan head tetradrachms from this period.

## Crested helmet I. - Monograms 5-7 r.

Monograms 5-7 are presumably variations of the same monogram. They are thus considered as a unit.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Makedonian shield decorated by two concentric circles on edge. Seven embossed crescent and eight-rayed star units ('star/crescents') arranged around a central emblem. In centre, horned head of Pan l. with three-fold drapery round neck, tied in front, and pedum at shoulder. Drapery ends in straight line. Two concentric lines surround central emblem. Face small, pedum far from head, starting from between the middle and top drapery folds.</p> <p><i>R</i>: ΒΑΣΙΛΕΩΣ ΑΝΤΙΦΟΝΟΥ. Archaising statuesque Athena Alkidemos I., brandishing thunderbolt, in exergue. Athena in Athenian crested helmet and high-girdled chiton, falling in clearly delineated folds with one heavy fall in middle and with the hem ending in points. Shawl over shoulders falls in dove-tail pleats with two-pointed ends. Aegis across her back; thunderbolt on l. arm, poised to strike. She is striding, with l. leg advanced. She walks on tiptoe with both feet. In field l., crested helmet with high bowl (pilos/konos).</p> <p><b>Group 1</b></p> <p style="padding-left: 40px;">Specimens: 10                      Obverses: 4 Die combinations: 8                Reverses: 8</p>					
1. 001	R01	<i>R</i> : Monogram 5 r.			
		a. ANS 1944.100.13836	17,08 g	6 h	-
		b. G. Hirsch 175 (14-16.9.1990) 243	16,70 g	-	-
<p>[<i>O</i> (<i>a</i>): flaws from (upper, middle, lower) pedum; also, on outer badge circle towards 'unit' 1 l.; diagonal wear, from lower r. end of 'unit' 1 towards outer badge end. Flaw between 'unit' 3 and badge circle. Attempted piercing (6 h): star 7 scratched out.</p> <p><i>R</i> (<i>a</i>): signs of attempted piercing in field (11 h). Beginning of flaw between r. pleat behind ΣΙ. Monogram with upper horizontal hasta of E beneath l. angle of M. Beginning of flaw r. of l. vertical bar of second N].</p>					
2. 001	R02	a. ANM; ex Eretria, 1937 (Picard, <i>Chalcis</i> , 157.307, pl. XXIX).	17,08 g	5:30 h	3, 00 cm

<sup>19</sup> Newell, *DP*, 87-92, nos. 77-82 (Pella); 106-8, nos. 107-12 (Amphipolis).



O No	R No	Provenance	Weight	Axis	Diameter
		[O (a): flaws on badge and between outer badge circle and outer 'crescent' 1 develop; flaw between inner and outer badge circle, off 'unit' 3; small flaw, from outer 'crescent' 3 downwards. R (a): l., flaws: between l. pleat and Γ; (signs) between l. pleat and second N; also, between l. pleat and figure. NB: uncleaned].			
3. 001	R03	a. Coin Galleries MBS (14.2.1973) 22	16,95 g	-	-
		[O (a): breaks on badge area and off 'units' 1 and 3 develop. R (a): signs of flaw between l. pleat and figure. NB: very bad photograph].			
4. 001	R04	a. CBNC 1257	17,13 g	6 h	3,08 g
		[O (a): development of existing flaws. Large flaw on badge, from upper <i>pedum</i> through inner badge circle, to outer 'crescent' 2. Sign of die break on outer badge circle, off 'unit' 2. R (a): similar archaising Athena l.; shield closer to chest; hair lock shorter. R., flaws: from upper thunderbolt to edge, above ΩΣ, from each foot to edge].			
5. 002	R05	a. Peus 280 (30.10-31.11.1972) 99	17,13 g	-	-
		b. Schlessinger (4.2.1935) 776	17,00 g	-	-
		[O (a): six-rayed stars, except nos. 3 and 6 (seven-rayed); signs of flaw l., between 'unit' 2 and badge circle; also, between lower r. end of 'unit' 3 and badge. (b): flaws from 'unit' 5 through head to 'unit' 2; diagonal, wavy flaws: from 'unit' 6 to middle of neck, from hair to 'units' 2 and 3 and between head and <i>pedum</i> . Also, between badge edge and either side of 'unit' 3; on r. end of 'unit' 4; finally, on space 4. R (a-b): diagonal flaw from upper l. bar of N to shield and from between shield and pleat to <i>chiton</i> ; flaw r. of vertical hasta of Γ; between figure and shawl pleat].			
6. 002	R06	R: Monogram 6 r. a. Edinburgh ED55.1923.819 (Rutter, <i>Edinburgh</i> , 55); ex FM 35; ex SB 41, 44 (17,07 g)	17,10 g	4 h	3,2 cm
		[O (a): flaws starting diagonally from 'unit' 5 through to nose and chin; also, between 'unit' 2 and badge edge; on spaces 3 and 7. Flaw on badge, from drapery knob downwards, through to outer badge circle. Between <i>pedum</i> and head, countermark: star. R (a): l., flaws: diagonally from <i>chiton</i> to l. pleat, from l. pleat to upper r. crest. Monogram with upper horizontal hasta of E starting from l. angle of M].			
7. 003	R07	a. Nicola L 9 (9. 1974) 74	-	-	-
		[O (a): flaws on all spaces. Flaw from 'unit' 1 to l. horn and on inner badge circle, l. of l. horn; diagonal flaw up r., from inner badge circle towards upper <i>pedum</i> . R (a): l., dot up l. of O; flaw from O to l. crest].			
8. 004	R08	a. BM E. H. , p. 295, no. 3.	16,76 g	10 h	3,12 cm





O No	R No	Provenance	Weight	Axis	Diameter	
	b.	Peus 280 (30.10-31.11.1972)	100	17,08 g	-	-
	c.	Vinchon MBS (20-2.5.1959)	456; ex Vente Caron 179 (2.1926) Paris	16,95 g	-	-
		[O (a): very worn. Development of existing flaws. R (a): up l., worn].				
		<i>O: Six-rayed stars, but no. 6 with eight rays. Horns diverge, drapery ends in straight line. R: Athena taller, many folds on chiton. Shield held as high as upper arm.</i>				
13.	007 R13	a. Galata (2.1979)	11	-	-	-
		[O (a): flaw beneath chin; flaws on spaces 1-2, 5, 7. R (a): l., flaw from A through to <i>chiton</i> ; dot beside Y. In field up r., flaw on r. vertical monogram bar].				
14.	008 R14	a. MMAG 3 (1973)	148	17,13 g	-	-
		[O (a): flaw on badge, off eye; second flaw from <i>pedum</i> ; also, between 'units' 2-4 and outer circle. R (a): l., flaw between l. shawl and <i>chiton</i> ; also, above shield; dot beneath TI. Monogram with upper horizontal hasta of E on the same level as l. angle of M].				
		***      ***      ***				
		<i>O: All stars six-rayed, no. 4 eight-rayed. Horns r. and diverge; pedum farther from head; nebris ends in curve. Neck high, Adam's apple prominent. R: Similar.</i>				
		<b>Group 4</b>				
		Specimens: 11		Obverses: 2		
		Die combinations: 6		Reverses: 6		
15.	009 R15	a. BM 1896-7-3-192		17,06 g	8 h	3,32 cm
		b. Scotussa area, (pre-) 1989 (CH VIII 283, pl. XXXIV.6)		-	-	-
		c. Scotussa area, (pre-) 1989 (CH VIII 283, pl. XXXIV.2)		-	-	-
		[O (a-b): flaw from chin downwards; also, on spaces 3, 7; between 'unit' 3 and badge edge, 'unit' 4 and badge edge. Horizontal flaw between star 1 and badge. (b): development of existing flaws, new ones on spaces 1-2, 6, 'unit' 2 and badge circles. Flaw r. of neck and at upper <i>pedum</i> . R (a-b): flaw between l. bar of A and monogram. (b): l., flaws on A, N, T.; flaw extending horizontal monogram bar].				
16.	009 R16	a. Kölner 58 (6-7.4.1993)	29 (16,91 g); ex Kölner 51 (12-13.11.1990)	81		
			16,79 g	-	-	-
		[O (a): flaws on all spaces; also, between r. end of 'units' 1-4 and badge edge. R (a): l., horizontal flaws: between N and shield; r., and on top of monogram].				
17.	009 R17					

O No	R No	Provenance	Weight	Axis	Diameter
		a. NFA MBS (27.6.1986) 215	16,96 g	-	-
		[O (a): l., vertical flaw slightly expands; horizontal flaws on all spaces; flaw from 'unit' 2 through to upper head and eyebrows, to up r. end of 'unit' 6. R (a): up l., diagonal flaw between border and r. diagonal bar of A].			
18.	O09 R18	a. Gordion, 1961: <i>IGCH</i> 1405 (D. H. Cox, 'Gordion hoards III, V and VII', <i>ANSMN</i> (1966) 440.41)	16,50 g	9 h	-
		[R (a): l., diagonal flaw from field l., through $\Pi$ and r. end of pleat to l. foot. Horizontal flaws from r. through $\Sigma$ I to figure and from between letters $\Lambda$ and E to pleat end. Test cut on <i>chiton</i> ].			
19.	O09 R19	a. Scotussa area, (pre-) 1989: <i>CH VIII</i> (1994) 283, pl. XXXIV.7	-	-	-
		b. Superior Galleries (12.1987) 301; Superior Galleries, The Moreira Collection Sale, part 1, Auction & MBS (1.6.1988) 1483	16,63 g	-	-
		c. Classical Coins 28 (8.12.1993) 72	16,94 g	-	-
		[O (a): flaw on badge, up r.; flaws on all spaces and between 'units' 3-4 and badge area, past hair to upper <i>pedum</i> . R (a): very worn. Monogram with a horizontal hasta connecting both angles of M].			
		<i>O: Similar, but hair falls in larger locks from crown of head. Drapery ends in curve, middle fold prominent.</i>			
		<i>R: Similar. Monogram 5 r.</i>			
20.	O10 R20	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 47)	16,92 g	6 h	-
		b. Kress 91 (1951) 55	17,10 g	5 h	-
		[O (a): on badge, flaw from off chin downwards; second flaw, between hair and <i>pedum</i> ].			
		***	***	***	
		<i>O: All stars six-rayed. Head rendered in flat forms. Horns curved l., diverge. Hair linear, flowing from crown downwards. Neck shorter, but Adam's apple prominent.</i>			
		<i>R: Similar. The r. end of pleat very close to r. bar of <math>\Lambda</math>. Helmet with very short bowl. Monogram 7 r.</i>			
		<b>Group 5</b>			
		Specimens: 9	Obverses: 1		
		Die combinations: 3	Reverses: 3		
21.	O11 R21	a. ANS 1944.100.13837	17,05 g	12 h	-
		b. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 46)	16,88 g	5 h	-
		c. Scotussa area, (pre-)1989 ( <i>CH VIII</i> (1994) 283, pl. XXXIV.3)	-	-	-
		[O (a): flaw on badge circles and from drapery knob to outer badge circle. Beginning of flaw on outer crescent 3; also, respectively between 'units' 1, 2, 5 and 7 and badge edge. Flaw between lower <i>pedum</i> and middle fold of drapery. Signs of flaw on edge (space 4). (b): flaw (dots) off eye].			



O No	R No	Provenance	Weight	Axis	Diameter
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22. O11 R22

- a. Müller L 43 (5.1986) 11 (17,11 g); Müller 47 (28-9.9.1984) 33; Müller 44 (16-7.12.1983) 50; Müller 36 (12-13.2.1982) 70  
17,10 g - -
- b. Thesprotia, 1992 (Touratsoglou, *DM*, no. 48)  
16,74 g 12 h -
- c. Classical Galleries, Num. Review L 3.5 (1962) E56; Superior Galleries (1992) 2061; Helbing 24 (24.10.1927) 2861  
17,01 g - -
- d. Kurpfälzische Münzhandlung 46 (9-10.6.1994) 50  
16,20 g - -
- [*O (a-b)*: flaw on outer crescent 7; that from drapery knob expands to r. edge of 'unit' 5. (*b*): flaws on spaces 6 and 7. (*d*): flaw off nose.  
*R (a)*: l., diagonal flaw from border to  $\Pi$ . In exergue, flaws beneath feet].

23. O11 R23

- a. Peus 274 (29.10.1970) 1576 17,01 g - -
- b. G. Hirsch 2 (6-7.12.1979) 136 - - -
- [*O (a)*: horizontal flaw from 'unit' 2 through head and nose to 'unit' 6; flaw up r., at l. end of 'unit' 6; flaw from knob to lower badge circle develops. Flaws on spaces 2-5.  
*R (a)*: very worn].

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**Group 6**

Specimens: 3                      Obverses: [1-1]  
Die combinations: 1              Reverses: 1

24. O08 R24

- a. Münzzentrum L 19 (6.1974) 22 - - -
- b. Münzzentrum L 20 (1975) 19 16,65 g - -
- c. Superior Galleries, Chicago International Fair (30.5-1.6.1980) 2114  
16,11 g - -
- [*O (a)*: drapery with three folds ending in curve, middle fold prominent. Flaws on spaces 1-3, 7. In badge, up l., flaw.  
*R (a)*: flaw between head and inner badge circle; also r., from top of  $\Lambda$  to border; horizontal flaw from r. foot through  $\Sigma$  to border; worn. Monogram with horizontal line connecting both angles of M].

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*O*: Six-rayed, relief stars. Hair rendered in lines, flows from crown towards face. Anastole short. Horns diverge; eyebrows, chin, Adam's apple prominent. Three-fold drapery, pedum emerges from between middle and upper fold.  
*R*: Legend hastily engraved. Figure of Athena short, holding thunderbolt with lotus-tipped ends; shield diagonal. Helmet with small bowl and high crest with thin ends. Monogram with upper horizontal hasta of E on the same level as l. angle of M.





O No	R No	Provenance	Weight	Axis	Diameter
<i>R (a):</i> l., flaw on r. end of pleat].					

The eight-rayed stars in the elliptic star/crescent units on the Makedonian shield in groups 1 and 3 give way to six-rayed stars in the rest of the series. Even though the style of the archaising Athena on the reverses and the letter forms generally remain the same, stylistic variations may be observed on the obverses. The hair locks in *anastole* on the moderate, carefully rendered Pan heads of the first two groups, for instance, are reminiscent of the coin portraits of Alexander as Apollo or as a young beardless hero<sup>20</sup>. They are replaced by diagonal locks directed from the crown of the head towards the face on coin no. 9 from Group 2, to revert to locks flowing from the upper head downwards on the next groups. Group 3 is distinguished by a larger head of Pan, with a higher neck. The drapery is looser and ends in a larger curve. A long neck occurs in group 4, but a shorter and thicker one characterises group 5. A tendency to move the *pedum* away from Pan's head develops from group 3 until the end of the series, alongside a preference for smaller helmets l. on the reverse field.

Groups 8 and 9 may be placed towards the end of this series, on the basis of the less skilful designs on both the obverses and reverses. The *pedum* on the obverse is away from the head, the horns diverge and a different type of helmet is adopted, with an elaborate crest holder.

Ten different obverses are utilised alongside twenty-eight reverses by the mint officials signing with these monograms. A large die break on the *pedum* of specimen 4 presumably justifies the withdrawal of the first obverse die, and a number of flaws on O11 on specimen 23 may also account for its abandonment.

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<sup>20</sup> R. Fleischer, 'Hellenistic royal iconography on coins', in Per Bilde et al., *Aspects of Hellenistic kingship*, 28-39, esp. 28-31, 37-8.

**Crested helmet I. - Monogram 9 r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Eight-rayed stars, horns point r. Pedum starts from middle fold; heraldic dots at regular distances on pedum.  <i>R</i>: Athena standing on r. leg, ready to throw thunderbolt; stylised hem folds.</p> <p><b>Group 10</b></p> <p style="margin-left: 40px;">Specimens: 11                      Obverses: 2  Die combinations: 6                      Reverses: 6</p>					
29.	O13 R29				
		a. MMAG 15 (18-19.9.1985) 81	17,14 g	-	-
		b. Athena 3 (15.5.1990) 98	17,11 g	-	-
		c. MMAG 73 (17.10.1988) 143	17,08 g	-	-
		d. Sotheby (11-13.12.1894) 13; ex Lincoln	-	-	-
		<p>[<i>O</i> (a-b): flaws on spaces 2, 3, 6; near border, from space 6, connecting 'units' 6-7-1. Diagonal flaws, between 'unit' 6 and outer badge circle and on space 7. Flaw from r. edge of 'unit' 4 to border. Flaws expand on (b). On badge, l., flaws off nose; two flaws from drapery knob, the former upwards, the latter through badge circles.  <i>R</i> (b): l., dot r. of Y; flaw between <i>chiton</i> and shawl; r., flaw across upper bar of Σ.  NB (d): uncleaned].</p>			
30.	O13 R30				
		a. Coin Galleries MBS 4 (1993) lot 223 (17,09 g); ex G. Hirsch 159 (21-4.9.1988) 220 (17,13 g); ex Superior Galleries, Auction & MBS (11-12.6.1986) 994 (17,07 g)	17,09 g	-	-
		b. Münzzentrum 72 (2-4.12.1991) 297	17,14 g	-	-
		<p>[<i>O</i> (a): expansion of flaw on space 2 to border; further die break on spaces 5 and 6.  <i>R</i> (a): l., dot beneath O].</p>			
31.	O13 R31				
		a. Superior Galleries (12-14.2.1978) 2184	16,77 g	-	-
		<p>[<i>O</i> (a): r., expansion of flaws, particularly on spaces 1-4. Vertical flaws, between upper <i>pedum</i> and head, lower <i>pedum</i> and drapery.  <i>R</i> (a): up l., flaw from border to beneath r. bar of N].</p>			
32.	O13 R32				
		a. Christie's (14.6.1991) 71	17,11 g	-	-
		<p>[<i>O</i> (a): flaw on badge, off nose; also, from knob through badge circles to 'unit' 4. Flaws on either side of <i>pedum</i>.  <i>R</i> (a): l., flaw l. of A to lower end of l. bar and from Y diagonally to lower border].</p>			
33.	O14 R33				
		a. SNG Aarhus, 464	17,08 g	11 h	-
		b. N. Syria, 1970: CHI (1975) 74	-	-	-
		<p>[<i>O</i> (a): break on spaces 3, 7. Horizontal flaw from drapery knob through badge circles.  (b): flaw from nose to badge circle and from horns to 'unit' 1.  <i>R</i> (a): break l., through N and T, past upper shield to upper border. Flaw from l. end of pleat to Y].</p>			
34.	O14 R34				
		a. Coin Galleries, MBS (10.4.1991), lot 81	17,11 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
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[O (a): on badge, up l., curved flaw off eyes; second break between nose and badge circles; third, off hair towards upper badge circles; fourth, between *pedum* and hair. Flaws on space 2 and between 'unit' 4 and badge expand.

R (a): flaw from field l., up, past Alpha, through figure to r. pleat. In middle, flaw develops from between Omikron and Nu to l. pleat. Alpha crude].

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O: Seven- to eight-rayed stars. Horns r., slightly diverge. Linear rendering of nape-length hair, flowing downwards. Folds of drapery diagonal and regular. On neck, diagonal line between knob and cheek. Adam's apple prominent.

R: Similar. Legend letters regular.

**Group 11**

Specimens: 2	Obverses: 1
Die combinations: 1	Reverses: 1

35. O15 R35

a. Berlin, ex Imhoof-Blumer	17,10 g	12 h	-
b. Cambridge: Grose, <i>McClellan</i> , 3592; ex Grains Montagu Sale Catalogue; Sotheby (11-13.12.1894) 129	17,12 g	12 h	30,5 cm

[O (a-b): flaws on spaces 2 and 7; diagonal flaw on hair, from *anastole* r.; flaws on both crescent ends of 'unit' 3. Die break on outer crescent of 'unit' 5. In (b), flaw on outer edge of 'unit' 5 and on space 7.

R (a-b): flaws developing; up l, beneath  $\Sigma$ , between monogram and l. foot, beneath r. foot. (a): slightly off-centre].

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O: Stars no. 1, 2, 6 seven-rayed, no. 3 eight-rayed. Horns parallel and attached, arrangement of locks different; drapery folds vertical. Nose pointed. Pedum thin.

R: Crested helmet with high bowl. Athena shorter; shield held on level of upper arm.

**Group 12**

Specimens: 4	Obverses: 1
Die combinations: 3	Reverses: 3

36. O16 R36

a. Schulman (30.3.1910) 149; Watoch, 149	-	-	-
b. Dupriez (25.10.1909) 281	-	-	-
c. Meydançikkale, 1980: CH VIII (1994) 308 (Davesne-Le Rider, <i>Meydançikkale</i> , 2587 (A32))	17,06 g	-	-

[O (b): flaws on spaces 1-2, 5-6; flaw on l. edge of 'unit' 5.

R (a): r., flaw on upper lateral bar of first  $\Sigma$ . (b): l., flaw on OY. (c): recut on upper diagonal bar of  $\Sigma$ ].

37. O16 R37

a. Neuchâtel, 4028	17,20 g	11 h	-
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[O (a): curved flaw between l. end of 'unit' 1 to inner badge circle; also, from knob towards l. end of 'unit' 5.  
R (a): flaw on exergue, beneath l. foot].

O No R No	Provenance	Weight	Axis	Diameter
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38. O16 R38

a. Peus 300 (28-30.10.1980) 99; Kroh, Empire Coins, FPL 35 (-) 63

17,00 g

[O (a): diagonal breaks, from 'unit' 7 to nose and from 'unit' 6 past chin to drapery knob. Diagonal flaw from lower r. end of drapery to external badge circle.

R (a): flaw up r., across head, thunderbolt, B towards r. border].

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*O: Six-rayed stars, star 7 with seven rays. Horns upright, slightly diverge. Head small, hair short, locks in pear-dropped shape and arranged vertically, lower locks diagonal. Middle fold of drapery prominent. Pedum thin and dotted, emerging from middle fold.*

*R: Similar. Figure tall, with more plastic movement; large curved shield; helmet with low bowl l. Short distance between r. end of pleat and leg.*

**Group 13**

Specimens: 10

Obverses: [2-1]

Die combinations: 5

Reverses: 5

39. O17 R39

a. Volos 148.2; ex Phayttos, c. 1956: *IGCH* 159, 2 (P. R. Franke, *JDAI* 72 (1958) 38-62, 48.30, pl. 4)

17,08 g

6 h

b. Volos 148.1; ex Phayttos, c. 1956: *IGCH* 159, 1 (P. R. Franke, *ibid.*, p. 48.29, pl. 4)

17,11 g

6 h

c. Hess-Leu 36 (17-18.4.1968) 172

17,07 g

[O (a-b): curved flaw from 'unit' 7 through outer badge circle to 'unit' 1.

R (a): diagonal flaw from Λ through to shawl. Horizontal flaw beneath monogram. (a): off-centre].

40. O17 R40

a. Sotheby Zürich (4-5.4.1973) 343

17,10 g

12 h

3,25 cm

b. Hesperia Art 28 (1963) 60

[R (a-b): flaw beneath Y].

41. O17 R41

a. Elsen L 137 (11.1991) -; ex Elsen L 134 (5-6.1991) 33; ex Elsen L 133 (1991) 33; ex Elsen L 130 (2.1991) 19; ex Elsen L 122 (1-2.1990) 22

17,05 g

b. Kroh, Empire Coins, FPC 45, 54

17,04 g

[O (a): previous flaws expand. Small flaw between r. horn and inner badge circle; also, on outer badge circle, off 'unit' 2; flaw on spaces 2-3, 6.

R (a): flaw up l. from l. vertical bar of N, past shield, upwards. Second flaw off l. foot, downwards].

42. O17 R42

a. Sotheby (22.5.1975) 39

b. Scotussa area, (pre-)1989: *CH* VIII (1994) 283, pl. 34.8

[O (a): flaws develop, new ones on spaces 3 and 5.

R (a): vertical sign of tool l. of head, diagonal scratch between l. crest and r. foot].



O No	R No	Provenance	Weight	Axis	Diameter
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43. O03 R43

a. G. Hirsch 32 (22-4.10.1962) 2353; Dorotheum L 244 (24-7.10.1961) 440

17 g - -

[O (a): flaws on spaces 2-5; also, between 'unit' 5 and outer badge circle, 'unit' 1 and outer badge circle. Recut on upper *pedum*. Badge circles off 'unit' 4 worn. Recut on 'unit' 4.

R (a): l., between legend and l. pleat, worn].

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O: *As above.*

R: *Similar.*

Group 14

Specimens: 4                      Obverses: [1-1]  
Die combinations: 2              Reverses: 2

44. O08 R44

a. Vedrines MBS (23.6.1993) 29

16,77 g - -

b. MMAG L 449 (10.1982) 6

17,10 g - -

[O (a-b): flaw expands on badge circles: dot off eye, l.; diagonal break from 'unit' 5 through external badge circle to upper crescent of 'unit' 4. (b): break on inner badge circle (2 h).

R (a): flaws l. of ANTIFONOY; diagonal flaw, from vertical bar of T to r. end of l. pleat; curved flaw on r. foot. In exergue, small flaws].

45. O08 R45

a. Leu 30 (28.4.1982) 96

17,12 g    11 h    -

b. Toderi L 4 (12.1971) 139

-            -            -

[O (a): additional break on spaces 2, 4-5; also, between r. end of 'unit' 3 and border; horizontally, from 'unit' 3 to external crescent 5, from 'unit' 4 to 'unit' 6. On badge, r., flaw from hair to lower *pedum*].

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O: *Six-rayed stars, star 2 seven-rayed; pedum emerges from between middle and upper drapery fold, away from head. Hair locks in vertical arrangement from crown downwards. Small flaw on upper pedum.*

R: *Similar.*

Group 15

Specimens: 15                      Obverses: 1  
Die combinations: 7              Reverses: 7

46. O18 R46

a. Peus 334 (4.11.1992) 358

16,90 g - -

[O (a): flaws: on l. edge of 'unit' 1; on space 1; off 'unit' 4; between 'unit' 5 and badge; between forehead and badge circle.

R (a): flaw off nose].

47. O18 R47

a. ANS 1980.109.45

17,11 g    11 h    -

O No	R No	Provenance	Weight	Axis	Diameter
		b. MMAG L 404 (9.1978) 3, 21	-	-	-
		c. Sotheby (17-28.10.1993) 443	17,17 g	11 h	-
		d. MMAG L 452 (2.1983) 8	17,13 g	-	-
		e. Kricheldorf 16 (2.7.1966) 70	-	-	-
		f. Goin Galleries, MBS (29.4.1976) 849	17,10 g	-	-
		g. Athena 3 (15.5.1990) 99 (3 h); ex Athena 1 (8.10.1987) 69 (17,17 g)	17,16 g	3 h	-
		[O (a): flaw on space 1, vertical flaw from inner crescent 4 through rays 5-6 to border; small flaw on a ray of star 7. R (a): r., flaw from A up to above Σ].			
48.	O18 R48	a. Thesprotia, 1992 (Touratsoglou, DM, 23)	16,96 g	11 h	-
		b. MMAG L 404 (9. 1978) 21; ex MMAG L 300 (5.1969) 21 (17,10 g)	17,10 g	-	-
		c. Knopek (9.1978) 133	- (b)	-	-
		[O (a): flaw from inner 'crescent' 1, l. to external badge circle; also, on space 2. Vertical flaw across rays of star 4 expands. Scratches on space 1]. R (a): up l., beginning of flaw off helmet. (b): flaws: l., from edge towards N; from lower l. edge towards helmet; between helmet and lower field].			
49.	O18 R49	a. Elsen L 114 (7.1989) 9	17,16 g	-	-
		[O (a): flaws on spaces 4 and 5; also, from nose l. R (a): l., flaw l. of head].			
50.	O18 R50	a. Tkalec-Rauch (4.1989) 72; Classical Coins 9 (1989) 19 (16,45 g)	16,47 g	-	-
		[O (a): new flaw from nose to lower badge edge. Developing break on space 1. R (a): l., flaw between pleat's r. edge and chiton; also, between helmet and lower field. Recut: monogram 11 corrected to no. 9].			
51.	O18 R51	a. Beckenbauer (2.1973) 27	16,978 g	-	-
		[O (a): flaws expand; new flaw from internal badge circle through 'unit' 5 to border. R (a): l., flaw continuing r. vertical bar of second N; also, on lower end of shield].			
52.	O18 R52	a. Drouôt (2-4.6.1998) 48	-	-	-
		[O (a): flaws on spaces 1-2, 5-6; two diagonal flaws from 'unit' 1, one from space 1 towards centre; diagonal flaw from nose to lower l. badge. R (a): l., horizontal flaw beneath I].			

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O No	R No	Provenance	Weight	Axis	Diameter
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*O*: Six-rayed stars, star 3 seven-rayed. Horns dotted, upright and parallel. Head large; horizontal wrinkle on forehead. Neck shorter. Three-fold drapery.

*R*: Athena crude; short shield, decorated with aegis. Few folds on central and lower chiton. Helmet with very small bowl.

**Group 16**

Specimens: 5                      Obverses: [1-1]  
Die combinations: 3              Reverses: 3

53. O12 R53

a. Edinburgh 1926.105: Rutter, *Edinburgh*, 54

17,05 g              12 h              3,1 cm

b. Sotheby (26.4.1907) 65 (pl. 3.39)

16,977 g              -              -

[*O* (*a*): diagonal flaw on outer badge circle, off 'unit' 1; also, between external badge circle and external crescent of 'unit' 3.

*R* (*a*): l., vertical flaws following legend letters, A-Γ and N-Y].

54. O12 R54

a. BM 1852-2-22-14

17,07 g              12 h              3,25 cm

b. Berk 32 (1984) 81

-              -              -

*O* (*a*): curved flaw on space 3; also, from upper *pedum* upwards; third flaw on l. edge of 'unit' 4.

*R* (*a*): l., curved flaw between shield and N].

55. O12 R55

a. Schweizerischer Bankverein 2 (27.10.1977) 308

17,11 g              -              -

[*O* (*a*): r., flaw and wear on 'unit' 4; l., flaw from spaces 1 and 6 through badge circles to knob of drapery.

*R* (*a*): l., vertical flaw above shield; r., horizontal flaw from B to border; second flaw starting from Λ].

\*\*\*      \*\*\*      \*\*\*

*O*: *Similar*.

*R*: *Similar*.

**Group 17**

Specimens: 11                      Obverses: [2-1]  
Die combinations: 5              Reverses: 5

56. O06 R56

a. ANS 1944.100.13840

17,11 g              12 h              -

[*O* (*a*): flaws on spaces 4-5, 7; between crescents of 'unit' 7; also, between 'unit' 2 and inner circle, no. 7 and external badge circle. On badge, flaws starting from nose: the former horizontal, from nose to circle; the second very small, diagonal; the third, towards lower badge border, l.; fourth flaw towards chin; fifth horizontal flaw, towards lower badge border. Also, curve from lower end of drapery towards badge circle; r., small flaw from middle fold of drapery towards *pedum*.

*R* (*a*): horizontal flaw between figure and r. pleat].

O No	R No	Provenance	Weight	Axis	Diameter
57.	O06 R57	a. Salzburg	-	-	-
		[O (a): diagonal flaw r., from inner badge circle off external crescent of 'unit' 2, second flaw developing from nose downwards; diagonal flaw from middle fold of drapery towards 'unit' 4. R (a): l., flaws between legend letters and figure. Diagonal flaw from r. end of l. pleat towards lower l. vertical bar of monogram; also, between r. end of r. pleat and E].			
		O: <i>Similar. Drapery folds r. end in curve. Hair flows from crown.</i> R: <i>Similar.</i>			
58.	O19 R58	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 22)	16,455 g	11 h	-
		b. <i>SNG Manchester</i> , 735	-	-	-
		c. Jenkins, 735	-	-	-
		[O (a): worn in centre, l. (b): flaw between hair and <i>pedum</i> , and on space 6; <i>pedum</i> recut. R (a): flaws, from lower crest to r. arm, and on l. end of second $\Sigma$ . (b): l., flaw on upper r. bar of N and r., on upper horizontal bar of last $\Sigma$ ].			
59.	O19 R59	a. Lanz 74 (20.11.1995) 167	16,99 g	12 h	-
		b. Cederlind L 105 (24.9.1996) 336; ex Cederlind L 103 (winter, 1996) 1659; ex Spink NY (7.2.1995) 2052	17,00 g	-	-
		[O (a-b): flaw between chin and badge circle; second, smaller flaw up, starting from off nose; flaw from 'unit' 2 through badge to 'unit' 3; also, on space 7. R (a): flaw between l. end of helmet crest and $\Upsilon$ ].			
60.	O19 R60	a. Christie's (28.2-1.3.1989) 1275	17,08 g	-	-
		b. Drouôt (6-8.2.1956) 348	16,96 g	-	-
		c. Scotussa area, (pre-) 1989: <i>CH VIII</i> (1994) 283, pl. 34.5	-	-	-
		d. Mektepini, 1956: <i>IGCH</i> 1410 (Olçay-Seyrig, <i>Mektepini</i> , no 686)	17,07 g	-	-
		[O (a): flaws on space 6 expand; flaw from nose downwards and from knob of drapery to badge circles; flaw between badge circles (2:30 h); scratch on space 3. Scratches across unit' 7 through face and hair locks to <i>pedum</i> . (b): two flaws l., on space 6. (d): recut on nose. R (a): large, spread letters. (b): flaw between vertical bar of T and upper I; flaw on lower l. angle of second $\Sigma$ ].			

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O No	R No	Provenance	Weight	Axis	Diameter
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*O: Similar.*

*R: Similar.*

**Group 18**

Specimens: 5

Obverses: 1

Die combinations: 5

Reverses: 5

61. O20 R60

a. Cederlind 109 (25.9.1997) 780

-

-

-

[*O (a)*: flaws on spaces 1-3].

62. O20 R61

a. MMAG 53 (29.11.1977) 65

16,96 g

-

-

[*O (a)*: flaw on spaces 2-3, 5, between 'unit' 1 and badge; diagonal flaw from nose to badge edge, and between *pedum* and hair.

*R (a)*: l., flaw off second N and beneath second O; r., flaw from  $\Sigma$  downwards].

63. O20 R62

a. Sternberg 24 (19-20.11.1990) 61

17,09 g

-

-

[*O (a)*: new flaw l. of chin; from nose to lower badge; on badge circles off space 1.

*R (a)*: flaw from border up l. towards nose].

64. O20 R63

a. Glasgow 4: MacDonald, *Hunterian*, 340.3, pl. XXIII.19

17,20 g

-

3 cm

[*O (a)*: flaw on space 5 expands to inner 'crescent' 5 and to lower border; new flaw on space 4.

*R (a)*: flaw beneath l. foot].

65. O20 R64

a. Cahn 9 (30.5.1932) 292

17,02 g

-

[*O (a)*: flaw on space 5 develops; flaw on nose and chin, from hair locks through to edge of 'unit' 4.

*R (a)*: up r., flaw on either side of thunderbolt].

\*\*\*      \*\*\*      \*\*\*

*O: As above.*

*R: Similar.*

**Group 19**

Specimens: 7

Obverses: [2-2]

Die combinations: 4

Reverses: [4-2]

66. O09 R63

a. Gorny 76 (22.4.1996) 25; ex Sternberg 10 (1980) 74

17,00 g

-

-

b. Galata Coins L (5.1977) 6

-

-

-

[*O (a)*: flaws on spaces 2-3.

*R (a)*: flaws on and beneath exergue, l.].

O No R No	Provenance	Weight	Axis	Diameter
67. O09 R65	a. BM PRK A.1, p. 88 b. Berlin; ex C. B. Fox c. Scotussa area, (pre-) 1989: <i>CH VIII</i> (1994) 283, pl. 34.1	17,06 g 17,00 g -	12 h 12 h -	3,2 cm - -
	[O (a): flaw on lower 'unit' 3; between 'unit' 4 and badge. Between <i>pedum</i> and head, flaw parallel to <i>pedum</i> . (c): up, flaw from upper hair to badge. R (b-d): r., flaw through B and thunderbolt].			
68. O09 R66	a. Drouôt (2-3.12.1993) 36; ex Galata Coins L (6.1988) 22	-	-	-
	[O (a): flaw between 'unit' 1 and border; in centre, flaw on neck. R (a): r., flaw between E and O].			
	<i>O</i> : Horns parallel and upright, drapery folds end on curve r. <i>R</i> : Alpha without horizontal bar; shield badge prominent. In field l., r. bar of Nu longer. Helmet away from shawl pleats.			
69. O10 R67	a. Kricheldorf 4 (7.10.1957) 161	17,09 g	-	-
	[O (a): flaws on either side of 'unit' 2, between 'unit' 2 and badge end; horizontal flaws, from internal badge circle to nose and mouth respectively. Horizontal flaw from internal badge circle to neck. Flaw from lower <i>pedum</i> to badge circle. R (a): signs of flaw r. of helmet].			
	***      ***      ***			
	<i>O</i> : Six-rayed stars, nos. 1, 3-4, 7 seven-rayed. Neck long. Curved, dotted <i>pedum</i> . <i>R</i> : Large helmet with high bowl, rich crest, long cheek flaps.			
	<b>Group 20</b>			
	Specimens: 19	Obverses: 3		
	Die combinations: 11	Reverses: [11-1]		
70. O21 R65	a. <i>SNG Delepierre</i> , 1064	-	-	-
	[O (a): flaws off nose, chin and <i>pedum</i> expand. R (a): flaw up r., through B and thunderbolt; off I and diagonally off second $\Sigma$ ; up l., from A to upper edge].			
71. O21 R68	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 20)	16,95 g	11 h	-
	[O (a): flaws on spaces 2-4, 6-7. In centre, flaw above head and (signs) from middle fold; also, between drapery and inner badge circle, <i>pedum</i> and inner badge circle. Flaw (signs) between lower hair lock l. and knob, and between lower hair locks and upper fold of drapery. Flaw off nose. R (a): vertical flaw between r. end of l. pleat and helmet crest].			
72. O21 R69	a. ANS 1946.89.25	17,10 g	12 h	-



O No R No	Provenance	Weight	Axis	Diameter
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[O (a): flaw l. of chin; also, flaws starting from ends of drapery folds.  
R (a): flaw between l. pleat ends and helmet].

73. O21 R70

a. Milan, B1185 (coll. Brera) 17,16 g 12 h -  
[O (a): l: countermark, plant].

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O: Six-rayed stars, minor repairs on stars 6 and 7. Hair linear, from crown downwards.  
Horizontal wrinkle on forehead.  
R: Similar.

74. O22 R71

a. Marseille, coll. Vernie, 390 16,99 g - -  
b. Berliner Münzkabinet 13 (21-2.5.1981) 30; ex Berliner Münzkabinet 12 (4-5.12.1980) 15 16,20 g - -  
[O (a): small diagonal flaw from nose to inner badge circle. (b): on badge, from border up r. towards hair; diagonal break from end of drapery towards lower border; flaw on space.  
R (a): r., portion of metal flaked off in field].

75. O22 R72

a. Christie's (14.6.1993) 20; ex Kroh, Empire Coins, FPL (Fall 1983) 4095 16,70 g - -  
b. Pherai, 1937-8: *IGCH* 168 (*ANSMN* 26 (1981), pl. 14.537) 16,62 g 11 h -  
c. NFA MBS (12.10.1990) 191 16,76 g - -  
[O (a): l., start of flaw, from mouth downward. (b): l., flaw between nose and badge circles; also, r., between end of *pedum* and badge circle.  
R (a): r., flaw between pleat and monogram].

76. O22 R73

a. NFA (3.1975) 93 16,95 g - -  
b. Thesprotia, 1992 (Touratsoglou, *DM*, no. 21) 16,46 g 11 h -  
[O (b): flaws through spaces 1 and 4; also, on external badge circle, off space 2. On badge, l., diagonal flaws: from forehead to lower badge circle, from off 'unit' 2 to hair. Small flaws l., r. and above *pedum*.  
R (b): flaw from lower l. border past exergue downwards and in lower field, r.]

O: Six-rayed stars, a ray added to star 2. Vertical flaw on 'unit' 1. Neck shorter, *pedum* starts from between upper and middle fold. Hair locks arranged towards face. Horizontal wrinkle on forehead. Two diagonal lines across neck, from lower hair to knob.  
R: Similar.

77. O23 R74

a. Milan, B1184 (coll. Brera) 16,92 g - -  
b. Kress 127 (23.10.1963) 378 17,00 g - -  
[O (a): flaw on spaces 1, 3-4 and on nose.  
R (a): flaw l., in middle; also, between helmet crest and *chiton* and between r. pleat ends].

O No	R No	Provenance	Weight	Axis	Diameter
78.	O23 R75	a. Elsen L 113 (1.1989) 38 [O (a): new flaw on space 6; flaw on nose expands. R (a): flaw on exergue, beneath r. foot].	17,08 g	-	-
		<i>O: Upper ends of 'crescents' 7 converge. Flaw l. of pedum; pedum very close to badge edge. R: Similar.</i>			
79.	O24 R76	a. Brussels, coll. de Hirsch, no 117 b. SNG Cop, 1200 [O (a): flaws: on spaces 5-7; from <i>anastole</i> to beginning of neck; off <i>pedum</i> ; diagonally, from middle drapery to external badge circle, off space 4].	17,07 g 16,86 g	11 h 10 h	3,1 cm -
80.	O24 R77	a. BM 1866-12-1-1185 b. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 24) c. Emporium 12 (21-2.4.1988) 41 [R (a): recut on nose; r., flaw from r. end of pleat and legend; second flaw further, r. (c): flaw up l., from Alpha through to head].	17,04 g 17,03 g -	12 h 12 h -	3,15 cm - - cf b-c
		***      ***      ***			
		<i>O: Stars 6-7 with eight rays, no. 2 seven-rayed; flaw on badge l., off nose. R: Helmet l. with small bowl, long cheek pieces and crest. Legend letters small, regular and elaborate. Monogram very close to legend. Athena more elaborate.</i>			
		<b>Group 21</b>	Specimens: 1 Die combinations: 1	Obverses: 1 Reverses: 1	
81.	O25 R78	a. Meydançikkale, 1980: <i>CH VIII</i> (1994) 308 (Davesne-Le Rider, <i>Meydançikkale</i> , no. 2586) [O (a): diagonal flaw from edge of 'unit' 5 to 'unit' 4; vertical flaw on space 3. R (a): l., flaw beneath l. lateral bar of Alpha; also, l. of r. foot, on exergue].	17,10 g	-	-

Much more prolific coin production may be observed under the mint official utilising monogram 9, than under those signing with monograms 5-8. The surviving specimens with the symbol of this mint official come from nineteen obverse dies. These dies are combined with forty-nine reverses signed with monogram 9. Fourteen of the dies utilised by this mint official are not combined with the previous monograms. However, the five obverses that also occur with monograms 5-9 fit in with the stylistic evolution of these dies, thus confirming the parallel function of all the die cutters.



The fact that Monogram 9 is recut on monogram 11 on specimen 50 also certifies the contemporary, at least, activity of the two officials.

The 'units' with seven- to eight-rayed stars decorating the shield on groups 11-13 give way in group 14 to six-rayed stars, which henceforth become the norm. A growing preference for taller figures of Athena and for helmets with smaller bowls is observed on the reverses, though the style of the lettering generally remains the same. An Athena of crude workmanship, however, is combined with a change in the legend letters, which become larger, with a Sigma with straight horizontal hastae and with a Nu with vertical end even bars at the end of groups 15-17. The production of these dies by the same die cutter and their generally contemporary use are thus effectively portrayed. The tendency for larger heads of Pan, with a *pedum* away from the head tallies with the use of wider flans, particularly as the obverse designs of nos. 33 and 34 have been spread beyond the flans. Some ineptness may be observed on nos. 30, 33-4, 49, 60 and 70, which come from somewhat rotated dies. The edge of no. 43 is also cracked, presumably reflecting the flan's insufficient heating at the time of striking. Finally, scratches are observed on the reverses of certain specimens (i.e. no. 41).

The last group with Monogram 9 is represented by a single coin, but it deserves attention. On the obverse, a rough, small head is made to fit into a small flan. The crude workmanship of the obverse is offset by the very carefully engraved letters, helmet and monogram on the reverse. This specimen is obverse linked to Groups 22 and 29, signed with monograms 10 and 11, and it is stylistically similar to no. 143, without a crested helmet and with monogram 11 l. The *Meydançikkale, 1981* hoard, including no. 81 from this catalogue, provides an approximate *terminus ante quem* around 240 BC for these groups. The degree of wear and the style of no. 81 approximate it to no. 36c, from the same hoard. Rather than assuming that an issue with such an ideological gravity as the Pans started with a rather crude variety<sup>1</sup>, one might beg to assign the low quality of this group to the engagement of the mint official with celebratory issues towards the end of this period.

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<sup>1</sup> As does Mathisen: *Silver Coinages*, 111-2.

**Crested helmet l. - Monogram 10 r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Eight-rayed, elliptic units. Pan with short hair arranged downwards, horns directed backwards. End of neck concave. Pedum very thin, held upright.</i>  <i>R: l., helmet with long crest, high bowl and long cheek flaps.</i></p>					
<b>Group 22</b>					
		Specimens: 1		Obverses: 1	
		Die combinations: 1		Reverses: 1	
82.	O25 R79	a. Gorny 13 (28-9.6.1979) 84	-	-	-
<p>[<i>O (a)</i>: flaw: on space l; break on external badge circle, r.; off 'unit' 1; off chin. Die break on head.  <i>R (a)</i>: signs of flaw between upper crest and l. pleat end; l., diagonally, from l. foot towards legend letters].</p>					
			***	***	**
<p><i>O: As above.</i>  <i>R: Similar.</i></p>					
<b>Group 23</b>					
		Specimens: 2		Obverses: [1-1]	
		Die combinations: 2		Reverses: [2-1]	
83.	O17 R80	a. ANS 1944.100.13842	16,74 g	2 h	-
<p>[<i>O (a)</i>: new diagonal flaw from internal badge circle to 'unit' 6; also, between l. crescent ends of 'unit' 4 and border; flaws between nose and badge edge develop; new flaw off <i>pedum</i>.  <i>R (a)</i>: l., flaw l. of Γ and on r. vertical bar of second N. R., flaw r. of both Σ, r. of Ω; recut r. of mon.; flaw further r.].</p>					
84.	O17 R79	a. BM 1911-4-9-281 (Rollin)	16,95 g	5h	3,25
<p>[<i>O (a)</i>: curved flaw between 'units' 7 (inner crescent) and 1 on coins 83a-84a; diagonal flaw from up r. end of 'unit' 1 diagonally to l. horn. On badge, flaw off end of drapery, towards 'unit' 4 and from internal badge circle diagonally to 'unit' 6. Nose pointed and worn; signs of flaw off nose and between <i>pedum</i> and badge edge.  <i>R (a)</i>: r., flaw between pleat's r. end and <i>chiton</i>].</p>					

A small issue is signed by a combination of letters K and Ω, monogram 10. The obverse link between nos. 81 and 82 and nos. 39a-43 and 83-4, in addition to the similarity in the legend letters and in the helmet types, may be taken to suggest that Groups 13 and 21 (monogram 9), 22 (monogram 10), 29 and 30 (monogram 11) are contemporary.



**Crested helmet l. - Monogram 11 r.**

O No R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Varied number of rays on each star, horns upright. Hair flows in three locks on nape, Pan's upper lip prominent, chin small, side lock curves, neck longer. Horizontal wrinkle on forehead. Diagonal folds on drapery, distance between lower drapery and inner badge circle larger. Pedum upright, drapery ends in straight line.  <i>R</i>: Similar. Archaising Athena l., brandishing thunderbolt and walking on tiptoes with both feet, in exergue. Shawl over shoulders falls in dove-tail pleats with two-pointed ends. In field l., crested helmet with high bowl (pilos/konos).</p>				
<b>Group 24</b>				
		Specimens: 31	Obverses: 1	
		Die combinations: 5	Reverses: 5	
85. O26 R81				
	a. SNG Ashmolean, 3259 (Robinson); Glendining (16.7.1950) (Hall), 86	17,14 g	12 h	3,2 cm
	b. Leiden, 1949/70; ex auction Schulman (19.7.1970) 772	17,10 g	12 h	-
	c. SNG Lockett 3, 1524 (17,10 g); Sotheby (19-21.1.1914) 143; Naville 5 (1923), lot 1465 (17,10 g)	17,07 g	12 h	-
	d. NFA (winter 1989) 461; Leu 22 (8-9.5.1979) 81 (17,12 g 12 h); J. Hirsch 33 (1913) 669; Sotheby (24-5.6.1914) 70; SNG BYB, 350	17,09 g	12 h	-
	e. Royal Ontario Museum, 9734; ex Freeman-Sear, MBS 2 (31.1.1996) 2717,15 g	12 h	3,01 cm	
	f. Weber, 2163	16,97 g	-	3,1 cm
	g. Ciani, 99 (ex coll. Duruflé); Jameson, 1009	17,14 g	-	-
	h. Bloesch, Winterthur, 161; V 172; Merzbacher 4 (1910) 410 (17,15 g); Gaebler, AMNG III.1, 186.3	17,07 g	12 h	3,10 cm
	i. Hartwig (5.3.1910) 733	-	-	-
	[ <i>O</i> (a): beginning of small flaw from end of nose; star 2 with many rays, flaw on space 2. ( <i>f</i> ): nose, pedum recut. <i>R</i> (a): small flaw on nose. ( <i>f</i> ): Athena flatter. ( <i>g</i> ): line between drapery and monogram].			
86. O26 R82				
	a. Berlin; ex Imhoof-Blumer	17,16 g	5 h	-
	b. SNG Delepierre, 1063	17,08 g	11 h	-
	c. SNG Fitzwilliam, 2304; ex A. W. Young, 665-1936; ex Montagu 251	17,14 g	1 h	2,9 cm
	d. J. Hirsch 26 (1910) 258	17,10 g	-	-
	e. Zschiesche (1913) 327	-	-	-
	f. Drouôt (27.2.1961) 121 (Lu. 1698)	17,13 g	-	-
	g. J. Hirsch 31 (5.1912) 276; ex J. Hirsch 24 (1912) 444 (17,20 g); ex Hirsch 13 (15.5.1905) 1180 (17,12 g)	17,10 g	-	-
	h. Helbing 9 (8.4.1913) 327	-	-	-
	i. Drouôt-Bourgey (11.1957) 64	17,13 g	-	-
	j. J. Hirsch 14 (27.11.1905) 583 (17,15 g)	17,12 g	-	-
	[ <i>O</i> (c): off-centre. ( <i>g</i> ): break on lower pedum and on star 5. ( <i>j</i> ): flaw from nose downwards and on star 7. ( <i>k</i> ): recut on lower pedum and on star 5. <i>R</i> ( <i>j</i> ): distance between r. end of pleat and l. leg. In field r., Alpha without curves].			

O No	R No	Provenance	Weight	Axis	Diameter
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87. O26 R83

a.	<i>SNG Sweden II</i> , 1138	17,16 g	5 h	-
b.	Gans 16 (1960) 258	17,07 g	-	-
c.	<i>SNG Fitzwilliam</i> , 2305	16,79 g (p)	1 h	-
d.	NFA 20 (1988) 682	17,10 g	-	-
e.	Brussels, Coll. Du Chastel	17,15 g	3 h	3,1 cm
f.	J. Hirsch 14 (27.11.1905) 310	17,14 g -	3,05 cm	
g.	ANA (8.1952) 2244	-	-	-
h.	Kress 112 (1959) 164	-	-	-

[*O (a)*: parallel ray added to star 2; flaw from nose. *O (a-b)*: recut on side lock. (*k*): flaw on *pedum*.

*R (a)*: horizontal bar on A hardly discernible. Athena taller. Leg discernible through folds. (*b*): curve joining 'unit' 1 with badge; linear flaw on 'unit' 5. Flaw on nose; slight difference on *pedum*. (*k*): r., flaw on Y].

88. O26 R84

a.	BM G 0513	17,09 g (p)	3 h	3,22 cm
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[*R (a)*: reverse curved, change of colour on obverse presumably indicates that it was heated before its striking].

89. O26 R85

a.	ANM; ex Rauch 56 (5.2.1996), 82 (16,80 g); ex G. Hirsch 164 (29-30.12.1984) 210 (17,05 g)	17,12 g	12 h	3,10 cm
b.	MZA 82 (6-8.9.1995) 58	16,80 g	-	-
c.	Wales, 86.11H/2	16,78 g	12 h	-
d.	<i>SNG Cop</i> , 1199	17,07 g (p)	12 h	-

[*O (a)*: stars with thinner lines. (*d*): flaw, two curved flaws on space 7.

*R (a)*: r., flaw between l. end of pleat and *chiton*; also, between l. bar of monogram and *chiton*. (*b*): flaw up r.].

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*O*: Six-rayed stars, upper l. ray of star 3 not connected with centre. Pan's dotted horns converge l. Side lock curves on lower end. Flaw on lower badge, from r. end of *pedum* to badge edge.

*R*: Similar.

**Group 25**

Specimens: 5	Obverses: 1
Die combinations: 1	Reverses: 2

90. O27 R85

a.	BM T.C., p. 107, No. 1	17,10 g	10 h	3,62 cm
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[*O (a)*: curved flaw from ray 1 of star 1 through to upper badge circle. Concave flaw from space 6 through lower end of 'unit' 7 to upper emblem. Signs of tool on space 1, worn on space 2.

*R (a)*: r., flaw between *chiton* and monogram].



O No	R No	Provenance	Weight	Axis	Diameter
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91. O27 R86

a. NFA MBS (12.10.1988) 207 (ex Brauer coll.); Coin Galleries L 1.1 (1-2.1960) A11

16,96 g - -

[O (a): curved flaw across 'unit' 1 and flaws on spaces 2, 4-5 expand; curved flaw on 'unit' 7. Flaw on upper *pedum* and between its r. side and badge edge; also, from knob downwards.

R (a): up, vertical flaw from upper border to badge; l., second flaw, l. of ΓO; lower, curved flaw from r. bar of Y through r. leg to lower border].

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O: *Similar.*

R: *Similar.*

Group 26

Specimens: 3

Obverses: [1-1]

Die combinations: 1

Reverses: [1-1]

92. O15 R83

a. BM 1947-4-6-191 (Oman)

17,14 g

9 h

3,42 cm

b. Leu 53 (21-2.10.1991) 77; ex Glendining 20 (1986) (Knoepke), lot 170

17,17 g

-

-

c. ANS 1944.100.13843

17,18 g

9 h

-

[O (a): flaw on space 4, on edge with badge circles; on border, on spaces 5 and 6; beginning of flaw between badge circles and unit 4. Diagonal flaw on upper badge, l. of horns. Horizontal flaw, from forehead through hair. (c): slight flaw off lower lip and chin, and off two lower folds of drapery: die slightly moved r.? flaws on spaces 6 and 7.

R (a): l., flaw between end of l. pleat and helmet crest; a smaller one, r. of exergue. (c): recut l., between pleat and helmet crest. Flaws off r. pleat and *chiton*].

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O: *Six-rayed stars, a ray added to no. 2. Pedum moves away from head.*

R: *Athena moderate. Shield large, held horizontally. Distance between helmet and pleat edge.*

Group 27

Specimens: 3

Obverses: 1

Die combinations: 2

Reverses: 2

93. O28 R87

a. Peus 337 (3-9.11.1993) 118 (17,10 g); ex Peus 334 (4.11.1993) 359; ex Vinchon MBS (14.5.1982) 12 (16,95 g)

16,90 g

-

-

[O (a): flaw on spaces 1, 3, from border to badge circle l. of 'unit' 4; between 'unit' 5 and badge; between forehead and badge edge. Recut on nose.

R (a): l., flaw off nose; r., horizontal flaw between monogram and E].

94. O28 R88

a. Tradart (16.11.1995) 53: enlargement of coin illustrated on p. 79; ex TNA 1, 68

17,16 g

11 h

-

b. CNA MBS 49 (26.2.1995) 6; ex CNA MBS 45 (25.6.1994) 67: enlargement of coin illustrated; ex Drouôt (13-14.11.1980) 33

16,84 g

-

-

[O (a): flaws expand on spaces 1, 4-5; new flaw between badge and chin.

O No	R No	Provenance	Weight	Axis	Diameter
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*R (a-b): l., flaws beneath T and IΓ; (a): l., flaw from beneath Λ and pleat end. (b): r., flaw between pleat and Σ].*

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*O: Horns parallel, pointing up r. Side locks different, lower hair longer. Two slight curves in anastole, no drapery fold prominent. Nose pointed. Hair locks arranged towards face. 'Star/crescents' 5-7 closer to badge edge.*

*R: Similar.*

**Group 28**

Specimens: 2                      Obverses: [1-1]  
Die combinations: 1              Reverses: [1-1]

95. O16 R85

a. NFA 18 (1987) 124; ex V20: J. Hirsch 13 (1905) 152

17,03 g                      -

b. LJ, 56594

16,03 g

2 h

2.9 cm

[*R (a): shield large and curved, monogram low in field].*

\*\*\*      \*\*\*      \*\*\*

*O: Head small, locks untidy, arranged downwards. Three-fold drapery ends in big curve. Pedum upright, starting from between middle and last fold.*

*R: Letters spread. Figure tall with stylised hem folds, thin shawl pleats and long shield, held upright. Helmet with large bowl, rich crest and long cheek pieces.*

**Group 29**

Specimens: 2                      Obverses: [2-1]  
Die combinations: 2              Reverses: 2

96. O25 R89

a. Thesprotia, 1992 (Touratsoglou, *DM*, no 29)

16,76 g

6 h

-

[*O (a): flaw on 'unit' 4. Diagonal flaw across anastole.*

*R (a): l., flaw between Y and helmet crest; also, from upper bar of N through pleat to crest].*

97. O29 R90

a. Ahlström 28 (22-3.10.1983) 1913

-

-

-

[*O (a): worn between 'units' 2, 5 and badge, and on spaces 4-6; also, between pedum and head, off nose. Diagonal flaw from off 'unit' 1 to hair locks. Diagonal flaw from shield downwards.*

*R (a): l., flaw between l. end of pleat and crest].*

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O No R No	Provenance	Weight	Axis	Diameter
	<i>O: As above.</i>			
	<i>R: Similar.</i>			
	<b>Group 30</b>			
	Specimens: 10	Obverses: [1-1]		
	Die combinations: 5	Reverses: 5		
98. O17 R91				
	a. Schulman (3.1936) 62	17,20 g	-	-
	b. Schulman (1.1913) Nr. 12, n. 4	-	-	-
	[ <i>O (a)</i> : new break on space 7; worn on 'unit' 5 and between 'unit' 5 and badge circles. Flaws between l. horn, r. horn and 'unit' 1 develop.			
	<i>R (a)</i> : l., flaw between Y and helmet].			
99. O17 R92				
	a. Gorny 56 (7.10.1991) 190	-	-	-
	b. Berlin; ex C. R. Fox	17,16 g	9 h	-
	c. Waddell (7.2.1979) 96	17,12 g	-	-
	[ <i>O (a)</i> : flaw up l.; a ray added to star 7. Off-centre. ( <i>b</i> ): horizontal flaw from 'unit' 5 through to no. 6.			
	<i>R (a)</i> : vertical r. monogram bar smaller].			
100. O17 R93				
	a. Ratto (9.10.1934) 110 (17,22 g); ex Ratto (24.6.1929) 257			
		17,18 g	-	-
	b. Baranowsky (1931) 450	17,18 g	-	-
	c. Ratto (13.3.1912) 650	17,15 g	-	-
	[ <i>O (a-c)</i> : up l., flaw on space 7 through upper badge circles. ( <i>b-c</i> ): l., progressive flaws across 'units' 4-6 and between 'units' 3-4 and centre.			
	<i>R (c)</i> : r., flaw between monogram and Σ, off r. pleat; horizontal flaw from l. to r.; flaw between pleat and <i>chiton</i> ].			
101. O17 R94				
	a. Bloesch, <i>Winterthur</i> , 1619	17,19 g	5 h	3,12 cm
	[ <i>O (a)</i> : flaw between 'unit' 3 and badge circles.			
	<i>R (a)</i> : the edge of r. pleat reaches E].			
102. O17 R95				
	a. Lanz 16 (24.4.1979) 82	17,01 g	10 h	-
	[ <i>O (a)</i> : flaw between 'unit' 6 and badge; also, between 'units' 5 and 6.			
	<i>R (a)</i> : l., diagonal flaw between Γ and O; vertical flaw between helmet crest and Y. Horizontal flaw from l. pleat through figure to end of r. pleat].			

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O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Stars six-rayed, a thinner ray added to star 5. Hair from upper head moves diagonally to front, arranged in two rows. Horizontal wrinkle on forehead; diagonal folds on edge of drapery. Pedum starts from between middle and top fold of drapery.</i></p> <p><i>R: Similar.</i></p> <p><b>Group 31</b></p> <p style="text-align: center;">Specimens: 14                      Obverses: [1-1] Die combinations: 8                      Reverses: 8</p>					
103.	O05	R96			
	a.	CBNC 1258	16,86 g	8:30 h	3,20 cm
	b.	ANS 1944.100.13835	16,29 g	12 h	-
	c.	Scotussa area, (pre-) 1989 ( <i>CH VIII</i> (1994) 283, pl. XXXIV.9)	-	-	-
<p>[<i>O (a)</i>: up l., flaw between badge and internal 'crescent' 1 expands to border, l. Flaw between upper head and badge circles.</p> <p>[<i>R (c)</i>: legend l. starts beneath ankle].</p> <p><i>O: Similar.</i></p> <p><i>R: Letters irregular, rough, Athena crude. Shield oval-shaped, aegis with small dots. Legs discernible through chiton, middle fold shorter. Helmet bowl small, with short cheek pieces.</i></p>					
104.	O05	R97			
	a.	Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 33)			
			16,90 g	12 h	-
<p>[<i>R (a)</i>: pleat edges point downwards].</p>					
105.	O05	R98			
	a.	BM E. H., p. 295, n. 2	16,86 g	1 h	3,40 cm
	b.	Toderi L (1981, 1983-4) 53	-	-	-
<p>[<i>O (a)</i>: flaws: between external 'crescent' 1 and badge, inner 'crescent' 1 and external badge circle, l., on spaces 1, 5-7. Also, diagonal flaw between 'units' 1, 4 and badge; between badge circles, up l. Hair divided by curved flaw into two rows. Flaw between <i>pedum</i> and badge circle].</p>					
106.	O05	R99			
	a.	MMAG 37 (5.12.1968) 179; Gorny 73 (11.10.1995) 28			
			17,12 g	-	-
<p>[<i>O (a)</i>: expansion of flaw from badge circles to emblem, l.; flaw lower, parallel to inner circle in field, l.</p> <p>[<i>R (a)</i>: l., lateral bars on A concave. Up, sign of tool through head].</p>					
107.	O05	R100			
	a.	Scotussa area, (pre-) 1989 ( <i>CH VIII</i> (1994) 283, pl. XXXIV.4)	-	-	-
108.	O05	R101			
	a.	G. Hirsch 15 (9.1977) 16	-	-	-
	b.	Grabow (9-10.7.1930) 309	17,01 g	-	3,1 cm
<p>[<i>O (a-b)</i>: new flaw from off nose to lower l. emblem].</p>					



O No	R No	Provenance	Weight	Axis	Diameter
109.	O05 R102	a. Peus 313 (5.1985) 68	17,06 g	-	-
		[O (a): flaws around emblem expand; flaw behind <i>pedum</i> down to drapery. R (a): r., flaw between <i>chiton</i> and lower bar of Σ].			
110.	O05 R103	a. S. Asia Minor, 1963: <i>IGCH</i> 1426 (Boehringer, <i>Chronologie</i> 156.19, pl. 25), ex MMAG L 417 (1979) 7	-	-	-
		[O (a): flaws between 'units' 1, 2, 7 and badge; up r., horizontal flaw from 'unit' 2 through head; on badge r., off nose, downwards. R (a): l., break parallel to diagonal bar on second N and below I; also, break along border; r., between Λ and pleat].			
		***      ***      ***			
		<i>O: Stars large, six-rayed. Hair arranged in two rows, flows downwards; three locks hang from nape. Pedum emerges from middle fold, held upright.</i>			
		<i>R: Athena archaising, folds clearly delineated.</i>			
		<b>Group 32</b>			
		Specimens: 1		Obverses: 1	
		Die combinations: 1		Reverses: 1	
111.	O30 R1040	a. MMAG L 419 (1980) 8	-	-	-
		[O (a): flaws on spaces 2, 4; horizontal flaw from border of space 6 through badge circles to level of eye. Diagonal flaw, from inner badge circle off 'unit' 2 to crown of head. R (a): l, up, beginning of flaw off A; also, beneath I; r., diagonal flaw from between main figure and pleat's l. end to upper l. angle of monogram].			
		***      ***      ***			
		<i>O: Pedum emerges from between middle and upper fold, moving away from head. Hair locks arranged vertically and downwards. Shield pattern different: diameter of star/crescents (0,6-0,8 mm); six-rayed stars, a ray added to nos. 1 and 2. Pedum: dot on upper edge, small line prominent l.</i>			
		<i>R: Athena taller, holding shield directly in front of her. The r. end of l. pleat reaches leg. A without vertical hasta. Fall in middle. Cheek pieces shorter.</i>			
		<b>Group 33</b>			
		Specimens: 6		Obverses: [1-1]	
		Die combinations: 4		Reverses: 4	
112.	O06R105	a. Hess-Leu 31 (7.12.1966), pl. 12.264 (17,14 g); ex V176: J. Hirsch 13 (15.5.1905) 1178 (17,11 g)	17,11 g	-	-
		b. Glendining (18-20.4.1955) 290	-	-	-
		[O (b): flaw on 'units' 2 and 6 and on space 2; flaw from star rays through to crescents of 'unit' 7. Flaw from nose downwards. R (b): l., horizontal flaws beneath I, Γ; also, between legend and pleat, pleat and <i>chiton</i> . Flaw beneath OY].			

O No	R No	Provenance	Weight	Axis	Diameter
113.	O06 R106	a. Munich, 1 b. Ariadne (15.9.1982) 55 [O (a): two flaws starting from nose].	16,98 g (p) 16,58 g	6 h -	- -
114.	O06 R107	a. SNG Tübingen, 1188 [O (a): recut on nose. R (a): r., flaw between foot and Σ].	16,93 g	5 h	-
115.	O06 R108	a. Ciani (20-2.2.1935) 97 [O (a): flaw up r., off 'unit' 2; also, on space 3. R (a): l., flaw on l. lateral bar of A and above A; diagonal signs from lower border l. through l. pleat to <i>chiton</i> ].	-	-	-
***      ***      ***					
O: Similar. Six-rayed stars, small ray added to 'units' 1-2; flaw on 'unit' 5 expands; horns diverge.					
R: Similar.					
Group 34					
Specimens: 8                      Obverses: [1-1]					
Die combinations: 6              Reverses: 6					
116.	O07 R109	R: Legend letters crude, 'splayed' Σ. Athena, helmet of different style. a. Athens, Benaki Museum [O (a): test cut on chin].	-	-	-
117.	O07 R110	a. Thesprotia, 1992 (Touratsoglou, DM, no. 37) b. MMAG 85 (11.4.1997) 59 [O (a): flaw on spaces 1-3; flaw on 'unit' 5].	16,75 g 16,99 g	11 h -	- -
118.	O07 R111	R: Helmet with wide bowl and with a rich crest. a. Malter 1 (9-11.11.1973) 86	17,09 g	-	-
119.	O07 R112	a. G. Hirsch 30 (9-10.4.1962) 100 [O (a): r., flaw between <i>pedum</i> and badge circles; also, on space 4. R (a): l., horizontal flaw between pleat and <i>chiton</i> and a vertical one, alongside l. leg; r., between l and border].	-	-	-
120.	O07 R113	a. Poindessault-Vedrines, MBS (15.11.1991) 145 b. Glendining (13.12.1963) 227 [O (a): diagonal flaw on space 1, from r. end of 'unit' 1 through to badge circles; between badge circles, off space 2; flaws on spaces 1, 4-5].	16,88 g -	- -	- -



O No	R No	Provenance	Weight	Axis	Diameter
121.	O07	R114			
		a. Gorny (25-6.5.1982) 55	16,52 g	-	-
		<i>O (a): diagonal flaw, from nose to badge circle, l.; also, from chin to lower badge circle. Expansion of existing flaws.</i>			
		<i>R (a): l., flaw between l. helmet crest and foot].</i>			
		***	***	***	
		<i>O: Six-rayed stars, crescents semi-circular. Head crude. Hair flows in straight thick locks; upper and lower folds of drapery more prominent, pedum upright, emerging from lower drapery.</i>			
		<i>R: Similar. Legend letters cruder; chiton side folds wider.</i>			
		<b>Group 35</b>			
		Specimens: 1	Obverses: 1		
		Die combinations: 1	Reverses: 1		
122.	O31	R115			
		a. Münzzentrum 53 (13-15.11.1984) 1528	16,52 g	-	-
		***	***	***	
		<i>O: As above.</i>			
		<i>R: Similar.</i>			
		<b>Group 36</b>			
		Specimens: 2	Obverses: [1-1]		
		Die combinations: 1	Reverses: 1		
123.	O09	R116			
		<i>R: Legend letters large, Athena crude. Helmet of different type.</i>			
		a. SNG Ashmolean, 3258 (bt. Oman 1947)	17,06 g	5 h	3,3 cm
		b. ANS: SNG Dewing 1203 (ex Robinson collection)	-	-	-
		<i>[O (a): break on edge (2:30 h)].</i>			
		***	***	***	
		<i>O: Horns parallel. Small distance between badge edge and drapery r.</i>			
		<i>R: Legend characters moderate in size. Athena tall. Large shield in front of Athena. Monogram lateral.</i>			
		<b>Group 37</b>			
		Specimens: 23	Obverses: [2-2]		
		Die combinations: 13	Reverses: 13		
124.	O09	R117			
		a. Glasgow 5: MacDonald, <i>Hunterian</i> , 340.4			
			17,08 g	2 h	-
		b. SNG Dewing, 1204; Schlessinger, 779	16,99 g	3 h	-
		<i>[O (a): flaw between outer badge circle and 'unit' 4].</i>			

O No	R No	Provenance	Weight	Axis	Diameter
125.	O09 R118	a. de Luynes, 1698 [Poorly preserved. <i>O (a)</i> : new flaw on space 4, between outer crescent and external badge circle. Diagonal flaw on badge. <i>R (a)</i> : curve from top through to shield].	17,05 g	-	-
126.	O10 R119	a. BNF 1378 b. N. Syria, 1960: <i>IGCH</i> 1533 (Seyrig, <i>Trésors</i> , 14, no. 66) c. Belgrade, V 269: V. Popović (ed.), <i>Tri numizmatička legata Univerziteta Beogradu</i> , Beograd 1991, no. 23 [ <i>O (a)</i> : signs of die wear on space 1; diagonal flaw across badge circles, off 'unit' 6. Recut on nose; small flaw from nose, downwards; flaw beneath <i>pedum</i> , starting from middle fold and developing alongside <i>pedum</i> . <i>R (a)</i> : horizontal die break on r. border].	17,30 g - 16,24 g	1 h - -	- - 3,1 cm
127.	O10 R120	a. MMAG L 392 (1977) 7 b. G. Hirsch 14 (10-20.9.1957) 12 c. S. Asia Minor, 1963: <i>IGCH</i> 1426 (Boehringer, <i>Chronologie</i> , 155-7, no 20) [ <i>O (a)</i> : beginning of new flaw, on external badge circle, off space 3. Sign of tool on upper end of 'unit' 6. <i>R (a)</i> : l., flaws: beneath N and from r. lateral bar of Y to helmet bowl; also, beneath r. end of r. pleat].	16,81 g 17,028 g -	- - -	- - -
128.	O10 R121	<i>R: Athena crude.</i> a. Leiden, 3155 b. ANM 2; ex Kindyni coll. c. Kavala, 1635; ex Polyzona coll. d. MMAG 6 (6-7.12.1946) 629 e. Peus 284 (9-10.12.1974) 203 f. Kricheldorf 4 (7.10.1957) 162; Gorny 40 (7.4.1988) 1058 [ <i>O (a)</i> : recut on nose. Signs of horizontal flaw across internal badge circle, off 'unit' 6. <i>R (a)</i> : r., flaw between Athena and monogram].	17,03 g 16,39 g 12,283 g - 17,05 g 16,95 g	12 h 9:30 h 9 h - - -	- 3,20 cm - - - -
129.	O10 R122	<i>R: ends of vertical monogram bars not connected.</i> a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 30) [ <i>O (a)</i> : horizontal flaw, starting from lower 'unit' 7, on space 1; small diagonal flaw, from hair to lower <i>pedum</i> ; small flaw beneath drapery. <i>R (a)</i> : <i>chiton</i> corroded: portion of surface flaked off; l., flaw continues l. end of helmet crest; r., flaw from upper end of A].	16,50 g	1 h	-
130.	O10 R123	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 25)	17,065 g	5 h	-



O No	R No	Provenance	Weight	Axis	Diameter
		[O (a): flaws: from crescent 3 through to space 3; on space 4; expansion of flaw beneath <i>pedum</i> ; beginning of a new one higher, off <i>pedum</i> ].			
131.	O10 R124	a. Hungary, Mayar Nemzeti, no. 13, Inv. No. 23A.1912.2	16,92 g	7 h	-
		[R (a): shield different].			
132.	O10 R125	a. Myers 11 (11-12.4.1975) 58; ex Coin Galleries L 11.1-2 (1970) A 20	17,02 g	-	-
		[O (a): flaw on space 3. R (a): diagonal flaw between l. leg and border].			
133.	O10 R126	<i>R: shield of triangular profile, helmet smaller.</i> a. ANM; ex Eretria, 1937 (IGCH 175, no. 21)	17,062 g	2 h	3,35 cm
		[O (a): poorly preserved; flaw beneath <i>pedum</i> ends in dot; l, signs of overstrike: trident r. R (a): l., flaw between legend and border; higher, horizontal flaw from border to leg].			
134.	O10 R127	a. MMAG 17 (7-8.6.1988) 165	17,00 g	-	-
		[O (a): flaws: on space 4 and from 'unit' 7 through to space 7. NB: very bad photograph].			
135.	O10 R128	a. CNA MBS 21 (19.4.1990) 58	16,10 g	-	-
		[O (a): flaw on space 6, off lower 'unit' 7; also, from off 'unit' 5 diagonally to badge circles. R (a): r., flaw from middle of border towards legend].			
136.	O10 R129	a. G. Hirsch 68 (1-3.7.1970) 115; V 335; ex G. Hirsch 27 (17-19.5.1961) 759	16,81 g	-	-
		[O (a): on badge, horizontal break and countermark on head; recut on <i>pedum</i> ; die ready to break between <i>pedum</i> and 'unit' 3. In field, die breaks: across star 3, on space 4, (diagonal) between 'unit' 7 and head. R (a): up l., dots].			
		***	***	***	
		<i>O: As above.</i>			
		<i>R: Similar.</i>			
		<b>Group 38</b>			
		Specimens: 1	Obverses: [1-1]		
		Die combinations: 1	Reverses: 1		
137.	O11 R130	<i>R: Small helmet with short cheek pieces.</i> a. Poinsignon-Pesce, MBS 4 (30.6.1987) 590	16,52 g	-	-
		[O (a): flaws on spaces 1-2; scratch through 'units' 4-5. In field l., two flaws from chin to lower l. border; r., vertical flaw from lower <i>pedum</i> through to 'unit' 4.			

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Similar.</i>			
		<i>R: Similar.</i>			
		<b>Group 39</b>			
		Specimens: 2		Obverses: [2-2]	
		Die combinations: 2		Reverses: 2	
138.	O20 R131	a. Schweizerischer Bankverein 6 (19.4.1980) 47			
		[ <i>O (a)</i> : 1., flaw from lower l. border and chin].			
139.	O24 R132	a. Crédit de la Bourse, FPC (3.1990) 62			
		[ <i>O (a)</i> : flaws: between nose and l. border; between drapery and lower badge border and from badge border to 'unit' 4; flaw as upward extension of <i>pedum</i> ; also, diagonal flaw between <i>pedum</i> and inner border.			
		<i>R (a)</i> : 1., scratches between helmet and legend letters].			

Monogram 11 runs most of the Pan head tetradrachms of this period. The obverses of groups 25-8 are very carefully engraved and their remarkable stylistic homogeneity suggests their production by the same hand. The elaborate constituent elements of the punches point to an early date for this group. There is also a tendency for taller figures of Athena on Groups 26 and 27. The crude workmanship of the reverse dies on Group 28, with an Athena with bulging limbs, the somewhat cruder legend letters and the crested helmet with an elaborate crest holder approximate these issues to Groups 8, 9, and 37. Helmets with a higher helmet bowl, paired with taller Athenas, characterise the groups that follow. A different engraver appears to have been occupied with the obverse of Group 33, but the short Athena on the reverses of specimens 112-4 suggests the proximity of these issues with the early groups carrying the same monogram. Some first signs of the engraver who continues with the reverses of period 2 are detected on the first specimen of group 35 and on specimen 118, which only prepare us for the coinage struck on period II. A new style is introduced with the obverses of Group 38, from which one die combination survives. The large number of die combinations suggests the exhaustive use of the respective obverse dies with a number of reverses, even though few specimens survive from this combination. Finally, flatter but heavier surfaces combine to yield the obverse of Groups 39-40, the last issues with monogram 11 during this period.

The general absence of reverse links might indicate either the issue of these coins over a longer period or the co-operation of more mint officials for an urgent issue. The second



alternative might be favoured by the stylistic homogeneity of the legend letters in most specimens. In fact, a tendency for larger legend letters is observed on the issues with a crude Athena. A preference for wider flans tallies with a tendency for larger heads of Pan, as in Groups 32 and 34, but this need not determine the chronological sequence of the groups. A technical mistake of the die-cutters may be observed on no. 88, which, apart from being pierced, is struck in such a way that the obverse is concave and the reverse is curved. The otherwise excellent quality of the coin might suggest that this mistake might have occurred at the earliest stages of operation of the mint, if not during the piercing of the coin. Finally, nos. 96 (group 31) and 135 (group 38) have been countermarked.

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### Monogram 5 l.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Modules smaller. Six-rayed stars, nos. 1-3 with seven, no. 7 with eight rays. 'Units' of smaller diameter. In centre, small elaborate head; horns r.; hair locks in tear-drop shape, flowing downwards. Three-fold drapery, ending in curve. Pedum long, close to head.</i></p> <p><i>R: Archaising Athena, with long stylised, pleated drapery.</i></p> <p><b>Group 40</b></p> <p>Specimens: 1                      Obverses: [1-1]            Die combinations: 1              Reverses: 1</p>					
140.	O17 R133	a. Gorny 76 (22.4.1996) 122	17,09 g	-	-
<p>[<i>O (a)</i>: poorly preserved. Flaws on spaces 3, 7. Curved flaw from 'unit' 2 through badge to upper end of 'unit' 7. In centre, two flaws starting off nose, the former directed horizontally to the badge circle l., the latter towards chin.  <i>R (a)</i>: flaw beneath I].</p>					
<p>***      ***      ***</p>					
<p><i>O: Similar.</i>  <i>R: Similar.</i></p> <p><b>Group 41</b></p> <p>Specimens: 3                      Obverses: [1-1]            Die combinations: 2              Reverses: 2</p>					
141.	O29 R134	a. Hess 13 (1931) 369	16,96 g	-	-
<p>[<i>O (a)</i>: flaws on spaces 1, 4-5. In centre, flaw from upper neck through to 'unit' 5. Flaw develops from <i>anastole</i> to upper head].</p>					

O No	R No	Provenance	Weight	Axis	Diameter
142.	O29 R135	a. Drouôt (19-22.6.1933) 175	-	-	-
		b. Peus 318 (7-8.5.1987) 1229; ex Kricheldorf 32 (14-15.11.1977) 43	17,05 g	-	-
[O (a): flaws r. and l. of 'unit' 7. (b): flaws develop on spaces. R (a): recut: l., helmet beneath monogram; r., signs of Monogram 11 erased. Flaw develops from upper head to eyebrows. (b): l., monogram 2, legend erased; r., Ω erased and corrected].					

### Monogram 11 L.

O No	R No	Provenance	Weight	Axis	Diameter
<b>Group 42</b>					
		Specimens: 2	Obverses: [1-1]		
		Die combinations: 1	Reverses: 1		
143.	O29 R136	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 7)	16,80 g	3 h	-
		b. Kölner 38 (18-19.4.1985) 55 (17,08 g); ex Kricheldorf 9 (12.6.1961) 196 (17,075 g)	17,075 g	-	-
[O (a-b): flaws on spaces 1, 4-5 and from nose to lower badge edge develop. Horizontal flaw on upper hair lock. R (a-b): l., expansion of angular flaw off monogram to Y. Off-centre].					

### Monogram 9 L.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Two concentric circles on edge, six-rayed stars. Head small, horns diverge. Long anastole, hair flows downwards. Pedum dotted, close to inner badge circle. Curve between lower drapery and lower badge circle.</i></p> <p><i>R: Characters small. Athena short, stylised; long, stylised shawl pleats, with few folds. Shield large, decorated with aegis.</i></p>					
<b>Group 43</b>					
		Specimens: 1	Obverses: 1		
		Die combinations: 1	Reverses: 1		



O No	R No	Provenance	Weight	Axis	Diameter
144.	O32	R137			
		a. Kress 157 (1973) 27; ex Kress 137 (21.11.1966) 174	16,10 g	-	-
		[Off-centre: in exergue, r. foot beyond flan; in field r., erasure].			

A coarse issue with significantly smaller modules and designs also belongs to the first period of the Pan head tetradrachms, as is suggested by the shape of the head and by the elliptic star/crescents. Even if the downward-pointing, flame-like hair locks on the small heads diverge from the linear hair of the first period, the drapery is curved and the *pedum* is very thin and close to the head, alongside the main badge. The transition from the eight-rayed to the six-rayed stars is also observed among specimens 140-2 and 143. These elements, paired with the taller figures of Athena and with the style of the legend letters, assign these groups to the first period of Antigonid coin production. Technically remarkable is the successful attempt to fit the designs into considerably smaller modules, contrary to the posthumous Alexanders, which are generally off-centre (cf. above). Moreover, the reverse of no. 141, with monogram 5, has been recut on a coin with a Makedonian helmet l. and with monogram 11 r. This places the issues with the helmet symbol before or, at least, alongside those with a monogram l. Finally, the obverse link between nos. 96 and 140-2, in addition to the progression of the die flaw across the *anastole* on the latter, from the upper head to the eyebrow, establish further the chronological proximity of the two issues.

In the absence of firm hoard context, R. W. Mathisen assigns the *Monogram l. Pans* at the beginning of the new type. He also explains the absence of the helmet symbol from this variety by the occupation of the related mint official with the *Helmet Alexanders*<sup>2</sup>. This suggestion presumably originates partly in his conviction that the posthumous Alexanders ceased when Gonatas' new types commenced and partly from his assumption that larger modules were eventually preferred at Amphipolis. However, as has been argued elsewhere, the continuation of the Alexander types parallel to the new coinage is not impossible (chapters 2.2.4, 2.4.1, 2.5). Furthermore, the die study of the first period of the Pans reveals the random choice of smaller and larger flans. The preference for smaller flans for special issues, such as the *Kalathos*/*Bakchos*-

<sup>2</sup> Mathisen, *Silver Coinages*, 111, n. 48-9.

Ring' variety, may be alternatively assumed. Finally, the recut reverse and the obverse link between the Monogram and the Helmet issue conclusively place the Monogram variety within or parallel to the helmet series of the Pans. The absence of the helmet symbol from this variety, its crude execution and the small flans may therefore alternatively be interpreted as an influence by the special Athena r., *Kalathos*/'Bakchos-Ring' series, with which it might be regarded as contemporary.

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## II. Athena r.

### *Kalathos*/'bakchos-ring' l.

#### *Kalathos*/'bakchos-ring' l. - Monogram 12 r.<sup>3</sup>

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Eight-rayed stars; crescents nearly semi-circular. Head diademed, pedum held upwards, nebris ties upon l. end. Two concentric circles on edge; each star bordered by two crescents.</p> <p><i>R</i>: ΒΑΣΙΛΕΩΣ Λ., ΑΝΤΙΓΟΝΟΥ ρ. Athena Alkidemos without aegis r., carrying thunderbolt with her uplifted r. hand and shield with her l. hand.</p> <p>Group 44</p> <p>Specimens: 1                      Obverses: [1-1]            Die combinations: 1              Reverses: 1</p>					
145.	O26 R138	a. Florence: Svoronos, <i>Athènes</i> , pl. 21.23	16,70 g	-	-
<p>[<i>O (a)</i>: very worn, attempted piercing up r. on internal badge. Vertical flaw along hair; second flaw, from knob of drapery through to 'unit' 5; third, vertically from r. end of 'unit' 5 through to lower border; horizontal flaw between 'unit' 5 to external badge circle.</p> <p><i>R (a)</i>: l., flaw between O and Υ].</p>					

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<sup>3</sup> An engraving of a coin with the *kalathos* symbol and with monogram 12 on the reverse is mentioned in Drouôt 1267, 1229; cf. Gréau, pl. II, 1229; W. Froehmer, *Choix de monnaies anciennes*, 1869, pl. IV.28.



O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Similar.</i> <i>R: Similar, kalathos smaller.</i> <b>Group 45</b> Specimens: 7                      Obverses: 4 Die combinations: 6              Reverses: 3			
146.	O31 R139	a. Leiden, 3158	16,93 g	1 h	-
		b. Berlin, Imhoof-Blumer (1900); ex Hoffmann (11-15.11.1867), Gréau, no. 1229; rev. in Gaebler, <i>AMNG</i> III.2, pl. 34.2	16,66 g	9 h	-
		[ <i>O (a-b)</i> : developing flaw on space 7; die breaks: across 'unit' 1; between 'unit' 1 and upper badge edge; from l. end of neck downwards, through to upper 'unit' 4].			
147.	O31 R140	a. Hess-Dietrich (27-8.10.1988) 38	16,23 g	-	-
		[ <i>O (a)</i> : r., flaws from 'unit' 2 to badge border and from 'unit' 1 through to upper head; in badge, flaws off nose].			
148.	O33 R141	a. ANS 1944.100.13835	16,29 g	12 h	-
		[ <i>O (a)</i> : flaw between 'unit' 2 and external badge circle; also, from nose through to 'unit' 6. <i>R (a)</i> : l., flaw between end of r. pleat and figure].			
149.	O34 R141	a. Sternberg 10 (1980) 73	17,03 g	-	-
		[ <i>O (a)</i> : flaw between 'unit' 7 and external badge circle. <i>R (a)</i> : l., vertical flaw down to l. pleat end].			
150.	O35 R141	a. BM 1981-9-15-15 (Baldwin)	16,92 g	3 h	3,20 cm
		b. Sotheby Zürich (27-8.10.1993) 442; ex NFA 25 (29.11.1990), lot 87	16,97 g	1 h	-
		[ <i>O (a)</i> : flaws on spaces 1-2, 5-7. Flaw between upper 'unit' 2 through to head. ( <i>b</i> ): expansion of breaks, particularly on spaces 1 and 2; new diagonal flaw on space 3. <i>R (a)</i> : break on r. monogram bar].			

***Kalathos/'bakchos-ring' l. - Monogram 13 r.***

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Similar, 'units' 4 and 5 closer. Off-centre.</i> <i>R: AN-TIFONOYI., BAZIAEQΣr. Shield smaller, held upright. Athena r., without aegis, shawl binds round chest and folds round arms. Dotted border.</i> <b>Group 46</b> Specimens: 6                      Obverses: 1 Die combinations: 1              Reverses: 1			

O No	R No	Provenance	Weight	Axis	Diameter
151.	O35	R142			
		a. BNF 1381A	16,81 g	1 h	-
		b. <i>SNG Ashmolean</i> , 3257	17,14 g	12 h	3 cm
		c. Leiden, 3157	17,11 g	12 h	-
		d. <i>SNG Cop</i> , 1198	17,04 g	12 h	-
		e. North of Larissa, 1985: <i>CH VIII</i> (1994) 517, pl. XXXIII.26	-	-	-
		f. Berlin; ex Löbbecke (1906)	16,73 g	12 h	-
		[O (a): vertical flaw on upper head of Pan].			

An important typological divergence from the main Pan series with Athena Alkidemos I. may be observed on a few elegant specimens carrying Athena r. on the reverse, with smaller modules but of a high artistic quality, and with different control marks. Of the eighteen specimens recorded from this variety, coming from five different obverses and all very well executed, the young Pan might favour the assignation of thirteen tetradrachms to the first period of coin production, leaving those carrying a diademed head of Pan with mature features to the third period (chapter 5.1). The Makedonian shield on the obverse is more skilfully rendered, with eight-rayed stars, weakly punched on the metal. The border ends in two concentric circles, and the design is off-centre. The reverse is occupied by an Athena facing r., stylistically similar to (but more natural than) that on the early tetradrachms of Ptolemy I with the legend ΑΛΕΞΑΝΔΡΕΙΟΝ ΠΤΟΛΕΜΑΙΟΥ / ΑΛΕΞΑΝΔΡΕΙΟΝ / ΑΛΕΞΑΝΔΡΟΥ, dated to c. 314 BC<sup>4</sup>. Neither she nor her shield carries an *aegis*, and the *gorgoneion* badge on her shield on the reverse has been replaced by the head of Pan. Athena's shield breaks the legend r. on the reverse: AN-TIFONOY. A *kalathos*/'bakchos-ring' on the left is combined with monograms 12 and 13, unknown from the main Helmet series.

The first die combination is obverse linked to the early issues of the Helmet group, carrying monogram 11. Most specimens are below 17,00 g, and the dies are loosely adjusted.

The relation of this issue to the main Pan/Athena I. series has raised vivid discussion. In fact, the careful execution of the tetradrachms with Athena r. has been taken to imply either an early issue date or a different mint, in or outside Makedonia. In the first place, the rarity and the high artistic quality of these tetradrachms has led F. Imhoof-Blumer to assume that they were earlier than those with Athena I. and that they were struck immediately after the battle of



Lysimacheia<sup>5</sup>. His view is further supported by H. Gaebler, on the grounds of (a) their thematic similarity to the individual bronze issues of king Antigonos Gonatas, with Athena/Pan with trophy, and of (b) the substitution of the *gorgoneion* on Athena's shield by a head of Pan, which he relates to the alleged epiphany of the god at Lysimacheia.

Radically departing from the generally accepted Makedonian provenance of this issue, I. L. Merker suggested in 1960 its production later, at a non-Makedonian mint. He reverted to the minting of these coins at Athens, during its siege and occupation by Gonatas<sup>6</sup>. Firstly, through the obverse link between the *helmet, Athena l.* series and coin no. 145 in our catalogue, from Florence, he disproved that the *Athena r.* is earlier than the *Athena l.* variety. Secondly, he emphatically pointed out that *Athena r.* is not a mirror image of *Athena l.* Finally, taking the crested helmet symbol to denote the main Makedonian mint and the monograms as the signatures of the die cutters in charge, he reverted to the identification by J. P. Six of the *kalathos* as a sign of the mint of Athens. He concluded that the *kalathos, Athena r.* issue was struck for the payment of the Antigonid troops at the end of the Chremonidean war at Athens and he interpreted the obverse link between coin no. 145 and the *helmet* group as a die transfer to the new mint (chapter 2.5).

Recent discussion, however, reassigns this variety to Makedonia. Chr. Boehringer, followed by Y. Touratsoglou<sup>7</sup>, allocates it to the beginning of the main Makedonian mint, along with all the coins carrying rare symbols and monograms. Yet Boehringer finds it difficult to explain the transition from the diademed head of Pan with the personal features of Antigonos Gonatas to the undiademed head of Pan in the *Athena l.* issue<sup>8</sup>. Alternatively, through the totally different styles and monograms of the variety with *Athena r.*, R. W. Mathisen (from the study of fourteen specimens, coming from ten obverse dies) interprets the obverse link between the *Helmet*

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<sup>4</sup> Hazzard, *Ptolemaic Coins*, 23-4, 72-3, cf. O. Masson, 'Numismatique chypriote', *RN* 33 (1991) 69-70; Mørkholm, *EHC*, 64, no. 92.

<sup>5</sup> Imhoof-Blumer, *MG*, 129.

<sup>6</sup> This suggestion had been put forward by J. P. Six and by W. W. Tarn. The dates proposed by Six for this variety, 266-55 BC, are those accepted at the time for Gonatas' siege of Athens: J. P. Six, 'Tetrachma Antigoneia', *Annuaire de numismatique* 6 (1882) 29-30; C. T. Seltman, 'A Synopsis of the Coins of Antigonos I and Demetrius Poliorcetes', *NC* 9 (1909) 268; Tarn, *AG*, 174, n. 20.

<sup>7</sup> Touratsoglou, *DM*, table III, n. 1.

<sup>8</sup> Boehringer, *Chronologie*, 100, n. 9. Boehringer questions the existence of the coin 'from Florence', mentioned by Svoronos. He suspects that this specimen is a combination of merged casts from different coins, the obverse coming from a coin from Athens, of which a plaster cast survives in the cast collection from the Academy in Berlin (with code number: Athen no. 1620a), and the reverse coming from a specimen from Berlin, no. 146b in our catalogue.

I have not been able to study the specimens from the Florentine coin collection. The reverse of the coin mentioned by Svoronos is indeed identical to that illustrated in Gaebler, *AMNG* III. 2, pl. 34.2, but no. 1620a from Athens is a completely different specimen. Moreover, the obverse of no. 91a, from Athens (Iliou Melathron Exh. I, 6 no 125 1898/99 Z, 2, room 3: 'Names'), is better preserved than its Florentine counterpart, with which it is obverse linked. I am therefore hesitant to deny at present the existence of this coin.



and the *Athena r.* groups as a die transfer to a different Makedonian mint. He actually assumes from the peculiarly reversed legend order on the reverse of both these specimens and the transitional posthumous Alexanders the production of the *Athena r.* variety at Pella, alongside the transitional Antigoniid silver Alexanders and the Monogram Group of posthumous Alexanders.

The internal evidence favours the assignation of the *Athena r.* series to the main Makedonian mint. In the first place, it has been argued that there is no reason not to assign the transitional posthumous Alexanders to the main Makedonian mint. The reversed legend order does not suffice to locate the mint of these celebratory issues, as the legends had been simultaneously reversed at both mints in 291 BC, under Demetrios Poliorketes (chapter 3.2.1). Moreover, the impression given by the very few surviving coins with *Athena r.*, their careful execution, their absence from hoards and the large and skilfully rendered legend letters, is that of a small special issue, with a limited circulation. The exclusive symbols and control marks of this series distinguish them from the Makedonian posthumous Alexanders or from the Pans with *Athena l.* However, the obverse link with the *Athena l.* variety and the representation of an *Athena l.* with an *aegis* on no. 152 from period III establish a connection between the two individual Antigoniid types (cf. chapter 5.1). The obverse link with *Athena l.*, in particular, associates the *Athena r.* variety with the main Makedonian mint, Amphipolis. As the changes in the size of the modules have been argued not to determine the chronology of the posthumous Alexanders from Amphipolis<sup>9</sup>, the small modules of the *Athena r., kalathos* variety are not incompatible with a later date.

Insofar as the introduction of Gonatas' individual coinage has been disconnected from the battle of Lysimacheia (chapter 2.4.2), the replacement of the *gorgoneion* by the head of Pan on Athena's shield on the reverse and the stylistic proximity of Athena on the reverse with that on the early Ptolemaic tetradrachms require consideration. The thematic and stylistic similarity of Athena to that on the Ptolemaic tetradrachms, alongside the revival of the legends regarding Pan's critical roles in battles might identify the *Athena r.* series as celebratory, declaring the renewal of the Antigoniid political claims in the Aegean against the Ptolemies. The capitulation of Athens and either of Gonatas' naval victories over the Ptolemies, that off Kos and that off Andros, would have offered most opportune moments for the launching of celebratory issues. The impact of Gonatas' naval victory off Kos, for one thing, may be reflected upon the *ισοθέους τιμὰς* paid to the Makedonian king by the demes of Kos, Ios and Rhamnous in the mid-250s<sup>10</sup>. In view, as well, of the consistent demonstration of power on the part of the Ptolemies, in the form of honorary coin

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<sup>9</sup> Chapter 2.4, *contra* Mathisen, *Silver Coinages*, 80-1.

<sup>10</sup> See p. 114, n. 12.



issues or of penteteric processions<sup>11</sup>, Gonatas may have launched celebratory numismatic issues, gold and silver, in order to manipulate this major naval victory, to reinforce his claims in the Aegean and to gain the trust of the Greek states.

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### 3.2.3            Fractional denominations

#### Crested helmet I. - Monogram 9 r.

#### Silver drachma

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Similar.</i>  <i>R: Athena with large, oval-shaped shield, decorated with aegis. In field r., Alpha with curved diagonal hastae and without horizontal bar.</i></p> <p><b>Group 47</b></p> <p style="margin-left: 100px;">Specimens: 1                      Obverses: 1            Die combinations: 1              Reverses: 1</p>					
152. 001	R01	a. BM 1886-11-11-1(W. Keady)	4,02 g	1 h	1,9 cm

The single surviving drachma with the types of the Pan head tetradrachms may be associated through its style and control marks to the silver tetradrachms with a crested helmet and Monogram 9, and, in particular, Group 10 of this period. Its circumstantial issue may be assumed by the absence of more specimens from this denomination (cf. chapters 2.4.2, 2.4.4).

<sup>11</sup> See chapters 2.4.2, 7.

#### 4.0 Period II: From the Revolt of Alexander, Tyrant of Korinth to the Battle of Andros (252/1-246 BC)

##### 'Dramatic Style'

The second period of minting of Antigonid precious coinage may have been triggered by diplomatic and military activities for the establishment of control over Greece and by naval struggles in the Aegean. In the first place, the loss of key areas in the Makedonian garrison network such as Megalopolis or as Korinth and Euboia (subsequent to the revolt of the garrison commander of Korinth, Alexander, son of Gonatas' half-brother Krateros, in c. 252/49 BC)<sup>1</sup>, not only jeopardised the so-called Antigonid 'Greek hegemony' but also deprived Gonatas of important naval bases in the Aegean<sup>2</sup>. Alexander's revolt, in particular, demonstrated the importance of the personal attachment of the garrison commanders to the Makedonian king. Thus, leaving military operations aside, the pretended creation of marital links with Alexander's widow, Nikaea, on the eve of the recapture of Korinth was meant to diplomatically confirm the loyalty of the commander of Korinth, and in the long run to corroborate the system of Makedonian garrisons that controlled entry and exit from mainland Greece<sup>3</sup>.

Gonatas' resort to diplomacy in order to regain Korinth and Euboia might suggest his parallel engagement in other military activities. In fact, financial requirements may also have sprung from military preparations for the effective supervision of the Antigonid realm in the Aegean, culminating in the naval conflict between Ptolemies and Antigonids off the island of Andros (246/5 BC) (chapter 5.0). Some indirect Ptolemaic instigation of the individual rulers' independence acts from the Makedonian king in Central Greece has been speculated as Ptolemy's revenge for his defeat at the battle of Kos<sup>4</sup>. These reactions to the Makedonian rule may have been meant to distract Gonatas from the Aegean, just as minor revolts had effectively distracted Antigonos during the Chremonidean war. New coinage would have been required in order to cover the concomitant financial needs of the Makedonian king at all fronts.

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The limited coinage of this period consists exclusively of Pan head tetradrachms. The designs on both the obverses and the reverses are spread on the remarkably larger flans and large

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<sup>1</sup> P. Trog. *Prok.* 26. For a date to c. 252 BC, see Will, *HPMH I*<sup>2</sup>, 316; Gabbert, *AG*, 35. 249 BC is favoured by Hammond-Walbank: *Macedonia III*, 301, n. 1 (following Urban, *Wachstum und Krise*, 14 ff.).

<sup>2</sup> P. Trog. *Prok.* 26; Plut. *Arat.* 17.2. See Hammond-Walbank, *Macedonia III*, 296-303. Green, *Alexander to Actium*, 148; F. W. Walbank, 'Macedonia and Greece', *CAH VII.I*<sup>2</sup>, 221-56, esp. 247; Gabbert, *AG*, 33-40.

<sup>3</sup> Plut. *Arat.* 17; Polyæn. 4.6.1. Gabbert, *AG*, 36.

<sup>4</sup> Gabbert, *AG*, 55.



heads, in high relief, occupy the central badge. Dramatic and dynamic profiles are drawn in energetic contrapuntal curves and are enhanced by the contrasts between light and shadow. The tumbled hair locks are rendered in full and various curvilinear movement and chiaroscuro, the fleshy lips are somewhat parted and the eye is distended, thus effectively adding to the inspired personality of Pan. The hair locks are stylistically reminiscent of the Hellenistic baroque style, as known from the head of the dying Gaul or from the figures of the Pergamene altar. Little space is left for the linear and upright *pedum*, which develops alongside the inner badge circle. The short and thick neck ends in a very small drapery rendered in a concave line. Remarkable is the return to the eight-rayed stars, which are plastically rendered and confined by two-crescent units each to serve as decoration of the shield that frames the head. The figure of Athena on the reverse is taller but much less skilfully rendered and it is characterised by a more confused understanding of the anatomy. Athena holds a large, oval, three-dimensional shield in front of her chest and a smaller, stylised thunderbolt with her uplifted r. hand. The impression of movement is more effectively given through the folds of the *chiton*, which depart from the strict forms of the previous period. A helmet with a conical bowl, a thin crest and small cheek pieces occupies the left reverse field. Large angular legend letters with 'splayed' Sigmas are also peculiar to the legends of this period.

The weights of most of these tetradrachms range between 17,05 g and 16,96 g (figs. 2-3, 14). No fractional denominations survive from this period. All coins come from loose dies, as is peculiar to the main Makedonian mint.

Twenty coins from this period come from securely dated hoard contexts, as analysed below (fig. 13). The late burial date of most of the above mentioned hoards sheds focus on '*Pherai*', 1938, *Eretria*, 1937 and *Karditsa*, 1929, in order to determine the approximate chronology of the second period. The suggested dates for the first and third hoard, illustrating the circulation pattern, respectively to c. 250-245 and 245-240 BC, and that of *Eretria*, 1937 to soon after 245 BC tally with a tentative date of this period around c. 252-246 BC. They fail, however, to establish firmly its beginning.

In technical terms, only two of the recorded specimens have been pierced and two are broken<sup>5</sup>. The surface of the metal flans is in some cases rough (i.e. nos. 11a-12a, 30a, 56-9), culminating in no. 48a, in which the metal is deformed. The frequent combination of the same obverse with reverses carrying various monograms and letters contrasts with the few reverse links and the few specimens surviving from each die combination. These may be taken to suggest the independent co-operation of various mint officials with the principal moneyer for an urgent issue, as that required by the military and political circumstances around the 250s.

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<sup>5</sup> Pierced specimens: nos. 7a, 43a; broken specimens: nos. 12a, 53a.

NO.	HOARD	CAT. NO.	GROUP NO.	MON. NO./LETTERS R.
1a	Pherai, 1937-8	22a	6	11
1b	Pherai, 1937-8	46	16	15
2	Eretria, 1937	4b	2	9
3	Karditsa (Palaiokastro), c. 1929	57b	21	TI
4	Kassandraia, 1985-7	23a	6	11
5a	Thesprotia, 1992	3a	2	9
5b	Thesprotia, 1992	6a	2	9
5c	Thesprotia, 1992	28a	7	11
5d	Thesprotia, 1992	41a	12	11
5e	Thesprotia, 1992	44a	15	11
5f	Thesprotia, 1992	51a	17	16
5g	Thesprotia, 1992	52c-d	18	TI
5l	Thesprotia, 1992	54a	18	TI
5j	Thesprotia, 1992	58a	21	TI
5k	Thesprotia, 1992	62a	23	TI
6	Hija se Korbit, 1982	5b	2	9
7	S. Asia Minor, 1963	33b	10	1
8	N. Syria, 1970	49a	17	16
9	Mektepini, 1956	52a	18	TI

Fig. 13. Period II: Silver Specimens in Hoards.



Weight (g)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	All	
17.3-17.26				1																				1
17.25-17.21																					1			1
17.2-17.16	1																							1
17.15-17.11	1			1					1	1				1	1			1				2		9
17.1-17.06		2			1				1	1			1							1		1		8
17.05-17.01	1	2			1	1			1	1					1	4						1		13
17.0-16.96			2	1		2	1	1						1		1	2					2		13
16.95-16.91	1		1	1					1	1		3						1	1					10
16.9-16.86	1				1		1																	3
16.85-16.81	1						1							1		2								5
16.8-16.76									1	1														2
16.75-16.71										1														1
16.7-16.66						1						1												2
16.65-16.61												1					1							2
16.6-16.56										1	1													2
16.55-16.51																							1	1
16.20-16.16																								
15.70-15.66																								
15.65-15.61																								
15.60-15.55																								
15.50-16.46																								
16.45-16.41																								
16.40-16.36																		1	1					2
16.35-16.31																					1			1
16.3-16.26																								
16.25-16.21																								
16.2-16.16																							1	1
16.15-16.11	1																							1
16.10-16.06																								
16.05-16.01																							1	1
16.00-15.96																								
15.95-15.91																								
15.90-15.86																								
15.85-15.81																								
15.80-15.76																								
15.75-15.71																								
15.70-15.66																	1							1
15.10-15.06																				1				1
Specimens	5	6	2	4	4	4	3	1	5	7	2	4	1	1	1	9	5	3	1	7	1	3	26	

Fig. 14. Period II: Pan Head Tetradrachms, Weight Table

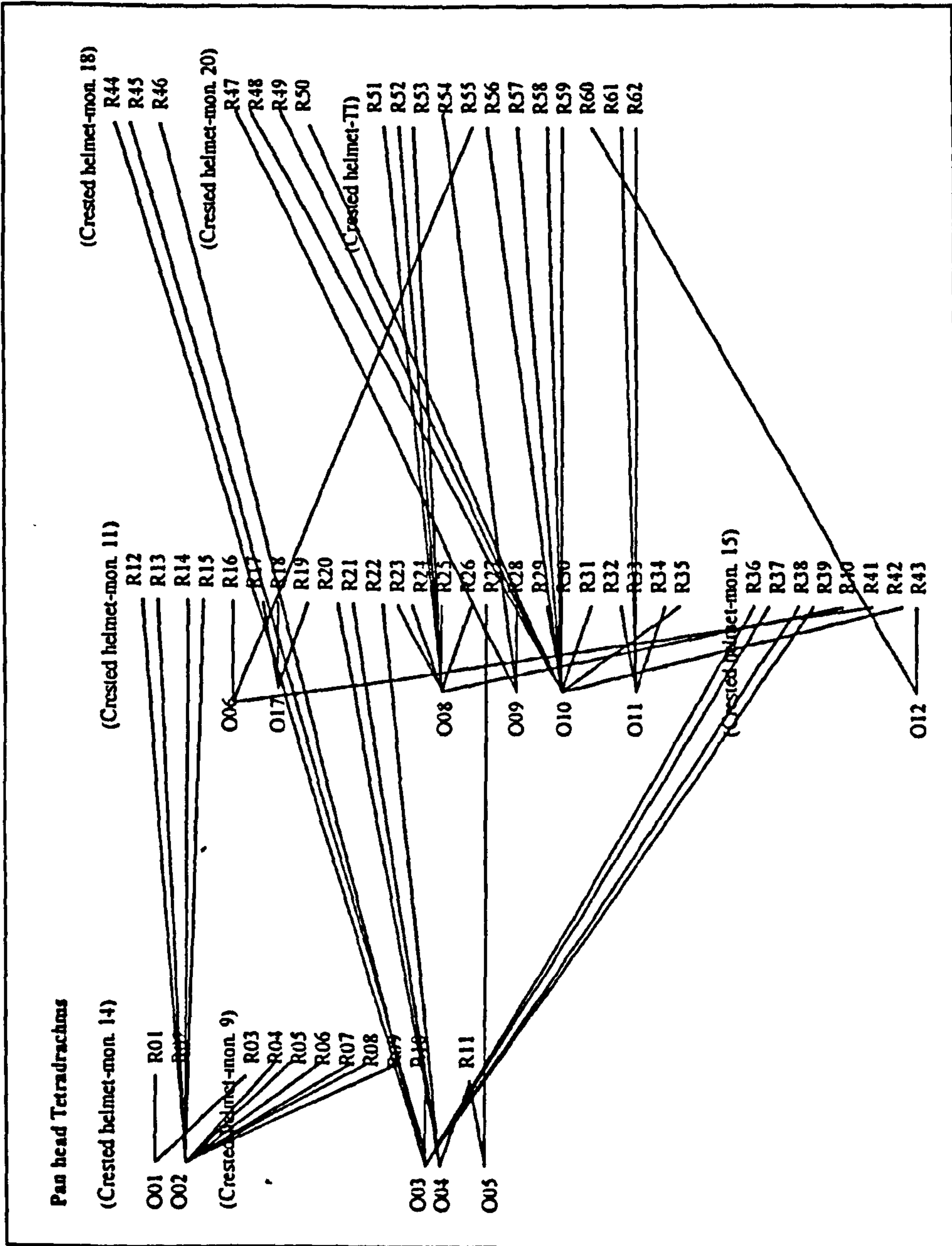


Fig. 15. Period II: Diagram of Die Links.



MINT A

4.1 Individual Types: Pan Head Tetradrachms

Crested helmet L

Crested helmet L - Monogram 14 r.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Makedonian shield with large, relief, eight-rayed star/crescents. Face with fleshy, rounded forms and wide open eyes, surrounded by hair flowing in full and various curvilinear movement from the crown of the head and hanging from the nape of the short, thick neck. Drapery small, ending in curve. Pedum small, upright.</i>  <i>R: Athena taller, chiton folds more energetic, characters smaller. Shawl pleats shorter.</i></p>					
<p><b>Group 1</b></p>					
		Specimens: 5		Obverses: 2	
		Die combinations: 2		Reverses: 2	
1. 001	R01	a. Monetaarium Zürich 57 (spring 1992) 58; Superior Galleries, Auction & MBS, (1988) 1482	16,85 g	-	-
		b. Superior Galleries, Chicago International Coin Fair (5.1980) 2114	16,11 g	-	-
<p><i>O: Badge larger, head tends to fill badge. Hair in tumbled locks, rich in movement and chiaroscuro, flowing from crown of head to nape in two rows. Lips somewhat parted, eye open wide; two-fold drapery, pedum dotted and more elaborate.</i>  <i>R: Similar.</i></p>					
2. 002	R02	a. ANS 1944.100.13849	16,87 g	11 h	-
		b. Drouôt (6-8.2.1956) 349	17,12 g	-	-
		c. MMAG 18 (21-2.9.1989) 618; ex Kricheldorf 21 (6-7.4.1970) 63; ex Naville-Ars Classica, coll. W. H. Woodward 15 (2.7.1930) 527	17,04 g	-	-
<p>[<i>O (a)</i>: slight development of existing flaw, new flaw on space 2; worn on 'unit' 4 and on badge circles. (<i>c</i>): development of flaws on space 2, on 'units' 6-7, on space 6 and on the corresponding badge area.  <i>R (c)</i>: l., signs of Σ beneath legend letters: overstrike].</p>					

The five specimens from this group come from two die combinations, combining two different pairs of dies.

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**Crested helmet L - Monogram 9 r.**

O No	R No	Provenance	Weight	Axis	Diameter
<b>Group 2</b>					
		Specimens: 10	Obverses: [2-2]		
		Die combinations: 7	Reverses: 7		
3. O01	R03	<i>O: Field flatter. Head large, plastic.</i>			
		a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 19)			
			17,01 g	11 h	-
		[ <i>R (a)</i> : module larger. Helmet, legend letters, Athena larger].			
4. O02	R04	<i>O: Similar. R: Shield flatter. Horizontal bar of A very small.</i>			
		a. Berlin, old collection			
			17,09 g	9 h	-
		b. ANM; ex Eretria, 1937 ( <i>IGCH</i> 175, no. 15)			
			17,005 g	5:30 h	3,15 m
		[ <i>O (a)</i> : die ready to break on badge circles off 'unit' 7. Beginning of flaw on space 1. Horizontal flaw between 'units' 3 and 4.			
		<i>R (a)</i> : well preserved. In field r., beginning of flaw on lower horizontal bar of first $\Sigma$ ].			
5. O02	R05	<i>R: Helmet with small bowl and short cheek flaps. A with very small vertical bar.</i>			
		a. Göttingen, Inv. Orig. 1988-9; Athena 2 (4.10.1988) 100			
			16,93 g	11 h	-
		b. Hija së Korbit, 1982: <i>CH VIII</i> (1994) 299 (Shpresa Gjongecaj, 'Thesari i Hijes së Korbit', <i>Iliria</i> 1 (1985) 167-93, esp.190.282, pl. 14.282)			
			-	-	-
		c. Drouôt (20-1.3.1925) 28			
		[ <i>O (a)</i> : die ready to break on badge circles off 'unit' 7 and on nose. ( <i>b</i> ): beginning of flaw from lower end of neck to badge circles. Signs of flaw on spaces 3-4.			
		<i>R (a)</i> : portion of metal flaked off l., between Y and lower field; flaw between r. end of l. pleat and figure. R., flaw off upper horizontal bar of $\Sigma$ . ( <i>b</i> ): r., flaws between pleat and monogram].			
6. O02	R06	<i>R: Ends of r. pleat longer, letters more condensed. Module larger.</i>			
		a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 18)			
			17,07 g	11 h	-
		[ <i>O (a)</i> : development of flaw on badge circles off 'unit' 7; two flaws, respectively on spaces 4 and 6.			
		<i>R (a)</i> : l., flaw between r. end of pleat and figure].			
7. O02	R07	a. Madrid 3, 6020/7-8			
			16,80 g (p)	11 h	3 cm
		[ <i>O (a)</i> : flaw from tie on lower neck through badge circles to 'unit' 5. Flaw on space 3.			
		<i>R (a)</i> : l., diagonal flaw from l. vertical bar of second N upwards (possibly sign of overstrike)].			
8. O02	R08	<i>R: legend spread wider in field.</i>			
		a. Christie's (7.9.1989) 27; ex Sotheby (3.5.1984) 53			
			17,20 g	-	-
		[ <i>O (a)</i> : flaw on space 3; signs of attempted piercing on space 4. Flaw off nose. Worn on cheek.			
		<i>R (a)</i> : up l., signs of attempted piercing; r., diagonal flaw between monogram and figure].			



O No	R No	Provenance	Weight	Axis	Diameter
9. 002	R09	a. Lepczyk Auction & MBS 25 (28-9.4.1978) 47 [Very bad photograph. <i>O (a)</i> : flaws on all spaces. Three breaks on badge circles, off space 2, off 'units' 5 and 6. Flaw on badge area, off nose. <i>R (a)</i> : l., diagonal flaw from r. vertical bar of A downwards].  <i>O</i> : Double dots on either side of pedum. <i>R</i> : Helmet smaller. <b>Group 3</b> Specimens: 4                      Obverses: 3 Die combinations: 3              Reverses: 2	-	-	-
10. 003	R10	a. Drouôt-Bourgey (11.1957) 63 b. Feuarent (18.6.1924) 82 [ <i>O (a)</i> : break on badge circles (1 h). Flaws on crescents of 'units' 3 and 6. 'Unit' 5 struck twice. <i>R (a)</i> : l., diagonal flaw from legend towards extreme edge].	17,00 g -	- -	- -
11. 004	R11	<i>O</i> : Head smaller, pedum larger. <i>R</i> : head, upper figure smaller. a. Schlessinger (4.2.1935) 781 [ <i>O (a)</i> : development of flaw off 'units' 1 and 2. Diagonal flaw between hair and pedum; second flaw between hair and 'unit' 3. Also, between nebris tie and 'unit' 4. <i>R (a)</i> : r., flaw between r. pleat and chiton].	17,00 g	-	3,2 cm
12. 006	R11	<i>O</i> : Similar. <i>R</i> : Similar. a. Malloy MBS 16 (7.2.1980) 55 [ <i>O (a)</i> : in centre, flaws above head. Diagonal flaw between hair and pedum. Flaws on spaces 1-2 and 5 and on 'unit' 6. <i>R (a)</i> : l., diagonal flaw across legend and on exergue. On exergue, erasure. In field r., horizontal flaw on extreme l. end. NB: Flan deformed].	-(b)	-	-

Five different obverses are combined with reverses carrying Monogram 9. The very large but elaborate and emotive heads of Pan on Group 2 give way to smaller but somewhat cruder obverses on the next group. There is a tendency to reduce the size of Athena and of the legend letters in order to amply fit the designs into the metal flans. The crested helmet symbol is of moderate to small shape with a thin crest and short cheek flaps and with the monogram engraved on the right beneath the r. shawl pleat. 245 BC may be suggested as a *terminus ante quem* for the issue of these tetradrachms through the specimen from *Eretria*, 1937 (chapter 2.3).

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**Crested helmet I. - Monogram 11 r.**

O No	R No	Provenance	Weight	Axis	Diameter
		<p><i>O: Similar.</i>  <i>R: Shield held in front of chest. Athena taller, her r. arm bent and relatively low. Legends closer to figure. Helmet beneath shawl pleats. Monogram smaller.</i></p>			
		<p><b>Group 4</b></p> <p style="text-align: center;">Specimens: 6                      Obverses: [2-1]            Die combinations: 5              Reverses: 5</p>			
13.	O02 R12	a. Berk 41 (11.2.1986) 103	17,15 g	-	-
		<p>[<i>O (a)</i>: flaws, on space 7, from outer crescent 1 diagonally to the l.; also, on spaces 3-5. On badge, flaw from nose downwards.  <i>R (a)</i>: l., flaw between r. helmet crest and figure].</p>			
14.	O02 R13	a. J. Hirsch 30 (9-10.4.1911) 474	-	-	-
		<p>[<i>O (a)</i>: die ready to break on badge circles off 'unit' 7; flaws on spaces 4-6; 'unit' 2, star 4 possibly struck twice.  <i>R (a)</i>: l., diagonal flaw from l. helmet crest through <math>\Upsilon</math> to edge].</p>			
15.	O02 R14	a. NFA, colls. Cutler-Suthers-Ward-Tucker, Fall MBS (12.10.1990) 625	17,00 g	-	-
		b. G. Hirsch 175 (9.1992) 242	16,94 g	-	-
		<p>[<i>O (a)</i>: new flaws on spaces 6-7. On badge, new flaw from nose to circles l.; flaw from neck through badge circles to 'unit' 5.  <i>R (a)</i>: up, signs of flaw above head; r., flaw off <math>\Sigma</math>].</p>			
16.	O02 R15	a. Kress 143 (6.9.1961) 1416	-	-	-
		<p>[<i>O (a)</i>: flaw from 'unit' 7 to l. horn.  <i>R (a)</i>: two diagonal flaws, above head and on exergue].</p>			
17.	O06 R16	<i>O: Similar.</i>			
		a. Cahn 60 (2.7.1928) 460; ex Drouôt (1910) 344	17,30 g	-	-
		<p>[<i>O (a)</i>: flaw between 'unit' 3 and outer badge circle; also, on space 3. Worn between 'crescents' 7 and badge circles].</p>			
		***	***	***	
		<p><i>O: Similar.</i>  <i>R: Similar.</i></p>			
		<p><b>Group 5</b></p> <p style="text-align: center;">Specimens: 4                      Obverses: 1            Die combinations: 3              Reverses: 3</p>			
18.	O07 R17	<i>R: Athena more elaborate. Helmet with linear crest, longer than cheek flaps. 'Splayed'</i>			
		a. SNG BYB, 352	17,08 g	9 h	-
		b. Glendining (3.2.1993) 36; ex Glendining (7.3.1957) 37	17,01 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
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[O (a): development of flaw on spaces 1 and 2; also, from nose downwards.  
R (a): l., diagonal flaw from second O downwards. R., curved flaw along edge].

19. O07 R18

O: *pedum thinner.*

a. SNG Klagenfurt, 578 (1250)

16,897 g 1 h -

[O (a): development of flaws on spaces 1, 2 and 6. On badge, horizontal break off chin].

20. O07 R19

a. Rauch 32 (16-19.1.1984) 150

16,92 g - -

[O (a): flaws on spaces 1, 6-7.

R (a): flaws l. and r., on either side of legends].

\*\*\*      \*\*\*      \*\*\*

O: *Similar.*

R: *Similar.*

Group 6

Specimens: 6

Obverses: [2-1]

Die combinations: 4

Reverses: 4

21. O04 R20

a. Drouôt (29.9.1981) 4; ex Drouôt-Bourgey (12.3.1972) 30; ex Pozzi, 970

b. Schulten (5-7.10.1981) 28 17,03 g - -

c. Müller 36 (12-13.2.1982) 71 17,00 g - -

[O (a-b): developing diagonal flaw on space 7. (c): flaw between horns and upper badge circles; diagonal flaw between chin and lower badge circle.

R (c): l., diagonal flaw between legend and coin edge. Not cleaned].

22. O04 R21

a. Thessaly, 1938: T. R. Martin, 'A third-century B. C. hoard from Thessaly at the ANS (IGCH 168)', *ANSMN* 26 (1981) 64, pl. 13.533

16,69 g 9 h -

23. O04 R22

a. Kassandreia, 1985-7: *CH VIII* (1994) 322, pl. 39.5

- - -

[O (a): diagonal flaw develops alongside horns.

NB: very bad photograph].

24. O08 R23

a. G. Hirsch 60 (1968) 86; ex P. G. Hirsch Miscellaneous Sales 21 (5 Cervna 1935) 114; ex Helbing FPC 16 (1934) 222; ex Helbing 70 (9.12.1932) 592

17,00 g - 3,2 cm

[O (a): development of flaw on space 1; new flaw on space 2 and on badge, from off chin towards lower badge circles and up r., above hair.

R (a): flaws on extreme l. end and beneath legend. Diagonal flaw between I and l. pleat.

In field r., diagonal flaw from *aegis* to r. pleat].

\*\*\*      \*\*\*      \*\*\*

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: As above.</i> <i>R: Similar.</i> <b>Group 7</b>			
		Specimens: 4 Die combinations: 4		Obverses: [3-2] Reverses: 4	
25.	008 R24	a. Gorny 73 (11.10.1995) 29; ex Müller 38 (25-6.6.1982) 52 16,90 g		-	-
		[ <i>O (a)</i> ]: flaw between 'unit' 6 and edge and on space 6; also, from chin downwards to inner badge circle. <i>R (a)</i> : r., flaw between edge and legend.			
26.	008 R25	<i>R: legend letters smaller.</i> a. Madrid, 2	16,98 g	8 h	-
		[ <i>O (a)</i> ]: flaw on space 3 and on upper l. badge circles. <i>R (a)</i> : l., diagonal flaw l. of Athena's face; r., flaw across B. NB: very bad photograph].			
27.	005 R26	a. Berk 69 (22.1.1992) 74		-	-
		[ <i>O (a)</i> ]: flaw on space 3 and off 'unit' 7. On badge, flaw beneath chin. <i>R (a)</i> : flaws on outer side of both legends].			
28.	006 R27	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 36)	16,85 g	1 h	-
		[ <i>O (a)</i> ]: not cleaned. <i>R (a)</i> : distance between l. pleat end and helmet smaller].			
		***      ***      ***			
		<i>O: Pan with shorter neck, crossed by diagonal line, longer lower locks reach the drapery; hair arranged differently.</i> <i>R: Caricature-like Athena, taller, head small. Middle fall starts from high up and falls with a number of diagonal, free and rich side folds. L. shawl pleat longer than the r. Thunderbolt diagonal, stylised. Shield in front of chest, with badge prominent. Helmet small, with thin (nearly linear) crest and crest ends at the same level as the short and thin cheek flaps. In field r., characters progressively smaller. Legend letters large and irregular, 'splayed' Sigma.</i>			
		<b>Group 8</b>			
		Specimens: 1 Die combinations: 1		Obverses: 1 Reverses: 1	
29.	009 R28	a. Stack's, F. S. Knobloch coll., (10-11.6.1970) 194 17,00 g		-	-
		[ <i>O (a)</i> ]: diagonal flaws on spaces 2, 3, 7. Horizontal flaw on upper <i>pedum</i> . <i>R (a)</i> : l., die worn between legend and face].			



The progression from larger to smaller heads and modules is analogous to that of groups 2 and 3 with Monogram 11, and the obverse links between these groups and those discussed here confirm their simultaneous production. The helmet symbol is characterised by a small bowl and visor, thin and medium cheek flaps and by a long and thin crest; the length of the crest is inversely proportionate to the size of the bowl. The monogram is generally small and the diagonal bars are not firmly joined with the vertical ones. Specimen 29 from group 8 combines a linear *pedum* with a somewhat cruder Athena and with less elaborate legend letters.

\*\*\*      \*\*\*      \*\*\*

O No	R No	Provenance	Weight	Axis	Diameter
<b>Group 9</b>					
		Specimens: 4	Obverses: 1		
		Die combinations: 3	Reverses: 3		
30.	O10 R32	<i>O: Similar. R: Similar.</i>			
		a. BNF, H. S. 440, 1972/1340-1	17,10 g	6:30 h	-
		b. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 31)	16,76 g	1 h	-
[ <i>O (a)</i> : slightly chipped on edge (11:30 h). Die ready to break on badge circles off star/crescent 2. Signs of flaw between inner and outer crescent 6].					
31.	O10 R33	a. Gorny 60 (5.10.1992) 230; ex Peus 291 (30.3-1.4.1977) 205 (16,99 g); ex Drouôt (6-7.5.1971) 69; ex Ratto (24.6.1929) 258	16,92 g	-	-
[ <i>O (a)</i> : flaws: on spaces 2-3, 5-6, along badge circles off space 3, between <i>pedum</i> and hair. <i>R (a)</i> : flaws: l., (signs) between coin edge and legend; r., (vertical) between legend and edge; on exergue, beneath l. foot].					
32.	O10 R34	a. Peus 332 (23-8.10.1991) 275	17,15 g	-	-
[ <i>O (a)</i> : development of the two flaws between chin and 'unit' 5 and the tie of drapery and 'unit' 5 respectively. <i>R (a)</i> : r., two flaws, from A to field r. and from lower horizontal bar of Σ to beneath exergue].					

\*\*\*      \*\*\*      \*\*\*

*O*: Pan with tumbled hair locks flowing from the crown and hanging from the nape of the long, strong neck. Neck long and thicker, with emphasis on diagonal veins. *Pedum* upright, with knobs around main area.

*R*: Helmet short and stylised, with medium crest very close to main bowl and at the same level as the cheek pieces, very close to l. pleat. Lower hair short. Legend letters less regular, the last three in ΒΑΣΙΛΕΩΣ progressively smaller. Monogram small, relatively high.

**Group 10**

Specimens: 6  
Die combinations: 3

Obverses: 1  
Reverses: 3

O No	R No	Provenance	Weight	Axis	Diameter
33.	O11 R29	a. ANS13 1954.203.91; ex Weber, 2193 b. S. Asia Minor, 1963: <i>IGCH</i> 1426 (Boehring, <i>Chronologie</i> , 156, pl. 26.23)	17,12 g -	3 h -	- -
34.	O11 R30	<i>R: helmet bowl shorter. Legend characters crude.</i> a. Classical Coins 7 (4.5.1989) 56 [O (a): horizontal flaw on spaces 1-2. R (a): l., flaw beneath foot].	17,05 g	-	-
35.	O11 R31	a. Sternberg 11 (1981) 82 b. Künker 93 (2/3.1991) 7; ex Künker 71(10.1986) 286 c. Kress 138 (17.4.1967) 299a; ex Pozzi 2934 [R (a): legend letters elaborate, with serifs, close to each other; flaw between upper angles of N and shield].	17,07 g 16,73 g	- -	- -
***      ***      ***					
<p><i>O: Head tends to fill most of the emblem area. Hair shape different. Neck long and thick, ending in circular drapery, following the badge edge; diagonal line on neck.</i>  <i>R: Athena taller, thinner and more stylised; shield smaller, not upright, with badge protruding; helmet with thin crest but with longer cheek flaps.</i></p> <p><b>Group 11</b></p> <p style="margin-left: 100px;">Specimens: 2                      Obverses: 1 Die combinations: 1              Reverses: 1</p>					
36.	O10 R35	a. Elsen L 105 (1-2.1998) 23 (16,60 g); ex Elsen MBS 8 (19.10.1987) 54 (16,60 g); ex Elsen MBS 7 (21.4.1987) 65 b. Glendining, C. W. Moss Sales, (1-2.12.1927) 293 [O (a): diagonal flaw up, on badge circles. (b): flan larger. Diagonal flaw on space 1, between badge circles (12-1 h); also on internal badge circle, off 'unit' 6. R (b): flaw up, from off l. hasta of A until above head; also, across T].	16,60 g	-	-

In the second part of the coins signed with monogram 9, the heads of Pan are larger and spread beyond the badge, pushing the large star/crescents out of the flans. Emphasis is attached to the muscles of the neck, which tends to be longer at the final stages of function of the mint during this period. The *pedum* is also schematic, with a curved line developing alongside the inner badge circle.

The flans on Groups 9 and 11 become smaller. The slightly chipped edge of no. 33 (11:30 h) suggests the insufficient heating of the metal when it was struck and hence haste in its striking. The flan is generally deformed.



**Crested helmet l.- Monogram 8 r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: As above.</i>  <i>R: Similar.</i>  <b>Group 12</b></p>					
		Specimens: 7		Obverses: [2-2]	
		Die combinations: 5		Reverses: 5	
37.	003 R37	a. G. Hirsch 15 (9.1977) 15; ex G. Hirsch 12 (25-7.4.1957) 86	-	-	-
38.	003 R38	a. G. Hirsch 182 (4-6.5.1994) 143; ex G. Hirsch 179 (21-5.9.1993) 277	16,94 g	-	-
39.	003 R39	a. Hamburger 7 (3-4.4.1933) 525	-	-	-
40.	003 R40	a. Cederlind L 102 (Fall 1995) 1182	-	-	-
41.	008 R41	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 51)	16,61 g	9 h	-
		b. B Elsen L 40 (1.1982) 12; ex Elsen L 29 (2.1981) 6; ex Peus 299 (6-8.5.1980) 139 (16,94 g)	16,93 g	-	-
		c. J. Elsen (6.3.1999) 1310; J. Elsen L 68 (6.1984) 12	16,91 g	-	-
***			***	***	
<p><i>O: As above.</i>  <i>R: Similar.</i>  <b>Group 13</b></p>					
		Specimens: 1		Obverses: [1-1]	
		Die combinations: 1		Reverses: 1	
42.	006 R36	a. Sotheby (7.3.1996) 88	17,09 g	-	-
<p>[<i>O (a)</i>: two horizontal flaws, on spaces 1 and 7. Dot on space 3.  <i>R (a)</i>: l., horizontal flaws above head].</p>					
***			***	***	
<p><i>O: As above.</i>  <i>R: Similar.</i>  <b>Group 14</b></p>					
		Specimens: 2		Obverses: [1-1]	
		Die combinations: 2		Reverses: 1	

O No	R No	Provenance	Weight	Axis	Diameter
43.	O11	R42			
		a. Stuttgart (old coll.)	16,85 g (p)	12 h	-
		b. Leiden 1 3156	17,11 g	5 h	-
		***	***	***	
		<i>O: Similar.</i>			
		<i>R: Similar.</i>			
		<b>Group 15</b>			
		Specimens: 1		Obverses: 1	
		Die combinations: 1		Reverses: 1	
44.	O12	R70			
		a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 35)	17,00 g	1 h	-
		[ <i>O (a)</i> : beginning of flaw on space 2.			
		<i>R (a)</i> : l., flaw from A to head].			

**Crested helmet l. - Monogram 15 r.**

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Similar.</i>			
		<i>R: Similar.</i>			
		<b>Group 16</b>			
		Specimens: 3		Obverses: [1-1]	
		Die combinations: 3		Reverses: 3	
45.	O03	R43			
		a. Kölner 61 (17-18.11.1994) 80; ex D. Thirion L (autumn 1992) 9 (17,07 g)	17,05 g	-	-
		[ <i>O (a)</i> : cheek scratched; also, flaw from end of drapery downwards. Flaws on spaces 2, 6 and 7.			
		<i>R (a)</i> : flaw above shield].			
46.	O03	R44			
		a. Pherai, 1937-8 (T. R. Martin, 'A third-century B.C. hoard from Thessaly at the ANS (IGCH 168)', <i>ANSMN</i> 26 (1981) 64, pl. 14.536)	17,12 g	5 h	-
		[ <i>O (a)</i> : flaws on spaces 1, 2 and 7.			
		<i>R (a)</i> : flaws l. and r., between legend and coin edge. Diagonal flaw between monogram and Σ].			
47.	O03	R45			
		a. Cederlind L 83 (winter 1989) 44	-	-	-
		[ <i>O (a)</i> : flaws on spaces 2-3, 6-7. Also vertically, from lower chin to inner badge circle.			



O No	R No	Provenance	Weight	Axis	Diameter
<p><i>R (a):</i> l., flaw between upper edge and A and beneath Y. In field r., signs of overstrike: anchor].</p>					

**Crested helmet l.- Monogram 16 r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><b>Group 17</b></p> <p>Specimens: 11                      Obverses: [2-2]  Die combinations: 4                Reverses: 4</p>					
48.	O09 R46	<i>R: Similar. Athena rough, shield held in front of chest.</i> a. Berlin; ex Löbbbecke b. SNG Klagenfurt, 578a [flan deformed. <i>R (a):</i> flan curved beneath l. foot; diagonal flaw on exergue].	16,87 g 15,70 g	11 h 10 h	- -
49.	O10 R47	<i>R: monogram larger.</i> a. N. Syria, 1960: IGCH 1533 (Boehringer, <i>Chronologie</i> , 69); Coin Galleries MBS (11.1975) 2031 [ <i>O (a):</i> three flaws, the first behind head, the second between eye and l. border, the third on badge circles, off 'unit' 6].	16,98 g	-	-
50.	O10 R48	a. Myers 6 (1973) 100 [Bad photograph. <i>O (a):</i> die break off 'unit' 4 and on space 4; test cuts on either side of 'unit' 6].	17,02 g	10 h	-
51.	O10 R49	a. Thessaly, 1992 (Touratsoglou, <i>DM</i> , no. 50) b. Müller 20 (20-1.5.1977) 56 c. Poinsignon MBS 42 (6.1997) 607; ex Poinsignon MBS 41 (6.1996) 572; ex Poinsignon MBS 38 (11.1994) 608 d. CNA MBS 36 (23.7.1992) 4 e. Gorny 58 (9.4.1992) 260 f. Kress 140 (7-8.8.1967) 63 g. MMAG 26 (16-19.9.1996) 130 [ <i>O (a-d):</i> flaws: up l., along outer badge circle; on spaces 1-2 and 2-3. ( <i>d</i> ): flaw on badge, from 'unit' 7 to nose. Worn on lower r. field. ( <i>e</i> ): flaw diagonally, from 1 h through to 7 h, across hair and face. Flaw on space 6. ( <i>f</i> ): scratches on rays on 'unit' 3. <i>R (a):</i> r., signs of monogram erased, signs of legend letters r. of ΒΑΣΙΛΕΩΣ and in field l.: overstrike. ( <i>b</i> ): r., signs of mon 11. ( <i>d</i> ): monogram struck upon letters/monogram. ( <i>e</i> ): vertical flaw/sign of tool from up to elbow].	16,63 g 16,85 g - 17,05 g 17,05 g 17,05 g 16,81 g	11 h - - - - -	- - - - - -

With the exception of no. 47, the metal flans of groups 16 and 17 are somewhat smaller and the execution of the designs is unrefined. The deformation of the flan of no. 48 may have been due to the use of a metal instrument or to the insufficient heating of the metal surface when the coin was struck.

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### Crested helmet L- TI r.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: As above.</i>  <i>R: Similar.</i>  <b>Group 18</b>  Specimens: 6                      Obverses: [1-1]  Die combinations: 3              Reverses: 3</p>					
52.	O08 R50	a. Schulman 254 (1971) 3038	17,12 g	-	-
		b. Mektepini, 1956: <i>IGCH</i> 1410 (Olçay-Seyrig, <i>Mektepini</i> , 26, no. 693)	16,95 g	-	-
		c. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 8)	16,99 g	12 h	-
		d. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 14)	16,36 g	11 h	-
<p>[<i>O (a)</i>: beginning of diagonal flaw from l. end of 'unit' 2 to outer badge circle; signs of horizontal flaw on space 7. (<i>b</i>): face countermarked.  <i>R (c)</i>: recut on r. end of l. pleat?].</p>					
53.	O05 R51	a. Müller 34/5 (24-6.9.1981) 61	15,09 g (b)	-	-
<p>[<i>O (a)</i>: development of old flaws and of that on space 2. Horizontal and diagonal flaws respectively on spaces 4 and 6.  <i>R (a)</i>: l., flaw between Γ and end of pleat; horizontal flaws between O and N, O and Y. Up, diagonal flaw between shield and head; r. of r. foot, above and on exergue. In field r., diagonal flaw crossing thunderbold and B; at extreme r. end, flaw r. of E].</p>					
54.	O05 R52	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 15)	16,99 g	11 h	-
<p>[<i>O (a)</i>: development of flaw on space 1; flaw between 'unit' 7 and outer badge circle.  <i>R (a)</i>: r., flaw between l. end of helmet crest and chiton.</p>					
<p>***      ***      ***</p>					
<p><b>Group 19</b>  Specimens: 1                      Obverses: 1  Die combinations: 1              Reverses: 1</p>					
55.	O09 R54	<i>O: Similar. R: Similar.</i> a. MMAG 24 (23-4.6.1994) 162; ex MMAG L 190 (5-6.1959) 12	16,94 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
		<b>Group 20</b>			
		Specimens: 1			
		Die combinations: 1			
56.	O07 R53	<i>O: As above. R: Simillar.</i>			
		a. Stack's (17-18.9.1980), lot 82	17,09 g	-	-
		[Edge slightly chipped (12-3 h).			
		<i>O (a):</i> development of flaws off <i>pedum</i> and on space 2. Flaw on chin. New flaw off nose].			
		<i>R (a):</i> 1., diagonal flaw 1. of legend].			
		***	***	***	
		<i>O: Nose more curved, upper side lock, drapery, pedum different.</i>			
		<i>R: Head small. Legend characters compact. Shield with large rim, held diagonally. Hem ends in fine folds, middle fall shorter.</i>			
		<b>Group 21</b>			
		Specimens: 7			
		Die combinations: 4			
57.	O11 R55				
		a. Berlin; ex Løbbecke	17,12 g	12 h	-
		b. ANM; ex Karditsa (Palaiokastro), 1929 (IGCH 162, no. 7)			
			16,32 g	12 h	3,30 cm
		[ <i>R (a):</i> $\Omega$ open and floating].			
58.	O11 R56				
		a. Thesprotia, 1992 (Touratsoglou, DM, no. 9)			
			17,00 g	11 h	-
59.	O11 R57				
		a. Bruun 349 (16-18.6.1976) 136	16,98 g	-	-
60.	O11 R58				
		<i>R: letters of varied size.</i>			
		a. Lanz 48 (22.5.1989) 198; ex Peus 277 (1971) 89			
			17,04 g	-	-
		b. MMAG 15 (18-19.9.1985) 82	17,21 g	-	-
		d. Kress 135 (15.3.1966) 165	-	-	-
		[ <i>R (a):</i> dot on top of A. In field 1., smaller crested helmet. On exergue. <i>R (c):</i> 'units' 1-3 struck twice.			
		***	***	***	
		<b>Group 22</b>			
		Specimens: 1			
		Die combinations: 1			
61.	O12 R59				
		a. BM; ex Baldwin 4 (3.5.1995) 47	17,07 g	11 h	3,5 cm

O No	R No	Provenance	Weight	Axis	Diameter
<i>O: Shield stars similar, but head rougher.</i> <i>R: Shield protects chest. Helmet bowl very small, with thin crests.</i>					
<b>Group 23</b>					
		Specimens: 3		Obverses: [1-1]	
		Die combinations: 2		Reverses: 2	
62.	O10 R60	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 13)	16,55 g	11 h	-
63.	O10 R61	a. Rauch 6 (1971) 22	16,20 g	-	-
		b. G. Hirsch 120 (10-12.4.1980) 7	16,01 g	-	-
[O (b): in field, flaw on space 7; diagonal flaw from 'unit' 7 through to nose].					

The coins with the letters TI on the r. started right before the transition from the wide flans with large Pan heads to the smaller flans and heads. As above mentioned, no. 54 is similar in style to no. 29, carrying Monogram 11. The crude execution also of the obverse of no. 59, with the letters TI r. on the reverse, might suggest the issue of all three specimens at the last stages of operation of the mint during period II, possibly during an emergency.



## 5.0 Period III: From the Battle of Andros to the Death of Demetrios II (246/5-229 BC) 'Portrait Style'

The new prospects created for Makedonia on the international political scene after the recovery of the Akrokorinth, Isthmos and Euboia culminated in Gonatas's naval victory over the Ptolemaic fleet at Andros in the same year (246/early 245 BC). In fact, 246/5 BC has been taken to represent the accomplishment of the Makedonian *desiderata* both on peninsular Greece and in the Aegean: a *status quo* favourable to Gonatas was reestablished in Greece, with a firm control over Korinth, Peiraeus, Chalkis and Demetrias. Control over these naval bases presumably paved the way to the king's naval victory at Andros (246/early 245 BC), which considerably restricted the Ptolemaic influence in the Aegean<sup>1</sup>.

An examination of the historical context of this battle is a prerequisite to a better assessment of its impact. The wider context is set by the Third Syrian (Laodikean) war between the new kings respectively of the Seleukid realm and Egypt, Seleukos II and Ptolemy III, during which Gonatas favoured the Seleukids while defending his possessions in the Aegean (246-1 BC)<sup>2</sup>. Ptolemy's campaign against the Hellespont and Thrace at the outset of this war has been taken by Buraselis to have caused this naval conflict between the Antigonid and the Ptolemaic fleet<sup>3</sup>. According to P. Trogus, Antigonos as commander of the Makedonian fleet defeated the Ptolemaic general 'oprona'<sup>4</sup>.

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<sup>1</sup> Buraselis, *HM*, 119-51, 170-9; F. W. Walbank, 'Antigonos Gonatas: The Last Years', in Hammond-Walbank, *Macedonia III*, 306; Reger, *Delos*, 18-19, 23-26, 41; Πασχίδη, *Ποσειδώνες και Αντίγονοι*, 254-5. The date suggested by Buraselis for the battle of Andros (c. 246/5 BC) might be confirmed by the stability in the prices of pitch, a product of Makedonian monopoly, at Delos between 246 and 169 BC: G. Glotz, 'L' histoire de Délos d'après les prix d'une denrée', *REG* (1916) 281-325; Merker, *Studies*, 76-80; G. Reger, 'The price histories of some imported goods on independent Delos', in *Économie Antique, Prix et formation des prix dans les économies antiques, Entretiens d'archéologie et d'histoire*, Saint-Bertrand-des-Comminges 1997, 53-72.

<sup>2</sup> Will, *HPMH I*<sup>2</sup>, 248-61. Cf. F. W. Walbank, 'Macedonia and Greece', *CAH VII.1*<sup>2</sup>, 239-43, 248-9.

<sup>3</sup> Buraselis, *HM*, 127, 172-3.

<sup>4</sup> P. Trog. *Prol.* 27: Ut Ptolomaeus Adaeum denuo captum interfecerit, et Antigonos Andro proelio navali Opronon vicerit. Information on the naval battle is drawn from the following sources: a) Plut. *Pel.* 2: 'Αντίγονος ὁ γέρων ὅτε ναυμαχεῖν περὶ Ἄνδρον ἐμελλεν, εἰπόντος τινὸς ὡς πολὺ πλείους αἱ τῶν πολεμίων νῆες εἶεν. ἐμέ δ' αὐτόν, ἔφη, πρὸς πόσας ἀντιστήσεις; b) Plut. *Mor.* 183 c: Μέλλων δὲ ναυμαχεῖν πρὸς τοὺς Πτολεμαίου στρατηγούς, εἰπόντος τοῦ κυβερνήτου πολὺ πλείονας εἶναι τὰς τῶν πολεμίων ναῦς, 'ἐμέ δέ', ἔφη, 'αὐτόν παρόντα πρὸς πόσας ἀντιτάτεις;' Plut. *Mor.* 545 b: καὶ Ἀντίγονος ὁ δεύτερος τῶν ἄλλων μὲν ἦν ἄτυφος καὶ μέτριος, ἐν δὲ τῇ περὶ Κῶ ναυμαχίᾳ τινὸς εἰπόντος, 'οὐχ ὀρᾶς ὅσω πλείους εἰσὶν αἱ πολέμιοι νῆες;' 'ἐμέ δέ γε αὐτόν', εἶπεν, 'πρὸς πόσας ἀντιτάττετε;'. c) P. Haun., p. 42-4; Chr. Habicht, 'Bemerkungen zum P. Haun. 6', *ZPE* 39 (1980) 1-5. For a systematic discussion of the evidence, see Buraselis, *HM*, 120-41 and F. W. Walbank, 'The battles of Kos and Andros', Appendix 4, in Hammond-Walbank, *Macedonia III*, 587-95, with earlier bibliography. For the identification of 'Opron', see Al. N. Oikonomides, 'Opron and the Sea Battle of Andros, A Note in Ptolemaic History and Prosopography', *ZPE* 56 (1984) 151-2.



Unlike the battle of Kos, whose result did not conclusively establish either king's sovereignty over the Aegean, the second Antigonid naval victory over the Ptolemies at Andros had a major impact. This is proved not only by the fact that the recovery of Korinth by Aratos of Sikyon in 243 BC was not manipulated by the Ptolemies in order to regain control of the Aegean, but also by the extensive celebrations of its outcome. These included the establishment of two vase festivals at Delos, the Soteria and the Paneia<sup>5</sup>, and presumably the introduction of a second tetradrachm type, the Poseidon head (chapter 2.4.3). The compliance of the Makedonian cities of Amphipolis, Philippoi, Kassandreia and Pella with the king's will and their recognition of the *asylia* of the priesthood of the sanctuary of Asklepios at Kos in 243 BC might also echo a rise in the king's prestige in Makedonia, as a result of this naval victory<sup>6</sup>.

The loss of Korinth to Aratos in 243 BC<sup>7</sup>, however, renewed the military worries of Antigonos *vis-à-vis* his Greek hegemony in the last years of his reign and rendered the conflict between Aratos of Sikyon and the Makedonian king inevitable. Two opposing military blocks were thus structured in Greece as, on the one hand, Ptolemy III was appointed hegemon of the Achaian Confederacy 'by land and sea'<sup>8</sup> and Aratos made an alliance with Sparta<sup>9</sup>, and as Antigonos, on the other hand, made compacts both with the Aitolians to partition Achaia and with Aitolia and Epeiros to partition Akarmania<sup>10</sup>.

The unquestioned rise of Gonatas' son to the throne after the death of the 'γέρων' in 240/39 BC<sup>11</sup> might imply that Demetrios II had already been appointed coregent, following the example of Monophthalmos and Poliorketes<sup>12</sup>. The thrust of Gonatas' policy was maintained by his successor. Demetrios II had to effectively tackle opposition on multiple military fronts

<sup>5</sup> Buraselis, *HM*, 141 ff.; Nachtergaeel, *Galates*, 180, 295-414; F. W. Walbank, 'Appendix 4: The Battles of Cos and Andros', in Hammond-Walbank, *Macedonia III*, 592-5; Bruneau, *Délos*, 557-64; cf. chapter 1.2.

<sup>6</sup> Decree of Philippoi for Kos: Hatzopoulos, *Institutions II*, no. 36, l. 6-8, 9-11, 12-15 (ἐπὶ τῇ εὐνοίᾳ τῇ τε πρὸς τὸν βασιλέα Ἀντίγονον καὶ τῆμ πόλιν τὴν Φιλίππων καὶ τοὺς ἄλλους Ἕλληνας καὶ Μακεδόνας, δοῦναι δὲ καὶ τὸ ἱερὸν τὸ ἐν Κῶι ἄσυλον, καθάπερ καὶ ὁ βασιλεὺς Ἀντίγονος προαιρεῖται...). Amphipolis: Hatzopoulos, *Institutions II*, no. 41, esp. l. 6-8, 12-14. Kassandreia: Hatzopoulos, *ibid.*, no. 47, l. 4-7, 9-10, 12-14. Pella: Hatzopoulos, *ibid.*, no. 58, l. 3-5, 12.

<sup>7</sup> Paus. 2.8.4, 7.8.3; Index Stoic. Herc. col. xv. Plut. *Arat.* 23.5-6; Athen. 4.162d; Polyæn. 6.5. For a discussion, see F. W. Walbank, 'Antigonos Gonatas: the last years', in Hammond-Walbank, *Macedonia III*, 309, n. 1.

<sup>8</sup> Urban, *Wachstum und Krise*, 52-3; Walbank, *ibid.*, 311, n. 1.

<sup>9</sup> Plut. *Arat.* 13-15.

<sup>10</sup> Plb. 2.45.1; 9.34.7; 38.9; Just. 26.3.1; 28.1.1. Walbank, *Commentary*, 1.239-40. Also, F. W. Walbank, 'Antigonos Gonatas: The Last Years', in Hammond-Walbank, *Macedonia III*, 311.

<sup>11</sup> Plut. *Pel.* 2: Ἀντίγονος ὁ γέρων ὅτε ναυμαχεῖν περὶ Ἄνδρον ἐμελλεν... On the death of Gonatas in spring 239, see Ehrhardt, *Studies*, 140; Hammond-Walbank, *Macedonia III*, 313, n. 6.

<sup>12</sup> Will suggests his coregency with Gonatas since 257/6 and definitely by 240/39 BC: *HPMH I*<sup>2</sup>, 344; F. Walbank is more cautious, for lack of confirming evidence: 'Demetrius II (239-229 BC)' in Hammond-Walbank, *Macedonia III*, 317-8.



throughout his short reign: the Demetrian war (239-5 BC)<sup>13</sup>, for instance, against Aratos and Pantaleon, allied representatives of the Achaian and of the Aitolian Confederacy respectively<sup>14</sup>, and the marriage of Demetrios with Phthia, princess of Epeiros<sup>15</sup>, were meant to counter the growth of the Aitolian and the Achaian Confederacies in mainland Greece. At the same time, he attempted to influence the Athenians by assigning them the command of Eleusis, Phyle and Panakton, after his invasion of Boiotia (c. 236 BC)<sup>16</sup>. Moreover, the renewal of hostility between Achaia and Sparta in the Peloponnese in view of the annexation of Megalopolis to the Achaian Confederacy and of the rise of the young and ambitious Kleomenes III to the Spartan throne allowed the Makedonians to regain a foothold in the area<sup>17</sup>. On the western front, however, their only indirect support to the Akarnanians' move of independence from Epeiros lost them Epeiros to the Achaian and to the Aitolian Confederacies<sup>18</sup>.

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The wide scale of the Antigonid military and diplomatic activities throughout this period, both by sea and land, is reflected in the diversity of the types, style and artistic quality and in the large quantity of the silver produced. The coinage consists of tetradrachms only, which may be distinguished into the Pan head and the Poseidon head individual Antigonid types. It is, in fact, during this period that the Poseidon head type was introduced (chapters 2.4.2-3). The large numbers and the stylistic diversity of the Pan head tetradrachms might render possible the assignation of certain groups with mature features of Pan to the successor of Gonatas, Demetrios II. This might then belie the alleged absence of portraiture in the name of all the successive Antigonids and reveal a deep conscience of dynastic continuity in this dynasty, similar to that of the Ptolemies and the Seleukids<sup>19</sup>. It is in fact odd that Demetrios, who conducted extensive military campaigns on diverse Greek fronts, should be left without precious metal coinage. On the other hand, the unquestioned dynastic transition from father to son subsequent to Gonatas' death renders the striking by Demetrios II of coinage in the name of his father plausible. There

<sup>13</sup> Inauguration of the war in the archonship of Lysias, 239/8: *Syll* 485, l. 37. For an account of the events, see Will, *HPMH* I<sup>2</sup>, 343-9; F. W. Walbank, 'Demetrios II (239-229 BC)', in Hammond-Walbank, *Macedonia* III, 321-9.

<sup>14</sup> On the alliance between Aratos and Pantaleon, see Plb. 2.44.1; Plut. *Arat.* 33.1-2.

<sup>15</sup> Just. 28.1-4. For a discussion of this marriage, see F. W. Walbank, 'Demetrios II (239-229 BC)', in Hammond-Walbank, *Macedonia* III, 322-3.

<sup>16</sup> *IG* II<sup>2</sup> 1299 = *Syll* 485, esp. l. 41-2, 65-6.

<sup>17</sup> On the incorporation of Megalopolis into the Achaian Confederacy, see Plut. *Arat.* 30.3-4.

<sup>18</sup> On Demetrios' subsidy to the king of the Illyrian Ardiaei to assist the Akarnanians against the Aitolians, see Plb. 2.2.5-7-6; App. *Ill.* 7.

<sup>19</sup> R. Fleischer, 'Hellenistic Royal Iconography on Coins', in Per Bilde et al., *Aspects of Hellenistic Kingship*, 28-39. Also see chapter 8.0.



are therefore many good reasons allowing for the possibility that some of this coinage was struck under Demetrios II posthumously, in the name of Gonatas.

Certain groups of the Pan head tetradrachms, nos. 1-3 and 23, are stylistically more elaborate and in this sense diverge from the norm. The temporary typological changes presumably echo the celebratory atmosphere after the battle of Andros, of which the foundations of the Soteria and Paneia also formed part. As has been extensively argued above (chapter 2.4.3), the introduction of the Poseidon head tetradrachm type may also have formed part of the same celebratory *repertorium* that renewed the political discourse regarding the Antigonid naval supremacy in the Aegean. The ideological burden of this second type suggests its striking either subsequent to the naval battle, for military payments, or in relation to the vase festivals, Paneia and Soteria, and their periodical issue alongside these celebrations at Delos. The relatively brief period of their production justifies the great similarity in the style of the obverses.

Monograms 9, 11 and 22, which occur as secondary control marks on both the Pans and the Poseidons, associate the two silver tetradrachm types (cf. chapters 2.2.4, 2.4.3, 2.5). In fact, the presence of no. 9 on the Poseidon head series and its disappearance from the Pans of the same period suggests the transfer of a mint official until then engaged with the minting of the Pans to the striking of the new Poseidon head tetradrachms, presumably at the same Makedonian mint. Similarly, no. 22, alongside the main monogram of a few Poseidons, establishes a connection between the X- monogram 22 tetradrachms with a diademed head of Pan on the obverse. Insofar as these Pan tetradrachms were allegedly struck in order to celebrate the outcome of the battle of Andros, the Poseidons with the same secondary control mark may have been launched within the same context.

That the reconstruction of the Pans does not reveal a strict progression of the size of the modules casts doubt on the validity of Mathisen's tentative chronological arrangement of posthumous Alexander tetradrachms on the basis of this criterion. It may, however, be argued that smaller modules have been selected for the celebratory silver tetradrachm issues. Certain specimens of a good quality have been pierced (ie. no. 10a, 19b, 22a, 72c), while others, of a poorer execution, are broken (i.e. nos. 22a, 35a). A few Poseidon head tetradrachms are also broken (nos. 159a, 197c, 199a) or have been pierced (no. 199), and some have been cracked on the edge, as a result of the insufficient heating of the flan. A test cut has also been performed on no. 191, in order to confirm its validity.



NO.	HOARD	CAT. NO.	GROUP NO.	OBV. NO.	MON. NO./LETTERS
1a	S. Asia Minor, 1963	3a	1	01	(trident)
1b	S. Asia Minor, 1963	49b	10	09	11
1c	S. Asia Minor, 1963	67a	15	12	KT
1d	S. Asia Minor, 1963	109a	26	14	22
2a	Thesprotia, 1992	10c	4	03	11
2b	Thesprotia, 1992	16a	5	04	11
2c	Thesprotia, 1992	19c	5	04	11
2d	Thesprotia, 1992	26a	7	06	11
2e	Thesprotia, 1992	27a	7	06	11
2f	Thesprotia, 1992	28b	7	06	11
2g	Thesprotia, 1992	61a	14	11	KT
2h	Thesprotia, 1992	64a	14	11	KT
2i	Thesprotia, 1992	68a	16	11	18
2k	Thesprotia, 1992	81a	22	08	TI
2l	Thesprotia, 1992	88a	22	08	TI
3a	Mektepini, 1956	11a	4	03	11
4a	Eretria, 1937	35a	8	07	11
4b	Eretria, 1937	36a	8	07	11
4c	Eretria, 1937	41a	10	09	11
4d	Eretria, 1937	42a	10	09	11
4e	Eretria, 1937	43a	10	09	11
4f	Eretria, 1937	109c	26	14	22
5	Meydançikkale, 1980	51b	11	02	15
6a	N. Syria, 1960	52a	12	02	15
6b	N. Syria, 1960	67c	15	12	KT
6c	N. Syria, 1960	72d	19	03	TI
7a	Hija se Korbit, 1982	56a	13	10	KT
7b	Hija se Korbit, 1982	82a	22	08	TI
8a	Gordion, 1951	63c	14	11	KT
9a	Karditsa (Palaiokastro), 1929	79b	21	13	TI
10a	Larissa ('Sitochoro'), 1968	85e	22	08	TI
11a	Pherai, 1937-8	99a	22	09	TI

12a	'Pisidia', 1963	100.1	23	14	-
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Fig. 15a. Period III: Pan Head Tetrachms in Hoards.

NO.	HOARD	CAT. NO	GROUP NO	OBV. NO	MON. NO/LETTERS R.
12a	Pergamon, 1960	121c	31	20	25-M
13a	Mektepini, 1956	123a	31	20	25-M
13b	Mektepini, 1956	150b	36	26	25
14a	Thesprotia, 1992	145a	36	25	25
14b	Thesprotia, 1992	155e	37	27	25
14c	Thesprotia, 1992	174a	39	29	25
14d	Thesprotia, 1992	194b	39	31	25
14e	Thesprotia, 1992	197b	39	32	25
14f	Thesprotia, 1992	198a	39	33	25
15a	Kassandraia, 1985-7	138a	33	21	25
15b	Kassandraia, 1985/7	153a	37	27	25
16	Syria, 1959	148a	36	25	25
17	Larissa ('Sitochoro'), 1968	174a	39	29	25
18	Oylum Höyüğü, 1989	180d	39	29	25
19	Asia Minor, 1947	189a	40	30	25

Fig. 15b. Period III: Poseidon Head Tetrachms in Hoards.





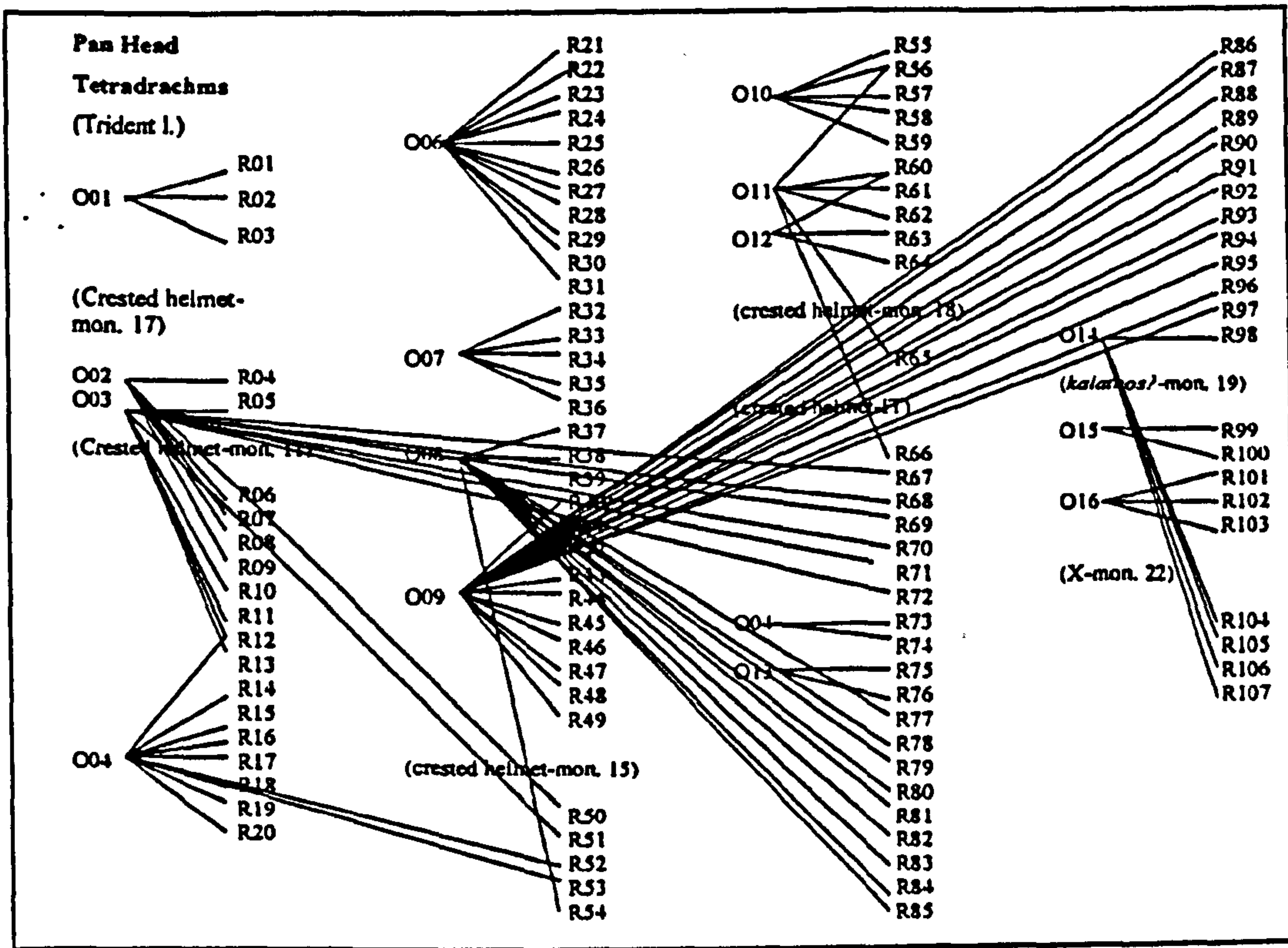


Fig. 18a. Period III: Pan Head Tetrachms, Diagram of Die Links.

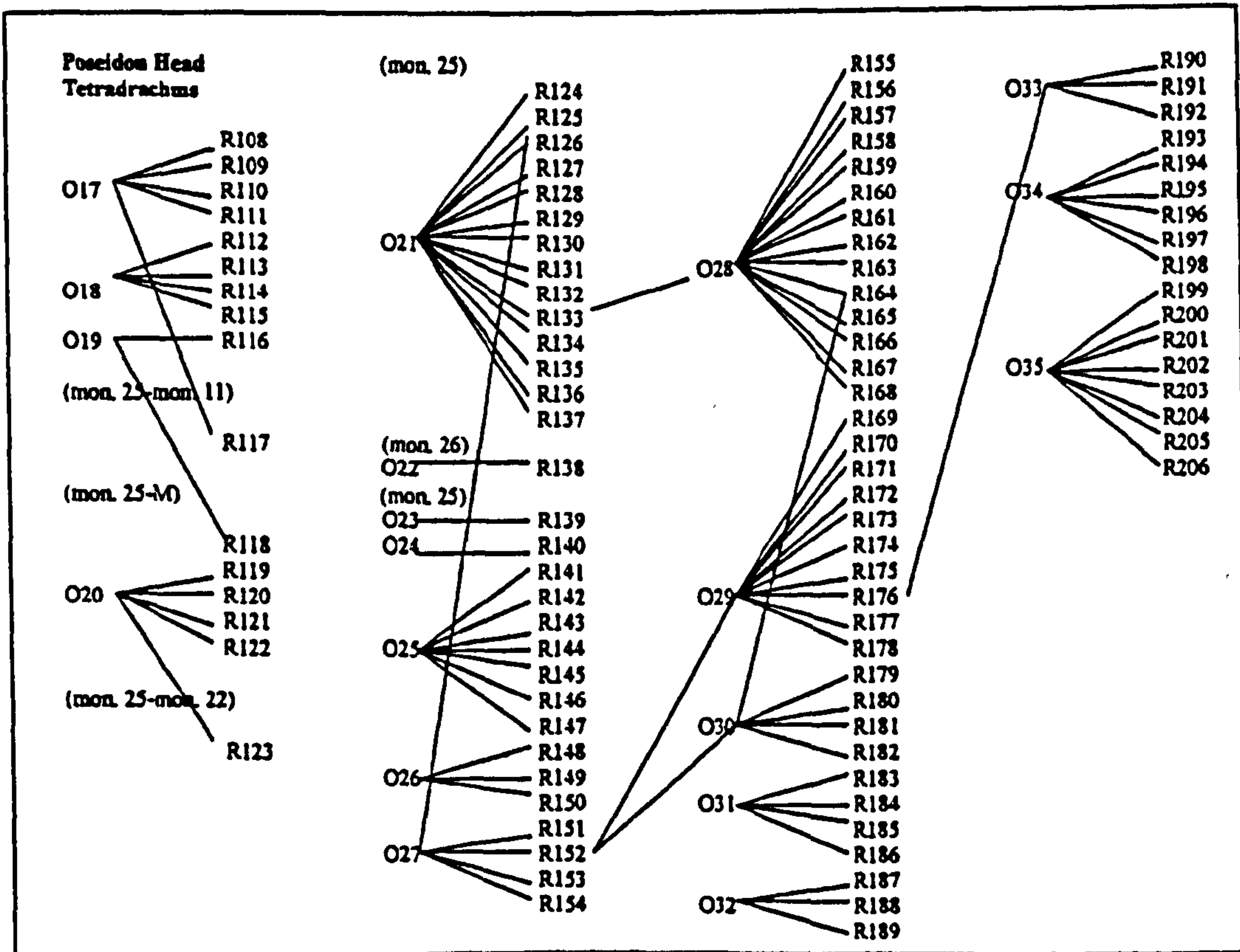


Fig. 18b. Period III: Poseidon Head Tetrachms, Diagram of Die Links.



## MINT A

### 5.1 Individual Types: Pan Head Tetradrachms

#### I. Athena Alkidemos I.

##### Trident I.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Eight-rayed, relief stars. Pan with bent, backward pointing horns and with tumbled locks flowing backwards and hanging from nape. Drapery folded, ending in three pleats, binding to front.</i></p> <p><i>R: Hem with rich folds, the l. pleat end longer than the r. The l. end of pleat attached to leg. Head of Pan as emblem of shield, which is not particularly elaborate. Trident large, with short middle prong.</i></p> <p><b>Group 1</b></p> <p style="margin-left: 40px;">Specimens: 3                      Obverses: 1 Die combinations: 3                  Reverses: 3</p>					
1. 001	R01	a. ANS 1967.152.209	16,97 g	9 h	-
2. 001	R02	a. BM G10-III-109	16,89 g	5 h	3 cm
3. 001	R03	a. S. Asia Minor, 1963: IGCH 1426 (Boehringer, <i>Chronologie</i> , 157, pl. 26.56)	-	-	-

A small issue carrying a trident I. on the reverse may be placed at the beginning of this period. Small heads with bent horns and with untidy locks are surrounded by relief, eight-rayed stars and fit into small flans. A three-fold drapery covers the greatest part of the neck and binds on the front with a knob, while the *pedum* is different from that of the previous groups. A single obverse is combined with three different reverses, and each die combination is represented by a single specimen.

The trident symbol I. on the reverse is smaller, with a shorter handle but with a longer middle prong than that on the Poseidon head tetradrachms (cf. chapters 2.2.4, 6.2). It need not, however, identify a different, small mint (cf. chapter 2.5). The tetradrachm from *S. Asia Minor, 1963* has tentatively been dated by Chr. Boehringer to c. 240 BC<sup>20</sup>. Even though the late burial

<sup>20</sup> *Chronologie*, 157.

date of *S. Asia Minor, 1963* allows for an alternative production date around 225 BC for this group, its similarity in terms of style and legend letters to nos. 4 and 10-13 favours its placement to the beginning of the third period, subsequent to the battle of Andros. The distinct control mark is compatible with a celebratory issue at the main 'Makedonian' mint.

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### Crested helmet I.

#### Crested helmet I. - Monogram 17 r.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Eight-rayed, relief stars, with centre prominent. Pan heads similar in shape to those of group 1, but neater arrangement of locks than in group 1. Change in direction of pedum, which is now curved, following the diagonal line of the drapery.  <i>R</i>: Legend letters angular. Athena in chiton with fine diagonal folds, rich in movement.</p>					
<p><b>Group 2</b></p>					
		Specimens: 2	Obverses: 2		
		Die combinations: 2	Reverses: 2		
4. 002	R04	a. SNG Fitzwilliam, 2306	17,04 g	5 h	3,05 cm
<p>[<i>O</i> (<i>a</i>): flaws: on space 3; on badge, off nose, and from lower fold upwards.  <i>R</i> (<i>a</i>): horizontal flaw, above monogram. Flaw off pleat].</p>					
5. 003	R05	<i>R</i> : Similar, but pedum upright, alongside inner badge circle. a. Hess 251 (7-8.5.1982) 35; Kurpfälzische Münzhandlung (9.5.1982) 27	16,80 g	-	-
<p>[<i>O</i> (<i>a</i>): in centre, flaw from inner circle off 'unit' 2 through to hair. Also, from off nose diagonally to lower badge circle and through to 'unit' 5. Flaw on space 2.  <i>R</i> (<i>a</i>): r., flaw from r. ankle to edge; lower, flaw from l. end of r. pleat through monogram to lower edge].</p>					

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**Crested helmet l. - Monogram 11 r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: As above.</i>  <i>R: Similar.</i>  <b>Group 3</b></p>					
		Specimens: 4			Obverses: [1-1]
		Die combinations: 4			Reverses: 4
6.	O02	R06			
		a. Seaby 693 (1976) A393	17,09 g	-	-
		[O (a): flaw on spaces 2-4. Beginning of flaw on nose].			
7.	O02	R07			
		a. Peus 279 (14-17.3.1972) 25	17,04 g	-	-
		[O (a): flaw between crescent 7 and badge circles. In centre, development of flaw from lower fold upwards; beginning of flaw between drapery and lower badge circle].			
8.	O02	R08			
		a. Sotheby (20.5.1986) 52	-	-	-
		[O (a): flaw on badge circles, off 'unit' 2; on space 3, between badge and 'unit' 5].			
9.	O02	R09			
		a. Feuardent (12-13.12.1919) 208	-	-	-
		[O (a): die break on badge, up r., off 'units' 2 and 7 respectively; also, off chin; between 'unit' 5 and badge; between 'units' 3 and 4].			
***      ***      ***					
<p><i>O: Head spreads over badge, nose pointed, horns r. Two-fold drapery, from the middle of which emerges the pedum. Wrinkles on neck.</i>  <i>R: Legend letters regular. Athena short, stylised; pleats fall straightway, without many folds. L. pleat slightly longer than r. pleat. Thunderbolt stylised. Hem's middle fold shorter. Helmet with rich crest, falling on either side of bowl; bowl small, with short cheek flaps.</i></p>					
<p><b>Group 4</b></p>					
		Specimens: 6			Obverses: [1-1]
		Die combinations: 4			Reverses: 4
10.	O03	R10			
		a. BNF 1377	16,94 g (p)	-	-
		b. MMAG 41 (18-19.6.1970) 92	16,90 g	-	-
		c. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 38)	16,82 g	3 h	-
		[O (a): flaw between outer crescent 7 and edge; also, on space 1. (b): beginning of flaw on nose, flaws: on spaces 1 and 3; between outer crescent 7 and edge; on badge, between nose and inner badge circle. (c): flaw off nose and diagonally, from chin to 'unit' 4.			
		R (a): l., small flaws between legend and coin edge. Also, diagonal flaw between mon. and r. edge, presumably as a result of piercing. (b): Alpha without vertical bar, legend			

O No	R No	Provenance	Weight	Axis	Diameter
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not carefully engraved. Athena crude, transparency of drapery in lower half - legs discernible. Athena on tiptoe, holding thunderbolt. Vertical lines on lower helmet; crest elaborate. (c): l., flaw l. of legend letters].

11. O03 R11

a. Mektepini, 1956: *IGCH* 1410 (Olçay-Seyrig, *Mektepini*, n. 690)

17,05 g

[O (a): l., development of flaw between nose and inner badge circle; r., from off unit' 2 and hair; horizontal flaws on spaces 2 and 4].

12. O03 R12

a. Ahlström 51 (8-9.4.1995) 1622

[O (a): development of flaws: between nose and inner badge circle, between tie of drapery and inner badge circle. Development of flaw between outer 'crescent' 3 and edge. Flaws on space 1.

R (a): l., diagonal flaw between legend and coin end and between T and l. pleat. R., diagonal flaw between lower horizontal bar of Σ and edge. Flaws on exergue.

NB: Off-centre].

13. O03 R13

a. MMAG 6 (30.9-1.10.1976) 124

16,65 g

[O (a): development of existing flaws. New horizontal flaw on inner badge circle, off *pedum* and between *pedum* and outer 'crescent' 3. Flaws on space 3.

R (a): flaws, l. and r., between legend and edge. Up, flaws above head].

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O: *Similar.*

R: *Similar.*

Group 5

Specimens: 10

Obverses: 1

Die combinations: 6

Reverses: 6

14. O04 R14

R: *legend letters regular. Shield large, middle fall smaller, l. pleat slightly longer. Helmet with rich crest, lower part larger, cheek flaps small.*

a. ANS 1944.100.13844

16,91 g

11 h

[O (a): recut on nose. Small horizontal flaw between nose and badge circles. Diagonal flaw from beneath drapery through badge circles to 'unit' 4; signs of flaw between 'unit' 5 and badge circles; two flaws between 'units' 5 and 6.

R (a): l., flaw beneath r. bar of first N and between N and T; r., vertical flaw between main figure and r. pleat].

15. O04 R15

a. Vico (25.11.1996) 50

17,00 g

[O (a): development of flaws between 'unit' 5 and badge circles and from lower drapery to 'unit' 4.

R (a): up l., flaw from upper head to legend; lower, signs of flaw beneath l. crest. In field r., horizontal flaw through pleat ends to E].



O No	R No	Provenance	Weight	Axis	Diameter
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16. O04 R16

a. Thesprotia, 1992 (Touratsoglou, *DM*, no. 34)

16,96 g      5 h      -

b. Coin Galleries, MBS (17.4.1975) 255

16,19 g      -      -

[O (a): development of previous flaws alongside new ones, between 'unit' 2 and badge circles, and on badge circles off 'unit' 3.

R (a): l., flaw between l. pleat and figure; also, beneath first O; between second O and l. helmet crest. In field r., flaw beneath  $\Omega$ , and between  $\Sigma$  and mon.; also, from l. leg downwards].

17. O04 R17

a. Milan, 2; ex Müller 8 (12.5.1973) 9

-      -      -

[O (a): on badge, flaw between chin and badge circles l. Development of flaw on space 5.

R (a): l., flaw between l. end of l. pleat and last three legend letters].

18. O04 R18

a. G. Hirsch 55 (11-13.12.1967) 2105

17,00 g      -      -

b. Kress 136 (19.9.1966) 225

16,95 g      -      -

[O (a): flaws on 'units' 1-3; new diagonal flaw between crescent 6 and badge circles. Flaw from upper *pedum* upwards.

R (b): l. lateral monogram bar missing].

19. O04 R12

R: *Shield prominent, curved. Chiton with long pleats.*

a. Kress 156 (2.4.1973) 197; ex V27: Kress 140 (7-8.8.1967) 64; ex Pozzi 970

16,80 g      -      -

b. Göttingen, AS 168-2

16,95 g (p)      11 h      -

c. Thesprotia, 1992 (Touratsoglou, *DM*, no. 39)

17,01 g      1 h      -

[O (a): diagonal flaw on space 7. On badge, flaw from nose downwards.

R (a): up l., horizontal flaw from head to legend letters.

NB: Very bad photograph].

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*O: Eight-rayed stars, smaller in diameter than group 5, all of approximately the same size. Distance between badge circles larger; additional rays on star 6. No distance between lower badge circle and drapery edge. In centre, small horned head with curls, short neck and a long side lock separating hair from face. Nose pointed, slightly curved downwards. Pedum attached to inner circle.*

*R: Middle hem fall starts from high up. Letters uniform, carefully engraved. Athena tall, transparency of drapery on second half - legs discerned, middle pleat higher. Thunderbolt, helmet small. Helmet with short lower bowl, short cheek flaps and crest at same level as cheek flaps.*

**Group 6**

Specimens: 6

Obverses: [3-1]

Die combinations: 5

Reverses: 5

O No	R No	Provenance	Weight	Axis	Diameter
20.	O04 R19	a. Münzzentrum 66 (26-8.4.1989) 149; ex Münzzentrum 39 (6.1988) 60; ex Münzzentrum L 36 (6.1986) 104; ex Lanz 26 (1983) 183 17,10 g	-	-	-
		b. Münzzentrum 62 (4-6.11.1987) 116 16,70 g	-	-	-
		[O (a): flaw between 'unit' 3 and badge circle; beginning of flaw between 'units' 5 and 6 and outer badge circle. R (a): flaw from l. foot to exergue. Up r., horizontal flaw between legend and edge].			
21.	O04 R20	a. MMAG L 379 (6.1976) 16 17,04 g	-	-	-
		[O (a): small flaws on spaces 1, 4 and 5. R (a): l., slightly broken on edge].			
22.	O05 R21	a. Dorotheum L 290 (13-16.12.1966) 110 15,75 g (b)	-	-	-
		[O (a): development of flaws. Diagonal flaw from nose to 'unit' 5. R (a): r., horizontal flaw beneath N].			
		<i>O: Change on spaces. One-fold drapery. Pedum small, dotted. R: Rough, short Athena. Shield upright, with badge prominent. Helmet with large bowl and rich crest, long cheek flaps. On exergue. Chiton folds stylised.</i>			
23.	O06 R22	a. SNG Lewis, 539; ex Sotheby (2.2.1876) 21 17,16 g	3 h	-	-
		[O (a): flaw on spaces 2, 6. R (a): l., diagonal flaws l. and r., from upper end through chiton downwards].			
24.	O06 R23	a. Kress 122 (30.5.1962) 319	-	-	-
		[O (a): development of flaws; break on nose. R (a): roughly cut, legend letters smaller but regular. In field l., vertical flaw above shield; r., horizontal flaws].			
		***	***	***	
		<i>O: Triangular head; curved, backward-pointing horns. Shawl pleats almost at same length. R: Athena tall, helmet with very short cheek flaps.</i>			
		<b>Group 7</b>			
		Specimens: 13	Obverses: [1-1]		
		Die combinations: 8	Reverses: 8		
25.	O06 R24	a. Button 101 (29.10.1957) 59	16,95 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
26.	O06 R25	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 26)	16,68 g	9 h	-
		[ <i>R (a)</i> : shield larger, not upright; Athena taller, crest ends and cheek flaps at same level, distance between l. pleat and helmet smaller].			
27.	O06 R26	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 28)	17,06 g	9 h	-
		b. Hess 202 (28.10.1930) 2372	17,10 g	-	-
		[ <i>O (a)</i> : signs of wear l. ( <i>a-b</i> ): flaws: off nose downwards; between chin and lower badge edge; behind hair; on space 6. <i>R (a)</i> : distance between helmet and pleat larger. Helmet with higher bowl. Shield small, round].			
28.	O06 R27	a. BM6 G10-III-110	17,07 g	11 h	3,2 cm
		b. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , 27)	17,00 g	11 h	-
		c. Lanz 32 (29.4.1985) 172	16,92 g	-	-
29.	O06 R28	a. Drouôt-Bourgey (12.1928) 503	-	-	-
		[ <i>O (a)</i> : flaw from chin to lower badge edge].			
30.	O06 R29	a. ANM4, Iliou Melathron I.6	16,97 g	11 h	3,20 cm
		b. Gorny 58 (9.4.1992) 259	17,05 g	-	-
		[ <i>O (a)</i> : diagonal flaw from nose to 'unit' 6. Flaw on space 6].			
31.	O06 R30	a. Sternberg L 5 (9.1993) 350	-	-	-
		[ <i>O (a)</i> : development of flaw on space 6; new flaws, on badge, off 'unit' 1 and on spaces 4 and 5. <i>R (a)</i> : l., scratches from edge to legend].			
32.	O06 R31	a. Classical Coins 31 (9-10.9.1994) 154 (ex Dr. Frank J. Novac coll.)	16,97 g	-	-
		b. Glendining (7.3.1957) 36; ex Glendining (2.1957) 36	-	-	-
		[ <i>O (a-b)</i> : flaw l. (6-8 h); also, across badge circles, off 'unit' 4, and on spaces. <i>R (a)</i> : l., flaw between r. helmet crest and <i>chiton</i> ; r., worn].			

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O No	R No	Provenance	Weight	Axis	Diameter
		<p><i>O: Seven-rayed, plastic stars. 'Units' nearly semi-circular, more regularly distributed around emblem. Untidy locks flow from crown. Side lock covers ear. Bulging face, chin prominent, large neck crossed by diagonal line. Two-fold drapery.</i></p> <p><i>R: Similar.</i></p> <p><b>Group 8</b></p> <p style="padding-left: 40px;">Specimens: 6                      Obverses: 1</p> <p style="padding-left: 40px;">Die combinations: 5              Reverses: 5</p>			
33.	O07 R32	<p><i>R: Helmet with wide bowl, short cheek pieces and rich crest. Legend letters large, Omikron large. Athena short, with rich chiton.</i></p> <p>a. Berlin; ex Knobelsdorf</p>	16,95 g	3 h	-
		[O (a): die ready to break on upper pedum and beneath chin. Worn on space 4].			
34.	O07 R33	<p><i>R: Athena elaborate, stylistically similar to no. 50. Crest holder high.</i></p> <p>a. Schulman (14-15.12.1970) 772</p>	-	-	-
		[O (a): flaw from 'unit' 6 to nose. Also, on spaces 3-7. Die break on badge circles, off 'unit' 3.			
		[R (a): l., flaw from edge downwards. R., horizontal break from beneath l. arm through legend letters to edge].			
35.	O07 R34	<p>a. ANM; ex Eretria, 1937: <i>IGCH</i> 175, no. 16</p>	16,78 g (b)	2 h	3,10 cm
		[O (a): development of breaks at level of mouth and off nose; horizontal break on inner badge circle, off chin. Flaw from beneath drapery through to 'unit' 4.			
		[R (a): Middle fall starts higher, ending in middle diagonal folds. Pleats at same level. Helmet with thin crest, small bowl and short cheek flaps. Small stride. On exergue. NB: Not cleaned].			
36.	O07 R35	<p>a. ANM; ex Eretria, 1937: <i>IGCH</i> 175, no. 17</p> <p>b. SQ (1986) 995; ex NFA 9 (10.12.1980) 183 (16,98 g); ex Frey (24-5.9.1954) 541</p>	16,972 g	5 h	2,95 cm
			16,91 g	-	-
		[O (a): development of existing flaws.			
		[R (b): alteration at 8 h.			
		NB: Not cleaned].			
37.	O07 R36	<p>a. MMAG 27 (10-11.12.1996) 218</p>	17,07 g	-	-
		[O (a): development of existing flaws. New flaws on spaces.			
		[R (a): l., diagonal flaw from drapery to end of legend].			

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O No R No	Provenance	Weight	Axis	Diameter
	<p><i>O: Shield pattern similar to no. 17, horns wavy, head diademed, pedum decorated with dots and curved. Three-fold drapery. On badge, r., die break or pedum upright erased.</i>  <i>R: Legend letters similar to no. 10. Athena short with peculiar drapery, helmet and monogram bars small.</i></p>			
	<b>Group 9</b>			
	Specimens: 6	Obverses: 1		
	Die combinations: 3	Reverses: 3		
38. O08 R37	a. Coin Galleries MBS (24.8.1970) 34	17,06 g	-	-
	[ <i>O (a)</i> : flaw on outer badge, off 'unit' 2, and between crescents of 'units' 3 and 6. <i>R (a)</i> : l., flaw between pleat and helmet crest].			
39. O08 R38	a Numifrance MBS (2.6.1982) 57; ex Sotheby (7.7. 1974) 14	17,07 g	-	-
	b. Schweizerischer Bankverein (Spring 1975) 144	17,08 g	-	-
	[ <i>O (a)</i> : break between badge circles (11 h, 7 h, 8 h, 3 h). <i>R (a)</i> : horizontal bar of Alpha hardly discernible; r., flaw from edge (5 h) through E and r. pleat. ( <i>b</i> ): flan larger].			
40. O08 R39	a. Leiden, 3153	17,20 g	10 h	-
	b. Peus 316 (5-7.11.1986) 174 (16,98 g); ex Peus 321 (27-9.4.1988) 150	16,97 g	-	-
	c. Florange-Ciani 6 (1929) 98	-	-	-
	[ <i>O (a)</i> : on badge, horizontal flaw from hair to inner badge circle. <i>R (a)</i> : crest helmet ends and cheek flaps at same level, distance between l. pleat-helmet smaller. In field r., horizontal flaw across pleat].			
	<p><i>O: Head larger, nose and chin reach badge edge. Pedum decorated by small dots and is slightly larger.</i>  <i>R: Athena elaborate, small head and middle fall starting from higher up. Shield small and horizontal, with protruding centre. Small helmet with medium bowl and rich crest. Pleats at same length. On exergue.</i></p>			
	<b>Group 10</b>			
	Specimens: 16	Obverses: 1		
	Die combinations: 10	Reverses: 10		
41. O09 R40	a. ANM; ex Eretria, 1937: IGCH 175, 20	17,085 g	7 h	3,13 cm
	b. G. Hirsch 120 (10-12.4.1980) 75	16,01 g	-	-
	c. Schlessinger (4.2.1935) 780	17,1 g	-	3,1 cm
	d. MMAG 13 (23-4.6.1983) 169	17,09 g	-	-
	[ <i>O (a)</i> : badly cleaned. On badge, flaw on neck. Die breaks on spaces 1, 3 and around space 5. <i>R (a)</i> : horizontal flaw through legend, pleat, figure through to r. pleat].			

O No R No	Provenance	Weight	Axis	Diameter
42. 009 R41	a. ANM; ex Eretria, 1937: <i>IGCH</i> 175, 22	17,048 g	7 h	3,15 cm
	[O (a): horizontal flaw on spaces 1, 2 and 4. Development of flaws r. R (a): l., wear between legend and shield; beginning of flaw beneath Γ; r., flaw from r. bar of mon. to Ω. In exergue, vertical flaw].			
43. 009 R42	R: <i>Athena taller</i> .			
	a. ANM; ex Eretria, 1937: <i>IGCH</i> 175, 19	16,98 g	10 h	3,10 cm
	b. Riechmann 30 (11-12.12.1924) 468	-	-	-
	[O (a): development of flaws from head to upper badge end. Flaws on 'unit' 6 and around 'unit' 7. R (a): horizontal flaw above head. In field r., horizontal flaw connecting <i>chiton</i> to horizontal bar of Σ].			
44. 009 R43	a. Bourgey (14-16.5.1914) 55	-	-	-
	[O (a): flaw on spaces 2 and 4 and between 'unit' 3 and badge; horizontal flaw across 'unit' 6 and badge circles. R (a): l., diagonal flaw from l. helmet crest through to edge; r., flaw from figure through pleat and Σ].			
45. 009 R44	a. Galata L (9.1979) 15; Tjetjen 58 (13.9.1989) 102	16,19 g	-	-
	[O (a): vertical flaw from end of <i>pedum</i> to 'unit' 4; also, from neck to 'unit' 5 and from 'unit' 7 to horns. R (a): horizontal flaw from middle of field, l., through TI to l. pleat; r., from figure through pleat to EQ].			
46. 009 R45	a. Coin Galleries, New Series 1.1 (1977) A98; ex Banque Populaire du Nord – Crédit de la Bourse (4.1987) 112	16,33 g	-	-
	b. MMAG L 360 (9.1974) 18	17,09 g	-	-
	[O (a): flaws on spaces 1, 4 and 7. Horizontal flaw at level of eyes, through badge circles. Scratches on head. (b): development of flaw between space 1 and badge circles; flaw on space 6. R (b): l., horizontal flaws; r., diagonal flaw between r. pleat and figure].			
47. 009 R46	a. Drouôt-Bourgey (5.1950) 59	-	-	-
	[O (a): two flaws starting from outer crescent 2. Between head and badge circles, small flaws. Flaws on edges of 'units' 6 and 7].			
48. 009 R47	a. Helbing 24 (24.10.1927) 1699	17,20 g	-	-
	[O (a): flaw off chin and diagonally from his chin to 'unit' 5 (7 h). R (a): vertical flaw from edge to upper shield; r., flaw between r. foot and Σ].			



O No	R No	Provenance	Weight	Axis	Diameter
49.	009 R48	<i>R: Athena taller, middle fall starts high and disperses diagonally. Omikron larger, r. bar of Nu shorter; l., flaw on r. bar of Nu.</i> a. Sotheby (15.5.1974) 25; ex Better 4 (Haifa) (1973) 300 16,99 g b. S. Asia Minor, 1963: <i>IGCH</i> 1426 (Boehrer, <i>Chronologie</i> , 36, pl. 26.22)			
		[ <i>O (a)</i> : horizontal flaw from 'unit' 6 to eye level. Second flaw from tie of drapery through badge circles to 'unit' 4. Recut on nose. <i>R (a)</i> : up, flaw from edge above shield to A; r., horizontal flaw from edge through upper horizontal bar of Σ to lower <i>chiton</i> ].			
50.	009 R49	<i>R: Shield flatter.</i> a. CBNC 2335 17,08 g	10 h	3,10 cm	
		[ <i>O (a)</i> : flaw from nose through to badge edge].			

The exceptional care of Group 1 is continued on the obverses of the next two groups, carrying respectively monograms 17 and 11. The elaborate heads with short locks, neatly arranged around the head, are combined with a curved *pedum*. At the same time, the small, crude Athenas, with angular legend letters and with helmets having a small bowl and a long, thin crest are eventually replaced by taller figures, regular letters and helmets with medium bowls and rich crests on the reverses.

Monogram 11 is that with the longest duration, hence the obverses combined with this control mark efficiently reflect the mainstream stylistic changes of this period. From group 4 onwards, the *pedum* develops alongside the inner badge circle. Groups 4-7 are characterised by small modules carrying small, elaborate heads with short locks. Six obverse dies are combined with various reverses, not closely interlinked with each other and carrying generally short Athenas, bell-shaped helmets and neat, large legend letters. The earlier, oval-shaped heads of groups 2-5 may have come from the same hand as the *kalathos* and *Xi* groups (see below). The Pan of Group 7 is reminiscent of the head on the shield that has been engraved on a proxeny decree from Gonnoi. This decree, honouring Alexandros son of Admetos from Arkynia, dates from between the end of the third and the middle of the second century BC (plate 49.3)<sup>21</sup>.

<sup>21</sup> Chr. Habicht, 'Epigraphische Zeugnisse zur Geschichte Thessaliens unter der Makedonischen Herrschaft', *Archaiia Makedonia* I, Thessaloniki 1970, 265-79, pl. 75; Helly, *Gonnoi* II, 13-4, No. 12; Liampi, *MS*, 61, pl. 6.1. The date of the decree need not also determine that of the shield on the stone: an older type of shield may have served as a prototype, particularly as the honoured had also participated at Sellasia.

Group 8 marks the transition from the smaller heads to those combining heavier surfaces. The first signs of a strong, thick and high neck already occur in O08, and they are paired with heavier surfaces on the face, but the result is smoothed by a prominent diagonal nerve across the neck. The innovative introduction of the two-fold drapery round the neck sets the precedent for the consistent use of a two-fold drapery on the silver tetradrachms of a 'mature style', that follow. On the reverse, a helmet with a thin crest and with thin cheek flaps is associated with a cruder Athena, but with carefully engraved legend letters. Omega, in particular, is characteristically engraved with two dots on either side of a curve. The two specimens from *Eretria, 1937* date this group around 245 BC.

The heads with mature features introduced with Group 9 are compatible with the attribute assigned to Gonatas after Andros, 'γέρων'<sup>22</sup>. The forehead, nose and chin expand towards the inner badge circle. The head is characterised by heavy circular forms, and by a dewlap beneath the chin. The style of Athena on the reverse is natural, characterised by smaller heads but by regular diagonal folds. A smaller shield is held in a nearly upright position, at the same level as her shoulder. A bell-shaped helmet 1. is also characteristic of this lot. The specimens from *Eretria, 1937* indicate the simultaneous production of this variety with the coins of the earlier group, thus betraying the parallel operation of two different engravers in the same mint during this period.

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### Crested helmet 1. – Monogram 15 r.

O No	R No	Provenance	Weight	Axis	Diameter
<i>O: As above.</i> <i>R: Similar.</i> <b>Group 11</b>					
		Specimens: 2	Obverses: [1-1]		
		Die combinations: 1	Reverses: 1		
51. O02	R50	a. Peus 324 (5-7.4.1989) 123	16,79 g	-	-
		b. Meydançikkale, 1980: <i>CH VIII</i> (1994) 308 (Davesne-Le Rider, <i>Meydançikkale</i> , 2588 [Amphipolis])	17,12 g	-	-
<i>[O (a): more worn than in no. 6; flaw off nose. Cut on space 7, badge r. worn (signs of upright pedum beneath curved pedum). Flaws on spaces.</i> <i>R (a): diagonal test cut on figure. (b): flaw prolonging 1. crest].</i>					

<sup>22</sup> See n. 11.



O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: As above.</i>			
		<i>R: Similar.</i>			
		<b>Group 12</b>			
		Specimens: 6		Obverses: [3-3]	
		Die combinations: 4		Reverses: 4	
52.	O03 R51	a. N. Syria, 1960: <i>IGCH</i> 1533 (Seyrig, <i>Trésors</i> , 22-4, no 68)	16,96 g	1 h	-
		b. Lanz 38 (24.11.1986) 242	17,06 g	-	-
		c. Italo Vecchi 1 (1-2.2.1996) 243	17,14 g	-	-
		[ <i>O (a)</i> : flaws on spaces 2 and 3 and between badge circles off 'unit' 2, on spaces 5 and 6. [ <i>(b)</i> : breaks off spaces 1, 2, 5 and off 'unit' 7. Crude. <i>R (a)</i> : l., diagonal flaw from above head to lateral bar of A. ( <i>b</i> ): l., flaw between legend and l. pleat. Also in exergue, beneath l. foot].			
53.	O04 R52	a. MMAG 10 (15-16.3.1938) 221; <i>SNG Wulfing</i> , 162 (17,12 g)	17,10 g	12 h	-
		[ <i>O (a)</i> : diagonal flaw, from nose to l. outer badge circle; signs of flaw on space 1; also, on 'crescents' 6. <i>R (a)</i> : l., diagonal flaw from A to edge. Flaw beneath l. foot].			
54.	O04 R53	a. BM 1911-4-9-280 (Rollin)	17,04 g	7 h	2,98 cm
55.	O08 R54	a. G. Hirsch 135 (19-21.1.1983) 185; <i>Kurpfälzische Münzhandlung</i> 22 (17-19.5.1982) 27	16,62 g	-	-
		[ <i>O (a)</i> : on badge, horizontal flaw off nose; second, diagonal, flaw from mouth to space 5. Diagonal flaw from tie to 'unit' 5. <i>R (a)</i> : flaw on exergue].			

All four obverses combined with monogram 15 are linked to the previous varieties of the same period, and their degree of wear generally confirms their production alongside monogram 11. The *terminus ante quem* offered by no. 51b, from *Meydançikkale*, 1980 for O03, c. 240-35 BC, and the good condition of the coin, are not incompatible with the dates suggested for the related issues, 245-39 BC.

The test cut on the reverse of tetradrachm 52a may have been due to its lower weight.

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**Crested helmet L - KT r.**

O No R No	Provenance	Weight	Axis	Diameter
<p><i>O: Head large. Hair locks flow towards face; deeply set eye; two wrinkles on neck. Pedum large and dotted.</i>  <i>R: Legend characters l. smaller than those r. Athena crude, holds small thunderbolt and small round shield. Small helmet, with crest ending very close to main figure.</i></p> <p><b>Group 13</b></p> <p style="padding-left: 40px;">Specimens: 7                      Obverses: 1            Die combinations: 5              Reverses: 5</p>				
56. O10 R55	<p>a. BM G0514 (Graves); ex Münzzentrum 2 (1995) 25; ex Münzzentrum L 84 (29-30.11.1995) 17</p> <p>b. Hija së Korbit, 1982: <i>CH VIII</i> (1994) 299 (Shpresa Gjoncecaj, <i>Iliria I</i> (1985) 190, no. 283, pl. XIV)</p> <p>c. Müller 71 (26-7.6.1992) 111</p>	<p>16,40 g</p> <p>-</p> <p>16,40 g</p>	<p>-</p> <p>-</p> <p>-</p>	<p>-</p> <p>-</p> <p>-</p>
<p>[<i>O (a)</i>: flaws: on spaces 1, 2, 5; off nose, off 'unit' 6. On badge, breaks off nose and chin. (<i>b</i>): flaw develops from 'unit' 6 through to nose.  <i>R (a)</i>: up l., flaws: above shield, beneath NTL, between second N and edge, pleat and figure. In field r., flaws between r. pleat and TL, B and edge. Beginning of flaw between A and E. (<i>b</i>): flaw between l. foot and r. helmet crest. (<i>c</i>): r., flaw between Σ and chiton].</p>				
57. O10 R56	<p>a. ANS 1977.158.168</p> <p>[<i>O (a)</i>: new flaw off 'unit' 5].</p>	<p>17,07 g</p>	<p>8 h</p>	<p>-</p>
58. O10 R57	<p>a. Numismatica Ars Classica, Auction A (27-8.2.1991) 1371</p> <p>[<i>O (a)</i>: flaw on inner badge circle, off space 2].</p>	<p>17,07 g</p>	<p>-</p>	<p>-</p>
59. O10 R58	<p>a. Schulten (1-3.4.1987) 118</p> <p>[<i>O (a)</i>: development of old flaws, new flaw on 'unit' 5. Horizontal flaw off Σ].</p>	<p>16,91 g</p>	<p>-</p>	<p>-</p>
60. O10 R59	<p>a. <i>SNG BYB</i>, 356</p> <p>[<i>O (a)</i>: new flaw between 'unit' 2 and badge. Flaw on space 3.  <i>R (a)</i>: flaws: l., between legend letters and edge; r., legend and foot recut].</p>	<p>17,08 g</p>	<p>3 h</p>	<p>-</p>

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*O: Similar.*

*R: Similar.*

**Group 14**

Specimens: 16  
 Die combinations: 4

Obverses: 1  
 Reverses: [4-1]



O No	R No	Provenance	Weight	Axis	Diameter
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61. O11 R60

a.	Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 41)	16,965 g	7 h	-
b.	<i>SNG BYB</i> , 355; ex MMAG L 510 (5.1988) 11; ex Pilartz 7 (1-3.10.1964) 45	17,14 g	5 h	-
c.	Spink Zürich 20 (6.10.1986) 203	17,08 g	-	-
d.	Cahn (6.5.1930) 197	-	-	-
e.	Lanz 78 (25.11.1996) 234	16,83 g	-	-
f.	Helbing 4 (20.3.1928) 198	17,10 g	3:30 h	-
g.	Glendining (10.3.1965) 244	-	-	-
h.	Glendining 11 (5.11.1980) 23	-	-	-

[O (a): flaws on spaces 4-5. (f): flaw on space 1, between 'unit' 2 and badge circle].

62. O11 R56

a.	ANS22 1944.100.13853	17,06 g	3 h	-
b.	Schulten (24-5.5.1983) 46	16,92 g	-	-

[O (a): angular flaw on space 3. Flaw between badge circles off space 2. (b): flaw on space 6; on badge, between nose and badge circles].

63. O11 R61

a.	Leiden, 1946/15	16,86 g	11 h	-
b.	Seaby 680 (1975) A239; Waddell L 36 (-) 30	-	-	-
c.	Gordion, 1951: <i>IGCH</i> 1406 (Cox, <i>Gordion</i> 8, pl. IV.53)	16,62 g	-	3,0 cm
d.	Seaby-Glendining (1-2.12.1927) 295	-	-	-

[O (a): development of flaws].

64. O11 R62

a.	Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 42)	17,03 g	1 h	-
b.	Schlessinger (4.2.1935) 777	17,00 g	3 h	-

[O (a): flaw develops off space 2; signs of new flaw on space 6].

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*O: Head larger, with deeper face lines.*

*R: Athena crudely modelled, of moderate size, chiton with elaborate fall in middle.*

*Legend characters small.*

**Group 15**

Specimens: 9                      Obverses: 1  
Die combinations: 3              Reverses: 3

65. O12 R63

a.	NFA 33 MBS (3.5.1994) 133	17,07 g	11 h	-
b.	Kölner 41 (1-8.4.1986) 59; Coin Galleries MBS (18.7.1973) 206; Ratto L 4 (1971) 206	16,89 g	-	-
c.	Drouôt (21-2.1.1992) 58	-	-	-

[O (a): worn on spaces 1-3].

O No	R No	Provenance	Weight	Axis	Diameter
66.	O12 R60	a. BER19 Berlin, 7780/1957	17,03 g	12 h	-
		b. Cahn 1 (4.1911) 152	17,30 g	-	-
		c. Seaby (9.1979) C890	16,43 g	-	-
		[R (b): flaw on 'units' 1, 3-4, 7].			
67.	O12 R64	a. S. Asia Minor, 1963: <i>IGCH</i> 1426 (Boehring, <i>Chronologie</i> , 156, no 25); ex Pozzi, 971	-	-	-
		b. G. Hirsch 14 (4.1977) 13	17,044 g	-	-
		c. N. Syria, 1960: <i>IGCH</i> 1533 (Seyrig, <i>Trésors</i> , 22-4, no 59; MMAG L 331 (2.1972) 6; Müller 34/35 (24-6.9.1981) 60	16,98 g	-	-
		[O (a): countermarked on cheek. R (a): worn; l., flaw beneath letters A-N].			

Even though Groups 13-15 occur in much later hoards, their stylistic proximity to the second period and their epigraphic adjacency to the third period might favour a date around the 240s. The letters K and T on the reverse may stand either for a single mint employee or for two co-operating ones. The use of the same obverse alongside letters IT and the first occurrence of the combination TI during this period might indicate either a co-operation of mint officials or the independent function of officials with similar names.

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#### Crested helmet L - Monogram 18 r.

O No	R No	Provenance	Weight	Axis	Diameter
		O: <i>As above.</i>			
		R: <i>Similar to no. 63, but shield larger, helmet smaller. Many folds on lower chiton.</i>			
		Group 16			
		Specimens: 2	Obverses: [1-1]		
		Die combinations: 1	Reverses: 1		
68.	O11 R65	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 49)	16,385 g	-	-
		b. Berlin; ex Dannenberg	16,96 g	11 h	-



O No R No	Provenance	Weight	Axis	Diameter
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[O (a): development of die break off spaces 2 and 3].

The lighter tetradrachm from *Thesprotia*, 1992 presumably circulated widely before its deposition.

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**Crested helmet l. – IT r.**

O No R No	Provenance	Weight	Axis	Diameter
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*O: Semi-circular crescents. Horns upright. Lower locks parallel with each other. One curved fold on drapery. Pedum constituted by small dots. Horizontal flaw, from nose to l.*

*R: Helmet larger, shawl pleats thin; helmet short, with small cheek flaps. On exergue, IT.*

**Group 17**

Specimens: 2

Obverses: [1-1]

Die combinations: 1

Reverses: 1

69. O11 R66

a. Drouôt (13-14.11.1980) 32; ex Peus 283 (14-16.5.1974) 87

16,55 g

-

-

b. MMAG 5 (2-3.12.1975) 77

16,96 g

-

-

[O (a): development of flaw off space 2. New flaws starting from nose].

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*O: Similar, wrinkle on neck.*

*R: R. pleat longer.*

**Group 18**

Specimens: 1

Obverses: [1-1]

Die combinations: 1

Reverses: 1

70. O03 R67

a. Brussels; ex coll. de Hirsch, no 116

17,08 g

11 h

3,1 cm

[R: flaw l. of crest].

The letters IT approximate these groups. This is further supported by similarities in the style and in the engraving of the legend letters.

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**Crested helmet L – TI r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Diagonal line on neck, cheekbones prominent.</i>  <i>R: Letters not regularly arranged, shield and helmet small.</i>  <b>Group 19</b>  Specimens: 10                      Obverses: [1-1]  Die combinations: 5                Reverses: 5</p>					
71.	003 R68	a. Sotheby (9-10.10.1995) 73 b. Baudin (1920) 69 [O (b): struck twice].	17,03 g -	- -	- -
72.	003 R69	a. Berlin; ex Sperling; ex Friedl.- v. Sallet, 38617,09 g b. Canessa (22.5.1922) 401 c. Munich, 5 d. N. Syria, 1960: <i>IGCH</i> 1533 (Seyrig, <i>Trésors</i> , 22-4, no. 58)	17,09 g 14,30 g 13,14 g (p) 16,72 g	12 h - 11 h 12 h	- - - -
73.	003 R70	a. Burgan (22.12.1990) 25; ex Burgan (24.5.1986) 312 (17,02 g)	16,98 g	11 h	3,1 cm
74.	003 R71	a. Münzzentrum Lagerkatalog II (Summer 1995) 24; ex Münzzentrum 77 (13-14.4.1994) 78	17,00 g	-	-
75.	003 R72	a. <i>SNG Blackburn</i> , 517 b. NFA 7 (16.12.1979) 109 [O (a): l., flaw between edge and star/crescent 7].	17,09 g 17,09 g	11 h -	- -

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O No	R No	Provenance	Weight	Axis	Diameter
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*O: Two wrinkles on nose. Pedum decorated by two dots. Two wrinkles on neck.  
R: Athena taller and stylised, aegis/head on shield discernible.*

**Group 20**

		Specimens: 2	Obverses: [1-1]		
		Die combinations: 2	Reverses: 2		
76. O04	R73	a. BM 1911-4-9-279 (Rollin)	17,15 g	7 h	3,12 cm

77. O04 R74

a. *SNG Newnham Davis*, 169 16,90 g 11 h -  
*[O (a): high degree of wear in space 1 and between star/crescent 2 and badge circles. Flaw between star/crescent 5 and badge circles. In badge area, flaw from nose to badge circles.  
R (a): l., diagonal flaw between Γ and pleat; r., horizontal flaw from between ΙΛ and edge and from lower horizontal bar of Σ and main figure. Beginning of flaw between feet].*

\*\*\*      \*\*\*      \*\*\*

*O: Similar.*

*R: Athena figure shorter, shield large.*

**Group 21**

		Specimens: 6	Obverses: 1		
		Die combinations: 2	Reverses: 2		
78. O13	R75	a. Grose, <i>McClellan</i> , 3593	17,01 g	11 h	30,5 cm

79. O13 R76

a. Peus 313 (5.1985) 67 17,06 g - -  
b. ANM: Karditsa (Palaiokastro), 1929: *IGCH* 162, no. 8 16,535 g 11:30 h 3,10 cm  
c. *Numismatica Ars Classica*, Auktion A (27-8.2.1991) 1370; ex Coin Galleries MBS (14.11.1984) 313; ex Coin Galleries L 11.3 (1970) B24; ex V256: J. Hirsch 25 (21.11.1909) 546 (17,00 g); ex V265: Sotheby (24.4.1907) 99, pl. IV (Delbecke coll.) [17,042 g]; Florange 6 (-) 97 16,965 g 3,1 cm -  
d. J. Hirsch 33 (1913) 668 17,05 g 2,6 cm -  
e. CNA MBS 35 (18.6.1992) 44; ex Drouôt (6-8.2.1956) 346 (17,08 g) 17,07 g - -

*[O (b-c): worn on badge, offl 'units' 7 and 3.*

*R (b): signs of dotted border from r. end of exergue upwards. (c): r., two signs of attempted piercing].*

**Group 22**

		Specimens: 48	Obverses: [2-2]		
		Die combinations: 21	Reverses: 21		
80. O08	R77	a. Glasgow 6: MacDonald, <i>Hunterian</i> , no. 5	16,92 g	-	2,9 cm

O No	R No	Provenance	Weight	Axis	Diameter
81.	O08 R78	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , 16)	16,745 g	11 h	-
		b. Leiden, 3152	16,92 g	12 h	-
		c. Classical Coins 27 (29.9.1993) 454; ex Burgan (30.6.1987) 276; ex Burgan (24.5.1986), 311	16,99 g	-	-
		d. Superior Galleries 85, 2106	17,00 g	-	-
		e. Sotheby, Haughton collection (30.4-1.5.1958) 106	17,06 g	-	-
		f. Helbing 70 (9.12.1932) 594	-	-	-
		[O (a): light scrape before chin, corrosion on cheek; (b-c): flaws on spaces 1, 3, 5, 7].			
82.	O08 R79	a. Hija së Korbit, 1982: <i>CH VIII</i> (1994) 299 (Shpresa Gjongecaj, 'Thesari Hijes së Korbit', <i>Iliria</i> 1 (1985) 167-93, esp. 190.281, pl. 24)	-	-	-
83.	O08 R80	a. Kress 127 (23.10.1963) 377	-	-	-
		[R (a): letters more regular. Shield prominent].			
84.	O08 R81	a. Kress 142 (22.1.1968) 92	17,00 g	-	-
85.	O08 R82	a. BNF 1376	16,77 g	11 h	-
		b. Spink 15 (15.5.1981) 35	17,04 g	-	-
		c. Riechmann 30 (12.1924) 467	-	-	-
		d. Riechmann 37 (14.9.1926) 6	-	-	-
		e. Larissa ('Sitochoro'), 1968: <i>IGCH</i> 237 (Price, 'The Larissa, 1968 Hoard ( <i>IGCH</i> 237)', in Le Rider et al., <i>Kraay-Mørholm Essays</i> , 235, pl. 46.15)	17,44 g	11 h	-
		[O (a): flaw up l., scratch up r., above thunderbolt. (b): development of flaw off units between badge circles off unit 7. (e): worn].			
		<i>O: Medium-sized, regular legend letters. Oval shield, held upright. Note bar of K, helmet with very short cheek flaps. In exergue.</i>			
		<i>R: Many folds on chiton. Helmet symbol large. Shield oval, horizontal.</i>			
86.	O08 R83	a. Sternberg 8 (16-17.11.1978) 60	17,13 g	-	-
87.	O08 R84	a. BNF H. S. 1973.75	17,10 g	10 h	-
88.	O08 R85	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 17)	16,955 g	3 h	-
		b. Dombrowski Lagerkatalog 63 (4.1975) 106	17,00 g	-	-
		[O (b): worn between badge circles; flaw on chin].			



O No R No	Provenance	Weight	Axis	Diameter
89.009 R86	a. G. Hirsch 177 (10-13.2.1993) 214	16,42 g	-	-
90.009 R87	a. Numismatic Auction 3 (1.12.1985) 75 [O (a): on badge, flaw between hair locks and upper <i>pedum</i> . Flaws on spaces 1-3 and 7].  O: <i>As above</i> . R: <i>Crude Athena holding shield on level of shoulders, badge prominent. Small, round shield. Helmet with long crests and short cheek pieces, long pleats away from helmet but close to TI, r.</i>	17,03 g	-	-
91.009 R88	a. ANS 1944.100.13850 b. Schulman (5.1973) 1154 c. Münzzentrum 19 (6.1974) 21; Numismatica Münzauktion 4 (22-3.4.1974) 97 d. Stack's (6.1969) 133 e. Schulman 256 (28-30.5.1973) 1154 f. Seaby-Glending (1-2.12.1929) 294; ex Seaby-Glending (1-2.12.1927) 295;  [O (e-f): flaw on space 5. R (e-f): flaw between <i>chiton</i> and shield; also, off Y. (f): recut on nose].	17,09 g 16,99 g 17,01 g - 16,99 g -	12 h - - - - -	- - - - - -
92.009 R89	a. Peus 340 (11.1994) 321	17,01 g	-	-
93.009 R90	a. Ashmolean (Godwyn); ex Cahn (14.10.1931) 290 b. MMAG 26 (16-19.9.1996) 129 c. Stack's (10-11.6.1970) 64 d. G. Hirsch 142 (25-7.6.1984) 24	17,07 g 17,15 g - 16,50 g	11 h - - -	3,2 cm - - -
94.009 R91	a. Burgan (22.12.1992) 28 b. NFA 11 (8.12.1992) 95 [O (a): development of flaw between hair locks and upper <i>pedum</i> , and from nose to inner circle. In field, off 'units' 1-3, flaws from <i>nebris</i> through to inner circle].	17,08 g 16,94 g	- -	- -
95.009 R92	a. Malter 34 (13-15.12.1986) 24 b. Müller 71 (26-7.6.1992) 112 c. Spink-GMG (10.10.1977) 165 d. Galata L (3.1978) 8 [R (c-d): l., flaw off Y and r., off AE].  O: <i>Drapery, pedum smaller</i> . R: <i>Small, round shield. Letters medium-sized. Athena tall</i> .	16,87 g 16,40 g 16,92 g -	- - - -	- - - -
96.009 R93				

O No	R No	Provenance	Weight	Axis	Diameter
		a. Gorny 31 (1985) 89; Historical Coin Review BBS 10.5 (19.7.1985) 413	17,01 g	-	-
		b. Schlessinger (4.2.1935) 782	17,00 g	3 h	-
97.	O09 R94	a. Peus 282 (11.1973) 95	16,99 g	-	-
98.	O09 R95	a. Leiden, 3151	17,08 g	11 h	-
		b. Lanz 42 (23.11.1987) 186	16,80 g	-	-
		c. Spink 25 (24-5.11.1982) 60	-	-	-
		[O (b-c): flaw from r. angle of neck through to unit 4 and from unit 1 to badge circle (7 h). Also, from neck through to badge circles. (c): flaw in inner badge circle, off chin].			
99.	O09 R96	a. Pherai, 1937-8 (T. R. Martin, 'A third-century B. C. hoard from Thessaly at the ANS (IGCH 168)', <i>ANSMN</i> 26 (1981) 64, pl. 14.538)	17,08 g	11 h	-
		b. Gorny 46 (30.10.1989) 134 (16,76 g); Kricheldorf 16 (1-2.7.1966) L 74; Stack's (6.1969) 133; Dupriez (11.1912) 1357	16,76 g	-	-
		c. G. Hirsch 97 (23-5.3.1976) 6	16,96 g	-	-
		d. Glendining (9.3.1931) 1006	17,06 g	-	-
		[O (d): flaw off nose to inner badge circle. R (a-b): horizontal flaw r. (3 h), through B-A to edge. (b): l., worn l. of N].			
		<i>O: Curved wrinkle on neck. Crescents more circular/regular.</i>			
		<i>R: Legend characters moderate. Small helmet with thin crest and short cheek flaps. Shield small.</i>			
100.	O09 R97	a. Kress 132 (8.2.1965) 137	16,85 g	-	-

The parallel existence of two styles is also observed on the tetradrachms signed with TI r. on the reverse. Of the five different obverses utilised in this group, only O13 is exclusively utilised with the letters TI. Tetradrachms 79b, from *Karditsa, 1929*, no. 99a, from *Pherai, 1937-8*, nos. 8a, 88a from *Thesprotia, 1992* and 82a, from *Hija se Korbit, 1980* are not incompatible with the issue dates of this period. The worn state of no. 72d from *Northern Syria, 1960* suggests the long circulation of the coin by the time of its burial.

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**Crested helmet l. - no Monogram r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Eight-rayed stars. Horned head, diademed, with hanging ribbons. <i>Nebri</i>s binds in front of neck, sceptre curved.  <i>R</i>: Similar.  <b>Group 23</b></p>					
		Specimens: 1		Obverses: 1	
		Die combinations: 1		Reverses: 1	
°100.1.	O14	R98			
<p>a. 'Pisidia', 1963: <i>IGCH</i> 1411 (Boehringer, <i>Chronologie</i>, 177.8, pl. 35)</p>					
			17,10 g	11:30 h	-
<p>[<i>O</i> (<i>a</i>): more worn than nos. 106-9, from group 27.  <i>R</i> (<i>a</i>): signs of monogram r.]</p>					

This specimen is distinguished by an elaborate head wearing a diadem (cf. groups 24-6) and carrying a curved *pedum* on the obverse (cf. groups 2-3)<sup>23</sup>. The *nebris* binds three-quarters facing to the front of the neck. The forward-pointing horns differentiate this head from the rest of the coinage struck during this period and set a precedent to the heads of period IV. The corpulent head may have been influenced by Ptolemaic heads on contemporary coinages<sup>24</sup>, while Athena is depicted r. She is more stylised and the shield is held in front of her chest.

The obverse link between this specimen and group 27 with the letter Xi l. on the reverse disproves Merker's assignation of the Xi group of Pans to a mint different from that of the Helmet group and favours the striking of this variety at the main Makedonian mint, Amphipolis<sup>25</sup>. The diadem on the head of Pan and the different direction of the sceptre classify this group among the small celebratory issues of 'king Antigonos'. These features might favour the issue of this group later than Boehringer's c. 270 BC, possibly within the context of a naval victory, such as Andros.

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<sup>23</sup> Merker, *Silver Coinage*, 39-52, esp. 52. Boehringer, *Chronologie*, 177.8, pl. 35.

<sup>24</sup> Hazzard, *Ptolemaic Coins*, 28-33; Morkholm, *EHC*, 107-9, no. 316.

<sup>25</sup> *Contra* Boehringer, *Chronologie*, 177.8, who identifies the main Makedonian mint with Pella (chapter 2.5).

## II. Athena r.

*Kalathos? l. –*

*Kalathos? l. – Monogram 19 r.*

O No	R No	Provenance	Weight	Axis	Diameter
101.	015	R99			
<p><i>O: Three concentric circles on edge of shield. In middle, head of young horned Pan with diadem, nebris (round the neck) and pedum at shoulder. Horns lean backwards. Crescents with three elliptic circles. Between the two concentric circles round emblem, ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ (in very small characters).</i>  <i>R: ΒΑΣΙΛΕΩΣ l., Α-ΝΤΙΓΟΝΟΥ r. Athena r., without aegis, brandishing thunderbolt. Oblong shield. Dotted border.</i>  <b>Group 24</b>            Specimens: 1                      Obverses: 1            Die combinations: 1              Reverses: 1</p>					
<p>a. Berlin; Gaebler, <i>AMNG</i> III.2, 185-6.1, pl. 34.1; Tarn, <i>AG</i>, front cover; Liampi, <i>MS</i>, front cover            16,99 g (p)                      11 h                      -  <i>[O (a): small flaw on r. end of 'unit' 1; also, on spaces 2-3, 7. On badge, horizontal flaws on either side of head.</i>  <i>R (a): r., beginning of flaw off nose and off shield].</i></p>					

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## III. Athena Alkidemos l.

*Kalathos? l. – – r.*

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Similar.</i>  <i>R: ΒΑΣΙΛΕΩΣ l., Α-ΝΤΙΓΟΝΟΥ r. Athena Alkidemos l. wearing aegis, shield with large border decorated with aegis and head in centre. Dotted border.</i>  <b>Group 25</b>            Specimens: 1                      Obverses: [1-1]            Die combinations: 1              Reverses: 1</p>					



O No	R No	Provenance	Weight	Axis	Diameter
102.	015	R100			
		a. Schulten (26-7.3.1981) 26; ex Schulten L (11.1980) 34	16,35 g	-	-
		[O (a): diagonal flaw on spaces 1-4, 6; r., horizontal flaw between Σ and border.			
		R (a): l., diagonal flaw beneath pleat; r., horizontal break from border to Σ].			

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#### IV. Athena r.

#### *Kalathos?* L - Monogram 20 r.

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Similar.</i>			
		<i>R: ΒΑΣΙΛΕΩΣ l., ΑΝΤΙΓΟΝΟΥ r. Athena Alkidemos r. without aegis, brandishing thunderbolt with her uplifted r. hand and holding large shield with her l. hand. Horned head of Pan in centre of shield.</i>			
		<b>Group 26</b>			
		Specimens: 3		Obverses: 1	
		Die combinations: 3		Reverses: 3	
103.	016	R101			
		a. ANS 1975.212.1	17,08 g	3 h	-
		[O (a): diagonal flaw from 'unit' 7 to border r., also, worn between space 1 and border.			
		R (a): ΒΑ-ΣΙΑΕ[ΩΣ] r].			
104.	016	R102			
		a. ANS 1965.77.7	16,92 g	12 h	-
		[O (a): poorly preserved. Curved flaw from l. end of 'unit' 1 via upper badge end to 'unit' 7; diagonal flaw on space 6.			
		R (a): up r., worn].			
105.	016	R103			
		a. Elsen L 117 (7.1989) 16	16,83 g	-	-
		[O (a): on badge l., diagonal flaw between nose and lower l. border; also, diagonal flaw from 'unit' 1 through badge to no. 6].			

The mature features of the diademed head of Pan on these very well executed specimens, in small modules, distinguish them from their counterparts of the *kalathos* group, which have been assigned to the first period of Antigonid coin production (chapter 3.2.1). These mature Pans are characterised by an elaborate Makedonian shield on the obverse, carrying eight-rayed stars, each surrounded by three elliptic 'crescents'. The 'star/crescents' are identical with those on the Makedonian shield from Dodona<sup>26</sup>. The name and royal title of Antigonos (in small characters) that surround the emblem on nos. 101-5 (Group 26) are reminiscent of the legend around the badge of the Makedonian shield from Vegora<sup>27</sup>.

W. W. Tarn saw in the features of Pan the first portrait of king Antigonos, wearing a diadem<sup>28</sup>. Specimen 102 is the only specimen from the *kalathos* variety with Athena facing l., carrying an *aegis* across her back and on the shield. A *kalathos*'/bakchos-ring' on the left is combined with monograms 19-20, unknown from the main helmet series. The excellent quality of this group is also confirmed by the consistent alignment of the dies between 12 and 1 h.

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#### V. Athena Alkidemos I.

#### XL

#### XL - Monogram 22 r.

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Eight-rayed stars. Horned head diademed, with hanging ribbons. Nebris binds in front of neck, sceptre curved.</i> <i>R: ΒΑΣΙΛΕΩΣ ρ., ΑΝΤΙΓΟΝΟΥ Ι. Shield diameter, legend letters larger.</i>			
		<b>Group 27</b>			
		Specimens: 6		Obverses: [1-1]	
		Die combinations: 4		Reverses: 4	
106.	014 R104	<i>R: legend letters larger.</i>			
		a. Berlin; ex Sperling	16,73 g	12 h	-
		[O (a): dot on internal badge circle, off hair].			

<sup>26</sup> Liampi, *MS*, pl. 1.2 (S 2); cf. chapter 2.1.

<sup>27</sup> plate 49.2; Liampi, *MS*, pl. 1.3 (S 3); cf. chapter 2.1.

<sup>28</sup> *AG*, 174, n. 20; cf. 250, n. 106. C. T. Seltman, 'A synopsis of the coins of Antigonos I and Demetrius Poliorketes', *NC* (1909) 268; Imhoof-Blumer, *MG*, no. 70. Nachtergaeel assigns the issues carrying diademed heads of Pan on the obverse to either Gonatas or Doson and considers them contemporary with the introduction of the Delian Paneia and Soteria: *Galates*, 180. On the diadem as one of the royal signs in the Hellenistic period, see Le Bohec, *AD*, 202-3.



O No	R No	Provenance	Weight	Axis	Diameter
107.	O14 R105	<i>R: X-monogram 23, corrected to monogram 22. Athena figure taller and thinner, diameter of shield smaller.</i>			
		a. Berlin; ex Löbbecke 1905	17,17 g	12 h	-
		b. SNG Fitzwilliam, 2307	17,00 g	11 h	-
		[O (a): dot between hair and internal circle, as in previous specimen. Flaw on space 3; die break l. of horns. On space 5, star: overstrike? R (a): flaws, up r. and r., between Λ and monogram].			
108.	O14 R106	a. Leiden, 3154	17,10 g	12 h	-
		[O (a): die break on spaces 3 (starting from crescent 3) and 7]. R (a): r., flaws through legend letter Os EQ. NB: off-centre].			
109.	O14 R107	<i>R: ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ. Helmet with high crest. Athena tall, thunderbolt elaborate.</i>			
		a. Munich, 4; ex S. Asia Minor, 1963: IGCH 1426 (Boehring, <i>Chronologie</i> 156, pl. 25.18)	16,84 g	11:30 h	-
		b. Warsaw, 567110	17,00 g	-	-
		c. ANM; ex Eretria, 1937: IGCH 175, 18	17,08 g	5:30 h	3,00 cm
		[O (a): flaws: on space 5; off 'unit' 1, between inner badge circle and crescent; also, between badge circle and 'unit' 3; recut on l. end of crescent 4. On badge, two small vertical flaws, off nose and off chin. R (a): r., beginning of flaw on r. end of pleat].			

A special issue with a stylised Athena facing l. but with different control marks might be considered in the same context. I. L. Merker's assignment of this issue to the mint of Chalkis through the letter X, which occurs l. on the reverse, is disproved by an obverse link between this group and the helmet series (cf. Group 23). The association of the Xi variety with a Makedonian mint is further supported by the presence of the letter Xi on posthumous Alexander issues from Uranopolis<sup>29</sup>. In fact, the small size of this issue, in addition to the presence of a diadem and to the reversed *pedum* on the badge, may indicate its production under circumstances analogous to those that created these changes on the Athena r., *kalathos* variety of the first period (see chapter 3.3). The inclusion of a tetradrachm from this variety in the *Eretria, 1937* hoard indicates 245-40 BC as a *terminus ante quem* for its striking.

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<sup>29</sup> See also chapter 2.5.

**PLATED COUNTERFEIT TETRADRACHM, THIRD CENTURY BC**

**Crested helmet l. - Monogram indiscernible r.**

<b>O No</b>	<b>R No</b>	<b>Provenance</b>	<b>Weight</b>	<b>Axis</b>	<b>Diameter</b>
°1.		ANM 7 (dépôt 1910 / 11, AA7, donation K. Karapanos)	10,95 g (pl)	8 h	2,9 g
		[Obverse crude. Disfigured by corrosion on the reverse, so that the monogram cannot be read].			



## Monogram 24

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Bearded head of Poseidon r. in wreath of reeds; hair locks flow from crown downwards. Dotted border.  <i>R</i>: ΒΑΣΙΛΕΩΣ up, ΑΝΤΙΓΟΝΟΥ down, on prow facing l. Archaising Apollo holding bow, seated on prow.</p> <p><b>Group 28</b></p> <p>Specimens: 4                      Obverses: 1  Die combinations: 1              Reverses: 1</p>					
110. O17	R108				
		a. Kress 143 (1968) 252a	17,00 g	-	-
		b. MMAG L 19 (5-6.6.1959) 403	17,07 g	-	-
		c. Sotheby (3-11.7.1911) 140	-	-	-
		d. SNG Cop, 1204; ex Rollin	16,17 g	12 h	-
<p>[Flan rough, flaw off nose and r., from hair downwards. Also, off l. foot. Diagonal flaw on prow, from O to l., downwards.  <i>O</i> (a): beginning of flaws on level of eye, off nose and mouth. (b): monogram.  <i>R</i> (c): progression of flaw from toes of r. foot downwards. (d): very worn].</p>					

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## Monogram 25 - Monogram 9

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Similar.  <i>R</i>: Similar.</p> <p><b>Group 29</b></p> <p>Specimens: 17                      Obverses: [3-1]  Die combinations: 8              Reverses: 8</p>					
111. O17	R109				
		a. CBNC 5683	16,59 g	11 h	3,02 cm
		b. Aes Rude (7-8.4.1978) 95	-	-	-
<p>[<i>O</i> (a): flan rough. Flaws from nose off eye outwards and from middle of nose outwards; also, from mouth outwards. Flaw off hair.  <i>R</i> (a): flaws: between arm and prow; l. of prow; from r. foot to lower field. In field up r., letters, BA/graffito erased. Monogram 9 above monogram 11. (b): development of flaw beneath l. foot].</p>					

O No	R No	Provenance	Weight	Axis	Diameter
112.	O17 R110	<i>R: Flan rough.</i>			
		a. Weil (15-16.11.1994) 11; ex Sternberg (25-6.11.1976) 38; ex Hamburger 7 (3-4.4.1933) 524	17,11 g	-	-
		b. Numismatic Review & Coin Galleries FPL 5.1 (1964) A 25	14,95 g	-	-
		c. R. Ball (5.12.1932) 2013	16,60 g	-	-
113.	O17 R111	a. Gorny 40 (7.4.1988) 137	-	-	-
		[O (a): development of flaw off eye and nose.			
		R (a): development of flaw from r. foot downwards.			
114.	O18 R112	a. SB 28 (17-19.9.1991) 91	16,48 g	-	-
		b. BER26; ex Löbbbecke (1906) 902	17,11 g	12 h	-
		c. Lanz Graz 5 (1.12.1975) 145	16,85 g	-	-
		d. NFA 6 (27-8.2.2979) 155	16,99 g	-	-
		e. Peus 334 (4.11.1992) 360	16,90 g	-	-
		[O (a): flan rough. In field l., flaw near dotted border; horizontal flaw along side locks.			
		R (a): flaw on edge, beneath l. foot].			
115.	O18 R113	a. ANM 1610b	17,09 g	11:30 h	3,20 cm
116.	O18 R114	a. BM 1947-4-6-192	16,83 g	11 h	3,2 cm
		b. Classical Numismatic Group MBS 43 (24.9.1997) 287	16,56 g	-	-
		[O (a): l. portion of metal flaked off cheek. (b): flaw off nose and behind hair locks.			
		R (b): flaws r. of prow, horizontal flaw beneath legs].			
117.	O18 R115	a. Stack's (1979) 74; ex Hess 6 (1931) 368	16,70g	-	3,1 cm
		b. Kurpfälzische Münzhandlung 45 (12.1993) 45		-	-
		[O (a): flaw off nose.			
		R (a): horizontal flaw from Apollo's head to edge; scratch beneath l. foot].			
		<i>O: Hair ends in two locks. Wreath similar.</i>			
		<i>R: Similar. Bow diagonal.</i>			
118.	O19 R116	a. J. Hirsch 32 (14-15.11.1912) 467 (17 g); MMAG 10 (15-16.3.1938) 222; SNG Wulfin, 163	16,98 g	11 h	-

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## Monogram 25 - Monogram 11

O No R No	Provenance	Weight	Axis	Diameter
	<i>O: As above.</i> <i>R: Similar.</i> <b>Group 30</b>			
	Specimens: 1	Obverses: [1-1]		
	Die combinations: 1	Reverses: 1		
119. O17 R117	a. Seaby-Glending (1-2.12.1927) 291; Hesperia Art 26 (-) 12			
	[O (a): flan rough. Progression of flaws on nose and off mouth. Monogram 9 corrected to monogram 11].			

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## Monogram 25 - M

O No R No	Provenance	Weight	Axis	Diameter
	<i>O: Similar. Linear border.</i> <i>R: Similar.</i> <b>Group 31</b>			
	Specimens: 10	Obverses: [2-1]		
	Die combinations: 5	Reverses: 5		
120. O19 R118	a. NFA März (1975) 94	16,87 g	-	-
	<i>O: Similar. Hair ends in three locks. Linear border.</i> <i>R: Similar. Apollo archaising.</i>			
121. O20 R119	a. LEID 4755 (coll. Rede); <i>Arethuse</i> 1 (1929) 198	17,09 g	12 h	-
	b. Hess-Leu (24.3.1959) 174 (17,17 g); Jameson, 1008	17,15 g	12 h	-
	c. Pergamon, 1960: <i>IGCH</i> 1303 (Boehring, <i>Chronologie</i> , 163, no. 10)	-	-	-
	d. Schlessinger (4.2.1935) 774	17,10 g	-	3,1 cm
	[O (a-c): flaw on upper lock of hair; also, on cheek.			
	R (a-d): flaw from l. foot to l. end of prow; also, from r. foot to end of Mu. Monogram recut. (f): development of flaws on either side of r. foot].			

O No	R No	Provenance	Weight	Axis	Diameter
122.	O20 R120	a. Madrid 6, Mus. Arq. Nacional	17,01 g	12 h	-
		b. Kress 140 (7-8.8.1967) 62	17,00 g	-	-
		[ <i>R (a)</i> : scratches up, off head, r. of figure; below l., off l. foot and at level of prow. Below r., signs of tool. ( <i>b</i> ): flaw from l. foot to the l. end of prow].			
123.	O20 R121	a. BM Payne Knight (1824): RPK, 2, p. 174; ex Mektepini 1956: <i>IGCH</i> 1410 (Olçay-Seyrig, <i>Mektepini</i> , no. 699); Drouôt (7-8.9.1977) 62	16,67 g	12 h	3,1 cm
		[ <i>O (a)</i> : worn up r. and on forehead. Flaw on cheek. In field r., curve off brow. Off-centre. <i>R (a)</i> : flaws on top of head; off prow; between l. foot and prow. Alpha without horizontal bar, the r. lateral line shorter than the l.].			
124.	O20 R122	a. BNF AF 1328	17,07 g	12 h	-
		b. Sotheby (27-8.10.1993) 446	17,12 g	11 h	-
		[ <i>O (a)</i> : development of flaw on cheek].			

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### Monogram 25 - Monogram 22

O No	R No	Provenance	Weight	Axis	Diameter
		<b>Group 32</b>			
		Specimens: 2		Obverses: [1-1]	
		Die combinations: 1		Reverses: 1	
125.	O20 R123	<i>O: As above. R: Similar.</i>			
		a. Numifrance (2.6.1982) 58	-	-	-
		b. Hamburger 165, 219	-	-	-

A number of specimens with an archaising figure of Apollo on the reverse may tentatively be placed at the beginning of the Poseidon head tetradrachms. The obverse heads are very well executed and fit into the small modules. Signs of dotted borders on particular specimens indicate care in the execution of this issue. The first specimen of this series, no. 110, is signed with a distinct monogram. The obverses of the next specimens have been combined with reverses carrying a



second monogram alongside no. 25, which runs most of the series. The secondary monograms, nos. 9 and 11, establish some connection between the Pan head and the Poseidon head tetradrachms (chapter 2.2.4, figs. 4, 7). The correction of monogram 9 to monogram 11 on specimen 111, in particular, confirms the approximately contemporary operation of these two officials, who are also attested on Pan head tetradrachms. The occurrence of the official signing with monogram 9 on these specimens and not on the Pan head tetradrachms of this period may indicate that this experienced official was assigned to the execution of the new celebratory type.

The only specimens from securely dated hoard contexts are nos. 121c and 123a, respectively from *Pergamon, 1960* and from *Mektepini, 1956*. Insofar as the late burial date of these hoards and the worn state of the related specimens fail to provide clues to the introduction date of this group, their tentative placement at the beginning of this series has been primarily determined by the archaizing style of the Apollo and by the angular and crudely engraved legend characters (with splayed Sigmas) on the reverse.

The series begins with small modules and the designs often spread beyond the flan. The designs have been struck on rough flans on a number of specimens (i.e. nos. 114a, 119a). The monogram has been recut on a number of coins (i.e. no. 121a).

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### Monogram 25

O No	R No	Provenance	Weight	Axis	Diameter
<i>O: Poseidon in different wreath. Dotted border.</i>					
<i>R: Similar.</i>					
<b>Group 33</b>					
Specimens: 54			Obverses: 1		
Die combinations: 14			Reverses: 14		
126.	O21	R124			
	a.	BM G10-III-106, G0526	17,08 g	12 h	3,2 cm
	b.	Glendining (18-20.4.1955) 291	-	-	-
	c.	Kress 132 (8.2.1965) 135	16,805 g	-	-
	d.	Sotheby (4.1992) 59	17,17 g	-	-
	e.	Sotheby (30.3.1997) 381	-	-	-
	f.	Gorny 46 (30.10.1989) 136	17,10 g	-	-
	g.	NFA 28 (1992) 648	16,83 g	-	-
	h.	Egger (28.11.1904) 627	16,47 g	-	3 cm
		[(c): bad photograph].			

O No	R No	Provenance	Weight	Axis	Diameter
127.	O21 R125	a. Drouôt-Bourgey (11.1957) 65; ex Feuardent (18.6.1924) 80	17,00 g	-	-
		b. Peus 288 (30.9-3.10.1975) 145	17,13 g	-	-
		c. Müller 60 (20-1.1.1989) 45	17,20 g	-	-
		d. MMAG L 320 (2.1971) 11	17,10 g	-	-
		[O (a): r., die ready to break between forehead and side lock. Edge slightly deformed (4 h). Beginning of flaw on border (8 h). R (d): die break from lower edge to legs].			
128.	O21 R126	a. Monetarium 3 (19-20.4.1985) 164; ex MMAG 47 (30.11-1.12.1972) 458; ex MMAG 4 (1.10.1935) 648	16,88 g	-	-
		b. Coin Galleries MBS (11.1988), lot 151	17,04 g	-	-
		c. Peus 305 (12-15.10.1982) 57	16,84 g	-	-
		d. NFA 462 (14.12.1989) 463	16,86 g	-	-
		[R (a): flaw on monogram].			
129.	O21 R127	a. MMAG 27 (10-11.12.1996) 219	-	-	-
		[O (a): flaw off eye].			
130.	O21 R128	a. ANS 1977.158.172; ex Sotheby (1894) 14	17,06 g		
		b. Hess-Leu 31, 265; Frankfurt am Main, 1	17,16 g	11 h	3,1 cm
		c. Private Collection L.C. 8	- (p)	-	-
		d. SNG Ashmolean, 3266 (ex Robinson)	16,98 g (p)	11 h	3,1 cm
		e. Burgan (22.12.1992) ?	16,84 g	-	-
		f. NFA MBS (12.10.1989) 463	16,86 g	-	-
		g. Vedrines MBS (27.3.1990) 28	17,04 g	-	-
		[O (a): development of flaw off eye; also diagonally, from dotted border (6 h) downwards. (d): development of flaw off nose, on dotted border (6 h). Off-centre. R (a-c): flaw starting from end of flan l. towards prow, from prow's lower end to legs. (d): l., flaw beneath prow. NB (f): very bad photograph].			
131.	O21 R129	a. Peus 270 (10-12.6.1969) 65	17,05 g	-	-
		b. Aufhäuser (5-6.10.1989) 76	17,19 g	-	-
		c. Kurpfälzische Münzhandlung (9.1971) 48; ex MMAG L 320 (2.1971) 11	17,10 g	-	-
		d. MMAG L 294 (1969) 11	17,30 g	-	-
		e. Müller 58 (3-4.6.1988) 38	17,30 g	-	-
		f. Drouôt (17-18.5.1984) 48	-	-	-
		[Flan surface rough. O (a): flaws on nose and on beard. R (a): flaw along l. leg; from l. foot to the flan's l. end; from r. foot to monogram. Die breaks on end].			



O No	R No	Provenance	Weight	Axis	Diameter
132.	O21 R130	a. Ritter Lagerliste 27 (9.1988) 305 [O (a): development of existing flaws. R (a): reverse recut bow held horizontally, legend letters recut].	-	-	-
133.	O21 R131	a. Lanz 26 (5.12.1983) 187 b. Coin Galleries MBS (13.11.1991) 93; ex Coin Galleries MBS (9.11.1988) 90	17,05 g 17,189 g	11 h -	- -
134.	O21 R132	a. G. Hirsch 187 (19-23.9.1995) 312; ex Peus 340 (11.1994) 322 (17,05 g); ex G. Hirsch 185 (15-18.2.1994) 175G; ex G. Hirsch 190 (16-19.5.1990) 212; ex Coin Galleries MBS (9.11.1988), lot 60 (17,073 g) b. Dorotheum L 285 (3-6.5.1966) 132 c. Aufhäuser 4 (5-6.10.1989) 76; ex MMAG L 190 (1959) 11 d. Coin Galleries MBS (14.4.1993), lot 224 e. Müller 62 (19-20.5.1989) 49 f. Kurpfälzische Münzhandlung 2 (9.1971) 48 g. Baranowsky (1931) 449 [O (b-c): r., development of flaws off nose and eye. R (b): broken on edge (5 h). (c): scratches from feet to lower end of flan].	17,01 g 16,90 g 17,19 g 17,04 g 17,10 g - 16,57 g	- - - - - - -	- - - - - - -
135.	O21 R133	a. Sotheby (13-20.6.1911) 134 b. G. Hirsch 161 (22-4.1989) 176 c. Coin Galleries MBS (23.5.1990), lot 96 d. Vedrines MBS (25.3.1988) 33 e. Athena GMBH 1 (8.10.1987) 70 f. Waddell L 16 (3.1985) 12 [O (a): new flaw off nose. (b): recut off nose; new diagonal flaw from nose to end (3:30 h) and from beard to end (5 h). R (a): die breaks from end towards main figure (3 h, 6 h, 7:30-9:30 h)].	- 17,02 g 17,189 g 17,27 g 17,07 g 16,88 g	- - - - 3 h -	- - - - - -
136.	O21 R134	a. Hamburger (27.5.1929) 206	-	-	-
137.	O21 R135	a. Athena 2 (4.10.1988) 101; Monetarium L 50 (autumn 1988) 83 b. J. Elsen MBS 9 (6.2.1988) 35 c. Monetarium L 52 (autumn 1989) 51 d. Ahlström 30 (27-8.10.1984) 1966; ex Schlessinger (4.2.1935) 775 e. Rauch 41 (5-8.6.1988) 147	17,19 g 17,09 g 17,17 g 17,00 g 17,10 g	- - - 3 h -	- - - - -

O No R No	Provenance	Weight	Axis	Diameter
138. O21 R136	a. Kassandreia, 1985-7 ( <i>CH VIII</i> (1994) 322, pl. 39.6)	-	-	-
	[O (a): recut r. of forehead and nose].			
139. O21 R137	a. G. Hirsch 11 (1956) 132	-	-	-
	[O (a): r., new flaw from middle of nose through to edge].			

The archaising figures of Apollo on the reverse are henceforth combined with a single monogram on the rough flans of this group. The monogram has been recut on nos. 135b, 138a. The worn tetradrachm from *Kassandreia, 1985-7* provides a *terminus ante quem* for this group around 225 BC.

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### Monogram 26

O No R No	Provenance	Weight	Axis	Diameter
	<i>O: Similar. Dotted border.</i>			
	<i>R: Similar.</i>			
	<b>Group 34</b>			
	Specimens: 3	Obverses: 1		
	Die combinations: 1	Reverses: 1		
140. O22 R138	a. Berlin (Fox)	16,97 g	12 h	-
	b. BNF 1697	17,06 g	-	-
	c. Berlin (Löbb.)	16,97 g	12 h	-
	[O (a-c): diagonal flaws off forehead, off side lock; also, diagonally from eye to cheek. Development of existing flaws. (a-b): developing flaw from cheek through l. eye to <i>anastole</i> . On upper end of flan, flaw crossing end of wreath. (b): small breaks on edge (6 h).			
	R (a-b): flaw on r. foot; also, between l. foot and end of prow f law on l. heel. Flan rough].			



A distinct monogram and the tall archaising Apollo seated on a higher prow characterise this group. The details of the head and the beard locks on the obverse are rendered in lines. A flaw reaches the end of Poseidon's cheek through the eye's edge. The monogram is larger.

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### Monogram 25

O No	R No	Provenance	Weight	Axis	Diameter
<i>O: Wreath of different type. Head l.</i> <i>R: Figure more comfortably seated r. on prow, head leans forward. String close to bow.</i>					
<b>Group 35</b>					
Specimens: 1			Obverses: 1		
Die combinations: 1			Reverses: 1		
141.	O23 R139	a. NFA Gans 2 (1960) 255	-	-	-

This circumstantial change in the direction of the designs on both the obverse and the reverse in this group is presumably a mistake of the die-cutter. This is also suggested by the fact that the legend on the existing specimen cannot be read.

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O No	R No	Provenance	Weight	Axis	Diameter
<i>O: Poseidon r.</i> <i>R: Apollo l.</i>					
<b>Group 36</b>					
Specimens: 43			Obverses: 3		
Die combinations: 11			Reverses: 11		
142.	O24 R140	a. BNF AF 1065; <i>SNG Delepierre</i> , 1065; ex Hirsch 15 (1930) 524	17,02 g	6 h	-
		b. Kress 152 (5.7.1971), 104	16,90 g	-	-
		c. Slg. Haughton, 105A	16,99 g	-	-

O No	R No	Provenance	Weight	Axis	Diameter
		d. <i>SNG Klagenfurt</i> , 579 (1251) [ (c): found in Asia Minor, 1947/8].	16,822 g	12 h -	
143.	O25 R141	a. G. Hirsch 135 (19-21.1.1983) 184	16,62 g	-	-
144.	O25 R142	a. Cambridge: Grose, <i>McClellan</i> 3591; ex Sotheby (11-13.12.1894) 127	14,72 g	12 h	-
		c. <i>SNG Blackburn</i> , 518	14,97 g	10 h	-
		d. Hirsch 82 (1973) 51	16,74 g	-	-
		e. Monetaire L 57 (spring 1992) 59	16,99 g	-	-
		f. G. Hirsch 71 (8-12.3.1971) 78	16,98 g	-	-
		[R (a): upright scratch/flaw at r. end of prow. (a-b): on string, flaw].			
145.	O25 R143	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 52)	17,05 g	11 h	-
		b. Vinchon (2-3.12.1975) 51	16,85 g	-	-
		c. Cederlind 94 (Fall 1991) 34	-	-	-
		d. Aufhäuser 5 (9-10.10.1990) 80	17,06 g	-	-
146.	O25 R144	a. Leiden, 3149 (17,09 g); Kress 127 (23.10.1963) 379	17,00 g	11 h	3,1 cm
		b. NFA 7 (6.12.1979) 110	16,85 g	-	-
		c. MMAG 85 (11.4.1997) 60	17,09 g	-	-
		d. SB 24 (23-5.1.1990) 29	17,08 g	-	-
147.	O25 R145	a. Schulman 262 (1975) 1049	16,91 g	-	-
		b. Brussels, coll. du Chastel (acq. 1899)	16,90 g	6 h	3,4 cm
		c. ANS 1966.75.27: <i>SNG BYB</i> , 367	17,08 g	12 h	-
		d. Superior Galleries (1907) 4072; Peus 332 (23-8.10.1991) 176	17,07 g	-	-
		[R (d): diagonal flaw across prow and bow].			
148.	O25 R146	a. Syria, 1959: <i>IGCH</i> 1535 (Boehrer, <i>Chronologie</i> , 159.11, pl. 27.11)	-	-	-
		b. Lanz 76 (18.5.1996) 184	17,01 g	11 h	-
		c. Kricheldorf 26 (19-21.2.1973) 57	-	-	-
		d. NFA 22 (1.6.1989) 462	16,97 g	-	-
		e. Sotheby L (27-8.10.1993), lot 445 (17,11 g); ex NFA 18 (Summer 1987), lot 125	17,06 g	5 h	-
		f. Peus 338 (4.1994) 433	17,04 g	-	-
		[R (d): flaw r. of monogram].			



O No	R No	Provenance	Weight	Axis	Diameter
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149. O25 R147

- a. *SNG Sweden II*, 1143 (F. W. Spiegelthal) 16,27 g 11 h -  
 b. Drouôt (6-8.2.1956) 344; ex G. Hirsch 34 (5.5.1914) 299 (16,75 g); ex Merzbacher (15.11.1910) 409 16,72 g - 3,0 cm  
 [O (a): flaw r., off nose.  
 R (a): flaw l., beside upper prow].

O: *Similar.*

R: *Similar.*

150. O26 R148

- a. Berlin; ex Ratto (1909) 1965; ex Gansauge (1873) 16,70 g - -  
 b. Mektepini, 1956: *IGCH* 1410 (Olçay-Seyrig, *Mektepini*, 694) 17,02 g - -  
 c. Kölner 48 (10-11.4.1989) 34; ex Kölner 42 (10-12.11.1986) 31 17,02 g - -  
 d. Cahn (27.2.1933) 181 16,66 g - -

151. O26 R149

- a. Peus 333 (6-11.5.1992) 240 17,06 g - -  
 b. *SNG BYB*, 367 17,08 g 12 h -  
 c. *SNG Klagenfurt*, 579 16,822 g 12 h -  
 d. Superior Galleries (1985) 2107 17,00 g - -  
 [O (a-b): flaws behind head.  
 R (a): diagonal flaw from prow through bow. (b): break on edge (1 h)].

152. O26 R150

- a. Tradart (18.11.1993) 67 17,10 g 11 h -  
 b. SB 38 (1995) 115 16,49 g - -  
 c. Leu 2 (25.4.1972) 173 17,06 g 12 h -  
 d. J. Hirsch 13 (15.5.1905) 1174 - - 2,95 cm  
 [O (a): flaw off nose.  
 R (d): vertical flaw from elbow to prow].

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O: *Similar, hair locks more dense and regular; r. hair lock shorter than l. Wreath made by a main branch with flowers; side branches twine with the main branch. Dotted border.*

R: *Prow larger, figure upright.*

Group 37

Specimens: 16

Obverses: 1

Die combinations: 5

Reverses: [5-1]

153. O27 R126

- a. *Kassandraia*, 1985-7 (*CH VIII* (1994) 322, pl. XXXIX.7) - - -

[R (a): flaw above prow; monogram larger,  $\Omega\Sigma$  floating].

O No	R No	Provenance	Weight	Axis	Diameter
154.	O27	R151			
		a. MMAG 54 (26.10.1978) 196	17,05 g	-	-
		b. Kölner 38 (18-19.4.1985) 56	17,06 g	-	-
		c. Gorny 60 (5.10.1992) 131; ex Gorny 58 (6-7.4.1993) 262	-	-	-
		d. Gorny 48 (2.4.1990) 263	-	-	-
		[O (a): beginning of flaw on nose].			
155.	O27	R152			
		a. Boston 715, 77; Kricheldorf 17 (8.5.1967) 77	-	-	-
		b. Kricheldorf 22 (12.2.1971) 54	-	-	-
		c. Sambon (1889) 309	-	-	-
		d. Superior Galleries (1988) 1484	17,08 g	-	-
		e. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 53)	17,085 g	11 h	-
		[Flan rough. O (e): flaw across nose. R (a): similar. Similarities in engraving of legend. Monogram larger].			
156.	O27	R153			
		a. Cambridge: <i>SNG Fitzwilliam</i> , 2309 (Leake 282) (A. Monophthalmus); Babington, p. 9.36; ex Thomas collection, no 1142	16,89 g	12 h	-
		b. Sotheby Zürich (5.1975) 90	17,02 g	11 h	-
		[R (a): flaw above head; small legend letters. Worn].			
157.	O27	R154			
		a. ANS: <i>SNG Newnham Davis</i> , 97; Coin Galleries 2.3 (1961) A570; NFA 18 (summer 1980) 229; NFA 11 (8.12.1982) 97	17,03 g	12 h	-
		b. NFA 38 (1990) 33	17,11 g	-	-
		c. Ahlström 32 (26-7.10.1985) 1972	-	-	-
		d. Poindessault-Vedrines MBS (15.11.1991) 146	-	-	-
		[R (a): flaw from toes of l. foot downwards. Recut on monogram. (d): die breaks up (12 h), r. (2-4 h)].			

The figure of Apollo on the reverse is more comfortably rendered: the god leans on a prow, his head leaning forward. The *embolon* is larger. The border of the upper prow ends before the upper bar of Sigma. The date for no. 153, from Kassandreia, approximates the dating of this group to 225 BC.

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O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Head with two long hair locks and beard, arranged in two levels. His wreath made of a reed ending in a 'thyssanos'; four flowers and side branches attached. Dotted border.  <i>R</i>: Similar.</p>					
<b>Group 38</b>					
		Specimens: 75		Obverses: 1	
		Die combinations: 16		Reverses: 16	
158.	O28 R155				
	a.	Berlin; ex Rauch	15,53 g (b)	11 h	-
	b.	MMAG 7 (3-4.12.1948) 434	16,93 g	-	-
	c.	SNG Manchester, 739	17,11 g	11 h	-
	d.	Sotheby (9-10.10.1995) 75	17,12 g	-	-
[ <i>O</i> (a): beginning of flaw on nose. <i>R</i> (a): flaw r., circular, from prow upwards].					
159.	O28 R156				
	a.	Leiden 3262	16,99 g	11 h	-
[ <i>O</i> (a): die ready to break off forehead. Diagonal flaws on lower field. <i>R</i> (a): flaw diagonally, l. of l. foot. Flaws around monogram; also r., beneath prow].					
160.	O28 R157				
	a.	Drouôt (6-8.2.1956) 345	17,02 g	-	-
	b.	Christie's (13.3.1990) 49; ex Christie's (28.2-1.3.1989) 1276	17,00 g	-	-
	c.	Vedrines MBS (4.11.1992) 31	16,53 g	-	-
	d.	Ahlström 28 (22-3.10.1983) 1914	-	-	-
	e.	Spink-GMG (15-16.2.1977) 48	17,11 g	-	-
	f.	Spink 15 (15.5.1981) 36	17,13 g	-	-
[ <i>O</i> (a): dots behind head and off nose; also, beneath beard. (b): development of flaw behind head. <i>R</i> (a): flaw on end (12 h); r., sign of tool. Beginning of flaw between uplifted arm and prow. Flaws on both feet. Beginning of flaw (dot) r. of r. foot. (b-d): development of flaw between l. toes and prow. (d): vertical flaws l. and r. of prow].					
161.	O28 R158				
	a.	Classical Coins 16 (16.8.1991) 107 (16,97 g); ex Classical Coins 14 (20.3.1991) 72	16,96 g	-	-
	b.	Schulman (29-30.6.1922) 25	16,74 g	-	-
[ <i>O</i> (a): development of flaws across neck and along beard; also, development of those off forehead, nose and beard. Flaw on cheek].					
162.	O28 R154				
	a.	MMAG 15 (18-19.9.1985) 83; ex NFA 11 (8.12.1982) 96	16,95 g	-	-
	b.	SNG BYB, 369	17,12 g	10 h	-
	c.	SNG BYB, 370; ex G. Hirsch 159 (9.1988) 221	17,03 g	10 h	-
	d.	Gorny 44 (3.4.1989) 245	17,11 g	-	-
	e.	Kurpfälzische Münzhandlung 47 (12.1994) 47			
	f.	Superior Galleries (1988) 1485	17,10 g	-	-
	g.	Vinchon (17.11.1990) 19	17,10 g	-	-

O No	R No	Provenance	Weight	Axis	Diameter
		h. Elsen L 116 (5-6.1989) 40	17,13 g	-	-
		[O (a): new diagonal flaw continuing side lock. (e-f): diagonal flaw across side locks; also, off forehead. Development of diagonal flaw from nose to edge. R (a): flaw off prow; also, r. of prow upwards. (e): monograms erased beneath l. foot].			
163.	O28 R159	a. Drouôt (11-13.4.1988) 357; ex Ars Classica, Genf (1929) 204	16,84 g	-	-
		b. Schulman 254 (1971) 3039	16,06 g	-	-
		c. Numismatica, Münzauktion 13 (9-11.11.1976) 133	17,00 g	-	-
		d. BM101	17,09 g	12 h	3,2 cm
		e. CNA MBS 36 (23.7.1992) 4; ex CNA MBS 29 (8.8.1991) 30; ex Ratto (13.3.1912) 649	16,61 g	-	-
		f. Kurpfälzische Münzhandlung 46 (9-10.6.1994) 51	15,27 g	-	-
		g. Dorotheum 244 (24-7.10.1961) 439	17,00 g	-	-
		h. Superior Galleries (1987) 302	17,01 g	-	-
		i. Superior Galleries (1990) 6800	17,03 g	-	-
		j. Sotheby (3.2.1909) 438	16,977 g	-	-
		k. Jenkins, 739	-	-	-
		l. MMAG 25 (17.11.1962) 391	17,02 g	-	-
		m. Cederlind BBS 115 (14.4.1999) 1207	-	-	-
		[O (a): l., horizontal flaw off head. Beginning of flaw (dot) on forehead. (b): flaw behind head. R (b): r., diagonal flaw between l. arm and prow. (c): two diagonal scratches on upper field. Flaws, up and off l. foot diagonal flaw across l. foot. Also, vertical flaw l. of prow].			
164.	O28 R160	a. MMAG 23 (17-18.6.1993) 300 (17,08 g); ex MMAG 6 (6-7.12.1946) 628	17,07 g	-	-
		b. Myers 12 (4.12.1975) 128	16,91 g	-	-
		[O (a): flaw behind head. (b): development of existing flaws. Two new flaws, the first off forehead and the second starting from end of neck]. R (a): signs of flaw r. of prow. (b): flaw l., r. of prow upwards].			
165.	O28 R161	a. Numismatica Ars Classica (7.1929) 203; ex Sotheby (5-15.7.1909) 118	16,98 g	-	-
		b. Drouôt (19-22.6.1933) 174	-	-	-
		c. Drouôt (24.11.1969) 117	17,09 g	-	-
		[O (a): flan rough. Development of diagonal flaw on neck and of flaws off nose. New diagonal flaws across neck. Development of curved flaw beside head].			
166.	O28 R162	a. MMAG 22 (8-9.11.1989) 209	16,96 g	-	-
		b. Kress 140 (7-8.8.1967) 61	17,00 g	-	-
		c. Sotheby (9-10.10.1995) 75	17,12 g	-	-
		d. Sotheby (9.1976) 35	16,84 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
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e. Kurpfälzische Münzhandlung 42 (2-3.6.1992) 155; ex NFA (12.10.1988) 209 (Brauer coll.); ex Lugano 26 (13-1.5.1988) 70; ex MMAG L 315 (8.1970) 20 (17,15 g); ex Dupriez, 112bis (1913) 70

f. Peus 274 (29.10.1970) 1577

g. Madrid 1972/66

17,02 g

-

-

17,01 g

-

-

14,64 g (b)

11 h

-

[Flan rough. *O* (a): development of flaw beside head; new flaw from hair locks upwards.

Flaw off locks. (e): die break behind forehead.

*R* (d): flaws around monogram and above head, l. Legend letters  $\Omega\Sigma$  floating. (f): flaws from end of prow to edge and from lower arm upwards; below, flaw from dot through monogram; horizontal flaw from l. foot to monogram].

167. O28 R163

*R*: Monograms larger, legend letters small but regular.

a. Drouôt (4-5.6.1991) 77

-

-

-

b. Coin Galleries 3.6 (1962) F54

17,00 g

-

-

c. Sotheby (4.4.1991) 46

-

-

-

d. Berlin; ex Prokesch-Osten, 1875

17,18 g

6 h

3,1 cm

e. Drouôt (Vinchon) (14-15.3.1989) 90; ex Drouôt (21-2.6.1979) 43

17,03 g

-

-

f. Leiden; ex Rede, 4754

17,10 g

5 h

-

g. J. Hirsch 19 (1907) 182

17,05 g

-

-

h. Hess-Leu 31 (7.12.1966), pl. 12.265

17,16 g

-

-

i. Drouôt-Bourgey (11-12.3.1980) 61

16,95 g

-

-

j. Myers 13 (9.12.1976) 113; ex Myers L (15.5.1972) 21

16,93 g

-

-

k. Mygind L 6 (3.1992) 54; ex Mygind L 4 (2.1991) 61 (17,02 g); ex Mygind L 2 (2.1990) 91

16,97 g

-

-

l. NFA, Fall MBS (12.10.1988) 209

17,02 g

-

-

[*O* (a): signs of flaw behind head. Sign of flaw off end of nose. (b): development of vertical flaw from circular flaw to hair locks.

*R* (b): l., flaw from l. end of prow to l. foot. Dots in field up r.]

168. O28 R164

a. SNG Ashmolean, 3265 (Bodleian)

16,82 g

12 h

3,05 cm

b. J. Hirsch 20 (13.11.1907) 255

-

-

-

c. Ratto (4.4.1927) 728; ex Egger 13 (1906) 208

17,40 g

-

-

[*O* (a): development of flaw beside head. Horizontal scratch off forehead.

*R* (a): up l., flaw. Letters  $\Omega\Sigma$  higher.

NB: flan rough].

169. O28 R165

a. Rosenberg (1914) 90

16,90 g

-

-

b. MMAG 17 (7-8.6.1988) 166

17,08 g

-

-

[*O* (a): recut in front of forehead and nose. Development of flaw beside head. (b): l., flaw beneath circular flaw.

*R* (a): flaw between r. foot and monogram. Break on lower edge, l. (b): flaw above string of bow; below, l. and r., circular flaw beneath monogram].

O No	R No	Provenance	Weight	Axis	Diameter
170.	O28 R166	<i>O: Dotted border. R: Figure smaller. Legend letters smaller.</i>			
		a. G. Hirsch 166 (16-19.5.1990) 232	15,93 g	-	-
		b. Elsen L 182 (6.1996) 16	17,05 g	-	-
		c. Braunschweig 3 (1927) 289	-	-	-
		d. Gorny 22 (25-6.5.1982) 56; ex Glendining (7.4.1971) 43	17,17 g	-	-
		[O (b): up l., die break (10-12 h). (c): development of flaw beside head. R (b): l. on edge, signs of tool. (b): r., flaw. (d): very worn. Diagonal flaw. NB: Surface rough].			
171.	O28 R167	<i>R: Flaw on r. toes, his l. foot not at end of prow.</i>			
		a. Ars Classica (7.1929) 203; Sotheby (5-15.7.1909) 118; ex Sotheby (9.5.1904) 118	16,98 g	-	-
		b. Drouôt (11.1909) 117	17,09 g	-	-
		c. Ratto (4.4.1927) 728	16,92 g	-	-
		d. CNA MBS 21 (19.4.1990) 59	16,70 g	-	-
172.	O28 R133	<i>R: A without horizontal bar, Sigmas 'splayed'.</i>			
		a. Zürich, 1896.1	16,90 g	10:30 h	3,10 cm
		[O (a): l., new flaw beneath l. hair lock. R (a): monogram recut; flaws r. and l., off prow and on lower prow. NB: Flan rough].			
173.	O28 R168				
		a. Drouôt (11-12.3.1980) 61	16,95 g	-	-
		b. Sternberg 8 (16-17.11.1978) 61	16,95 g	-	-
		c. Lanz 32 (29.4.1985) 173	17,05 g	5 h	-
		[O (a-b): development of existing flaws. (b): new flaw l., from attempted piercing to hair lock. In field r., flaw continuing lock. (c): new flaw from nose downwards. R (b): flaws starting from feet and monogram].			
		***      ***      ***			
		<i>O: Similar. R: Edge of prow higher, more elaborate. Legend characters smaller.</i>			
		<b>Group 39</b>			
		Specimens: 41		Obverses: 1	
		Die combinations: 11		Reverses: [11-1]	
174.	O29 R169				
		a. Thesprotia, 1992 (Touratsoglou, DM, no. 56)	16,77 g	5 h	-
		b. ANS 1966.75.27: SNG BYB, 368	17,06 g	12 h	-
		c. Coin Galleries MBS (18.7.1995), lot 2108; NFA 18 (summer 1980) 14	17,06 g	5 h	-
		d. G. Hirsch 165 (14-16.9.1990) 218	17,00 g	-	-
		e. Munich 6	16,49 g (p)	11 h	-
		f. SNG Norman Davis, 96	16,71 g	12 h	-
		g. Leu 53 (21-2.10.1991) 78	17,05 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
		h. Leu L 20 (10.1995) 10	16,85 g	-	-
		i. Gorny 46 (30.10.1989) 135	17,10 g	-	-
		j. Waddell L 38 (-) 36; Waddell L 36 (-) 31	17,14 g	-	-
		k. Larissa ('Sitochoro'), 1968: <i>IGCH</i> 237 (Price, 'The Larissa, 1968 hoard ( <i>IGCH</i> 237)' in Le Rider et al., <i>Kraay-Mørkholm Essays</i> , 235.20, pl. 46)	16,80 g	5 h	-
		[O (b-c): flaws r. of nose. (b): flaw behind head. R (b): flaw l. of l. foot and low in field. (b): l., scrape l. of prow; r., vertical flaws].			
175.	O29 R170	a. Button 101 (29.10.1957) 58	17,00 g	-	-
		b. Hariga (8.2.1992) 32 (17,10 g); ex Sotheby (4-5.10.1990) 85 (17,04 g); ex Drouôt (17-19.6.1959) 285	17,02 g	-	-
176.	O29 R171	a. Elsen L 106 (3.1988) 31	17,17 g	-	-
		[O (a): flaw behind head and in front of nose].			
177.	O29 R172	a. Leu 38 (13.5.1986) 73; ex Merzbacher 2 (2.11.1909) 2800 (17,08 g)	16,86 g	12 h	3,2 cm
		[O (a): two die breaks, the former on forehead and the latter continuing the side lock].			
178.	O29 R173	a. Sotheby (1907) 97 (Delbeke)	17,13 g	-	-
		b. Sotheby (6-7.3.1900) 216	-	-	-
179.	O29 R174	a. BNF AF 1329A	16,97 g	12 h	-
		b. BNF 1973 I.74	17,19 g	12 h	-
		c. Numismatica Ars Classica 4 (1974) 96	17,10 g	-	-
		d. MMAG 73 (17.10.1988) 144; ex MMAG 72 (6.10.1987) 579 (17,10 g)	16,94 g	-	-
		e. Stack's (8-10.6.1994), lot 2104 (and colour plate); ex Stack's (12.1989), lot 3094	17,08 g	-	-
		e. Elsen 32 (11.12.1993) 57; ex Elsen 26 (12.9.1992) 188	-	-	-
		[O (a): progressively larger diagonal flaw on forehead. In field l., horizontal flaw off hair].			
180.	O29 R175	a. NFA (18.10.1990) 626	16,85 g	-	-
		b. Hungary, Mayar Nemzeti 8	17,02 g	12 h	-
		c. Kress 91 (1951) 55	17,10 g	-	-
		d. Oylum Höyüğü, 1989 ( <i>TCMAA</i> , 45-49, no 80)	17,00 g	12 h	3,4 cm

O No	R No	Provenance	Weight	Axis	Diameter
181.	O29	R152			
		a. NFA 9 (10.12.1988) 208	16,88 g	-	-
		b. Glendining (6.1992) 57	-	-	-
		c. Burgan (30.9.1994) 336; ex NFA (1990) 626; ex Classical Coins 5.6 (9.12.1988) F 59; ex MMAG 20 (8-9.11.1988) 272; ex Seaby-Glendining (1-2.12.1927) 292	16,85 g	-	-
		d. Burgan (22.12.1990) 26; ex MMAG 18 (21-2.9.1989) 620	17,03 g	-	-
		e. NFA 22 (1.6.1989) 269	16,70 g	12 h	-
		f. Gorny 50 (24.9.1990) 265	17,07 g	-	-
		g. NFA 9 (10.12.1980) 184	17,09 g	-	-
		[R (b-d): vertical flaw from elbow to prow].			
182.	O29	R176			
		a. <i>NCirc</i> 43.1 (2.1985) 17	16,51 g	-	-
		b. Malter 47 (4.2.1992) 80; ex SB 2 (27.10.1977) 305; ex Coin Galleries (9.3.1956) F 59	16,88 g	-	-
183.	O29	R177			
		a. Drouôt (24.11.1969) 117	17,09 g	-	-
184.	O29	R178			
		a. CBNC 5682	16,93 g	11 h	3,40 cm
		b. Troxell, <i>Davis</i> , 96	16,71 g	12 h	-
		c. Gorny 52 (6.11.1990) 204; ex Athena (15.5.1990) 100	17,09 g	-	-
		d. Gorny 52 (6.11.1990) 203	17,14 g	-	-
		[O (a): vertical break on forehead. Diagonal flaw off nose. R (a): vertical flaw from upper field to upper prow; scratches up r. In field l., horizontal scratch off <i>embolon</i> . (c): flan rough].			
		***      ***      ***			
		<i>O: Similar, wreath different.</i>			
		<i>R: Similar.</i>			
		<b>Group 40</b>			
		Specimens: 57	Obverses: 3		
		Die combinations: 13	Reverses: [13-2]		
185.	O30	R164			
		a. BNF AF 1327	16,93 g	12 h	-
		b. Glendining 11 (5.11.1980) 24; Santamaria MBS (10.1951) A. 442	17,05 g	-	-
		c. Kress 142 (22.1.1968) 91	16,90 g	-	-
		d. Drouôt-Bourgey (20-1.12.1929) 24	-	-	-
		e. Sotheby (4-5.10.1990) 84	17,10 g	-	-
		f. MMAG 76 (19-20.9.1991) 699	17,12 g	-	-
		[R (a): r., 'splayed' Sigmas. (b-c): flaw behind r. foot. Monogram large].			



O No	R No	Provenance	Weight	Axis	Diameter
186.	O30 R179	<i>R: vertical line on upper prow.</i>			
	a.	CBNC 5681	17,07 g	11 h	3,12 g
	b.	Burgan (5.11.1993) 56; ex Vico (8.3.1990) 121; ex Superior Galleries (1989) 2534; ex Bourgey (12.1929) ?	16,93 g	-	-
	c.	Classical Coins 36 (5-6.12.1995) 1841 (Jay Dawley Coll.)	17,00 g	-	-
	d.	Hess-Leu 49 (27-8.4.1971) 140	17,02 g	12 h	-
	e.	MMAG 8 (22-3.3.1937) 259; ex Weber, 2191	16,92 g	-	-
		[ <i>R (b-c): vertical flaw r.</i> ]			
187.	O30 R152	a. Glendining (11.12.1974) 31	-	-	-
188.	O30 R180	a. Feuardent (26-7.5.1914) 195	-	-	-
	b.	Glendining (1943) 37	-	-	-
		[ <i>O (a): flaw off nose.</i> ]			
189.	O30 R181	a. Asia Minor, c. 1947: <i>IGCH</i> 1451; Sotheby (30.4.1958) 105A	17,00 g	-	-
	b.	Glendining (13.12.1963) 228	-	-	-
	c.	Bourgey (20-1.12.1929) 24	-	-	-
		[ <i>O (a-b): progression of flaw continuing side lock and behind head.</i> ]			
190.	O30 R182	a. Münzzentrum 66 (26-8.4.1989) 150; ex Monetarium 7 (27-9.4.1987) 182; ex Peus 308 (19-21.10.1983) 121; ex Waddell (11.12.1980) 130; ex Peus 290 (5-7.10.1976) 94	14,16 g (b)	-	-
		[ <i>Test cut on edge (6:30 h). O (a): flaw off nose; also, from upper lock to edge.</i> ]			
		<i>O: Similar.</i>			
		<i>R: Similar.</i>			
191.	O31 R183	a. Glendining (2.1972) 154; ex Sotheby (24-5.6.1914) 69; ex J. Hirsch 20 (2.1907) 256	16,912 g	-	-
	b.	Drouôt (6-8.2.1956) 344	16,72 g	-	-
	c.	Coin Galleries MBS (16.2.1994) 90; ex Aufhäuser (1-9.10.1966) 32 (17,00 g)	16,89 g	-	-
	d.	Berlin; ex Drouôt (20-2.5.1959) 454; ex Drouôt (20-2.2.1935) 101	17,00 g	-	-
	e.	Leu 61 (17-18.5.1995) 111; ex Leu 54 (28.4.1992) 91	17,02 g	12 h	-
	f.	Sangiorgi Strozzi (1907) 1495	-	-	-
	g.	<i>SNG Lockett</i> , 1527	16,86 g	9 h	-
		[ <i>O (a-b): r., horizontal flaw.</i> ]			
		[ <i>R (a-c): flaw l., off prow. Monogram corrected; r. of monogram, flaw.</i> ]			

O No	R No	Provenance	Weight	Axis	Diameter
<b>192. O31 R184</b>					
	a.	ANS: <i>SNG Dewing</i> , 1206 (Robinson)	16,76 g	11 h	-
	b.	Hess 3 (30.4.1917) 701	17,06 g	10 h	-
	c.	Kricheldorf 26 (19-21.2.1973) 57	-	-	-
	d.	Monetarium L 47 (spring 1987) 27	17,02 g	-	-
	e.	Aufhäuser 2 (21-2.10.1986) 32	17,00 g	-	-
	f.	MMAG 23 (17-18.6.1993) 78	17,12 g	-	-
	g.	Munich, 42	15,96 g (b)	6 h	-
	h.	Vinchon (20-2.5.1959) 454; ex Drouôt (20-2.2.1935) 101; ex Feuardent (12-13.12.1919) 207; ex Ciani	17,00 g	-	-
	i.	Kricheldorf 10 (1962) 77	17,15 g	-	-
	j.	Leu 42 (1987) 205	16,97 g	-	-
	k.	Kurpfälzische Münzhandlung 51 (12-13.2.1996) 75	17,05 g	-	-
	l.	Gorny 60 (5.10.1992) 132	17,05 g	-	-
	m.	Lanz 50 (27.11.1989) 168	16,98 g	-	-
	n.	NFA 16 (1985) 147	16,23 g	-	-
	o.	Poinsignon MBS (14.12.1985) 103	-	-	-
		[O (j-k): die break on edge (9 h)].			
<b>193. O31 R185</b>					
	a.	Christie's (13.3.1990) 530; ex Christie's (28.2-1.3.1989) 1276; ex Frey, 1057	16,53 g	-	-
	b.	Lanz Graz 10 (3.12.1977) 105	15,84 g	-	-
<b>194. O31 R186</b>					
	a.	Kurpfälzische Münzhandlung 18 (20-2.5.1980) 39	-	-	-
	b.	Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 54)	16,75 g	12 h	-
<b>195. O32 R187</b>					
	a.	ANS 1966.75.26: <i>SNG BYB</i> , 361	17,08 g	10 h	-
	b.	Sotheby (27-8.10.1993) 444; ex NFA 25 (29.11.1990) 88	16,99 g	12 h	-
	c.	Spink 71 (11.10.1989) 62	17,05 g	-	-
	d.	Aufhäuser 8 (5-6.10.1993) 61	17,22 g	-	-
	e.	Ball 1 (9.2.1932) -	-	-	-
	f.	J. Hirsch 20 (13.11.1907) 256	-	-	-
		[R (a): monogram farther than foot; in field, flaw].			
<b>196. O32 R188</b>					
	a.	Seaby 713 (1978), C16	-	-	-
	b.	Drouôt (15.1.1882) 872	17,00 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
<b>197. O32 R189</b>					
		a. <i>SNG Ashmolean</i> , 3263 (Christ Church, 310)	15,63 g <sup>1</sup>	(b, p) 11 h	3 cm
		b. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 54)	16,75 g	12 h	-
		c. ANS 1966.75.19: <i>SNG BYB</i> , 364	17,05 g	10 h	-
		d. Banque Populaire du Nord-Crédit de la Bourse (10.1986) 669; ex Banque Populaire du Nord (6.1984) 66	-	-	-
		e. Aufhäuser 5 (9-10.10.1990) 80	17,06 g	-	-
		***	***	***	
<p><i>O</i>: Similar, the wreath wider, the knobs on wreath larger; a thinner branch discernible further up in wreath. The distance between the outer l. lock and the circumscribing lines larger. The third row of beard smaller, made by elliptic circles. Direction of locks in last row different. Neck ends in curve. Dotted border.</p> <p><i>R</i>: Legend characters smaller.</p> <p><b>Group 41</b></p> <p>Specimens: 40                      Obverses: 2</p> <p>Die combinations: 10              Reverses: 10</p>					
<b>198. O33 R176</b>					
		a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 55)	16,885 g	5 h	-
		b. BM T. C. p. 106, No. 1			
		c. Leiden 3148	17,13 g	12 h	-
		d. ANS 1966.75.22: PUS31: <i>SNG BYB</i> , 365	16,98 g	12 h	-
		e. ANS 1966.75.18: PUS32: <i>SNG BYB</i> , 366	17,02 g	12 h	-
		f. MMAG 37 (5.12.1968) 621; ex MMAG 22 (16-17.6.1992) 210	16,92 g	-	-
		g. Berk 40 (10.12.1985) 53	-	-	-
		h. Hess 257.1 (2.11.1986) 94	16,90 g	-	-
		[ <i>O</i> ( <i>a-c</i> ): l., flaw behind head and r., as extension to side hair lock; also, from nose. Cut up r.			
		<i>R</i> ( <i>a</i> ): l., below, badly cleaned].			
<b>199. O33 R190</b>					
		a. Monetaarium L 61 (spring 1994) 37	17,16 g	-	-
		b. Malter 51 (2.6.1993) 46; ex Lepczyk 50 (26-7.11.1982) 920	17,02 g	-	-
		c. Gorny (14.5.1991) 178; ex Gorny (24.9.1990) 266; ex Gorny (20.4.1990) 144; ex Schweizerischer Bankverein 21 (24.6.1989) 50	17,09 g	-	-
		d. Pilartz 7 (1-3.10.1964) 44	17,17 g	-	-
		[ <i>O</i> ( <i>a</i> ): flaw behind head; r., development of flaw from side lock onwards. ( <i>c</i> ): r., curved flaw from side lock to dotted border; also, behind head.			

<sup>1</sup> Not 15,03 g, as in *SNG Ashmolean*.

O No	R No	Provenance	Weight	Axis	Diameter
		<p><i>R (a-b):</i> r., horizontal flaw off head. Also, flaws beneath feet. Monogram erased and engraved r. of l. foot. <i>(c):</i> monogram beneath l. foot. Flaw up, l. of head r; also, l. of prow; also below, l. of l. foot and r. of monogram].</p>			
200.	O33 R191	<p><i>R: Similar. Prow wider. Monogram larger.</i></p>			
		a. Munich, 22	17,01 g	12 h	-
		b. Gorny 64 (11.10.1993) 93	-	-	-
		c. Spink NY (7.2.1995) 2052	17,00 g	-	-
		d. Berk 41 (11.2.1986) 102	17,15 g	-	-
		e. Leu-Spink 187 (26.9.1987) 95	17,05 g	-	-
		<p>[<i>O (a):</i> development of flaw starting from r. hair lock. Also r., off nose, and up, from side lock to coin edge. Badly cleaned].</p>			
		<p><i>R (a):</i> monogram larger, flaw off l. toes and heel and on r. edge of monogram. Badly cleaned].</p>			
201.	O33 R192	<p>a. <i>SNG Lewis</i>, 541; MN (1960) 39 ff.; ex Subhi (1978) 1139</p>			
			17,06 g	12 h	-
		<p><i>O: Wreath interrupted by two flower branches.</i></p>			
		<p><i>R: Bow small. Monogram smaller, legend characters more elaborate, with ΩΣ floating, and with an open Omega.</i></p>			
202.	O34 R193	<p>a. <i>SNG Ashmolean</i>, 3264 (Bodleian)</p>			
			17,20 g	12 h	3,05 g
		b. Lanz 62 (26.11.1992) 222	17,13 g	12 h	-
		c. MZA 66 (26-8.4.1989) 151	16,91 g	-	-
		d. Lanz 68 (6.6.1994) 125			
		e. Spink 87 (9.10.1991) 44	16,73 g	-	-
		f. Burgan (18.7.1995) 18	-	-	-
		<p>[<i>O (a):</i> flaw between eye and brow].</p>			
203.	O34 R194	<p>a. Drouôt (1910) 343</p>			
			-	-	-
		b. Kress 120 (30.11.1961) 163a	-	-	-
		c. Ratto (4.4.1927) 729	16,96 g	-	-
		d. MZA 84 (29-30.11.1995) 18	16,90 g	-	-
		e. Monetarium 49 (spring 1988) 33	17,14 g	-	-
		f. NFA 29 (13.8.1992) 92; NFA 32 (8.12.1993) 46			
			17,05 g	-	-
		g. <i>Hesperia Art</i> 12 (1960) 17	-	-	-
		h. <i>Hesperia Art</i> 28 (1963) 61	-	-	-
		j. <i>SNG Dewing</i> , 1207; ex Baranowsky, 1931	16,49 g	12 h	-
		k. Vigne (9.1987) 350	16,99 g	-	-
		<p>[<i>R (b):</i> r., flaw from end of prow towards monogram].</p>			
204.	O34 R195	<p>a. Münzzentrum 53 (13-15.11.1984) 1529</p>			
			16,94 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
205.	O34	R196			
		a. Gans 16 (1960) 259	16,95 g	-	-
		b. Vedrines MBS (23.6.1993) 30	17,12 g	-	-
206.	O34	R197			
		a. Poinsignon MBS (4.12.1985) 104	-	-	-
207.	O34	R198			
		a. Numismatica Ars Classica, Auction A (27-8.2.1991) 1372	17,02 g	-	-
		b. Lanz 38 (24.11.1986) 244	17,13 g	-	-

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*O: Wreath with a single reed, ending in a thyssanos. The wreath is decorated by two flowers in the middle; a side branch rises in its upper part. Hair ends in two side locks and a third, shorter, one hangs r. Dotted border.*

*R: Apollo seated comfortably, cross-legged, on prow whose upper part is shown by a straight line. Hair locks on either side of face, rest of hair at the back. Legend letters regular, close but on lower border; 'splayed' Sigmas. Horizontal monogram bars prominent.*

**Group 42**

Specimens: 28

Obverses: 1

Die combinations: 8

Reverses: 8

208. O35 R199

a. ANS 1977.158.172      17,06 g      12 h      -

[*O (a)*: flaws right beside upper head.

*R (a)*: flaw off l. foot; above r. arm; on upper prow].

209. O35 R200

*O: Dimple on cheek.*

a. Warsaw 106553      17,10 g      -      -

b. Monetaarium 63 (1995) 69; ex Sotheby (18-19.4.1994) 491

17,01 g      -      -

c. MMAG L 510 (5.1988) 12      17,13 g      -      -

d. Numismatica Ars Classica 2 (21.2.1990) 149

17,16 g      -      -

e. Elsen 15 (3.2.1990) 36      17,13 g      -      -

f. Drouôt-Bourgey (4.1934) 18      -      -      -

g. Banque Populaire du Nord-Crédit de la Bourse (1987) 111

-      -      -

h. Numismatic Review & Coin Galleries FPL 62 (6.2.1965) B58

i. Cederlind L 90 (autumn 1990) 19      -      -      -

j. Superior Galleries (1993) 1675      16,60 g      -      -

[*O (a-d)*: flaw behind head. (*f*): r., diagonal flaw from nose to edge.

*R (a-d)*: flaw at end of prow, dots on r. foot. (*f*): flaw behind head; also, flaws above and on r. end of prow, between r. arm and main figure; below, l. and r., beneath foot. Bow larger].

O No	R No	Provenance	Weight	Axis	Diameter
210.	O35 R 201	a. Sotheby (20.5.1986) 53; ex Hamburger (21.11.1910) 140	-	-	-
		b. MMAG L 309 (1970) 160; ex Kricheldorf 4 (7.10.1957) 160	16,71 g	-	-
		[O (a): flaw beside head, a little higher than wreath. (a-b): flaws off nose. R (a): flaw l. of end of prow].			
211.	O35 R202	a. Glendining (2.1983) 39	-	-	-
		b. Numismatica Ars Classica, Auction A (27-8.2.1991) 1373	17,06 g	-	-
212.	O35 R203	a. Royal Ontario Museum, 5	16,26 g	12 h	3,12 cm
		b. Aufhäuser 8 (5-6.10.1993) 61; ex Aufhäuser 7 (7-9.10.1992) 44	17,22 g	-	-
		c. MMAG 66 (22-3.10.1984) 80	17,03 g	-	-
		d. G. Hirsch 162 (8-10.5.1991) 180; ex NFA 20 (1988) 683	16,83 g	-	-
		d. NFA 5 (23-4.2.1978) 88	17,13 g	-	-
		e. NFA 25 (29.11.1990) 192	16,80 g	-	-
		f. Classical Coins 26 (11.6.1993) 256	17,06 g	-	-
		[O (a): flaw on neck. R (a): flaw on r. foot. ΩΣ floating].			
215.	O35 R204	<i>R as V121</i>			
		a. Schulten L (8.1989) 22	-	-	-
		b. NFA 35 (1988) 33; ex NFA 30 (1992) 59 (16,99 g)	16,93 g	12 h	-
		<i>O: Similar.</i>			
		<i>R: Prow and Apollo figure larger. Apollo archaising.</i>			
216.	O35 R205	a. Gans (1960) 259; ex Kricheldorf 2 (28-9.5.1956) 993	17,00 g	-	-
		b. NFA 25 (29.11.1990) 193	16,74 g	-	-
		c. Cahn (26.11.1930) 1246	17,10 g	-	-
		[O (a): flaw behind head and in front of nose. R (a): monogram recut].			
217.	O35 R206	a. Münzzentrum 47 (10-12.11.1982) 44	16,27 g	-	-
		b. Sotheby (20.12.1920) 98	16,84 g	-	-
		[O (a): l., scratches along hair. Flaw off nose].			



The bulk of the 'Poseidons' from this period are signed with monogram 25, which runs throughout this series. The chronological distance between the burial dates of the hoards with Poseidons and the beginning of this series thus confines the distinction of particular groups through the different types of wreaths, which occur on the obverses, the posture of Apollo and the type of the prow on the reverse. In fact, only a vague *terminus ante quem* c. 225 BC is broadly established through the specimens from these groups, which occur in hoards. Thus a wreath made of reeds with five side branches on Group 36 is combined with smaller figures of Apollo, naturally leaning on the small prow. This type of wreath gives way to that with side branches twining around the main branch, which ends in a *thyssanos* in the next group and with taller Apollos on the reverses, leaning on larger ships. Group 38 is characterised by larger modules, decorated by dotted borders on the obverse, and a circular die break beside the head of Poseidon facilitates the arrangement of the obverses. A different type of wreath is introduced with Group 40. This wreath type is characterised by a reed twining around the main branch, which ends in a *thyssanos*.

## 6.0 Period IV: Antigonos Doson (229- 221/0 BC)

### 'Expressive Style'

New financial requirements emerged from the multiple military fronts, both in the North and in the South, created for Makedonia after the unexpected death of Demetrios II. Parallel to the Dardanians' invasions from the North, the Aitolians and the Boiotian and Phokian League took advantage of the temporary *vacuum* of power in Makedonia. The Aitolians therefore temporarily annexed Thessalian areas to the Aitolian League<sup>1</sup>, while the Boiotians, who had already shown signs of independence from Makedonia<sup>2</sup>, and the Phokians jointly made an alliance with the Achaian League in Central Greece, at a time when the Kleomenean war (late 229/8 BC) between Sparta and the Achaian League was raging in the Peloponnese<sup>3</sup>. The infant Philip (V), the legitimate heir to the Makedonian throne, was therefore temporarily substituted by the nephew of Gonatas, Antigonos Doson, who was appointed ἐπίτροπος of the young king and στρατηγός, in order to tackle effectively the diverse challenges to the Makedonian realm<sup>4</sup>.

The new Makedonian ἐπίτροπος is credited with the first significant naval enterprise in the East undertaken by the Antigonids after Gonatas, the Karian expedition (227-5 BC), presumably subsequent to his firm establishment in Makedonia and despite the newly founded Roman protectorate on the Adriatic coast<sup>5</sup>. Even though the itinerary of this trip is well documented<sup>6</sup>, its motives are obscure. Countering Ptolemy III in the Aegean, an agreement between Attalos and Doson for the division of the Seleukid possessions in Asia Minor, a *coup d'arrêt* to the expansion of the kingdom of Pergamon and the creation of bases in Karia have all been considered, but none is firmly supported by the surviving documentation<sup>7</sup>. Even if the Karian expedition did not entail Doson's solid establishment in Karia, this was admittedly the last ambitious Makedonian maritime enterprise in the East.

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<sup>1</sup> Just. 28.3.14. F. W. Walbank, 'Antigonos Doson (229-221 B.C.)', in Hammond-Walbank, *Macedonia III*, 338-40, with earlier bibliography.

<sup>2</sup> Thespieae and Thebes had already given loans to Athens, for her liberation: *IG VIII.1737-8*, 2405-6: F. W. Walbank, 'Antigonos Doson (229-221 B.C.)', in Hammond-Walbank, *Macedonia III*, 341, n. 4.

<sup>3</sup> Plb. 1.13.5, 2.46.1-7, 2.56.2.

<sup>4</sup> Liv. 40.54.5; Athen. 6.251 d; Paus. 2.8.4, 6.16.3, 7.7.4, 8.8.11; Plb. 20.5.7. Plut. *Aem.* 8.3: ἐπίτροπον καὶ στρατηγόν.

<sup>5</sup> Plb. 20.5.11: τὸν προκείμενον ἐτέλει πλοῦν εἰς τὴν Ἀσίαν; P. Trog. *Prol.* 28: ...in Asia Cariam subiecit. Cf. chapters 1.2, 2.4.3-4.

<sup>6</sup> On Doson's itinerary, see F. Walbank, 'Antigonos Doson (229-221 B.C.)', in Hammond-Walbank, *Macedonia III*, 343-4; Le Bohec, *AD*, 327-35.

<sup>7</sup> A more detailed discussion in Le Bohec, *AD*, 336-42, with earlier bibliography.



The end of this expedition permitted to Antigonos to turn to the Peloponnese, in order to organise an interstate alliance between Makedonia and the Achaian, Epeirote, Phokian, Boiotian, Akarnanian and Thessalian Leagues (224 or 223/2 BC). This was a new version of the Hellenic League set up by Antigonos I and Demetrios I in 302 BC, serving as the basis for Makedonian control of Greece<sup>8</sup>. It is this alliance, along with the military defeat of Cleomenes of Sparta at Sellasia (222 BC), that consolidated the realm bequeathed to Doso's successor, Philip V<sup>9</sup>.

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Financing the military operation of Doso's short reign presumably required the use of old and the minting of new coinage. To the old individual tetradrachm types in the name of Antigonos are now added fractional denominations, drachmae of Attic weight and a silver pentobol, that is, a drachma of Egyptian weight, which is obverse linked to the Attic drachmae. The introduction of fractions has been related above with the financial requirements of the Karian expedition in Asia Minor, where silver drachmae were extensively utilised in everyday transactions (chapter 2.4.4).

The distinction of these tetradrachm groups from those of the third period of Antigonid coinage remains tentative, as it is primarily based on stylistic criteria and on their presence in hoards, and as some groups of the third period may be potentially added to it, thus proving a prolific coin production under Doso. The winged helmet symbol I., linking these silver drachmae with the first two groups of Pan head tetradrachms, favours the assignation of these two groups to the time of the Karian expedition. The stylistic similarity of the obverses of these groups to the following nine groups may be taken to suggest the chronological proximity between these two issues, which we have been tempted to date to the time of Doso. A late date for these groups is confirmed by their presence in hoards from the 220s BC: The earliest hoard with this variety is *Thesprotia*, 1992, which is dated to 227-5 BC. *Sophikon*, 1893, with Antigonid silver drachmae carrying a winged helmet symbol I. on the reverse, is also late (fig. 19; cf. chapter 2.3, fig. 9).

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<sup>8</sup> Plb. 2.54.4, 4.9.4.

<sup>9</sup> On the battle at Sellasia, see Plb. 2.54.5-71; 2.22.5; 20.5.12; Plut. *Cleom.* 23-32.1; *Arat.* 45-56; *Philop.* 6; Tacit., *Ann.* 4.43.4. For a more detailed account of this period, see, for instance, J. Briscoe, 'The Antigonids and the Greek States, 276-196 BC', in Garnsey-Whittaker, *Imperialism*, 145-57.

**Pan 4D**

NO.	HOARD	CAT. NO	GROUP NO	OBV. NO	MON. NO/LETTERS
1a	Kassandreia, 1985/7	4a	2	01	KT
1b	Kassandreia, 1985/7	13a	2	04	KT
2a	Thesprotia, 1992	8a	2	03	KT
2b	Thesprotia, 1992	13b	2	05	KT
2c	Thesprotia, 1992	22a	5	10	TI
2d	Thesprotia, 1992	25a	5	10	TI
2e	Thesprotia, 1992	27a	5	10	TI
2f	Thesprotia, 1992	42	10	12	11
3	Hija se Korbit, 1982	35a	7	10	11
4	'Pisidia', 1963	48a	11	13	11

**Pos 4D**

NO.	HOARD	CAT. NO	GROUP NO	OBV. NO	MON. NO/LETTERS
5	Syria, 1959	50	12	14	25
6	Syria?, 1962	61	16	18	(trident- mon. 22)
7	Oylum Höyüğü, 1989	62a	16	18	(trident-mon. 22)

**Zeus D**

NO.	HOARD	CAT. NO	GROUP NO	OBV. NO	MON. NO/LETTERS
8a	Sophikon, 1893	66a	18	20	TI
8b	Sophikon, 1893	68f	18	20	TI
8c	Sophikon, 1893	72	18	20	TI
9	Drama, 1989	66c	18	20	TI

Fig. 19. Period IV: Silver Specimens [Tetradrachms (4D), Drachmae (D)] in Hoards.



Weight (g)	P a n 4 B s												P o s						Weight	De no mi na tions	AB	
	1	2	3	4	5	6	7	8	9	10	11	AB	12	13	14	15	16	17				AB
178-1776																				435-431		
1740-1766 <sup>h</sup>																				430-426	1	1
173-1726	1											1								425-421	1	1
1725-1721																				420-416		
172-1716													1			1			2	415-411	2	2
1715-1711	1	1			2							4	2				1		3	410-406		
171-1706	4	1	2	2	3		1		1			14	5	1			1	1	8	405-401		
1705-1701	1	2	1	2	2	2	1	1				12	2	1	1	1	1	1	7	400-396		
170-1696	4				3							1	8	3			1	1	5	395-391	3	3
1695-1691		1						1	1	1		4	2					1	3	390-386	2	2
169-1686	6											1	7							385-381	3	3
1685-1681	3											2	5							380-376	2	2
168-1676	1												1							375-371	3	3
1675-1671	1				2								3							370-366	1	1
167-1666	1												1							365-361	2	2
1665-1661												1	1							360-356	4	4
166-1656																				355-351		
1655-1651																				350-346		
1650-1646							1	1					2							345-341	1	1
1645-1641																				340-336	1	1
1640-1636																				335-331		
1635-1631											1		1							330-326		
163-1626																				325-321		
1625-1621																				320-316		
162-1616																				315-311		
1615-1611																				310-306		
1610-1606																				305-301		
1605-1601														1					1	300-296		
160-1596												1	1							295-291	2	2
1595-1591											1		1							246-241	1	1
1585-1581																						
1555-1551																				Specimens	29	29
1530-1526																						
1495-1490																						
143-1426																						
1425-1421				1									1									
1390-1376												1	1									
Specimens	1	23	4	4	11	6	3	3	2	9	2	68	16	2	1	3	4	3	29			

Fig. 20. Period IV: Weight Table.

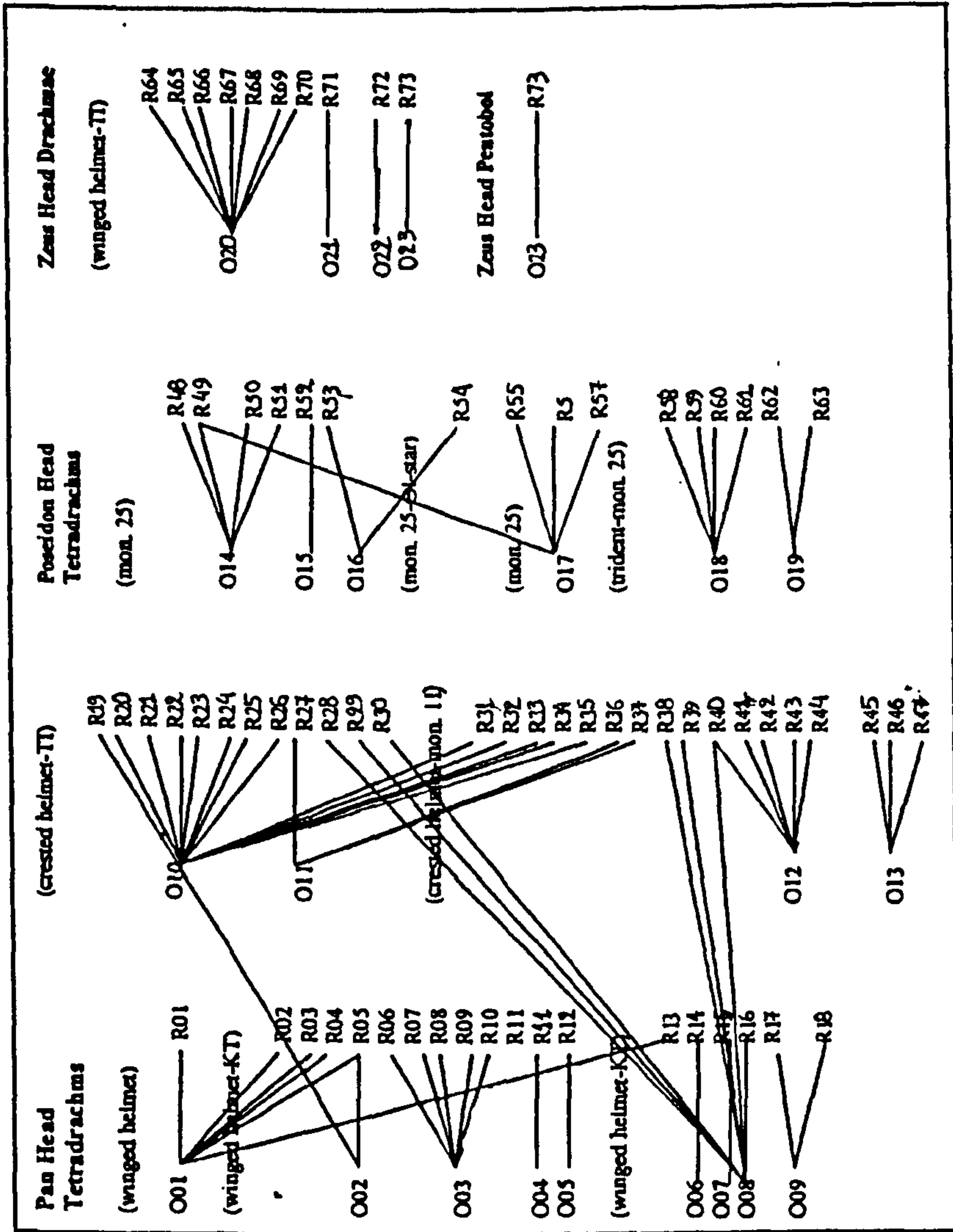


Fig. 21. Period IV: Diagram of Die Links.





O No	R No	Provenance	Weight	Axis	Diameter
		<i>R (a):</i> flaw from upper end of coin towards head].			
3. O01	R03	a. Münzzentrum 67 (7-9.11.1989) 1339; Müller 58 (3-4.6.1988) 37	16,90 g	-	-
4. O01	R04	a. Kassandreia, 1985-7: <i>CH VIII</i> (1994) 322, pl. 39.3	-	-	-
5. O01	R05	a. G. Hirsch 176 (19-20.11.1992) 168	16,76 g	-	-
		b. Münzzentrum 67 (7-9.11.1989) 1340; ex Schlessinger (4.2.1935) 778 (17,00 g)	16,97 g	-	-
		c. Καραμήτρου-Μεντεσιδη, <i>Βόιον</i> , pl. 34	-	-	-
		[ <i>O (a)</i> ]: flaw on lower badge, off 'unit' 5. <i>R (a-b)</i> : flaw from field (5 h) to centre of chiton; worn r. Horizontal breaks from l. to neck and to l. badge accordingly; ( <i>a-b</i> ): flaw from below (7 h) to lower badge.			
6. O02	R05	<i>O: Differences in nebris binding, upper hair locks, pedum shape, dot on edge of nebris.</i>			
		a. Berlin; ex Knobelsdorf	16,99 g	12 h	-
		b. ANS 1948.78.1	17,07 g	12 h	-
		<i>O: No wrinkles on neck; neck locks more curved; dove-tail pleat edges. In field r., Alpha without vertical bar. Hair arranged in two rows. Pedum with many dots.</i> <i>R: Athena steps on l. leg; folds richer, middle fold longer.</i>			
7. O03	R06	a. ANS 1977.158.169	17,09 g	12 h	-
		b. Peus 265 (1963) 272; ex Cahn 65 (15.10.1929) 129; ex Cahn 60 (2.7.1929) 460	17,30 g	-	-
		c. Superior Galleries (1987) 300	16,81 g	-	-
8. O03	R07	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 44)	16,73 g	11 h	-
		b. Berliner Münz-kabinet 9 (29-30.11.1979) 27	16,88 g	-	-
		c. Künker 23 (30.9-2.10.1992) 43	16,88 g	-	-
		[ <i>O (c)</i> ]: countermarked: caduceus or Φ].			
9. O03	R08	<i>R: Helmet with long and thin crest ends, very short cheek flaps. Letters regular and small.</i>			
		a. ANS 1944.100.13852	17,11 g	11 h	-
		[ <i>O</i> : flaws on badge, under drapery and between <i>pedum</i> and inner badge circle, between badge circles].			
10. O03	R09	a. Lanz 14 (18.4.1978) 60	17,01 g	-	-
		b. Gorny 78 (13.6.1996) 111	16,89 g	-	-



O No	R No	Provenance	Weight	Axis	Diameter
11.	O03 R10	a. Lanz 38 (24.11.1986) 243	17,06 g	-	-
		b. Schulten (27-9.3.1990) 79; ex Schulten (20-1.10.1988) 126	16,87 g	-	-
12.	O04 R11	a. Kassandreia, 1985-7: <i>CH VIII</i> (1994) 322, pl. 39.4	-	-	-
		b. <i>SNG Ashmolean</i> , 3261	17,06 g	12 h	3,05 g
		c. BM R.P.K., A	16,72 g (p)	4 h	-
		d. Coin Galleries (19.11.1973) 187	16,96 g	-	-
		[O (a-c): die break on edge between badge and 'unit' 2. Start of flaw on badge, r.]			
13.	O05 R12	a. Bartholt-Baudey (22-23.6.1983) 76 (16,84 g); ex Monetaarium 38 (4.1982) 60 (16,93 g); ex Coin Galleries 3.3 (1962) C31 (16,93 g)	16,84 g	-	-
		b. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 43)	16,68 g	11 h	-

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**Crested helmet l.**

**Crested helmet l. - KT r.**

O No	R No	Provenance	Weight	Axis	Diameter
		<b>Group 3</b>			
		Specimens: 4		Obverses: 3	
		Die combinations: 3		Reverses: 3	
14.	O01 R13	<i>R: legend characters larger.</i>			
		a. Jenkins, 734; <i>SNG Manchester</i> , 734	17,04 g	5 h	-
		b. JNFA 1.2 (2-3.1971) 274	17,01 g	-	-
		[O (b): development of flaw from upper badge, r., and on spaces 2, 4, 6].			
		<i>O: Spaces tend to become semi-circular. Eight-rayed, relief stars.</i>			
		<i>R: Similar.</i>			
15.	O06 R14	a. ANS 1967.152.210	16,92 g	12 h	-

O No	R No	Provenance	Weight	Axis	Diameter
16.	O07 R15	a. Elsen L 134 (7.1991) 46; ex Elsen L 173 (7.1995) 37; ex Elsen 32 (11.12.1993) 54; ex Elsen L 138 (12.1991) 49; ex Elsen L 129 (1.1991) 21	17,09 g	-	-
		[NB: no die links: forgery?].			
		***      ***      ***			
		<i>O: Similar.</i>			
		<i>R: Similar.</i>			
		<b>Group 4</b>			
		Specimens: 4		Obverses: 2	
		Die combinations: 3		Reverses: 3	
17.	O08 R16	a. <i>SNG BYB</i> , 357	17,05 g	3 h	-
		[Overstrike, undertype uncertain].			
		<i>O: Head smaller, not carefully engraved: hasty production?</i>			
		<i>R: Heavy fall in middle. Medium-sized, regular legend characters. Oval shield, held upright, helmet with very short cheek flaps. In exergue.</i>			
18.	O09 R17	a. Münzzentrum 47 (10-12.11.1982) 43	17,06 g	-	-
		[ <i>O (a)</i> : horizontal flaw from tie to 'unit' 6].			
19.	O09 R18	<i>R: Helmet with one cheek flap in middle of bowl.</i>			
		a. Cahn 68 (26.11.1930) 1247	14,23 g	-	
		b. Seaby-Glending (1-2.12.1927) 296; Ratto (4.4.1927) 731	17,10 g	-	-
		[ <i>O (a)</i> : flaws off 'unit' 2 and off nose].			

Ten obverse dies are combined with various reverses, yielding forty-one specimens signed with the letters KT. The winged helmet, with which the first two groups are signed, also occurs on the silver fractional denominations of this period and on bronze specimens of the Athena/Pan with trophy and of the shield/helmet type. The letters KT r. on the reverse also occur on a group from the third period. The order of the letters, as opposed to the letters TI, might either represent a single official or betray the co-operation of two different officials signing with these initials, K and T. It is remarkable that specimens from this variety are absent from earlier hoards. Their presence



in *Kassandreia*, 1985-7 and in *Thesprotia*, 1992 confirms an issue date for these coins around 225 BC.

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**Crested helmet L – TI r.**

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: As above.</i> <i>R: Athena tall, shield large. Helmet with very short cheek flaps. Medium legend characters.</i>			
		<b>Group 5</b>			
		Specimens: 12	Obverses: 2		
		Die combinations: 8	Reverses: 8		
20.	O02 R19	a. Myers 1 (18-19.11.1971) 89; ex Coin Galleries MBS (25.11.1969) 1036	17,02 g	-	-
		b. Classical Numismatic Review 19.3 (1994) 51	17,07 g	-	-
		[O (a): flaws on spaces 4-7].			
21.	O10 R20	a. Berlin; ex Löbbecke	17,11 g	1 h	-
22.	O10 R21	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 10)	17,065 g	11 h	-
		b. <i>SNG BYB</i> , 359	17,02 g	11 h	-
		[O (b): die break on badge circles, off 'unit' 1, on spaces 2 and 3. R (b): l., flaw beneath A and r., beneath TI].			
23.	O10 R22	<i>R: Similar, shield upright; pleats longer. Letters small, regular. Middle fall shorter.</i>			
		a. MMAG L 329 (11-12.1971) 170	17,14 g	-	-
		b. Künker 26 (9-11.3.1994) 108	17,00 g	-	-
		[O (a): flaw on space 5].			
24.	O10 R23	a. Aes Rude (3-4.11.1978) 140	-	-	-
		b. Superior Galleries, Chicago International Coin Fair (5.1980) F61, 150	17,00 g	-	-
		[O (b): development of existing flaws; horizontal flaw on space 4. R (b): l., above legend, worn; flaw l. of legend letters. Flaw between l. pleat and <i>chiton</i> ].			

O No	R No	Provenance	Weight	Axis	Diameter
25.	O10 R24	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 12)	16,73 g	11 h	-
		[ <i>O (a)</i> : diagonal flaw on space 6].			
26.	O10 R25	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 11)	16,75 g	11 h	-
		[ <i>O (a)</i> : flaw from space 3 to space 4. Flaw between crescents of 'unit' 3].			
27.	O10 R26	a. Spink-Taisei 241 (1992) 20	16,96 g	-	-
		[ <i>O (a)</i> : diagonal flaw across badge circles through 'unit' 3].			
		***      ***      ***			
		<i>O</i> : Similar.			
		<i>R</i> : Similar.			
		<b>Group 6</b>			
		Specimens: 5		Obverses: 2	
		Die combinations: 4		Reverses: 4	
28.	O11 R27	a. Drouôt (6-8.2.1956) 347	17,03 g	-	-
		[ <i>O (a)</i> : flaw on nose.			
		<i>R (a)</i> : between helmet and Athena, vertical flaw on knee].			
29.	O08 R28	<i>R</i> : Figure and legend letters elaborate.			
		a. CBNC 5680	17,10 g	11:30 h	3,08 cm
		b. <i>SNG BYB</i> , 358	17,05 g	11 h	-
		[ <i>O (a)</i> : more worn than no. 40. Development of flaws on spaces 1 and 3. Flaw off nose. Scratch on face].			
30.	O08 R29	a. MMAG 54 (26.10.1978) 195	17,08 g	-	-
		[ <i>O (a)</i> : development of flaw off nose. Also, on spaces 1-3 and 5.			
		<i>R (a)</i> : signs of flaw from upper end towards face].			
31.	O08 R30	a. Spink USA 4 (10-11.11.1983) 534; ex Phillips (18.6.1981) 53; ex RCCA-SSCC (1980) 2113	17,07 g	-	-
		[ <i>O (a)</i> : on badge, diagonal flaw off <i>pedum</i> . Flaw on space 3].			

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O No	R No	Provenance	Weight	Axis	Diameter
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*O: Similar.*

*R: legend letters larger, irregular. Athena small, middle fall starts from high up.*

*The l. pleat slightly longer. Helmet small, with short cheek flaps and long thin crest.*

*Rich folds.*

**Group 8**

Specimens: 3

Obverses: 1

Die combinations: 2

Reverses: 2

37. O11 R36

a. SNG BYB, 351

17,06 g

12 h

-

b. Thesprotia, 1992 (Touratsoglou, *DM*, no. 40)

16,925 g

1 h

-

[*O (a)*: die ready to break on inner badge circle, off space 2. (*b*): flaw on spaces 2-3; also, off nose and off chin.

*R (b)*: flaws: between legends and edges, under exergue.

*NB (b)*: module larger].

38. O11 R37

a. Münzzentrum 53 (13-15.11.1984) 1527 17,02 g - -

[*O (a)*: flaw between 'unit' 1 and internal badge circle; also, on spaces 2, 4.

*R (a)*: flaw between A and l. edge].

*O: As above.*

*R: Similar.*

**Group 9**

Specimens: 2

Obverses: 1

Die combinations: 1

Reverses: 1

39. O08R38

a. NFA 16 (29.3.1985) 146; MMAG 18 (21-2.9.1989) 619

17,03 g

b. Proschowsky (6-9.3.1970) 571

16,94 g

-

-

[*O (a)*: signs of flaws on spaces 3-4.

*R (b)*: flaw across B; l. up, scratches; r., erasure].

\*\*\*      \*\*\*      \*\*\*

*O: As above.*

*R: Similar.*

**Group 10**

Specimens: 10

Obverses: 2

Die combinations: 7

Reverses: 7

40. O08R39

a. G. Hirsch 123 (20-3, 26-8.1.1981) 2065; ex Rosenberg 64 (19.6.1928) 1426 (17,10 g)

16,95 g

-

-

b. Oldenburg 34 (3.1988) 33

-

-

-

[*O (a)*: progression of flaws. (*b*): badge pierced up l.

*R (b)*: l., flaw].



O No	R No	Provenance	Weight	Axis	Diameter
41.	O08 R40	a. Kress 137 (1966) 175	16,00 g	-	-
42.	O12 R41	a. Thesprotia, 1992 (Touratsoglou, <i>DM</i> , no. 32)	16,32 g	3 h	-
43.	O12 R42	a. G. Hirsch 157 (24-6.2.1988) 90 [O (a): flaws on spaces 4-5, 7].	16,88 g	-	-
44.	O12 R43	a. Schulten 6 (2-4.6.1982) 109 b. Lanz Graz 10 (3.12.1977) 104 [O (a): development of existing flaws, new flaw off nose. O (b): worn; test cuts on R: 11:30 h, 4 h].	16,84 g 16,81 g	- -	- -
45.	O12 R40	a. Peus 292 (25.10-16.11.1977) 5046 b. Hamburger 5 (29.5.1929) 242 [O (a): diagonal flaw from space 2 through 'unit' 1 to 'unit' 7; also on spaces 2-3, 5-7. R (a): very slight difference from previous die combination in the position of the monogram, as opposed to the legend in field, r.].	15,94 g 16,65 g	- -	- 2,85 cm
46.	O12 R44	a. Feuardent (19.12.1921) 89 [O (a): development of flaw off nose; also, from tie to 'unit' 5. Diagonal flaw on space 4, off 'unit' 5. R (a): l., flaw from l. crest to Y].	-	-	-
			***	***	***
<p><i>O: Similar.</i>  <i>R: Similar.</i>  <b>Group 11</b>  Specimens: 3                      Obverses: 1  Die combinations: 3              Reverses: 3</p>					
47.	O13 R45	a. Monetarium L 39 (12.1982) 64 [O (a): horizontal flaw on space 6; diagonal flaw on space 7; flaw on nose].	-	-	-
48.	O13 R46	a. S. Asia Minor, 1963: <i>IGCH</i> 1426 (Boehringer, <i>Chronologie</i> , pl. 26.24) [O (a): development of flaws on and off nose, on space 7].	-	-	-

O No	R No	Provenance	Weight	Axis	Diameter
49.	O13 R47	a. Kurpfälzische Münzhandlung 42 (2-3.6.1992) 154; ex Kress 132 (8.2.1965) 138 [NB: very worn].	17,00 g	-	-

Large heads of Pan with mature features, carrying small, dotted *pedums* occur on the obverses. Plastic stars decorate the shield, the legend letters on the reverse are large and spread over the flan.

The shield 'units' tend to become semi-circular and the distance between the two badge circles is larger. The head of Pan is considerably smaller and more elaborate, with very small horns, and the *pedum* is reminiscent of a sceptre. The arrangement of the hair is such that the main head is separated from its lower r. locks.

Athena on the reverse is of moderate size, with a middle fall starting from her chiton and with stylised folds. The thunderbolt is smaller and the round shield is held diagonally in front of her chest. The crested helmet is characterised by a large bowl, short and thin cheek flaps and a thin crest, whose edges hardly reach the level of the cheek pieces. The legend letters are very carefully engraved. The monogram is small and the diagonal bars are not joined with the vertical ones. A specimen from this variety occurs in *Hija sě Korbit*, 1982, dated to 250-25 BC. A second specimen comes from *IGCH* 1426 from Southern Asia Minor, dated to 210-200 BC (cf. chapter 2.3).

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## PLATED COUNTERFEIT TETRADRACHM, THIRD CENTURY BC

### Crested helmet l. - KT r.

O No	R No	Provenance	Weight	Axis	Diameter
°1.		ANM 6 [disfigured by chisel cut through 'unit' 7 to nose].	13,80 g (pl)	12 h	3,10 cm



## Monogram 25

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O</i>: Poseidon head r., in wreath of marine plants, side branches with buds spring heraldically from main branch. Neck ends in curve. Dotted border.  <i>R</i>: ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ (in two rows), on prow looking l. On prow, Apollo seated l. cross-legged (the r. leg backwards), leaning on his l. hand and holding with his protruding r. hand bow (with string up); his hair behind his ears, with two long locks hanging on chest and on the back of his neck. In field, below l., trident.</p>					
<b>Group 12</b>					
		Specimens: 13	Obverses: 1		
		Die combinations: 4	Reverses: 4		
50.	O14 R48	a. BNF Armand Valton 324	17,15 g	6 h	-
		b. Vedrines MBS (29.12.1990) 10; ex V. Gadoury, Monte-Carlo (13-15.10.1980) 193; ex Syria, 1959: <i>IGCH</i> 1535 (Boehring, <i>Chronologie</i> , 158-61, pl. 17.9); ex MMAG 52 (19-20.6.1975) 132; ex Kricheldorf 8 (2.11.1959) 82			
		c. Tkalec-Rauch (11.1987) 72	17,01 g	-	-
		d. Hess-Leu 28 (5-6.5.1965) 161	17,05 g	-	-
		e. Marseille 1; ex coll. Vermi, 391	16,97 g	11 h	-
		f. NFA 22 (1.6.1989) 462	17,09 g	-	-
		g. Gorny 48 (2.4.1990) 262	16,97 g	-	-
		[ <i>O</i> ( <i>a</i> ): r., flaw. <i>R</i> ( <i>a-c</i> ): l., flaw through to foot; also, up l. ( <i>g</i> ): l., monogram erased beneath feet; flaws beneath monogram].	17,06 g	-	-
51.	O14 R49	a. Elsen 24 (14.3.1992) 94	17,07 g	-	-
		b. Tkalec (26.3.1991) 89	17,17 g	-	-
		c. Bloesch, <i>Winterthur</i> , pl. 72.1624; ex O. van Lennep; Imhoof, Bernhard	17,06 g	7 h	3,19 cm
52.	O14 R50	a. Glasgow: MacDonald, <i>Hunterian</i> , 340, no. 1	17,07 g	8 h	-
53.	O14 R51	a. Hess-Leu 28 (5-6.5.1965) 161	16,97 g	11 h	-
		b. Gorny 44 (3.4.1989) 246	17,11 g	-	-

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**Monogram 25 - TI underneath - Star r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Similar. Hair locks shorter, beard constituted by irregular locks. Wreath composed of five branches, ending in flowers, which are formed by dots. The whole ends in a flower made by many dots. Dotted border.</i>  <i>R: Similar. No star r. Dot/flow on upper flan; surface of coin uneven. Die break on r. upper coin edge. Stuck twice. Prow smaller. Flan larger.</i></p> <p><b>Group 13</b></p> <p>Specimens: 2                      Obverses: 2            Die combinations: 2              Reverses: 2</p>					
54.	O15 R52	a. Leiden 3150	17,08 g	2 h	-
<p>[O (a): flaw off head, l. Flaw (or worn) on nose].</p> <p align="center">***      ***      ***</p>					
<p><i>O: Similar. Hair locks flow downwards. Two little edges on upper lock. Small flows on forehead. Five wreath branches, with two intermediate flowers on middle and on upper wreath. Locks shorter than neck. Dotted border.</i>  <i>R: ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ (in two rows), on prow looking l. Prow more elaborate. Apollo more elaborate, leaning to front, head to front. Legend letters smaller and more regular; floating Omega, 'splayed' Sigma.</i></p>					
55.	O16 R53	a. BM 1896-7-3-193 (Bunbury)	17,04 g	12 h	-
<p align="center">***      ***      ***</p>					

**Monogram 25 - ΘI underneath - Star up r.**

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: As above.</i>  <i>R: Similar.</i></p> <p><b>Group 14</b></p> <p>Specimens: 1                      Obverses: [1-1]            Die combinations: 1              Reverses: 1</p>					
56.	O16 R54	a. Sotheby Zürich (4-5.4.1973) 344	17,03 g	3 h	3,2 cm
<p align="center">***      ***      ***</p>					



## Monogram 25

O No R No	Provenance	Weight	Axis	Diameter
<i>O: Similar.</i> <i>R: Similar.</i> <b>Group 15</b> Specimens: 3 Die combinations: 2				
		Obverses: 1		
		Reverses: 2		
57. O17 R55	a. ANS 1964.79.6	17,05 g	12 h	-
	b. ANS 1966.75.20	17,02 g	10 h	-
58. O17 R56	a. ANS 1948.78.2	17,17 g	12 h	-
59. O17 R57	a. ANS: <i>SNG BYB</i> , 363	17,02 g	10 h	-

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## Trident - Monogram 25

O No R No	Provenance	Weight	Axis	Diameter
<i>O: Poseidon head r., in wreath of marine plants. Dotted border.</i> <i>R: ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ (in two rows), on prow looking l. On prow, Apollo seated l. cross-legged (the r. leg backwards), leaning on his l. hand and holding with his protruding r. hand bow (with string up); his hair behind his ears, with two long locks hanging on chest and on the back of his neck. In field, below l., trident.</i>				
<b>Group 16</b>				
		Specimens: 6		
		Die combinations: 4		
				Obverses: 1
				Reverses: 4
60. O18 R58	a. Glasgow 3	17,07 g	8 h	-
61. O18 R59	a. NFA 41 (6.1992) 77; ex Syria? 1962, 3: <i>IGCH</i> 1531; V11: <i>MMAG</i> 25 (1962) 443	16,96 g	-	-
	b. Coll. Comte de D. (1889) 55	-	-	-
[ <i>O (a)</i> : flaw off nose, between the two lower hair locks.				
[ <i>R (a)</i> : flaws l. and r., respectively off prow and on prow's edge.]				
62. O18 R60	a. Oylum Höyüğü, 1989: <i>TCMAA</i> , 45-49, 81	17,05 g	9 h	2,9 cm

O No	R No	Provenance	Weight	Axis	Diameter
63.	O18 R61	a. BNF de Luynes, 1696	17,05 g (p)	6 h	-
		b. Weber 2190	17,14 g	-	-
		[O (a): flaw between r. hair lock and end of neck].			

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### Letters IE - Trident I. (horizontally)

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Similar, but the distance between the two side locks is different and the wreath branches are shorter.</i>  <i>R: ΒΑΣΙΛΕΩΣ ΑΝΤΙΓΟΝΟΥ (in two rows), on prow looking l. On prow, Apollo seated l. cross-legged (the r. leg backwards), leaning on his l. arm and holding with his outstretched r. hand bow (with string up); hair behind ears, with long lock hanging on chest. In field, below, letters IE in middle, under l. foot; trident l. (horizontally).</i></p> <p><b>Group 17</b></p> <p>Specimens: 3                      Obverses: 1  Die combinations: 2              Reverses: 2</p> <p><i>O: Poseidon head r. in wreath of marine plants with many branches.</i>  <i>R: Similar, letters IE l. beneath prow.</i></p>					
64.	O19 R62	a. Berlin (Imhoof): Imhoof-Blumer, <i>MG</i> , 123.64, pl. D.9; Gaebler, <i>AMNG</i> III.2, 187.4, pl. 33.25	17,07 g	-	-
		b. Brussels 2	17,02 g	4 h	-
65.	O19 R63	a. Leu 13 (29-30.4.1975) 141	16,93 g	12 h	-
		[O (a): flaw off nose].			

Certain groups of the Poseidon variety, carrying elaborate bearded heads with rich hair locks on the obverses, may tentatively be placed at the fourth period of Antigonid coin production. The heads are crowned with wreaths made by a main branch ending in a *thyssanos*; a number of side branches ending in flowers heraldically spring from the main branch, and they become progressively more prominent in Groups 13-17.

The taller figures of Apollo leaning forward are combined with long and elaborate prows on the reverses of Groups 16-17. The legend letters are regular, they do not occupy all



the space available for the legend in the first dies but they tend to become larger in the last groups. Groups 13-15 are characterised by the addition of a star symbol up r. and of letters, TI in Group 13 and ΘI in groups 14-5, beneath the main monogram on the reverse.

The very carefully engraved Groups 16-17, characterised by small flans and carrying a trident symbol on the reverse, are worthy of particular attention. The designs are in high relief and they may be assigned through the rendering of the hair and beard to a later date. The obverse of specimens 64 and 65 is stylistically similar to that on silver pentobols of Kos, dated to the early second century BC (pl. 48.9-11)<sup>1</sup>. Apollo on the reverse is shorter, leaning forward and holding a curved bow. The sea waves depicted on the prow indicate care in the execution of the related reverses. The legend letters are progressively larger and angular, with a 'splayed' Sigma protruding up- and downwards. The letters IE on these specimens may be taken to represent initials of mint officials, the minting date, eponymous archons, or the first two letters of the surname of Antiochos Hierax.

Merker's tentative assignation of the Poseidon head groups carrying the trident symbol to the mint of Korinth is rejected by Boehringer and Touratsoglou, who reassign these groups to Makedonia. Touratsoglou, in particular, associates Group 16 through its control marks with the Pan head tetradrachms carrying a trident and monogram 22 on the reverse<sup>2</sup>. Moreover, he considers the obverse of the same group to be the iconographic prototype for the Poseidon on the Makedonian silver tetradrachms of the first *μερίς* (Poseidon r./Artemis Tauropolos). Merker's tentative date around 224 BC is adopted by Touratsoglou and is not incompatible with the *terminus ante quem* provided by the *Syria? 1962* hoard, dated by Boehringer c. 225-0 BC (chapter 2.3).

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<sup>1</sup> J. Kroll, 'The late Hellenistic tetrobols of Kos', *ANSMN* 11 (1984) 81-117, esp. 83-4.





O No R No	Provenance	Weight	Axis	Diameter
70. O20 R68	a. BM 5762 H.M. 22 (Ticanis 15)	3,74 g	12 h	-
	b. Berlin (Fox)	4,13 g	12 h	-
	c. ANS 672; ex MMAG 19 (5-6.6.1959) 402	3,86 g	-	-
	d. Gorny 62 (20.4.1993) 143	4,25 g	-	-
	d. Berlin; ex Prokesch-Osten	3,61 g	1 h	-
	e. Madrid, DNM XXII/42/41	3,91 g	11 h	-
	f. J. Hirsch 17 (2.1907) 1207	3,93 g	-	-
	[O (a-e): flaw on top of wreath. O (a): cut between hair and back of neck; also, on hair and on wreath (roughly in middle). R (a-e): flaw l. of l. foot; also, r. of r. leg].			
71. O20 R69	a. Berlin; ex Glendining (12.1981) 35; ex Löbbecke	3,73 g	12 h	-
72. O20 R70	a. <i>Sophikon</i> , 1893: IGCH 179 (Svoronos, <i>ibid.</i> , 776)	2,95 g	6 h	1,7 cm
	[O: in centre, test cut].			
73. O21 R71	a. CBNC 3971	4,27 g	9:30 h	1,7 cm
	b. Sternberg 27 (11.1994) 145	4,13 g	-	-
	c. Cahn 8 (14.10.1931) 291	3,82 g	-	-
	<i>O</i> : Bearded head of god r., in wreath from laurel leaves and flowers with three dots. His neck ends in a curve. His nose is curved. The beard locks arranged in four rows. The head spreads beyond the flan. <i>R</i> : ΒΑΣΙΛΕΩΣ r., ΑΝΤΙΓΟΝΟΥ l. of Athena brandishing winged thunderbolt with r. hand and a semi-circular shield held horizontally with l. hand. In field l., winged helmet; r., letters: Π.			
74. O22 R72	a. MMAG L 227 (11.1962) 454	3,71 g	-	-
	b. SNG Lockett 3, 1526	3,38 g	-	-
	c. Weber 2192	3,43 g	-	-
	[O (b): recut off nose. (c): flaw on nose; below, countermark. R (a): flaw above shield. (b): l., flaw. (c): l., flaw on diagonal bars of Alpha; badly cleaned; bad photograph].			
75. O23 R73	a. SNG Cop, 1203	3,60 g	9 h	-
	b. Cahn 4 (1928) 461	3,26 g	-	-
	c. Glendining (2.1958) 1394	-	-	-
	[O (b): diagonal cut across head. R (a): dot beneath r. vertical bar of N, which is shorter].			

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## Silver Pentobols

O No	R No	Provenance	Weight	Axis	Diameter
		Specimens: 2 Die combinations: 1		Obverses: [1-1] Reverses: [1-1]	
76. O23	R73	a. Berlin (Fox) b. Berlin 392/1872 [O (b): worn. R (b): up r., portion of metal flaked off between helmet and legend].	2,46 g 2,27 g (b) (pl)	9 h 3 h	- 1,5 cm

A few silver drachmae in the name of 'king Antigonos', carrying a bearded head on the obverse and Athena Alkidemos I. on the reverse, are associated through the control marks on the reverse, a winged helmet symbol I. and the letters TI r., with the Pan head tetradrachms of this period. The two specimens from *Sophikon, 1893 (IGCH 179)* and that from *Drama, 1989* fix a *terminus ante quem* for these denominations around the 220s BC. For a commentary and for the significance of these drachmae in dating the Pan head tetradrachms, see chapter 2.4.4.



Illustr. 1. Hija se Korbit, 1982 (ex Eggebrecht et al., *Albanien*, 260).

## **7.0 The Context of Production and Transmission: Coinage, Money and the Economy**

A clearer picture of the internal structure of the Antigonid precious metal coinages constitutes the basis for a better observation of their numismatic behaviour within a broader Hellenistic context. The main Antigonid silver tetradrachm types have been distinguished into those with Alexander types and into those with Gonatas' individual designs, 'Pan head on shield' and 'Poseidon head'. Both Gonatas' individual tetradrachm types have been related to financial requirements caused by military enterprises or/and by religious celebrations. Thus the exact dating of the transitional Alexander-type tetradrachms 'of king Antigonos' during the first period of Antigonid coin production remains uncertain, but the introduction of the Pans relates to Gonatas' financial requirements during the Chremonidean war. The iconography of the latter refers to the Celtic invasion of the early 270s. It is only during the third period of coin production that the Poseidon head tetradrachms were introduced alongside the Pan heads, presumably in order to celebrate the culmination of Gonatas' naval aspirations in the Aegean after his naval victory over the Ptolemaic fleet at Andros. Both the Pans and the Poseidons continued to be produced until the reign of Antigonos Doson. They are supplemented by very few silver fractional denominations, an early drachma with the same types as the Pan head tetradrachms, thirty-three drachmae and two pentobol with the head of Zeus on the obverse and Athena Alkidemos I. on the reverse. A few rare transitional Alexander-type gold staters, alongside certain silver Pan head groups, have been defined through their distinct control marks and style as celebratory. The distinctive monogram that runs through most of the Poseidon series might also indicate the launching of this issue on a celebratory occasion. A summary of the gold and silver issues, with a detailed reference to the numbers of obverses and reverses, to the number of die combinations and specimens included in each may be seen in fig. 22.

By contrast to the posthumous Alexander tetradrachms, carrying three control marks on the reverse, the number of control marks on the new Antigonid issues has been limited to one on the transitional Alexanders and to the bulk of the 'Poseidons', and to two on the Pans and on some Poseidon head varieties. Even so, the helmet symbol and certain monograms common on both the posthumous Alexander and the Antigonid silver suggest their consecutive or contemporary production at the main Makedonian mint. In fact, the obverse link and the control marks shared between the transitional Alexander-type tetradrachms in the name of 'king Antigonos' and the Makedonian posthumous Alexanders establish more closely a connection between the posthumous Alexander tetradrachms and the Antigonid issues struck at the main Makedonian mint. In fact, the loose dating of the hoards with these posthumous Alexander varieties allows for the issue of these Alexanders alongside the Pan head tetradrachms and reveals that the Antigonid economy was far more complicated than initially thought.



Thus, in the first place, the economic frame within which the Antigonid gold and silver coins were produced requires definition. In fact, the nature of the royal economy in Hellenistic Macedonia may be better understood in the light of the definition of economy in Aristotle's *Oeconomicus*. Though originally an analysis of the structure of the fourth century BC Persian economy, the text may be applied on a general level to the Hellenistic kingdoms<sup>1</sup>. The royal economy is described as one of the four main types of the economy, δυναμένη τὸ καθόλου, and it is distinguished into the following categories: περὶ <τὸ> νόμισμα, περὶ τὰ ἐξαγωγήματα, περὶ τὰ εἰσαγωγήματα, περὶ τὰ ἀναλώματα<sup>2</sup>. The policy related to coinage (περὶ <τὸ> νόμισμα) encompasses decisions concerning the type of coinage to be validated at a particular moment and the appropriate time for the confirmation of its validity (ποῖον καὶ πότε [τίμιον ἢ εὖωνον] ποιητέον). The 'importations'/'exportations' refer to the appropriate timing for the redistribution of the goods received by the regional administrators (πότε καὶ τίνα παρὰ τῶν σατραπῶν ἐν ταγῇ ἐκλαβόντι αὐτῷ λυσιτελήσει διατίθεσθαι). Finally, decisions on the nature of the expenses at a particular moment and on the form of payment, in coins or goods, are related to royal policy on expenses (περὶ τὰ ἀναλώματα)<sup>3</sup>.

Compared to Aristotle's other types of economy, satrapal, civic and private, the royal economy is described as μεγίστη and ἀπλουστάτη. It is the role of the king as regulator of the (re)distribution of goods that accounts for its simplicity. The royal economy has an effect on the function of the other three types and it is reciprocally affected by their individual functions: in other words, interaction between the four types is inevitable<sup>4</sup>.

The structure of the Antigonid royal economy has been elucidated by the recent discussion of the surviving literary and epigraphic evidence by Hatzopoulos<sup>5</sup>. The Macedonian king is presented in the relevant documentation as an administrator of public property (βασιλικά/*patrimonium*), namely of land (agricultural land, forests, groves), harbour dues and mines<sup>6</sup>. Royal land was often granted to individuals or groups as δωρεά; the mines, the collection of harbour dues and the revenues from the royal land were leased to contractors for a fixed sum.

The bulk of the raw material for the production of the royal precious coinages came from the royal mines<sup>7</sup>, but estimations of the annual income from this are highly speculative.

<sup>1</sup> Martin, *Sovereignty*, 266-70.

<sup>2</sup> Arist. *Oec.* 2.1-2.

<sup>3</sup> Arist. *Oec.* 2.2: περὶ δὲ τὰ ἀναλώματα τίνα περιαιρετέον καὶ πότε, καὶ πότερον δοτέον νόμισμα εἰς τὰς δαπάνας ἢ ἀντὶ νομίματος ὦνια.

<sup>4</sup> Arist. *Oec.* 2.1: ἐπικοινωνεῖν μὲν τὰ πολλὰ ἀλλήλαις ἀναγκαῖόν ἐστιν· ὅσα δὲ μάλιστα δι' αὐτῶν ἐκάστη συμβαίνει, ταῦτα ἐπισκεπτέον ἡμῖν ἐστιν.

<sup>5</sup> Hatzopoulos, *Institutions*, 431-42.

<sup>6</sup> Hatzopoulos, *Institutions*, 433, who also considers in this context the reference in the *Suida*: οὐ τὰ δημόσια τῆς βασιλείας κτήματα.

<sup>7</sup> On the Macedonian silver mines around Damasteion, Mt. Dysoron, Pangaion and Cholomon, see Billows, *Kings and Colonists*, 7; Borza, *In the shadow of Olympus*, 53-5; id., 'The natural resources of early Macedonia', in Adams-Borza, *Macedonian Heritage*, 10-12. Cf. Mathisen, *Silver Coinages*, 114-8, with earlier bibliography; Tarn, *AG*, 187-8, on the royal sources of income. Le Rider speculates that



Through a calculation of the size of the precious coinage in the name of Philip II, G. Le Rider concludes that Diodorus' report that the (annual) income of Philip II from Pangaion (Diod. 16.8.6-7) was 1000 talents is exaggerated. He suggests that the 1000 talents mentioned by Diodorus were not calculated in gold but in silver and that the sum amounts to approximately a hundred talents in gold<sup>8</sup>. This figure in fact tallies with the general agreement that only half of the reported annual income of the entire Makedonian kingdom under Perseus (which was approximately 200 talents) came from the mines. This confirms Mathisen's conventional assumption that the annual royal income from the mines under Gonatas amounted to 100 talents<sup>9</sup>.

Later literary references to royal money (Liv. 45.29.1), and to payments to the king (Liv. 45.18.7, 29.4, 29.11; Diod. 31.8.3), which presumably ended up in the βασιλικὸν ταμειῶν, might also echo earlier economic practices. To the regular royal revenues from taxation, including dues on the transport of goods<sup>10</sup>, may be added casual sources, such as booty shared between the king and his men or taxes on the manumission of slaves<sup>11</sup>. On the other hand, new coinage, in addition to the existing coin supplies, was required to finance military payments, public works and religious festivals. With the exception of certain groups, whose distinct features suggest that they were celebratory, the silver posthumous and transitional Alexanders and the Pans must have generally been meant to finance the military needs of Gonatas<sup>12</sup>. The second tetradrachm type, the Poseidons, may have been meant to mark a special, political or other, occasion (cf. chapters 2.4.3, 7.3).

Admittedly, the use of gold and silver Antigonid issues in transactions within Makedonia is only attested by the presence, in generally large proportions, of Pan head tetradrachms in five hoards, dated between c. 260 and 187-68 BC: *Verge ('Perge'), 1955, Thessalonike, 1978, Kassandreia, 1985-7, Makedonia?, 1927-8, Drama, 1989*. The hoard evidence, however, is not supplemented by any other references to the use of these particular issues within Makedonia. There is admittedly no definition of the issuing authority of the gold coins in the purchase of a house and land in the deeds of sale from Amphipolis dated to the mid-third century BC. This is opposed to the explicit use of gold *philippeioi* in equivalent

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booty and gold imported from Asia Minor were additional sources of income for Philip II: *Monnayage et Finances*, 76.

<sup>8</sup> *Monnayage et Finances*, 75-7. His calculations, however, are based on Carter's equations of estimating ancient coin production, which are not reliable (cf. chapter 7.1).

<sup>9</sup> Plut. *Aem.*, 28.3, cf. Liv. 45.18, 29; Mathisen, *Silver Coinages*, 114-5, n. 62.

<sup>10</sup> Information on taxation on private property under the first Antigonids is drawn from a metric inscription from Beroia, recognising the tax exemption that had been granted on a house since Philip II. A second inscription suggests that the priests of Asklepios were also granted ἀτέλεια, which was extended by the regent Demetrios to the priests of Herakles Kynaigidas in 248 BC: Hatzopoulos, *Institutions*, 433, n. 6, 440.

<sup>11</sup> Hatzopoulos, *Institutions II*, no. 93.

<sup>12</sup> M. Austin, 'Hellenistic kings, war and the economy', *CQ* 36 (1986) 450-66; cf., however, Chr. Howgego, 'Why did ancient states strike coins?', *NC* 150 (1990) 1-25 *contra* M. H. Crawford, 'Money and exchange in the ancient world', *JRS* 60 (1970) 40-8.



transactions of the fourth century BC<sup>13</sup>. As for the silver issues, the references to δημητρίσιοι δραχμαὶ on the accounts of the priests of Beroia from the second half of the third century BC are worthy of particular attention. Rather than denoting specific objects and as there is no need to assign these drachmae to Demetrios I, the δημητρίσιοι δραχμαὶ have been taken to represent the unit of weight valid in Antigonid Makedonia under Demetrios II and thus to demonstrate the role of the king as regulator of values in Antigonid Makedonia<sup>14</sup>. The reference to 'demetrian drachmae' in Makedonian documents is opposed to the τετραῖμα ἀντιγόνεια mentioned in the inscriptions from the Athenian Asklepieion from the mid-250s, where reference is clearly made to objects dedicated to the god and, in that sense, withdrawn from the circulation pool<sup>15</sup>. The δημητρίσιοι δραχμαὶ as a conventionally valid unit of weight in the 230s and 220s, alongside the variegated content of Makedonian hoards with silver issues from the same period<sup>16</sup>, apparently belie the exclusive use of Antigonid issues within the Makedonian realm. They indicate the plurality of the circulation pool in Hellenistic Makedonia instead.

An awareness of the limitations of the evidence highlights the specific economic fields that the numismatic behaviour of the precious metal issues is capable of elucidating. The study of the precious metal Antigonid issues, comprising silver tetradrachms, very few drachmae and a silver pentobol, along with a few gold staters, inevitably confines our scope to large-scale transactions, predominantly state payments. Thus recovering the rhythm of precious metal coin production in Antigonid Makedonia, as well as the range of the distribution of these coins reveal patterns of long-distance (rather than local) exchange during the second and the third quarter of the third century BC.

The rhythm of production of the silver issues in the name of 'king Antigonos' may now be tentatively recovered via a closer observation of the number of obverse dies utilised in every period of the royal coin production. In obtaining a fuller picture of the potential of the Pans and Poseidons to cover financially the needs of the state during the second and third quarters of the third century, our perception of the economic system, of which these types formed part, should be enhanced.

<sup>13</sup> Hatzopoulos, *Institutions* II, nos. 91 (Amphipolis, mid-third century), 31 (Beroia, 239-29 BC). Cf. *ibid.*, nos. 88, 90 (Amphipolis, 350-300 BC).

<sup>14</sup> Hatzopoulos, *Institutions* II, no. 82 I, l. 6, II, l. 14, 21, 40 = *SEG* 40 [1990] 530, with earlier bibliography. Cf. V. Allamani-Souri, *AA* 39 (1984), Meletai 205-31, esp. p. 215-7. Cf. calyx-cups and kylixes inscribed with their weight in Attic drachmae in the 'royal' tomb at Vergina: Andronikos, *Vergina*, 157-9; Price, *Alexander*, 39, n. 1.

<sup>15</sup> Aleshire, *Asklepieion*, 261-3, 269. Cf. chapter 2.4.2.

<sup>16</sup> Ehrhardt, *Studies*, 79.

AV	AR	4D	P e r i o d s																																								D												
Creep	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47							
Specimens	3	4	4																																																				
Dis Combinations	3	2	4																																																				
Observed data	5	1	[1-1]																																																				
Reverse data	3	2	4																																																				
Creep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47								
Specimens	10	1	7	11	9	3	4	1	1	11	2	4	10	4	15	5	11	5	7	19	1	1	2	31	5	3	3	2	2	10	14	1	6	8	1	2	23	1	2	1	2	1	3	1	2	1	7	6	1						
Dis Combinations	8	1	5	6	3	1	2	1	1	6	1	3	5	2	7	3	5	5	4	11	1	1	2	5	1	1	2	1	2	5	8	1	4	6	1	1	13	1	2	1	2	1	1	1	6	1	1								
Observed data	4	1	3	2	1	[1-1]	[1-1]	1	1	[2-1]	[1-1]	1	[2-1]	[1-1]	1	[1-1]	[2-1]	1	1	[1-1]	1	1	[1-1]	1	1	[1-1]	1	[1-1]	1	[1-1]	[2-1]	[1-1]	1	[2-2]	[1-1]	[2-2]	[1-1]	[2-2]	[1-1]	[1-1]	1	[1-1]	1	[1-1]	1	4	1	1							
Reverse data	8	1	5	6	3	1	2	1	1	6	1	3	5	2	7	3	5	5	[4-2]	[11-1]	1	1	[2-1]	5	2	[1-1]	2	[1-1]	2	5	8	1	4	6	1	1	13	1	2	1	2	1	1	1	3	1	1								

		P e r i o d s																				II	
Creep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Specimens	5	10	4	6	4	6	4	1	4	6	2	7	1	2	3	3	11	6	1	1	7	1	3
Dis Combinations	2	7	3	5	3	4	4	1	3	3	1	5	1	2	3	3	4	3	1	1	4	1	2
Observed data	2	[2-2]	3	[2-1]	1	[2-1]	[3-2]	1	1	1	1	[2-2]	[1-1]	[1-1]	[1-1]	1	[2-2]	[1-1]	1	1	[1-1]	[1-1]	
Reverse data	2	7	2	5	3	4	4	1	3	3	1	5	1	1	3	3	4	3	1	1	4	1	2

		P e r i o d s																				III		
Creep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Specimens	3	2	4	6	10	6	13	6	6	16	2	6	7	16	9	2	2	1	10	2	6	48	1	1
Dis Combinations	3	2	4	4	6	5	8	5	3	10	1	4	5	4	3	1	1	1	5	2	2	21	1	1
Observed data	1	2	[1-1]	[1-1]	1	[3-1]	1	[3-1]	[1-1]	[3-3]	1	1	1	[1-1]	[1-1]	[1-1]	[1-1]	[1-1]	[1-1]	1	[2-2]	1	1	[1-1]
Reverse data	3	2	4	4	6	5	8	5	3	10	1	4	5	[4-1]	3	1	1	1	5	2	2	21	1	1

		P e r i o d s																				IV																				
Creep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Specimens	3	2	4	6	10	6	13	6	6	16	2	6	7	16	9	2	2	1	10	2	6	48	1	1																		
Dis Combinations	3	2	4	4	6	5	8	5	3	10	1	4	5	4	3	1	1	1	5	2	2	21	1	1																		
Observed data	1	2	[1-1]	[1-1]	1	[3-1]	1	[3-1]	[1-1]	[3-3]	1	1	1	[1-1]	[1-1]	[1-1]	[1-1]	[1-1]	[1-1]	1	[2-2]	1	1	[1-1]																		
Reverse data	3	2	4	4	6	5	8	5	3	10	1	4	5	[4-1]	3	1	1	1	5	2	2	21	1	1																		

		P e r i o d s																				50																				
Creep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Specimens	1	27	26	4	12	5	10	3	2	10	3	13	2	1	3	6	3	31	2	1	3	6	3	31	2																	
Dis Combinations	1	12	4	3	8	4	5	2	1	7	3	4	2	1	2	4	2	10	1	4	2	4	2	10	1																	
Observed data	1	5	3	2	2	2	[1-1]	1	1	2	1	1	1	2	[1-1]	1	1	1	1	2	[1-1]	1	1	4	[1-1]																	
Reverse data	1	11	3	3	8	4	5	2	1	7	3	4	2	1	2	4	2	10	1	4	2	4	2	10	1																	

Fig. 22. Periods I-IV: Classification of Issues (Summary).



## 7.1 The Rhythm of Production: the Evidence of the Obverse Dies

The number of obverse dies struck in each of the four periods of Antigonid coin production (cf. chapter 2.1), when considered in relation to the known number of specimens, is likely to provide some answers to questions such as, (a) did the silver coinage in the name of Antigonos suffice to finance Makedonia during the second and the third quarter of the third century? And (b) would the issue of the Poseidon-head tetradrachms at the time of Gonatas have been superfluous?

Even though caution has been recommended with regard to calculations of ancient coin production<sup>17</sup>, the Antigonid precious metal coinages provide a sample large enough to allow for credible estimations on the basis of probability theory. They also offer an opportunity to test the accuracy of the formulae generated by the statisticians Carter, Esty and Good, which have been recognised by S. E. and T. V. Buttrey as reliable when applied to large samples<sup>18</sup>.

1. More specifically, with  $d$  = the number of known obverse dies,  $n$  = the number of recorded specimens,  $D$  = the original number of obverse dies, Carter calculates the number of the obverse dies,  $k'$ , with the aid of the following equations:

$$\begin{array}{ll} \text{If } n < 2d, & k' = nd / (1.214n - 1.197d). \\ \text{If } 2d < n < 3d, & k' = nd / (1.124n - 1.016d). \\ \text{If } n > 3d, & k' = nd / (1.069n - 0.843d). \end{array}$$

2. Esty's mathematical revision of the above Carter model has resulted in the following equations, in order to estimate the size of a coinage:

(1) An equal-output estimate ( $k'$ ) is obtained by the equation

$$k' = [k_2 + (n / 2)] / [1 + (n / (2d))] \quad (2),$$

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<sup>17</sup> S. E. Buttrey-T. V. Buttrey, 'Calculating ancient coin production, again', *AJN Second Series* 9 (1997) 113-35, contra F. de Callatay, 'Calculating ancient coin production: seeking a balance', *NC* 155 (1995) 289-311, and F. de Callatay-G. Depeyrot-L. Villaronga, *L'argent monnayé d'Alexandre le grand à Auguste*, Brussels: Cercle d'Études Numismatiques, Travaux 12, 1993; T. V. Buttrey, 'Calculating Ancient Coin Production: facts and fantasies', *NC* 153 (1993) 335-52; id., 'Calculating Ancient Coin Production, II: why it cannot be done', *NC* 154 (1994) 341-52.

<sup>18</sup> 'We agree that the formulae generated by Carter, Esty, and Good on the basis of probability theory can provide credible solutions under the right circumstances, but they are not fruitful in the case of very small samples': S. E. Buttrey-T. V. Buttrey, 'Calculating ancient coin production, again', *AJN Second Series* 9 (1997) 115. Cf. W. S. Esty, 'Estimating the Size of a Coinage', *NC* 144 (1984) 180-3; id., 'Estimation of the size of a coinage: a survey and comparison of methods', *NC* 146 (1986) 185-215. Cf. de Callatay, *Recueil*, vi-ix.

where  $r = n / d$  and  $k_2 = 2n / [r-4+(8r+r^2)^{1/2}]$ .

(2) The approximate confidence equal-output intervals are obtained from  $C_2$ , as follows:

$$C_2 = (d + n / 2) / (k_2 + n/2),$$

where  $C_2$  = output of dies of observed varieties and  $k_2' = k' + n (k'-d)/(pd)$ , with  $p = 2$ .

3. Thirdly, Good's method of estimating the coverage of a sample has been based on the following equations:

$$(a) C' = 1 - (N_1 / n),$$

where  $C'$  = coverage estimator and  $N_1$  = the number of varieties observed exactly once, or

$$(b) C' = 1 - (N_1 / n) + 2N_2 - (2N_2 / (n (n-1))),$$

where  $C'$  = coverage estimator and  $N_2$  = the number of varieties observed exactly twice.

Confidence intervals (based on equal-die outputs) for die-number estimates are given by

$$x = C' \pm (2 / n) [N_1 + 2N_2 - (N_1^2 / n)]^{1/2}.$$

The application of these three methods to the sample of the Antigonid coinage yields the results shown in fig. 23. The obverse dies linking two or more groups of the same period are considered only with the first group and the virtual number of obverses in the other groups are represented in brackets, as follows: [number of obverse dies - obverse dies linked to previous groups].

The figures obtained reveal inaccuracies in Carter's method of calculating ancient coin production, especially with regard to the smaller coin issues. Thus greater faith will be placed in the calculations of the size of the silver tetradrachm issues and, more specifically, in the calculations by Esty and Good based upon the existing sample. The estimated obverse dies, on the basis of the 99 observed for Antigonid silver tetradrachms (75 for the Pans, 24 for the Poseidons) are with Carter's formulae c. 82 obverses for the Pans (with 75 observed) and c. 89 obverses for the Poseidons, of which only 24 have been traced. This disproportionate estimate of obverses of Pans and Poseidons, paired with the inordinately high number of the expected obverse dies of transitional gold staters (294 v. 5 observed) and silver Zeus drachmae (c. 58.9 v. 1 observed), cast doubt upon the validity of Carter's calculations.



Firmly determining the exact duration of the four periods of Antigonid coin production in order to estimate the rate of annual production adds to the conventional nature of these calculations. Bearing this in mind, the 39 obverses estimated via Carter's method for the first period, ranging from 268/7 or 266/5 to between 261/0 and 255 BC, may have been utilised within an average period of nine years. 10.19 obverse dies are assigned to the six years between 252 and 246/5 BC of period II. Finally, approximately 120.38 obverse dies are expected from the 53 obverses of Pans and Poseidons, which have been assigned to the 25 years between 246/5 and 221 BC. The numbers acquired from the estimated annual production for this period are therefore 4.333 obverses for period I; 1.698 for period II; 4.815 for periods III-IV. These numbers, as opposed to the average production of  $\pm 28$  obverses per year estimated with the same method for Philip II<sup>19</sup>, are disproportionate to the increased financial needs created by the military, religious and other activities undertaken primarily by Gonatas. The annual rate of 1.698 obverses for period II, for instance, is as inappropriate for a period of intense military preparations as are the 4.33 obverses per year for period I. These numbers can neither represent the military expenditure in response to the revolt of Alexander of Corinth and the battle of Andros, nor that during the Chremonidean war and the battle off Kos, respectively (see chapters 3, 5). Similarly, the continuous engagement of the Antigonids in warfare in Central and Southern Greece, alongside the Karian expedition undertaken by Antigonos Doson during periods III-IV, would have required larger coin issues than those represented by 4.815 obverses per year. The picture obtained via Carter's formula is partly emended by the results obtained from Esty and Good (fig. 23). However, a comparison with the large amounts of silver required under Philip V<sup>20</sup>, for instance, reveals that the silver required for large enterprises in the late third century BC by far outnumbered the total estimates for the individual silver issues in the name of 'king Antigonos'. Therefore, it cannot be argued that the launching of the second tetradrachm type in the name of king Antigonos was superfluous. As it would be hard indeed to assume the maintenance by the Antigonids of small military and naval units during this period, alternative sources of coin or transaction practices must be considered. Prior to this, the distribution pattern of the hoards with Antigonid issues is worth investigating.

<sup>19</sup> Le Rider, *Monnayage et Finances*, 77; Callataÿ, *Recueil*, 96-104.

<sup>20</sup> A. Mamroth, 'Die Silbermünzen des Königs Philippos V. von Makedonien', *ZfN* 40 (1930) 277-30. Mørkholm, *EHC*, 135-6; N. G. L. Hammond, 'The defeat of the Macedonian army and the Roman settlement (197-196 B.C.)', in Hammond-Walbank, *Macedonia III*, 460-8.

	d	n	Carter		Esty			Good		
			r	k'	k'	C <sub>2</sub>	k <sub>2</sub> '	N1	C'	N2
<b>PERIOD I</b>										
Alex AV s	5	5	1	294.12	0.8182	0.8188	1.164	5	0	0
Alex AR 4D	1	7	7	1.0547	0.9106	1.1993	-0.165	0		0
<b>Pan 4D</b>										
Athens L	32	266	8.3125	33.072	3.4002	1.1754	-19.42	1	0.9963	3
Athens r. 5[5-2]	14	4.6667	6.844	3.377	11.783	1.5139	-2.046	1	0.9396	1
Pan D	1	1	1	58.824	0.9244	0.8182	0.7222	1		0
<b>PERIOD II</b>										
<b>Pan 4D</b>										
Athens L	10	96	9.6	10.192	1.5985	1.157	-6.08	0	1.0004	2
<b>PERIOD III</b>										
<b>Pan 4D</b>										
Athens L, trident	1	3	3	1.2733	6.1067	1.3248	0.0097	0		0
Athens L	12	182	15.167	11.841	0.8338	1.1081	-8.43	1	0.9945	0
Athens r.	2	5	2.5	2.7871	27.225	1.4134	-0.377	0	1.1	1
Athens L, X	1	6	6	1.077	3.3027	1.2222	-0.136	0		0
<b>Pos 4D</b>										
mon. 25	1	4	4	1.1652	1.2222	1.2857	-0.556	0		0
mon. 26 - mon. 10 3[3-1]	18	9	3.231	2.0506	8.6434	1.165	-1.525	0		1
mon. 26 - mon. 12 [-1]	1	1	58.824	9.2593	0.7548	0.8182	1.4444	1	0	0
mon. 26 - M 2[2-1]	9	9	2.2684	1.0253	10.829	1.3769	-0.869	0		0
mon. 26 - mon. 23 [-1]	2	2	1.6234		1.415	1.3333	0.125	0		0
mon 26	15	353	23.533	14.518	0.8182	1.074	-11.69	1	0.9972	0
<b>PERIOD IV</b>										
<b>Pan 4D</b>										
Athens L	14	106	7.5714	14.619	0.7778	1.1881	-7.971	1		0
<b>Pos 4D</b>										
mon. 26	1	21	21	0.972	2.3604	1.0675	-0.332	0		0
mon. 26 - TI, OI	2	3	1.5	4.1958	1.2222	1.2512	0.0985	1		0
trident - mon 23	1	6	6	1.077	1.4526	1.2222	-0.136	0		0
IE - trident L	1	17	17	0.981	0.75	1.0982	-0.305	0		0
<b>Zeus D</b>										
winged helmet - TI	4	33	8.25	4.1373	13.967	1.1764	-2.049	0		0

NB. With [dies also with other varieties - dies exclusively with this variety] in 'd'

Fig. 23. Periods I-IV: Index Ratio (Specimens: Obverse Dies) and Summary of Die Production.



## 7.2 Distribution

The range of the transmission of the precious metal coinages of 'king Antigonos' may also be partly recovered through their distribution around the Mediterranean. The hoards with these coinages ('in chronological order') have been mapped by Y. Touratsoglou, who proceeds to a comparison of the distribution patterns of the silver Pans (*a priori* assigned to 'Gonatas'), the Poseidons (assigned to 'Doson') and the silver coins of Antiochos Hierax. His accompanying remarks may be summarised thus:

(i) The Pans first occur in hoards of 270/60 BC, mainly after 260 BC, from mainland Greece. They continue until the end of the third century. With the exception of two hoards from South Asia, *South Asia Minor, 1976* and *Meydançikkale, 1980*, it is only during the 220s that they first occur in Asia Minor, in the Middle and Near East and Egypt. They continued sporadically to circulate in Syria, in particular, until 138 BC<sup>21</sup>.

(ii) The long circulation of the Pans in Greece contrasts to their rare presence beyond the Balkans, where Gonatas was presumably engaged in military activities. This is explained by the use of later Makedonian posthumous Alexanders in North and Eastern Makedonia. Touratsoglou expands Mathisen's alleged issue of these Alexanders in the early reign of Gonatas by suggesting their continued production until Philip V and the existence of common or similar monograms among Pans, Poseidons and the issues of Philip V, but without any further argumentation<sup>22</sup>.

(iii) Contrary to their rare presence in the Balkans (227-225 BC), the Poseidons are attested in high proportions in hoards of the 220s from the Eastern Aegean and the Eastern Mediterranean. This is presumably because they were meant to finance Doson's Karian expedition of 227-5 BC.

(iv) The Poseidons are contemporary with issues of Antiochos Hierax from Alexandria Troas. The concentration of hoards with the earliest issues of Alexandria Troas and Lampsakos in the Balkans and Asia Minor and of those with the latest issues from Asia Minor and Syria is explained by the transfer of these coins from Karia to the Balkans by the Makedonians, as booty<sup>23</sup>.

Criticism of these suggestions will be focused on the following points:

In the first place, the use of Alexanders in transactions in Thrace and the Danube is indeed a considerable possibility, particularly as the hoards from Verge, Kilkis and Jabukovac (respectively *IGCH* 455, 445 and 447), containing later Makedonian posthumous Alexanders, are probably of a later date (cf. chapters 2.3, 2.4). Moreover, the continuity among these Alexanders, the Pans and the Poseidons, is established through the monograms that they share (cf. chapter 2.2.4). Thus Ehrhardt's assumption based on the absence of silver issues 'of king

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<sup>21</sup> Touratsoglou, *DM*, 76.

<sup>22</sup> Touratsoglou, *ibid.*, 82.

<sup>23</sup> Touratsoglou, *ibid.*, 85.



Antigonos' from Thrace and the Danube that Gonatas had no influence in this area and that he did not recruit mercenaries from Thrace should be treated with caution<sup>24</sup>. Similarly, the alleged absence of Pans in the Black Sea area earlier than the 220s is now offset by an Alexander silver tetradrachm from Mesembria, dated to the mid-3rd c. BC, which was overstruck upon a Pan tetradrachm<sup>25</sup>. The absence of Antigonid issues from Thrace and the Danube might be explained by the application of the closed Ptolemaic monetary system in local transactions during the Ptolemaic presence in Thrace since the late 240s<sup>26</sup>.

The hoards with Pans postdate 260 BC. The reservations against the dating by Touratsoglou of the first lot of the deposition hoard *North of Larissa, 1985* to c. 270 BC and the shift of the date of the *Karditsa, 1985-7* hoard to c. 245-240 BC have been discussed elsewhere (see chapter 2.3).

It is worth noting that the absence of Pans from hoards from Asia Minor contrasts with the recent documentation suggesting Gonatas' presence in Karia in 268 BC<sup>27</sup>. Moreover, it is remarkable that, with the exception of the *S. Asia Minor, 1976* and the *Meydançikkale, 1980* hoard, neither the Pans nor the Poseidons are represented in hoards from Asia Minor between 240 and 220 BC. Furthermore, the return of the Makedonians from Karia *prima facie* might have entailed the arrival of the early issues of Hierax in the Balkans as booty. It certainly does not explain, however, the remarkable rarity of the Poseidons in the Balkans. For, had the Poseidons been meant to finance the Karian expedition, as Touratsoglou argues, one would expect their presence alongside the Hierax issues in most hoards from the Balkans containing these coinages. This, however, is not the case.

The distinction between 'circulation' and 'deposition' hoards (chapter 2.3, fig. 9), alongside the die study of the Antigonid precious metal coinages, reveals that it is the issues of the first period that circulated widely in Asia Minor, the Middle and Near East and that occur in late, most often depositional, hoards. The introduction of the Poseidons can therefore not be determined by the relative wear of the Pans and Poseidons that coexist in Eastern hoards, for the particular Pan head specimens may antedate the Poseidon series altogether (cf. chapter 2.3)<sup>28</sup>.

A more careful consideration of the historical context is likely to elucidate peculiar features of the hoard distribution. The concentration, for instance, of issues of the first two Ptolemies in hoards from the Peloponnese and (in smaller proportions) from Northern Greece

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<sup>24</sup> Ehrhardt, *Studies*, 79-80, who points out that Athenian silver coins are also rare in this region during this period; cf. F. W. Walbank, 'Antigonos Gonatas: The last years (251-39 B.C.)', in Hammond - Walbank, *Macedonia III*, 314.

<sup>25</sup> Price, *Alexander*, 183, no. 1005.

<sup>26</sup> Will, *HPMH I*<sup>2</sup>, 250-61.

<sup>27</sup> See chapter 2.4.2.

<sup>28</sup> Doubts on this criterion for dating the respective types have already been cast by Chr. Ehrhardt: *Studies*, 77-8.



after 246 BC is in stark contrast to the rare presence of issues of Ptolemy III from these areas<sup>29</sup>. This might be taken to indicate the withdrawal of the lighter Ptolemaic tetradrachms from the circulation pool in Greece after the naval defeat of the Ptolemies at Andros and their concomitant retreat from the Aegean (chapters 1.2, 2.4.3, 5). The rare presence of precious coinages of Ptolemy III in the Balkans is thus more convincingly explained than by the alleged arrival of Ptolemaic coins in Greece through commercial transactions, via Karia or through Ptolemaic gifts to the inhabitants of the Peloponnese<sup>30</sup>. Our suggestion is further supported by the fact that, as the hoards involved comprise silver coins on two different weight standards, Attic and Ptolemaic, they cannot reflect the contemporary circulation pool in the given areas. Similarly, the absence of both Pans and Poseidons from hoards from Thrace and Asia Minor between 240 and 220 BC coincides with the general dearth of hoards with silver coins from these areas struck on the Attic standard during this period<sup>31</sup>. This might be interpreted by the expansion of the Ptolemaic practice of 'recycling' silver in Thrace in the late 240s and on the coastal areas of Asia Minor, over which they gained control during the Laodikean war<sup>32</sup>. Therefore, the absence of the Poseidons from Asia Minor before the 220s does not conclusively determine their chronology. In fact, some form of exchange on the Ptolemaic weight standard is attested by the silver Zeus pentobol, identified as an Egyptian weight drachma, coming from the same pair of dies as the silver drachmae struck on the Attic weight standard. This anomalous denomination must have been struck in view of Dason's Karian expedition and indirectly confirms our suggestion (cf. chapter 2.4.4).

Unlike the Antigonid silver tetradrachms, the hoard evidence is not sufficient to reconstruct the distribution of the transitional posthumous gold Alexanders and of the silver Zeus fractions. There survives only a single hoard with a transitional gold stater, *Poteidaia/Kassandraia*, 1984. Two hoards including silver drachmae are also known, *Drama*, 1989 and *Sophikon*, 1893 (cf. chapter 2.3).

By and large, the respective distribution of the Antigonid silver issues predominantly reflects local preferences in transactions. The extensive use of the posthumous later Alexander silver issues in the North perhaps explains, to an extent, the absence of hoards with Pans from this area. Pans, however, are popular in the direct Antigonid realm, that is, Makedonia,

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<sup>29</sup> R. Ashton notes the presence of tetradrachms of Ptolemy III in *IGCH* 175, 179 and 237 from the Balkans: *Review*, 10.

<sup>30</sup> As Touratsoglou, *DM*, 85-6, who invariably identifies all the related hoards as 'circulation' hoards. He notes that 'the individuality of the coinage of the Lagids and their closed economic policy with its well known protectionism of their currency aimed at preventing any mixing of Ptolemaic tetradrachms with others of the Attic standard'. Yet he does not distinguish between the hoards with coins on both standards and those with specimens struck on the same weight standard.

<sup>31</sup> Except *IGCH* 869-71, including royal silver issues. The absence of Athenian tetradrachms from Makedonian hoards during this period has been noted by Ehrhardt: cf. n. 24.

<sup>32</sup> Will, *HPMH* I<sup>2</sup>, 251. On the conquest of Thrace during the Laodikean war (246-1 BC), see *OGIS* 54. Cf. Bagnall, *Administration*, 159-68. On the administration of Asia Minor in the given period, see Bagnall, *ibid.*, 89-116. On the coinage and on its circulation in the Ptolemaic realm, see Bagnall, *ibid.*, 176-212, esp. 210-12.



Thessaly, Epeiros and Eretria. They cluster in the period between 250 and 227 BC and they occur more rarely in depositional hoards between 220 and 190 BC. No hoards are recorded from Southern Greece, despite the Antigonids' engagement in military expeditions in this area throughout this period.

The absence of Antigonid precious metal issues from Egypt is certainly not surprising, as a letter from the Zenon archive reveals that the mint of Alexandria normally restruck foreign coin into Ptolemaic coin for 'foreigners who came here by sea, the merchants, the forwarding agents and others'<sup>33</sup>. As for the Eastern Mediterranean, with the exception of a depositional hoard from the temple of Artemis at Sardeis and of the hoard from Meydançikkale, which presumably reflect the circulation on the frontiers between the Seleukid and the Ptolemaic realms, the Pans are absent from Asia Minor until the 220s. This may arguably have been due to the application of the Ptolemaic practice of 'recycling' silver in the regions the Ptolemies occupied during the second half of the third century, as well as in Egypt itself. The Pans are more consistently represented in hoards after 220 BC, presumably due to the recovery of the area by the Seleukids. Finally, the very worn Pans from the first period in some of these (clearly late) deposition hoards attest the popularity of this type in Asia Minor<sup>34</sup>, despite the *lacuna* in the hoards between the mid-240s and the mid-220s.

The Poseidons' absence from hoards from Asia Minor between the 240s and the 220s may also have been due to the 'recycling' of silver in Asia Minor, the Middle and Near East. Remarkable is their rare presence in hoards from the Balkans, apart from those from Kassandreia, Karditsa and Thesprotia (cf. chapter 2.3). Their recovery in deposition and circulation hoards from Asia Minor, Syria, the Middle and Near East after 220 BC is presumably explained by the recovery of these areas by the Seleukids<sup>35</sup>. Finally, the alleged transport of the issues of Hierax to the Balkans after the Karian expedition does not entail the launching of the Poseidons for the Karian expedition, particularly as the Poseidons are not as extensively represented in hoards of the Balkans as the Hierax varieties. Last but not least, the transfer of these issues to the West must be related to the emergence of Rome in the Eastern Mediterranean<sup>36</sup>.

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<sup>33</sup> P. Cairo Zenon 59022; cf. W. Schubart, 'Die ptolemäische Reichsmünze in den auswärtigen Besitzungen unter Philadelphos', *ZfN* 33 (1922) 74-82; Mørkholm, *EHC*, 104; cf. C. J. Howgego, 'Coin circulation and the integration of the Roman economy', *JRA* 7 (1994) 5-21, for Roman examples. The *Delta*, 1927-8 hoard, dated to the early second century BC, is the only known hoard with Antigonid silver issues from Egypt: cf. chapter 2.3.

<sup>34</sup> Cf., for instance, the *Gordion*, 1961 hoard (chapter 2.3).

<sup>35</sup> Will, *HPMH* I<sup>2</sup>, 256-61.

<sup>36</sup> Touratsoglou, *DM*, 78.



### 7.3 Economic Systems at the Time of the Antigonids

The low annual production rate of silver Antigonid obverse dies (fig. 23) confirms that the volume of the silver Antigonid coinage (Pans and Poseidons) has been exaggerated. It therefore seems that Antigonos Gonatas, Demetrios II and Antigonos Doson did not aim to provide currency for international or large-scale national commerce. In the first place, the fact that the Antigonid silver coins are generally outnumbered by foreign specimens in Makedonian hoards indicates that there has been no attempt to impose a monopoly of Makedonian coinage, as was done from 305 BC in Egypt and in Pergamon, for instance, during the second century BC<sup>37</sup>. Only six of the forty-six recorded hoards with Antigonid silver issues come from Makedonia.

Walbank claims that Makedonian coins were outnumbered by foreign coins in Makedonia, Thessaly and Euboia, while they rarely occur outside these areas. Assuming, however, that the minting of an adequate and reliable silver coinage is an indicator of the prosperity of the kingdom, he concludes that Makedonia was not as wealthy in that period as the other Hellenistic states<sup>38</sup>.

In order to reconcile the limited production of individual Antigonid issues with the intense financial needs of their military (and other) enterprises, it might be worth questioning: is the small size of these issues an indicator of poverty in Antigonid Makedonia? How may the Antigonids have financed their activities, if their individual issues did not suffice for the full coverage of their monetary requirements?

Unless technical difficulties impeded the extraction of silver from the mines, it would indeed be difficult to assign this low minting activity during a period of particularly intense military enterprises to the poverty of the Makedonian state, despite the abundant resources of the primary metal in Makedonia itself. This hypothesis is also incompatible with the Antigonids' demonstration of wealth through dedications to Apollo and through the extensive building programmes undertaken by Gonatas both in Makedonia and at Delos<sup>39</sup>. The covering over by Gonatas of the royal tombs at Vergina and the construction of the portico of his ancestors, paired with his dedication of his flagship to Apollo, the foundation of vase festivals at Delos and with the celebratory issues launched after his naval victories at Kos and Andros, constituted his effective response to similar acts by the Ptolemies (cf. chapters 1.2, 2.4.3).

Indirect ways of meeting military costs, such as booty, taxation from Makedonia and from the Antigonid strongholds in Greece, might *prima facie* have significantly reduced the

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<sup>37</sup> See n. 16.

<sup>38</sup> F. W. Walbank, 'The end of Antigonos' reign', in Hammond-Walbank, *Macedonia III*, 314-5.

<sup>39</sup> On the practice of constructing buildings as a form of accumulation of surplus at controlling Greco-makedonian centres, see G. Shipley, 'Distance, development, decline? World-systems analysis and the 'Hellenistic' world', in Per Bilde et al., *Centre and periphery*, 276. Cf. K. Bringman, 'The king as benefactor: some remarks on ideal kingship in the age of Hellenism', in Bulloch et al., *Images and Ideologies*, 7-24; chapter 1.2.



cost of maintaining the Makedonian army and fleet<sup>40</sup>. It has also been argued that the cities may have financed military garrisons or recruited citizens and even billeted soldiers and officers through citizen households<sup>41</sup>. A more substantial clue to the nature of transactions in Makedonia might be seen in Aristotle's *Oeconomicus*, according to which the king is responsible for the validation of a particular type of coinage and for the selection of the appropriate moment in order to confirm its validity (ποιῶν καὶ πότε [τίμιον ἢ εὖωνον] ποιητέον). The fact that the king is reported to regulate the quality (ποιῶν) but not the quantity (πόσον) of the coinage struck confirms that he did not monopolise coinage<sup>42</sup>. This also raises the suspicion that he not only validated the type of the metal to be minted at a particular moment, but also accepted the use of other, earlier or foreign, coinages within his realm.

It may in fact be argued that the Attic weight standard allowed for considerable flexibility in the acceptance in Makedonia of coinages struck by various issuing authorities from the Greek mainland, the Seleukid empire and the West. This must have been the norm during the *interregnum* and the military tension in the North Balkans during the third century BC: the 'king without a kingdom' must at least until his nomination in Makedonia have utilised coins in the names of others for the payment of troops. The transitional posthumous Alexanders, for one thing, indicate the continued production and use of posthumous Alexander tetradrachms at least until the 260s (cf. chapter 2.4.1). The stylistically divergent heads of Herakles on these Alexanders, the various sizes of the modules on both the Pans and the Alexanders, and the compatibility of the last hoards with these Alexanders of a later date are remarkable (cf. chapters 2.4.1-2). Moreover, the different types of the crested helmet symbol on both issues establish internal links between them and thus render possible their parallel production after the introduction of the Pans. The crested helmet also links these issues with the dated 'anonymous' bronze coins, which have now been allocated to approximately the turning point between the fourth and the third century<sup>43</sup>.

The internal structure of the Antigonid individual silver issues elucidates that of their contemporary silver Alexanders<sup>44</sup>. The silver Antigoni may have been struck parallel to other royal coinages popular in the Balkans and the Black Sea, with which they share control marks. In fact, common monograms among the Antigonid issues, the posthumous Alexanders and those of Demetrios Poliorketes and Lysimachos may be taken to suggest their consecutive or

<sup>40</sup> For the finance of the army, see Le Bohec, *AD*, 310-21.

<sup>41</sup> G. Shipley, *ibid.*, 275; cf. Préaux, *Monde Hellénistique*, 309-10.

<sup>42</sup> Cf. the reconstruction of Gröningen's theory regarding the royal monopoly of coinage in Martin, *Sovereignty*, 266-70.

<sup>43</sup> Katerini Liampi, 'Zur Chronologie der sogenannten 'anonymen' makedonischen Münzen des späten 4. Jhs. v. Chr.', *JNG* 36 (1986) 41-65, pl. 4-6, 2. Price, *Alexander*, p. 116-30.

<sup>44</sup> Common control marks also exist between Makedonian Alexanders and those struck in Asia Minor: G. Le Rider, 'Antiochos II à Mylasa', *BCH* 114 (1990) 543-57.



simultaneous production at Amphipolis<sup>45</sup>. Some posthumous Lysimachi, in particular, may have been struck in the context of the vaguely known military activities of Gonatas in Thrace and the Hellespont<sup>46</sup>. Moreover, the monograms that these three issues share with Antigonal bronze coins might unravel the extremely complicated numismatic pattern in the region. Finally, that the construction of a completely *sui generis* numismatic system was not among Gonatas' intentions is also confirmed by the few Antigonal silver fractions. Their rarity might imply the use of other coinages, silver and bronze, for smaller scale transactions and possibly their introduction for a particular purpose, such as Doso's enterprise to Karia (cf. chapter 2.4.4).

The low production rate of Antigonal coinages is admittedly incompatible with the Antigonids' intense military and other enterprises during the second and the third quarter of the third century BC. It may thus be tentatively assigned to local preferences in transactions, alongside a greater flexibility in the acceptance of other coinages struck on the Attic weight standard. Antigonal practice is also in stark contrast to the remarkable variety and quantity of the contemporary Ptolemaic issues, military, celebratory and other, in gold and silver. The abundant coinage produced by the Ptolemies results from the limitations of the closed Ptolemaic monetary system and predetermines its brief duration<sup>47</sup>. By contrast this indirectly underlines the benefits from the plurality of the potentially exchangeable coinages in a market based on the Attic weight standard, as that of Makedonia, mainland Greece and Asia Minor. Thus Antigonal practice obviously reflects attitudes developed within a cosmopolitan Hellenistic environment, rather than an insufficient use of the mines and the lack of other resources in Antigonal Makedonia.

As for the distribution of the Antigonal precious metal coinages, it may be argued that the well established economic, political and military network between Greece and Asia Minor, based on the Attic weight standard, would ultimately seem to contradict the alleged concentration of the Pans in the Balkans and of the Poseidons in Asia Minor and the East. It is true that the concentration of hoards with Antigonal silver issues in the direct Antigonal realm contrasts with their absence from Thrace and Asia Minor between the 240s and the 220s.

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<sup>45</sup> Mathisen, *Silver Coinages*, 98-9, table 12; cf. chapter 2.2.4. Price assumes (through common monograms) the striking of the silver issues of Kassander and those of Lysimachos at the same mint: *Alexander*, 130-1.

<sup>46</sup> The assignation to Keraunos of the silver Lysimachi with the elephant scalp and the lion head symbols legitimises Gonatas' continuation of posthumous Lysimachi. The *terminus post quem* for these coins (281 BC) coincides with Gonatas' intensified activities in Thrace and the Hellespont prior to his rise to the Makedonian throne: W. Hollstein, 'Münzen des Ptolemaios Keraunos', *SNR* 74 (1995) 13-25. Cf. Mathisen, *Silver Coinages*, 108-9 ('thunderbolt' and 'Triton' Alexanders assigned to Keraunos); Price, *Alexander*, 131, no. 503 (Alexander drachma with thunderbolt, from the reign of Poliorketes, assigned to Keraunos).

<sup>47</sup> Cf. Bagnall, *Administration*, 211-12: 'The many variants and differences noted, especially the cleavage between the monetary zone and the other possessions, must to a large extent reflect the results of Ptolemaic power and its limits. Two questions surely governed the royal decision about treatment of a subject area or city: was it desirable (that is, profitable to the crown) to impose a monetary zone of isolation; and was it possible to do so'.



However, a distinction between 'circulation' and 'depositional' hoards with Antigonid issues reveals that our picture of their representation in hoards has been fragmented by the interaction of diverse economic practices in the periphery of the Antigonid realm. Such was the alleged expansion of the Ptolemaic practice of 'recycling' silver on Thrace, the Danube and on the coastal areas of Asia Minor after the 240s, as a result of their occupation by the Ptolemies. These more 'peripheral' areas show, in this case, what has been termed the 'negative effects of imperial dynamics' in the Eastern Mediterranean<sup>48</sup>.

Some final remarks might be added in regard to the nature of the Pans and Poseidons. Both types have been related to the increased military expenditure in view of Gonatas' enterprises both in peninsular Greece and in the Aegean. It has also been shown that the Poseidons would not have been superfluous to the existing Antigonid coinage. Their concentration in hoards from Asia Minor, the Middle and Near East might not be unrelated to the naval connotations in their iconography, in particular to their reference to naval sovereignty and to Delos.

It has been argued that the new type was introduced in order to celebrate Gonatas' naval victory over the Ptolemies at Andros. Renewing the Antigonid naval tradition after Andros meant not only a demonstration of power analogous to the processions, the honorary coin issues, and the festivals at Delos organised by the Ptolemies. It was also part of Gonatas' repost to the Aitolian policy in the mainland (cf. chapter 2.4.3)<sup>49</sup>. However, this coin issue by far outnumbers the groups denoted as celebratory. Could this have had a particular significance?

It is possible that the Poseidons were minted for the payment of Antigonos' navy after Andros. Given the strong Antigonid naval tradition in Asia Minor stretching back to Monophthalmos and Poliorketes, the distribution of this coinage in the East might be explained by the return of the members of the crew to their homelands. The similarity of Apollo to that on contemporary Seleukid tetradrachms is thus comprehensible.

Alternatively, one may consider this special issue as somehow compatible with the celebrations that followed this second naval victory. This is favoured by the elaborate features of the Poseidons, by the distinct monogram and by the naval connotations of the iconography. It is possible that the second tetradrachm type was periodically struck, on the occasion of the celebration of the Soteria and the Paneia (cf. chapter 2.4.3).

To conclude, the supplementary role of the new coinage in military, religious and other finances and in international markets effectively illustrates attitudes adopted within a

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<sup>48</sup> G. Shipley, 'Distance, development, decline? World-systems analysis and the 'Hellenistic' world', in Per Bilde et al., *Centre and periphery*, 277. Cf. Bagnall, *Administration*, 211.

<sup>49</sup> E. Will, who relates them, though, with Pan's role at Lysimacheia: *HPMH I*<sup>2</sup>, 323.



cosmopolitan Hellenistic environment. It therefore shifts the burden of the impact of the Pans and Poseidons on the large-scale economy primarily to an ideological sphere.

## 8 Concluding Remarks

To recapitulate, the precious coinages in the name of 'king Antigonos' add a missing link to our knowledge of the Makedonian macroeconomy and policy between the Temenid dynasty and the last two Antigonids. The introduction of both their individual silver tetradrachm types, Pans and Poseidons, has been reassigned to Gonatas. Their continued production through to Doson demonstrates a strong sense of dynastic continuity among Gonatas' successors, similar to that in the other Hellenistic dynasties<sup>1</sup>. The dearth of the Antigonid silver issues reveals that they were not utilised predominantly for commerce. This limited exercise by the Antigonids of pro-active economic and administrative control, contrary to the Ptolemies, may be assigned to their use of other precious coinages following the Attic weight standard<sup>2</sup>. It may therefore be argued that the introduction of the Antigonid individual issues was determined by political rather than by economic forces.

Politics (and religion) largely determined the iconography of the individual Antigonid types. In fact, establishing links with the major Greek sanctuaries at Delphi and Delos, the Antigonids aimed at the effective manipulation of local mentalities, in order to ultimately co-ordinate the regional diversities in the Makedonian state and mainland Greece. It has been argued that the first Antigonid tetradrachm type, the Pan head, echoes the Panhellenic defence of the Delphic sanctuary during the Celtic attack of 279 BC, possibly with particular emphasis on Makedonia's role in this as a 'shield' for the Greek peninsula. The participation of Gonatas' troops in the Greeks' collective resistance to the Celts at Delphi, possibly together with his personal victory over the Celts at Lysimacheia, effectively advertised Makedonia as an integral part of the Greek world. Similarly, the resumption of the naval claims of Monophthalmos and Poliorketes and the protection of the Antigonid fleet by Apollo were advertised on the Poseidons, after Gonatas' victorious naval battle against the Ptolemaic fleet at Andros (246/5 BC) and the concomitant decline of the Ptolemaic naval claims to the Aegean.

The emphasis that the Antigonids attached to their Hellenic identity and their demonstration of piety at the two main sanctuaries of Apollo addressed themselves to two main recipients: firstly, the Ptolemies, the main rivals of the Antigonids for control of the Aegean until the emergence of Rome. Secondly, the Greek states, whose control was a prerequisite for the Antigonids' more active engagement in international affairs. The *ex silentio* addressees of these individual types were primarily the Aitolians, who aimed to control Delphi and admittedly played a key role in the

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<sup>1</sup> Cf. chapter 2.1.

<sup>2</sup> For the Seleukids and the Ptolemies, cf. G. Shipley, *ibid.*, 283.



formation of political attitudes towards Makedonia in Central Greece throughout the third and the early second centuries BC.

Creating links with the history of Greek sanctuaries meant the return of the Antigonids to the *mos majorum* set out by the Temenids (especially Philip II). Philip's deliberate iconographic connections with Olympia and Delphi on his gold and silver issues set a direct precedent to this. On the other hand, the motif of the 'Greeks' collective resistance to a barbaric invasion' echoed that developed in Greece after the Persian wars, during the Pentekontaetia (479-31 BC). Under Alexander III, the Persian expedition (and the concomitant departure of the hoplites from the Greek states, as a result of Philip's policy) had effectively minimised the opposition of the Greeks of the mainland to Makedonia. As an aggressive policy of this kind was no longer realistic, Gonatas reverted to the 'defence of Greece from the barbarians' and, at a later stage and to a smaller scale, to the projection of his naval power, continuing the tradition of his ancestors, Monophthalmos and Poliorketes. The adoption of these main lines enhanced his assimilation to the military and political 'debates' in mainland Greece, but it did not firmly establish the Makedonian sovereignty over the old and diverse Greek political entities.

The military themes on the *Pans a priori* relate the bulk of this coinage to military finance, but special gold and silver issues, possibly also the Poseidons, presumably celebrated peaks in the rivalry between Antigonids and Ptolemies for control over the Aegean. There is no need to assign them to a different mint, as various control marks had signed issues of the main Makedonian mint during the *interregnum* prior to Gonatas. Should this mint be located, Amphipolis emerges as the most plausible candidate.

In terms of chronology, a clearer picture of the coinages minted under Antigonos is obtained until Gonatas' naval victory at Andros (246/5 BC). With the exception of certain issues, presumably meant to celebrate this naval victory, it is more difficult to 'render unto Caesar what is Caesar's' between 246/5 and 221 BC, when both types were presumably struck parallel to each other. With regard to the size of the individual Antigonid issues, the calculations based on the existing sample suggest that the individual issues of 'king Antigonos' could not cover all the military activities undertaken by the Antigonids throughout this period. This insufficiency leads us to speculate that the posthumous Alexander silver tetradrachms continued alongside coins in the name of 'king Antigonos', initially with the types of Alexander and later with his individual types. Rather than indicating poverty, this may be taken to reflect the complexity of the *lingua franca* in Antigonid Makedonia during the third century BC. In other words, the bulk of foreign currency in hoards from Antigonid Makedonia and mainland Greece presumably indicates the easy acceptance of foreign money in transactions following the Attic weight standard. This contrasts with the wide range of the

coin issues launched by the Ptolemies during the same period, due to the closed monetary system applied in their realm since 306 BC.

Much needs to be added to the history and the economy of Makedonia and Greece during the third century BC, which is admittedly a period prolific in coinage but not in other forms of documentation. The size of the later Makedonian posthumous Alexanders, for instance, must be calculated and the processes of the incorporation of other coinages in the contemporary economic market remain unexplored. At the same time, a systematic die study of the bronze issues in the name of 'king Antigonos' is desired. The reconstruction of the Antigonid precious coinages from Gonatas through to Dosoan has shown, however, that stability in Antigonid Makedonia was attained through a return to the political and ideological principles set out by the Temenids and reflected on the numismatic iconography. On economic terms, the macroeconomic profile of the Makedonian state was largely prescribed by its full integration into the more flexible market of the Eastern Mediterranean, based upon the Attic weight standard.

Under Philip V and Perseus, the iconographic repertory of the silver coinages was adapted to the *status quo* created by the addition of Rome to the opponents of Makedonia. However, the economic network among Makedonia, Greece and Asia Minor had already paved the ground for the eventual take-over of the Eastern Mediterranean 'periphery' by Rome, the new 'core-like' area.



9 Appendices

9.1 Ancient Imitations

L. Pan Head Tetradrachms

Crested helmet L - Monogram 11 r.

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Elliptic star/crescents, Pan head barbaric and very small. Neck ends in curve. R: Large and irregularly placed legend letters. Athena crude, with diagonal pleats on hem, small figure, monogram 11.</i></p>					
1.		MNM10: Hungary, Mayar Nemzeti, no. 14, Inv. Nr. 7A.1917.6	15,95 g	9 h	-
2.		Spink 71 (1989) 60	14,79 g	-	-
3.		BNF 1381	15,23 g	5:30 h	-
4.		Munich, 2	14,37 g	7 h	-

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II. Poseidon Head Tetradrachms

Monogram 25

O No	R No	Provenance	Weight	Axis	Diameter
<p><i>O: Similar; wreath (/ tainia?) wider, decorated by two knobs of five dots. Head flatter. R: Prow shorter and flatter. Legend letters elegant and elaborate, the edges of Q being high up and distant. Larger distance between bow and string. Apollo archaising.</i></p>					
5.		Hirsch 33, 667	-	-	-

O No	R No	Provenance	Weight	Axis	Diameter
6.		Cahn (27.2.1933) 182; Helbing 3, 2860	15,00 g	-	-
7.		SNG Manchester, 738	16,98 g	12 h	-
8.		a. Hirsch 14 (1905) 310; Cahn 84 (17.11.1933) 260	-	-	-
		b. V315; V184; Cahn 61 (1928) 80	16,20 g	-	-
		[O (a): flaw r. of nose and mouth; also, behind head. Beside Poseidon's head, signs of overstrike. R (a): in field up r., circular object (?): metal flaw between Apollo's l. foot and lower r. edge; on various parts of field, on O and R. Also, beside Apollo, circular badge. Die repaired along horizontal lines that form the <i>embolon</i> of the ship. Two scratches through Apollo's r. arm].			
		<i>O: Similar, but branches with flowers (knobs-five dots), spring from thinner wreath. Dotted border.</i>			
		<i>R: Apollo larger, monogram edges protrude.</i>			
9.		a. Hirsch 58 (1968) 3095	- (b)	-	-
		[O (a): die break starting from eye].			
10.		a. Milan 18	-	-	-
		b. SNG Lockett, 1527; Glendining (12.2.1958) 1395	16,86 g	9 h	-

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## 9.2 Modern Imitations

### L. Pan Head Tetradrachms

O No	R No	Provenance	Weight	Axis	Diameter
1.		Ashmolean, Forgeries collection, Christ Church	12,59 g	12 h	3 cm
2.		R: r., monogram 10. BNF, Forgeries collection [Technique: cast].	12,27 g	12 h	2,9 cm



O No	R No	Provenance	Weight	Axis	Diameter
3.		Ashmolean, Forgeries collection, Christ Church	12,65 g	12 h	3 cm
4.		Ashmolean, Forgeries collection	12,72 g	11 h	3,1 cm
5.		Brussels, Forgeries collection, inv. II 80482 (don Francheschi)	9,73 g	7 h	2,5 cm
6.		George Hill, part I, p. 66, pl. III, 50 [Forger: Becker].	-	-	-
7.		Ashmolean, Forgeries collection [Metal: Mus (silver). Technique: cast].	14,21 g	10 h	3,0 cm
8.		Fitzwilliam [Technique: cast].	14,44 g	11 h	3 cm
9.		Ashmolean, Forgeries collection, Christ Church [Obverse linked to nos. 10-11].	13,13 g	10 h	2,9 cm
10.		Ashmolean, Forgeries collection, Christ Church	12,06 g	10 h	2,9 cm
11.		Ashmolean, Forgeries collection, H. de S. Short Bequest, 1975	13,01 g	10 h	2,9 cm
12.		BNF, Forgeries collection (cast trade 1969, Bartin 1)	-	-	-

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## II. Poseidon Head Tetradrachms

O No	R No	Provenance	Weight	Axis	Diameter
13.		<i>O: Locks of hair.</i> <i>R: Apollo holding bow on prow.</i> BNF, Forgeries collection	-	-	-

O No	R No	Provenance	Weight	Axis	Diameter
		<i>O: Poseidon head r. in wreath.</i>			
		<i>R: Apollo holding bow on prow.</i>			
14.		BNF, Forgeries collection	-	-	-
15.		BNF, Forgeries collection	-	-	-
16.		BNF, Forgeries collection	-	-	-
17.		BNF, Forgeries collection	-	-	-
18.		BNF, Forgeries collection	-	-	-
19.		Ashmolean, Forgeries collection	14,71 g	6 h	2,9 cm



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# *PLATES*



PERIOD I

GOLD WITH TYPES OF ALEXANDER III



SILVER WITH TYPES OF ALEXANDER III





SILVER WITH INDIVIDUAL TYPES



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PERIOD II

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PERIOD III

SILVER WITH INDIVIDUAL TYPES



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PERIOD II (61-63) - PERIOD III (1-8)





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PERIOD IV

SILVER WITH INDIVIDUAL TYPES



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PERIOD IV



ANCIENT IMITATIONS



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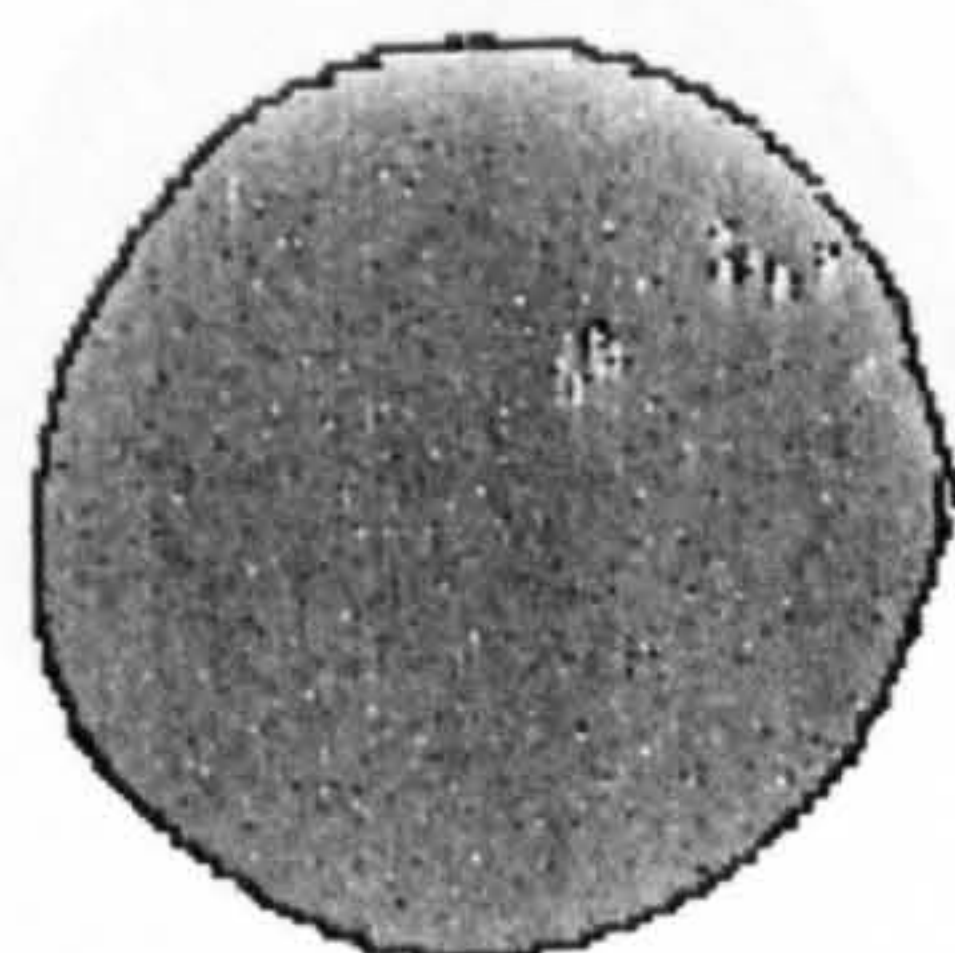
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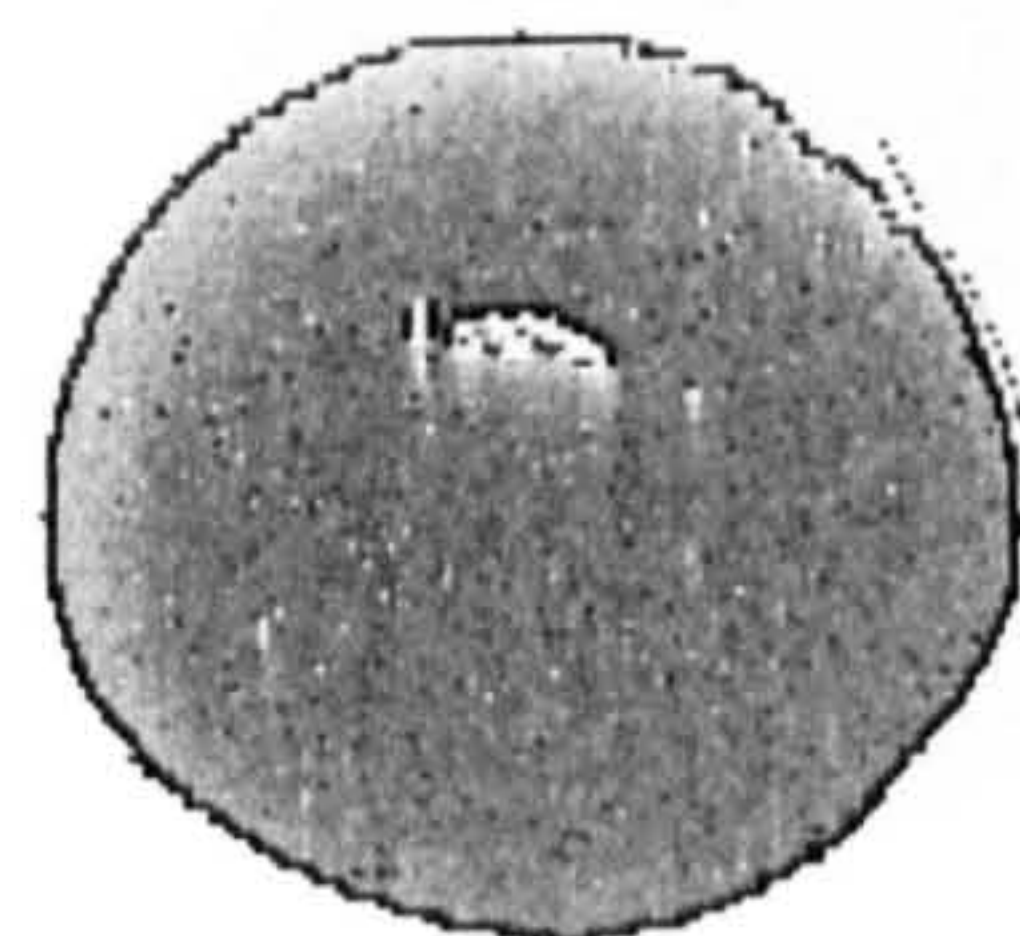
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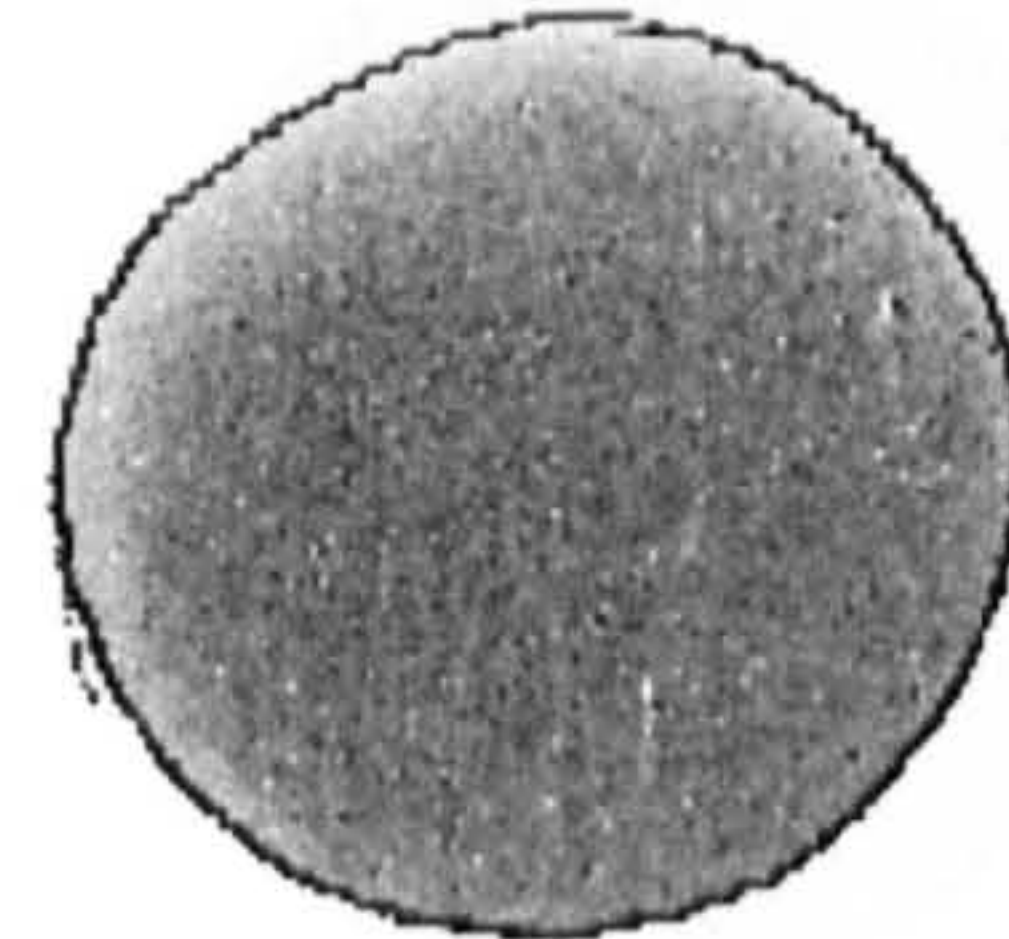
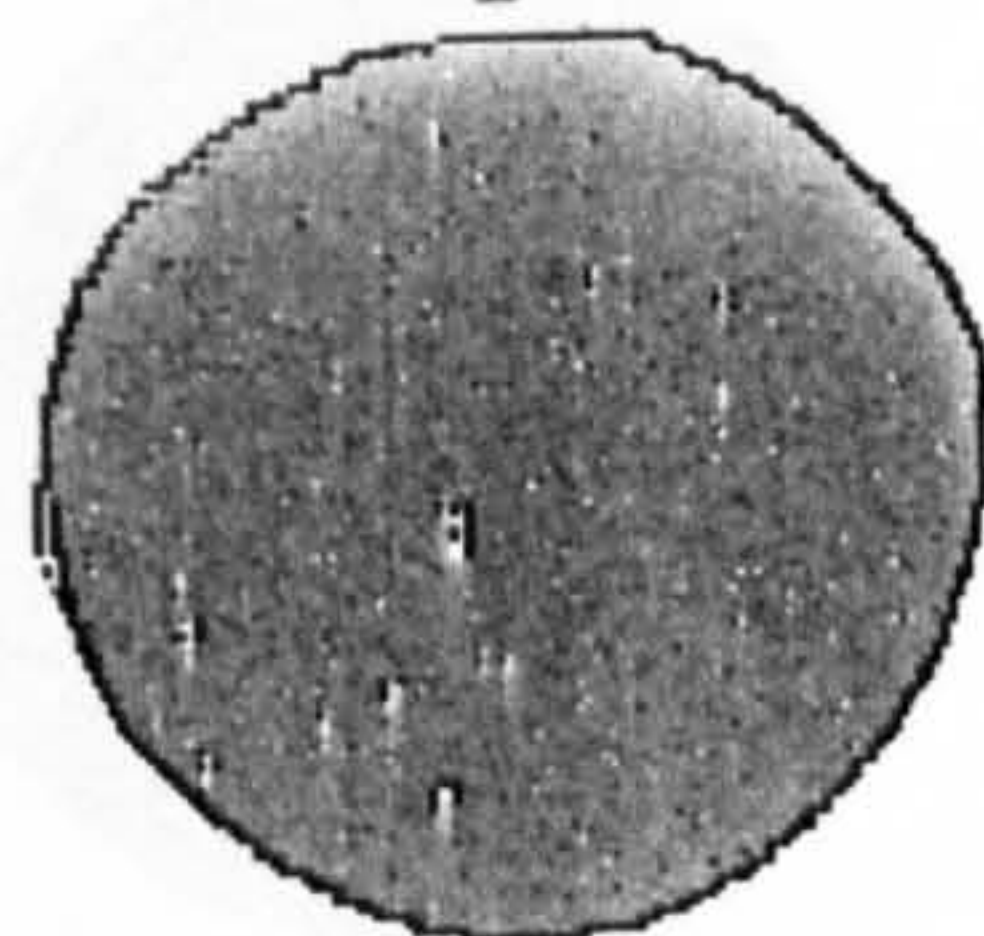
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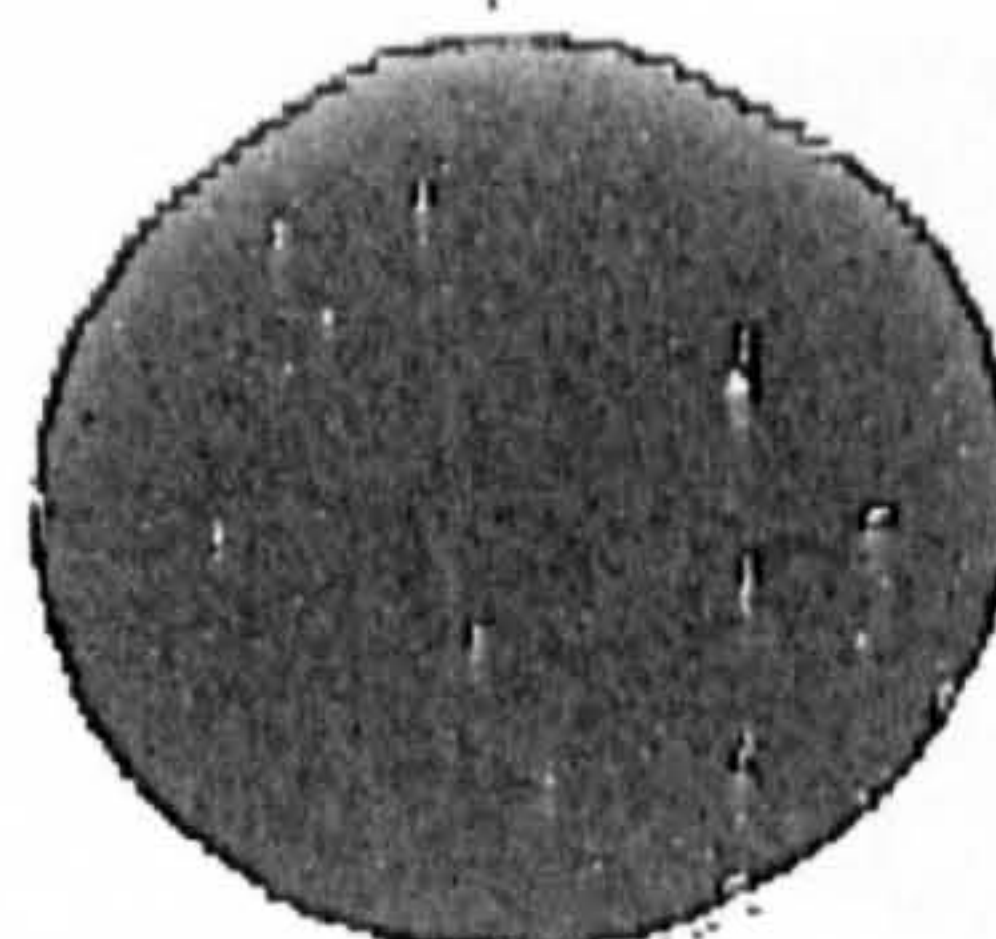
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IMITATIONS





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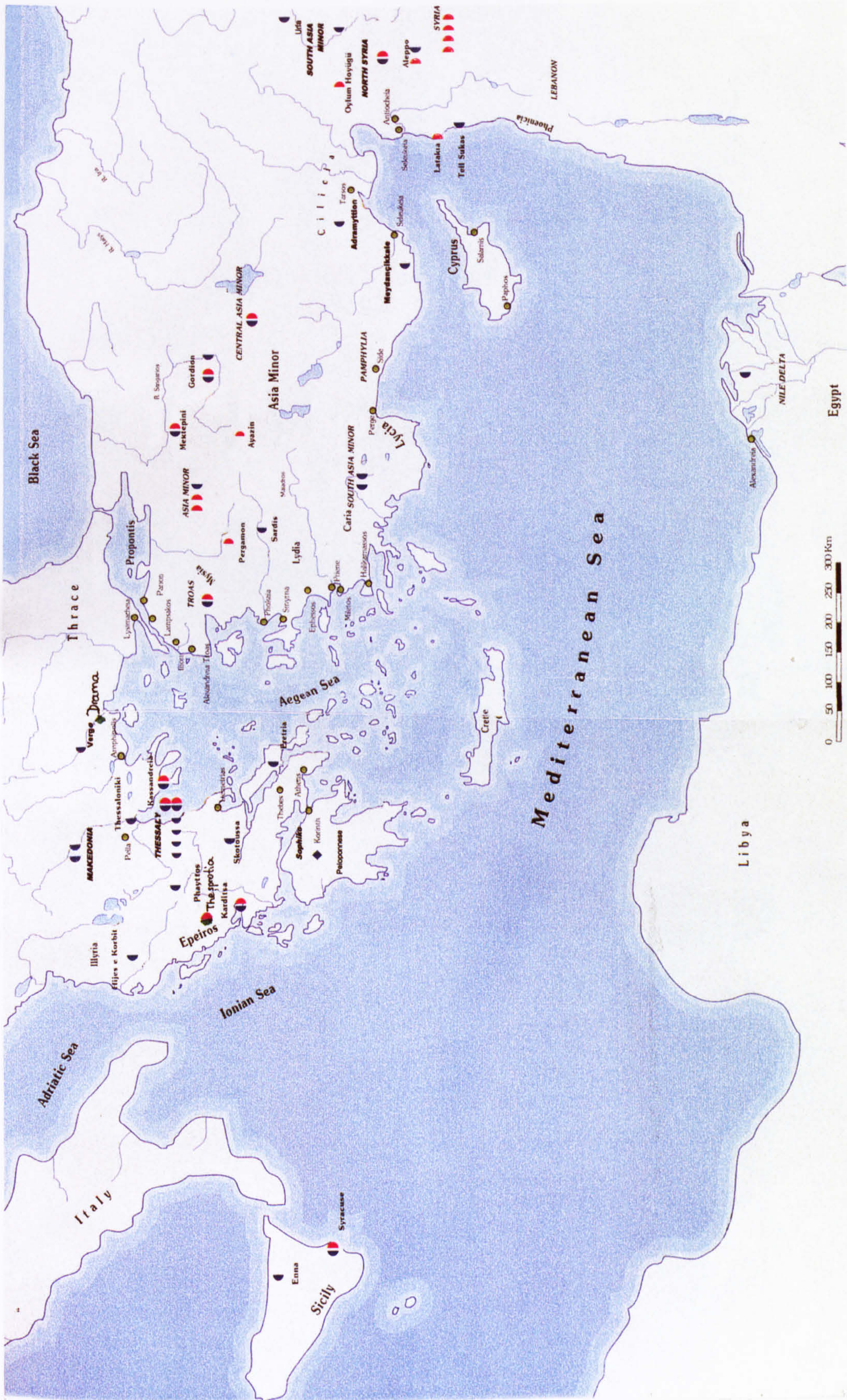


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KEY	
<b>Hoard contents</b>	
◐	Hoards with Pan head tetradrachms
◑	Hoards with Poseidon head tetradrachms
◒	Hoards with Pan head and Poseidon head tetradrachms
◓	Hoards with drachmae

●	Amphipolis	●	Ancient cities
◐	Meydancikkale	◐	Hoards with certain find spots
◑	ASIA MINOR	◑	Hoards with uncertain find spots

Map: Antigonid Tetradrachm (Pan head - Poseidon head) Types, Hoard Distribution.