TORONE I

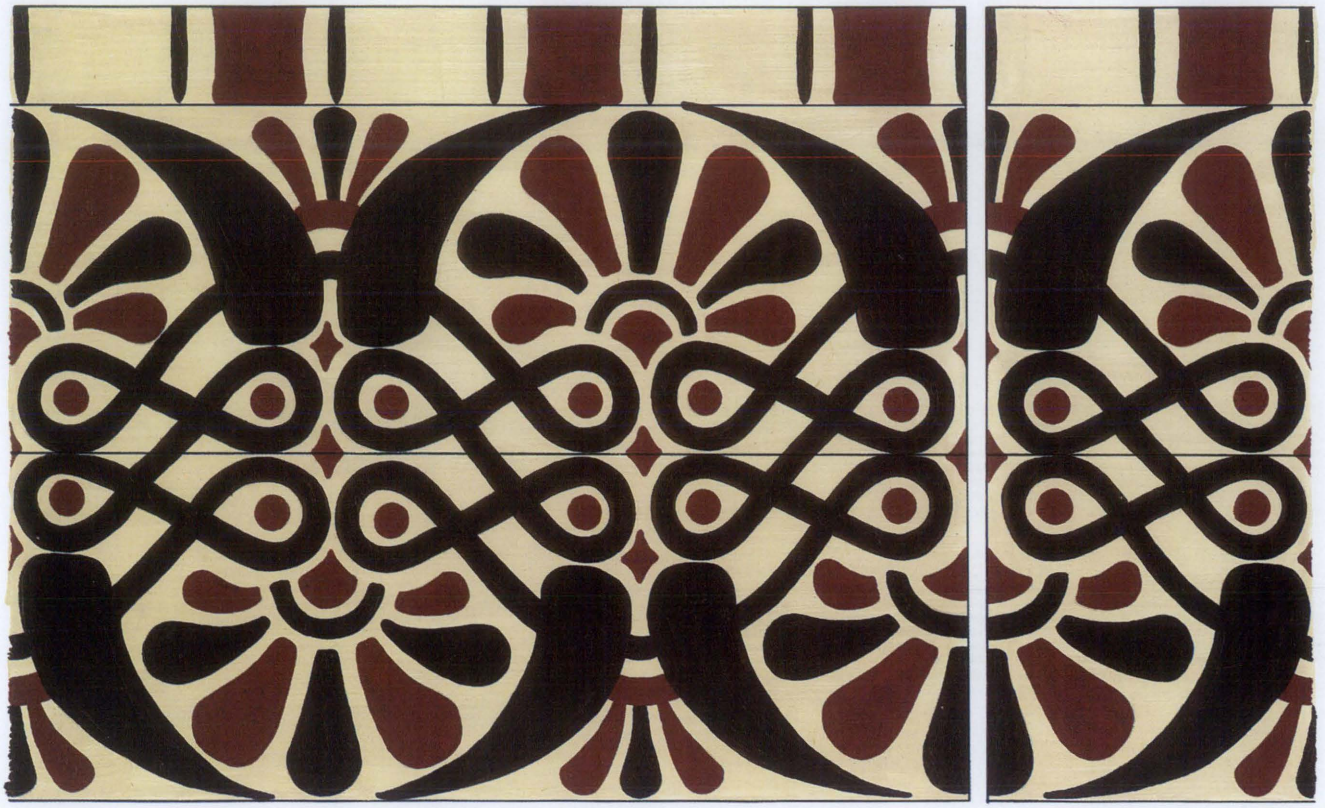
THE EXCAVATIONS OF 1975, 1976, AND 1978

TEXT : PART 1

ATHENS 2001

TORONE I

THE EXCAVATIONS OF 1975, 1976, AND 1978



Christopher Pfaff

Late Archaic Sima (510-480 B.C.)

ΒΙΒΛΙΟΘΗΚΗ ΤΗΣ ΕΝ ΑΘΗΝΑΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗΣ ΕΤΑΙΡΕΙΑΣ ΑΡ. 206

TORONE I

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ATHENS 2001

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THE EXCAVATIONS OF 1975, 1976, AND 1978

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PREFACE*

I first visited Torone in Chalkidike with the late Professor George Bakalakis in 1964, when I was looking for a site in Greece with the purpose of initiating an Australian Archaeological Expedition in the country. Bakalakis had repeatedly urged me to carry out field work in Northern Greece and had offered to accompany me to Torone. In the 1960s the road beyond Nea Moudania was primitive, but although driving to the site from Thessalonike proved to be long and uncomfortable the visit was very rewarding.

Geomorphologically and climatically Chalkidike is part of the Aegean rather than Macedonia and this is especially true of the three arms of the peninsula. Before a good road like a ribbon (or should I say a noose) was built along the entire coastline of Sithonia in the early 1970s, which brought throngs of tourists to Torone, the landscape was enchanting. The ruins of the late fortification Wall on the Lekythos and nature seemed to blend harmoniously and the modern village nearby consisted then of only a few picturesque cottages.

I climbed to the Vigla, the top of the hill to the south, which, as our research has shown, was in the Hellenistic period the fortified Acropolis of the site and which offers an unbroken view of the whole surrounding region.

Torone seemed to be a fine archaeological site known also from the literary sources, and above all from Thucydides; but, would Torone be the best choice for a first Australian archaeological expedition in Greece? From the Vigla Torone looked too vast and complex a site for the human and financial resources available in Australia in the 1960s and so, later on, after inspecting Zagora on the island of Andros, I became convinced that that was a more suitable target for a young Australian team consisting of members with limited archaeological field-work experience. The decision was taken to excavate at Zagora, which culturally as well as logistically, seemed to represent a more manageable undertaking. Between the years 1967 and 1974 the Australian team worked at Zagora solidly in alternating digging and study seasons and when by 1975 it was felt that an adequate amount of information had been gathered about the Geometric town, the team, following some inevitable changes, moved to Torone and worked there continuously until 1995 with only one interruption in 1977, when it returned to Andros for a final study season.

The present volume presents to the specialists and the larger archaeological community the results of the first three digging seasons carried out in 1975, 1976 and 1978 and the first two study seasons in 1979 and 1980. In addition, and for the sake

* Fig. 1 and Pl. 1.

of unity, it presents the results of the limited work done at the Gate of the Hellenistic fortification system in 1981. One should also mention here that, for the sake of greater clarity, in some cases a few objects from later digging seasons (for example **14.378** and **14.420**) have been included in this volume. Similarly, although the material from the later excavations is not dealt with in this book, the knowledge acquired in subsequent digging and study seasons has coloured the comments made in some of the chapters and especially in Chapter 1.

In 1975 it was decided to begin work at the site with the clearance of the growth along the Archaic/Classical and Early Hellenistic Walls, which enabled us to define, to a considerable extent, their traces. In the Gate Area of the Early Hellenistic fortification system trenches were dug, one of which allowed us to date it fairly accurately to the last quarter of the fourth century BC. Digging in the Gate Area continued in 1976 and 1981 when it was terminated following the completion of the excavation of the gate itself, which proved to be disappointing, since both the jambs of the entrance and the threshold had been looted and removed.

With regard to the fortification systems of Torone the excavation carried out in 1978 on Hill 2 (The Anemomylos) proved to be significant because it confirmed its identification by B.D. Meritt as Thucydides' ἀνωτάτω φυλακτήριον and proved its strategic importance through the discovery of a number of weapons such as sling bullets, arrowheads and spear-ends. The strategic importance of Hill 2 was also suggested to the excavators by the remains on it of an Early Hellenistic tower and by the fact that three Walls that belong to the fortification systems meet at it. Also in 1978 part of the SE continuation of the Classical Wall C at the Isthmus, which was clearly visible before the beginning of the excavations, was dug in the area which we called the "Lower City".

During the first three excavation seasons, in addition to the study of the fortification Walls, some information was collected about the Toroneans' burial customs since immediately to the East of the Hellenistic Gate a number of tombs were excavated dating mostly to the Classical or Early Hellenistic period suggesting that the area was used at that time, at least partially, as a cemetery.

Our research during the first three digging seasons also yielded important information about the domestic architecture of the city. In 1975 we started work at Structure 1 but the completion of its excavation in subsequent years became impossible since we were not allowed by the owner of the field in which the building is located to continue work there. In spite of this drawback the results of our limited investigation were interesting, as were some of the small finds that came to light from the building.

More rewarding proved to be the exploration of Structure 3, a house of considerable size located to the West of the Gate of the Hellenistic fortification system. Structure 3 which dates from the second half of the fourth century BC was partially excavated during the 1976 and 1978 seasons; it is interesting because of its masonry which is of more than one style and combines stone socles with mud-brick walls over them. The rather grand character of the building is testified by the monumental threshold in one of its internal walls. Another important feature of the house is a well, which also characterizes buildings of domestic use excavated elsewhere on the site in subsequent excavation seasons. Two charming finds from the building are a terracotta oven (cat. **12.65**) which helped us identify the room of the house in which it was discovered as the kitchen, and a discarded bee-hive discovered in the well mentioned above.

During the 1976 and 1978 seasons excavation was also carried out at the Isthmus connecting the mainland part of the city with Promontory 1, Thucydides' "Lekythos". The importance of this part of the archaeological site cannot be sufficiently emphasized and one should mention here the long human presence on it beginning perhaps as early as the Bronze Age and extending to the Post-Byzantine era.

At the end of the 1978 season digging at the Isthmus had not gone deeper than the upper levels and, since the area was occupied during many centuries, the stratigraphy in them was found disturbed. In spite of this, however, five phases of occupation were broadly distinguished, the top one dating to the Post-Byzantine period, the bottom one dating to the Early Classical or even to the Archaic period. In the process of excavation a number of walls of the Classical period were exposed, whose functions could not be identified with any certainty. Four, certain, features dating to this period are, however, worth mentioning here: two streets, one of which linked the harbour with the Lekythos, a well and a deposit which we called the "Amphora Deposit", a levelling fill, which took its name from the many transport amphorae it contained. This deposit is very important from the chronological point of view because it included datable late Classical pottery, pottery datable to the late fourth century B.C. The Alexander coin **20.18** is from TR1 tr2 (4b) associated with Phase III architecture, "Wall 6" and Feature 2 which lie above the amphora deposit.

Among the varied small finds from the Isthmus special mention should be made of the lead letter published in Chapter 19 (which is one of only two important inscriptions found at Torone so far), the terracotta antefix cat.**16.43** and a good number of coins of the Late Roman, Byzantine, Post-Byzantine and Ottoman periods. More than half of the Roman catalogued pottery presented in Chapter 14 comes from the

Isthmus and although the Byzantine and post-Byzantine pottery from the excavations of the first three seasons is not presented in this volume a good part of it also comes from the Isthmus proving again the long human presence in this part of the site.

One of the targets of the 1978 season was to locate the Agora of the Classical city which is mentioned by Thucydides. To that end we opened several trenches in an area near the harbour which we thought was promising and which we called the "Lower City". Although the digging in the "Lower City" continued in subsequent seasons, the results of the exploration in 1978 were already significant.

In addition to the continuation of Wall C mentioned above, digging in the "Lower City" brought to light a Late Roman/Early Byzantine large oval tomb which yielded a considerable amount of Late Roman pottery as well as a coin of Theodosius I (cat. no. **20.29**). Significantly, from this part of the site also comes a fragment of painted terracotta raking sima (cat. no. **16.46**). This object, which dates from the Late Archaic or Early Classical period, is important because it could have belonged only to a public building and because, although found out of context, it indicates that the Agora must have been in this general area.

Finally, in 1978 we opened two test trenches on the Lekythos (Promontory 1), which impresses the visitor mainly by its late fortifications dating probably from the early Post-Byzantine era. This most important part of the site produced significant results in later campaigns including the remains of an Early Bronze Age settlement and some architectural fragments of the Temple of Athena known until then only from its mention in Thucydides. In the trenches opened in 1978, however, digging did not go deeper than the Post-Byzantine levels. The almost continuous habitation of the Lekythos from the Early Bronze Age to Post-Byzantine times meant that the material discovered was mostly out of stratigraphic context. Among the significant finds found out of context on the Lekythos one should mention especially thirty-one Bronze Age sherds including some of the earliest Mycenaean pottery found in Macedonia, a good deal of Roman pottery, but above all great quantities of Late Byzantine and Post-Byzantine pottery.

It could be argued that the first three digging seasons at Torone did not quite produce the expected results. Although we were aware of the existence of a Prehistoric settlement on the Lekythos, suggested by surface sherds noticed and collected by archaeologists well before our own involvement on the site, we had gone to Torone with Thucydides in hand and in the hope of locating the areas and the features he mentions. Our initial aim, in other words, was to check the information given by Thucydides about the city in the Classical period against the archaeological evidence. In this we were successful only in a limited way, since although the excavation carried out in 1978 on Hill 2 (the Anemomylos) confirmed B.D. Meritt's identification

of Thucydides' ἀνωτάτω φυλακτήριον we failed to locate with any degree of certainty either the Agora or the προάστειον mentioned in his account, and on the Lekythos there were no visible remains of his Temple of Athena.

Although in the digging seasons that followed the first three, our knowledge of Torone in the Archaic, Classical, Hellenistic and later periods improved, it is perhaps fair to say that the most spectacular results of our exploration of the site are the discovery of the Early Iron Age cemetery on Terrace V in 1981 and of the Early Bronze Age settlement, including a burnt house, on the Lekythos in 1986. On the Lekythos, however, the discovery in a Hellenistic cistern of some discarded architectural fragments of the Temple of Athena was undoubtedly sensational since it established not only that the building mentioned by Thucydides existed, but also that it dated from the 6th century and that it was of the Doric order, that it was, in other words, one of the earliest Doric temples in Northern Greece.

In the course of subsequent excavation seasons it became clear that more information about domestic architecture of the Classical Period could be obtained in the "Lower City", where the deposit was deeper and the houses had suffered less than those in other areas. The difficulty of excavating in fields that were privately owned, however, limited our research considerably.

Nor did we locate a proper cemetery of the Archaic and Classical Periods and although a number of tombs were found in the area of the Gate of the Early Hellenistic fortification system they barely constitute a cemetery, especially if one considers the number of Early Iron Age tombs discovered on Terrace V and one remembers the size of the cemetery at Akanthos. Perhaps a cemetery may exist buried to the East of the Lekythos in the flood plain partly investigated for a short period in 1998 by Dr. Richard K. Dunn: there is no doubt now that the coast of the Toronean Bay in Antiquity was further inland, that the flood plain was built seaward and that the shoreline has moved further north into the sea.

With regard to Torone of the Archaic and Classical Periods we hope that eventually the problem of privately owned fields in the site will be overcome and that excavation will become possible in the "Lower City". Torone has by no means revealed all its archaeological secrets.

Our investigation of Torone was made possible through grants received from the Australian Research Council (ARC) supplemented by grants made by the Foundation for Classical Archaeology and, more recently, also grants made by the Australian Archaeological Institute at Athens. I would like to express my deep appreciation for this support and also for the unlimited support received from the administration of the University of Sydney. It would not be an exaggeration to say that the Australian

Expedition to Greece was made possible only because of the favourable intellectual climate that prevails in it.

I must also express here my gratitude to the Council of the Athens Archaeological Society for the continuous support it has given to the Australian expedition in Greece since its inception in 1967, firstly during the excavations at Zagora on the island of Andros and later on at Torone. Prior to the establishment of the Australian Archaeological Institute at Athens the Australian team's work in Greece was made possible only through its adoption by the Society. Since 1986, however, the Torone excavations continued as a collaboration (*synergasia*) between the two institutions.

My thanks are also due to the Greek Department of Antiquities and more generally to the Greek Ministry of Culture without whose kind annual permits the excavations at Torone could not have materialized. More particularly the expedition owes a lot to the late Ephor Dr. Ioulia Vokotopoulou who supported our work. She was a very efficient administrator and a fine scholar with a broad knowledge of the archaeological problems of Northern Greece.

In addition to myself, during the first three digging seasons and the two study seasons that followed the team included the following members:

1975

Jean-Paul Descœudres - Deputy Director
Ann Birchall - Trench supervisor
† Peter Connor - Trench supervisor
Graham Joyner - Trench supervisor
Jenifer Neils - Trench supervisor
Ruth Rivett - Archivist
David Watkinson - Conservator
Raymond Skobe - Photographer
Colin Williams - Architect
The trenches and architectural plans were drawn by the firm "Studio 23" of Thessalonike.

1976

John Wade - Trench supervisor
† Peter Connor - Trench supervisor
Graham Joyner - Trench supervisor
Jenifer Neils - Trench supervisor

Ann Steiner - Archivist
Helen Ward - Conservator
Karl Faltermeier - Conservator
Raymond Skobe - Photographer
Miriam Cahn - Draftsperson
Debbie Cramer - Secretary
The trench and architectural plans were drawn by the firm "Studio 23" of Thessalonike.

1978

John Wade - Trench supervisor
† Peter Connor - Trench supervisor
Jenifer Neils - Trench supervisor
Tim Potts - Trench supervisor
Sarah Peirce - Trench supervisor
Peter Byers - Trench supervisor
Ann Steiner - Archivist
Olwen Segal - Archivist
Helen Ward - Conservator
Jenifer Jones - Conservator
Ray Skobe - Photographer
Christine Young - Architect
Panos Theodorides - Architect
Graeme Phipps - Secretary-Accountant

1979

† Peter Connor - Research
Graham Joyner - Research
Jenifer Neils - Research
Sarah Peirce - Research
Olwen Segal - Archivist
Annette Keenan - Archivist
John Papadopoulos - Archivist
Kai Romot - Archivist
Karl Faltermeier - Conservator
Patricia Johnson - Conservator
John Olive - Conservator

Christopher Pfaff - Draftsperson
Raymond de Berquelle (formerly Raymond Skobe) - Photographer
Peter Tonkin - Architect - Draftsperson
Panos Theodorides - Architect
Lydia Bushell - Secretary-Accountant

1980

Graham Joyner - Research
Ann Steiner - Research
Ian McPhee - Research
Sarah Peirce - Research
Olwen Segal - Archivist
John Papadopoulos - Archivist
Patricia Johnson - Conservator
Leslie Bone - Conservator
Frank Minnie - Conservator
Christine Young - Architect
David Logan - Architect
Christopher Pfaff - Draftsperson
Margaret Minnie - Draftsperson
Tony Micklem - Secretary-Accountant

Whoever has been director of an archaeological expedition knows how difficult it can be to manage a group of heterogeneous people living isolated in a foreign environment, very close to each other and working under considerable pressure. The Torone team has had its share of personality difficulties but, on the whole, worked harmoniously and successfully over a period of many years. This was achieved thanks to a core of dedicated workers. Above all I would like to mention here John K. Papadopoulos, whose many talents and ability for hard work secured good standards both at the trenches and at the base and saved the expedition from many mistakes; also Olwen Tudor-Jones (formerly Segal), Stavros A. Paspalas, Anne Hooton and Beatrice McLoughlin. This core was formed mostly in subsequent years; its good work however also helped considerably towards a correct interpretation of the results of the first three digging seasons.

In the spelling of Greek names there is no absolute consistency partly because different chapters were written by different writers, whose views about this question had to be respected. However in certain cases as for example in the case of the names

Chalkidike, Thessalonike, Olynthos and Akanthos the principle was adopted of keeping as close to the Greek spelling as possible.

The task of preparing the text of this volume for final publication was not easy since the various chapters were written by different authors at different times. In this respect I cannot sufficiently acknowledge the dedicated contribution made by Dr. Miriam Caskey who is responsible for the layout and production of the book and Ms. Beatrice McLoughlin.

Finally I am most grateful to the Council of the Athens Archaeological Society and its Secretary General Dr. Basil Petrakos for accepting Torone 1 as one of the volumes in the Society's series of publications.

Alexander Cambitoglou
Director

ABBREVIATIONS

In addition to abbreviations for bibliography relevant to the various chapters, the abbreviations are the standard ones listed in the *Κανονισμὸς Δημοσιευμάτων* of the Athens Archaeological Society (Athens 1989), The *Lexicon Iconographicum Mythologiae Classicae (LIMC)* or in the more recent "Editorial Policy, Instructions for Contributors, and Abbreviations," *American Journal of Archaeology* 104 (2000) 3-24.

AA	*Archäologische Anzeiger*
AAA	*Ἀρχαιολογικὰ Ἀνάλεκτα ἐξ Ἀθηνῶν*
AAS	*Βιβλιοθήκη τῆς ἐν Ἀθήναις Ἀρχαιολογικῆς Ἑταιρείας*
AD	*Ἀρχαιολογικὸν Δελτίον*
AE	*Ἀρχαιολογικὴ Ἐφημερίς*
AEMTh	*Το Αρχαιολογικό Έργο στη Μακεδονία και Θράκη*
Agora IV	Howland, R. H., *Agora* IV, *Greek Lamps and their Survivals* (Princeton 1958)
Agora V	Robinson, H.S., *The Athenian Agora* V. *Pottery of the Roman Period: Chronology* (Princeton 1959)
Agora VII	Perlzweig, J., *The Athenian Agora* VII. *Lamps of the Roman Period. First to Seventh Century after Christ* (Princeton 1961)
Agora VIII	Brann, E. T. H., *The Athenian Agora* VIII. *Late Geometric and Protoattic Pottery, Mid-8th to Late 7th Century B.C.* (Princeton 1962)
Agora XII	Sparkes B. and Talcott, L., *The Athenian Agora* XII. *Black and Plain Pottery of the 6th, 5th and 4th Centuries B.C.* (Princeton 1970)
Agora XIII	Immerwahr, S. A., *The Athenian Agora* XIII. *The Neolithic and Bronze Ages* (Princeton 1971)
Agora XXI	Lang, M., *The Athenian Agora* XXI. *Graffiti and Dipinti* (Princeton 1976)
Agora XXII	Rotroff, S., *The Athenian Agora* XXII. *Hellenistic Pottery: Athenian and Imported Moldmade Bowls* (Princeton 1982)
Agora XXIII	Moore, M. B. and Philippides, M. Z. P., *The Athenian Agora* XXIII. *Attic Black-figured Pottery* (Princeton 1986)
AJA	*American Journal of Archaeology*
AJP	*American Journal of Philology*
Alasia III	Courtois, J.-C., *Alasia* III. *Les objets des niveaux stratifiés d'Enkomi* (Fouilles C.F.-A. Schaeffer 1947-1970) (Paris 1984)
Alfieri, *Spina*	Alfieri, N., *Spina. Museo Archeologico Nazionale di Ferrara* 1 (Bologna 1979)
Alt-Ägina II.1	Walter-Karydi, E., "Ostgriechische Keramik", H. Walter (ed.), *Alt-Ägina* II. 1 (Mainz 1982) 9-18
Alt-Ägina IV.1	Hiller, S., *Alt-Ägina* IV. 1, *Mykenische Keramik* (Mainz 1975)
Alt-Ithaka	Dörpfeld, W., *Alt-Ithaka. Ein Beitrag zur Homer-Frage. Studien und Ausgrabungen auf der Insel Leukas-Ithaka* (Munich 1927)
AM	*Mitteilungen des Deutschen Archäologischen Instituts*
Annales du 7e Congrès/Verre	*Annales du 7e congrès international d'étude historique du verre,*

	Berlin-Leipzig 1977. Association Internationale pour l'Histoire du Verre (Liège 1978)
Annales du 8e Congrès/Verre	*Annales du 8e congrès international d'étude historique du verre, Londres-Liverpool 1979.* Association Internationale pour l'Histoire du Verre (Liège 1981)
Annales du 9e Congrès/Verre	*Annales du 9e congrès international d'étude historique du verre, Nancy (France) 22-28 mai 1983.* Association Internationale pour l'Histoire du Verre (Liège 1985)
ANSMN	*American Numismatic Society. Museum Notes*
Antioch IV.1	Waagé, F.O. (ed.), *Antioch-on-the-Orontes* IV, Part 1. *Ceramics and Islamic Coins* (Princeton 1948)
AR	*Archaeological Reports* (Society for the Promotion of Hellenic Studies)
ARE	Peacock, D.P.S., and Williams, D.F., *Amphorae and the Roman Economy. An Introductory Guide* (London 1986)
ArchJ	*Archaeological Journal*
Argissa-Magula III	Hanschmann E. and Milojcic, V., *Argissa-Magula* III. *Die frühe und beginnende mittlere Bronzezeit* (Bonn 1976)
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ARV^2	Beazley, J. D. *Attic Red-figure Vase-Painters* (2nd ed. Oxford 1963)
Asine	Frödin, O., Persson A.W. and Westholm, A., *Asine. Results of the Swedish Excavations 1922-1930* (Stockholm 1938)
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Asine MHV	Nordquist, G. C., *A Middle Helladic Village: Asine in the Argolid* (Uppsala 1987)
ATMA	Dietz, S., *The Argolid at the Transition to the Mycenaean Age* (Copenhagen 1991)
Aust.Cat.	*Αρχαία Μακεδονία / Ancient Macedonia.* Museum of Victoria, Melbourne 25 November, 1988 - 19 February, 1989, Queensland Museum, Brisbane 11 March - 30 April, 1989, Australian Museum, Sydney 20 May - 23 July, 1989 (Athens 1988)
Bailey *BMC* I	Bailey, D. M., *A Catalogue of Lamps in the British Museum* I (London 1975)
Bailey, *Lamps*	_____, *Greek and Roman Pottery Lamps* (London 1963)
Barnard	Barnard, F. P. *The Casting Counter and the Counting-Board* (Oxford 1917)

BCH	*Bulletin de correspondence hellénique*
BCH Suppl. XVIII	Deroche, V. and Spieser, J. M. (eds.), *Recherches sur la céramique byzantine. Actes du colloque organisé par l'École Française d'Athènes et l'Université de Strasbourg* II. *BCH* Supplément XVIII (Paris 1989)
BE	Bulletin Épigraphique in *Revue des Études Grecques*
BMCat. I.1	Forsdyke, E. J., *Catalogue of the Greek and Etruscan Vases in the British Museum* I.1. *Prehistoric Aegean Pottery* (London 1925)
BMCat. Terracottas I	Higgins, R. A., *Catalogue of the Terracottas in the Department of Greek and Roman Antiquities, British Museum* I (London 1954)
BMCat. Vases	*British Museum, Catalogue of the Greek and Etruscan Vases in the British Museum*, (London 1893-1925)
Boon 1962	Boon, G. C., "Roman Window Glass from Wales," *Journal of Glass Studies* 8 (1966) 41-45
Brown 1920	Brown, H. F., "The Venetians and the Venetian Quarter in Constantinople to the Close of the 12th century," *JHS* 40 (1920) 68-88
BSA	*Annual of the British School at Athens*
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DAG	Snodgrass, A. M., *The Dark Age of Greece. An Archaeological Survey of the Eleventh to the Eighth Centuries B.C.* (Edinburgh 1971)
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Demetrias IV	Eiwanger, J., *Demetrias* IV. *Keramik und Kleinfunde aus der Damokratia-Basilika in Demetrias, I-II* (Bonn 1981)
DGE	Schwyzer, E., *Dialectorum Graecorum exempla epigraphica potiora* (Leipzig 1923, 3rd ed. of P. Cauer, *Delectus Inscriptionum Graecarum propter dialectum memorabilium)*
DHA	*Dialogues d'Histoire Ancienne*
DOC	Bellinger, A. R. and Grierson, P. (eds.), *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection* (Washington D.C. 1966)
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GBA	Vermeule, E., *Greece in the Bronze Age* (Chicago 1972 ed.)
GCP	Jones, R. E., *Greek and Cypriot Pottery. A Review of Scientific Studies,* BSA Fitch Laboratory Occasional Paper 1 (Athens 1986)
GDA	Desborough, V. R. d'A., *The Greek Dark Ages* (London 1972)
GDI	Collitz, H., Bechtel, F. *Sammlung der griechischen Dialekt-Inschriften* (Göttingen 1884-1915)
GGP	Coldstream, J. N., *Greek Geometric Pottery. A Survey of Ten Local Styles and Their Chronology* (London 1968)
Goulandris Coll.	Doumas, C. and Marangou, L., *Exhibition of Ancient Greek Art from the N. P. Goulandris Collection, Benaki Museum* (Athens 1978)
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JdI	*Jahrbuch des Deutschen Archäologischen Instituts*
JGS	*Journal of Glass Studies*
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LRBC	Carson, R. A. G., Hill P. V., and Kent, J. P. C., *Late Roman Bronze Coinage A.D. 324-498* (London 1960)
LRP	Hayes, J.W., *Late Roman Pottery* (London 1972)
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Makedonika	*Μακεδονικά. Ἑταιρεία Μακεδονικῶν Σπουδῶν*

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PAE	*Πρακτικὰ τῆς ἐν Ἀθήναις Ἀρχαιολογικῆς Ἑταιρείας*
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PGIT	Sipsie-Eschbach, M., *Protogeometrische Keramik aus Iolkos in Thessalien. Prähistorische Archäologie in Südosteuropa* 8 (Berlin 1991)
PGP	Desborough, V. R. d'A., *Protogeometric Pottery* (Oxford 1952)
PGRK	Pieridou, A. G., *Ὁ πρωτογεωμετρικός ῥυθμὸς ἐν Κύπρῳ* (Athens 1973)
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RBN	*Revue Belgique Numismatique*
RCRFActa	*Rei Cretariae Romanae Fautorum, Acta*
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TERMS used in the CATALOGUES

All measurements are given in metres.

The terms employed in the description of the lamps are standard.

D.	Diameter
H.	Height
L.	Length
W.	Width
Est.	Estimated (e.g. D. est. : estimated diameter)
M.	Median (e.g. M.L. : median length)
P.	Preserved (e.g. P.L. : preserved length)
Unest.	Unestimatable

1. HISTORICAL AND TOPOGRAPHICAL INTRODUCTION

Alexander Cambitoglou and John K. Papadopoulos

INTRODUCTION

The ancient city of Torone was located on a hilly cape near the southern tip of Sithonia, on the west coast, immediately to the north of Porto Koupho (the κωφὸς λιμὴν of the ancients),[1] near the modern hamlet of the same name (Pl. 1; Text Fig. 1). The harbour of Kophos offers an excellent retreat in time of storm and provides one of the few all-weather anchorages along the entire Macedonian coastline (Pls. 5a, 6).[2] In the course of the nineteenth and early twentieth centuries few scholars and travellers had ventured into this part of Macedonia and among the handful who did there was some uncertainty as to the location of the site. Two alternatives prevailed: the first, proposed by Leake[3] and followed by Kinch[4] and Demitsas,[5] placed the ancient city of Torone near the modern settlement of the same name.[6] The other alternative, put forward by Struck,[7] and which earlier appeared in Kiepert's map,[8] placed the site near the Bay of Vathy some ten kilometres due north. It should be noted, however, that of these five scholars only Kinch and Demitsas appear to have actually walked

[1] Thucydides V.2.2; W.M. Leake, *Travels in Northern Greece* III (1835) 119. In Zenobios IV.68 it appears as κωφότερος (τοῦ Τορωναίου λιμένος), *Suidas,* T. Gaisford ed. (1834) 2190.

[2] B.D. Meritt, "Scione, Mende, and Torone," *AJA* 27 (1923) 453-454; cf. Livy XLV.30.4 ".....maritimas quoque opportunitates ei praebent portus ad Toronen ac montem Atho Aeneamque et Acanthum." For the importance of this harbour see further J. Bérard, *L'expansion et la colonisation grecque jusqu'aux guerres médiques* (1960) 85; E. Oberhummer, *RE* 6A.2 (1937) 1795-1798 (Torone).

[3] Leake *op. cit.* (*supra* n. 1) 154-155.

[4] K.F. Kinch, "De hellenske Kolonier paa den makedoniske Halvø," in *Festkrift Thomsen* (1894) 147; see also *id.*, *Beretning om en archaeologisk Rejse i Makedonien* (1893).

[5] M.G. Demitsas, *Ἡ Μακεδονία ἐν λίθοις φθεγγομένοις καὶ μνημείοις σωζομένοις* (1896; reprint Thessalonike 1988) 616, and for a useful survey of Macedonian geography *id., Ἀρχαία γεωγραφία τῆς Μακεδονίας* (1870; *reprint Thessalonike* 1988; on Sithonia and Torone see pp. 422-435).

[6] The modern settlement at that time, although known as Torone, was usually referred to as Καλύβια, being one of a number of summer hamlets used by the villagers of Sykia; see Meritt *op. cit* (*supra* n. 2) 454 and Oberhummer *op. cit.* (*supra* n. 2) 1797. To this day few of the locals spend the whole year at Torone; the majority spend only the summer months there, wintering either in Sykia or, more recently, Thessalonike and Nea Moudania. In 1981 the permanent population of Torone was noted as being 150, that of Sykia as 2,500 (see I. Papangelos, *Chalkidike* [1981] 156f.).

[7] A. Struck, *Makedonischen Fahrten I. Chalkidike* (1907) 62-63.

[8] H. Kiepert, *Formae orbis antiqui* (1894), Map XVI. Graecia cum Macedonia et Epiro.

over the site of Torone near Porto Koupho. In any case, by 1923 Benjamin Meritt, through his careful survey of the region and its comparison to Thucydides' account, which provides much useful information on the topography of the ancient city in the later 5th century B.C., established beyond doubt the location of Torone at the site first proposed by Leake.[9]

The site itself consists of a series of small promontories - Promontories 1-4 (Fig. 1; Pls. 1-2) - of which only Promontory 1 (The Lekythos) (Pls. 1-3a)[10] and Promontory 2 (Pl. 3b) bear conspicuous evidence on the surface of ancient occupation, as well as several hills. Of the latter, the highest, Hill 1, known locally as Βίγλα (Vigla, 225 m. above sea level), commands an impressive view on all sides. From Hill 1 all approaches by land and sea can be observed easily (Pls. 2a, 5a). To the south of Hill 1 the ground slopes sharply down to the entrance of Porto Koupho, while to the west the upper part of the hill presents a near vertical cliff face (Pl. 5b). To the north the gradient, though steep, is rather more gentle down to Hills 2 and 3, and from there, in a westerly direction, down to the sea. Hill 1 with its advantage of height and terrain was the fortified acropolis of the Early Hellenistic defense system. It replaced the earlier ἀνωτάτω φυλακτήριον referred to by Thucydides, which was first equated with the summit of Hill 2 by Meritt in the early 1920s.[11] Standing to a height of 89.52 m above sea level, Hill 2 is today referred to locally as Ἀνεμόμυλος.

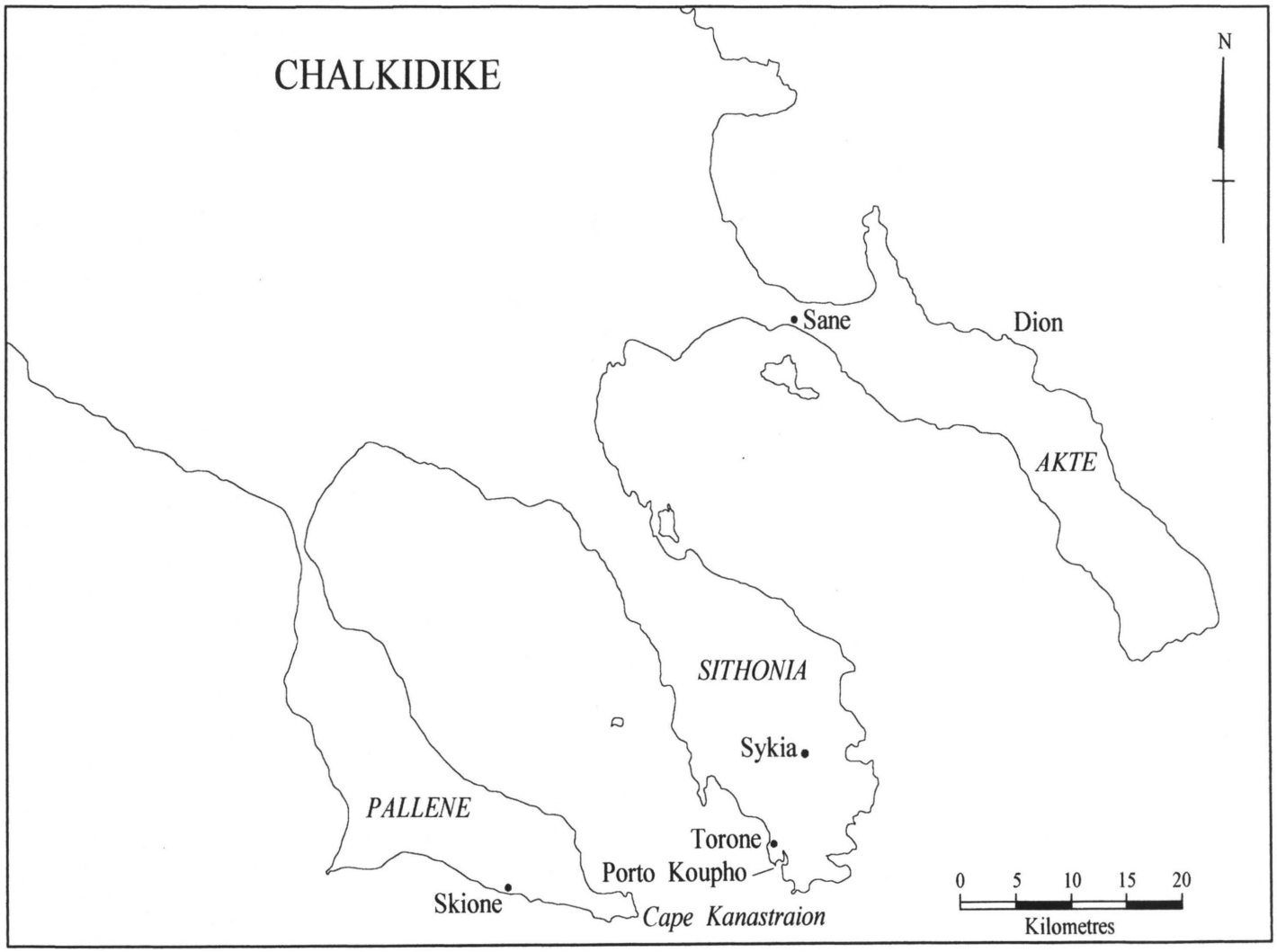
In the area between Hills 1, 2 and 3 (the latter perhaps Thucydides' προάστειον, or else near to the area where the suburbs may have been in the fifth century)[12] is a low saddle which provides the only natural route between Torone and the "κωφὸς

[9] Meritt, *op. cit.* (*supra* n. 2) 453-460; Thucydides IV.110-116, and V.2-3. Chalkidic Torone is completely overlooked in R. Stillwell (ed.), *Princeton Encyclopedia of Classical Sites* (1976); on p. 626 reference is made to an Epirote Torone (the modern Nista?), *cf.* N. G. L. Hammond, *Epirus* (1967) 80, 688, but not to Chalkidic Torone. The main reference to Torone in Epirus is in Ptolemy, where two cities of the same name are listed: *Claudii Ptolemaei Geographia* III.13.12; under the heading "Macedonia" Chalkidic Torone is listed and subsequently the Toronean Gulf. Torone in Epirus is listed under III.14.5. The topographical details provided by Thucydides are discussed more fully below in the section on the Archaic and Classical city walls.

[10] The name *Lekythos*, presumably referring to the resemblance of the promontory to the shape of an oil bottle laid on its side, appears in Thucydides IV.113: "..... τὴν Λήκυθον τὸ φρούριον.....ἄκρον τῆς πόλεως ἐς τὴν θάλασσαν ἀπειλημμένον ἐν στενῷ ἰσθμῷ". See further A.W. Gomme, *A Historical Commentary on Thucydides* Vol. III (1956) 590-591. The promontory is today referred to locally as *Kastro*, less commonly *Kastella*.

[11] Thucydides IV.110.2; Meritt, *op. cit.* (*supra* n. 2) 456; see further A. Cambitoglou, *PAE* 1978, 80-84.

[12] Thucydides V.2.4; Meritt, *op. cit.* (*supra* n. 2) 458-459; Hill 3 (29.0 m. above sea level) is today known locally as *Asmanes*. On the basis of Thucydides' account, the προάστειον could not have been located at any great distance to the east of the line of Wall B (see Fig. 1).


CHALKIDIKE
N
Sane
Dion
AKTE
SITHONIA
Sykia
PALLENE
Torone
Porto Koupho
Skione
Cape Kanastraion
0 5 10 15 20
Kilometres

Text Fig. 1.

λιμήν" (Pl. 4).[13] It would appear, however, judging from Thucydides' account and its proximity to the ancient settlement area, that the main harbour of Torone during the Classical period was the small sandy cove immediately to the north and east of Promontory 1, used today by the local fishermen (Pl. 2a).[14] To the north of the site and beyond the small knoll known as *Tis Kalogrias To Aloni* and the nearby valley known as *Perdikosykia*, stretches flat ground on which the modern village is located. This small fertile plain would have served as part of the agricultural area of the ancient settlement, as it does today, once watered by a small creek.[15] Prior to the installation of municipality water in 1986, drinking water was obtained exclusively by means of wells, and this seems to have been the practice also in Antiquity. This water was no doubt supplemented by water gathered in cisterns since there is no natural water supply within the area of the fortified ancient city.[16] The smaller stretch of flat ground immediately to the north of the ancient city known as *Perdikosykia* is the site of the Basilica of Aghios Athanasios, excavated by Professor N. Nikonanos in the 1970s.[17]

The name *Torone* has been used for the site throughout most of its known history and has survived into the present.[18] Two variant spellings are known: Τορώνη and

[13] The bronze hydria, now in the Thessalonike Museum, from a Classical tomb at Torone first reported by Ch. Makaronas, *AD* 16 (1960) *Chr.* 212, was found in this area. In *Treasures of Ancient Macedonia. Archaeological Museum of Thessalonike* (no place or date of publication given) 82, no. 338, pl. 48, the vessel is wrongly described as a "silver hydria."

[14] Gomme, *op. cit.* (*supra* n. 10) 631, rightly points out that the passage in Thucydides V.2.2 "Κωφὸν λιμένα τῶν Τορωναίων ἀπέχοντα οὐ πολὺ τῆς πόλεως" does not refer to that port as the "city harbour" but as "belonging to Torone," or being within its territory.

[15] The construction of the modern road, which was completed in 1975, requiring cuttings and subsequent embankments, significantly cut the natural flow of the creek from the higher hills to the east. The path of the creek is still visible today; water flows in it only in time of heavy rain.

[16] A number of ancient wells, mainly associated with structures of the Classical period, have been located and some partially excavated. Two of these are described and discussed below, one in Structure 3 (Figs. 29-30; Pl. 28a, c), the other in the Isthmus Area (Figs. 35-36; Pls. 31c, 33b,d). A large double cistern of Late Byzantine date was excavated by the Byzantine Ephoreia of Chalkidike on Promontory 1 in the early 1970s, see A. Cambitoglou, *PAE* 1978, 91; A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 181-182, ill. 7. A large circular cistern of the Hellenistic period was discovered on the promontory in the more recent excavations, see A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 4 (1991) 149, 154-158, figs. 2, 10, pls. 21:6, 22:1.

[17] N. Nikonanos, *AD* 29, 1973-1974, *Chr.,* 770-771, 776. The basilica is of Early Christian date.

[18] S. Casson, *Macedonia, Thrace and Illyria* (1926) 45. During the 12th century A.C. Sithonia came under the control of the monasteries of Mount Athos, during which time the peninsula was normally referred to as "Λόγγος." Torone itself came under the jurisdiction of Μονὴ Ἐσφιγμένου in A.D. 1346, see J. Lefort, *Actes d'Esphigmenou* (1973) 140-142, and is mentioned in the monastery texts by the name of Torone (spelt in various ways, often as Terone), and is referred to as "χειμαδεῖον," and later as "τόπος" (F. Dölger, *Aus den Schatzkammern des heiligen Berges* [1948] 142, 147).

Τερώνη; the former is the most common and is used always in the literary and epigraphic sources; the latter is known only from the Archaic and Classical coinage of the city (normally abbreviated TE or TEPO).[19] As for the namesake of the site, both Lykophron[20] and Nonnos[21] state that Torone was the wife of Proteus. Stephanos Byzantios gives a variant in which Torone was either the daughter — not wife — of Proteus, or else the daughter of Poseidon by Phoinike.[22]

Modern scholarship has focused much attention on the early history of the cities of Chalkidike, particularly the origins and ethnicity of its inhabitants. Torone itself has been seen traditionally as the earliest of the Euboian colonies in Chalkidike, founded in the eighth century B.C.[23] The Euboian complexities of the foundation of Torone are still hotly debated and many modern scholars maintain that Chalkidike derives its name from Euboian Chalkis.[24] This view is largely based on the testimony of Diodorus Siculus who explicitly states that Torone was a colony of Chalkis in Euboia.[25] According to Strabo the same Euboian Chalkidians settled about thirty towns in Chalkidike with the Sithones.[26] Earlier writers are, however, more ambiguous. In the often-cited passage, Thucydides simply refers to "Chalkidic Torone" (Τορώνην τὴν Χαλκιδικήν);[27] it is not clear if he is referring to the colonial origins of the city or to the people living in the city whom he knew as "Chalkidians." The latter is echoed by Herodotos who refers to a *Chalkidikon genos*.[28] On the basis of this

[19] L.H. Jeffery, *The Local Scripts of Archaic Greece* (1961; 2nd ed. 1990) 363, 369. For the coinage of Torone see, among others, B.V. Head, *Historia Numorum* (2nd ed., 1911) 206-207; *A Catalogue of Greek Coins in the British Museum. Macedonia* (1963 reprint) 106-108; *Olynthus* III (1931) 8-12, 27, 109-110; *Olynthus* VI (1933) 96-97, pl. XX nos. 859-876; *Olynthus* IX (1938) 314-316, pl. XXV; C. Seltman, *Greek Coins* (1955, 1965 reprint) 67, pl. VII no. 7; E. Babelon, *Traité des monnaies Grecques et Romaines* II:1 (1907) 1159-1164; M.S. Price and N.M. Waggoner, *Archaic Greek Silver Coinage. The "Asyut" Hoard* (1975) 14, 21, 47-49; C.M. Kraay, "Greek Coins Recently Acquired by the Ashmolean Museum, Oxford," *NumChron* Ser. 6, 14 (1954) 9-17, especially 10-15, pl. II no. 5; C.M. Kraay and M. Hirmer, *Greek Coins* (1966) pl. 130 no. 401.

[20] *Alexandra* 115-116.

[21] *Dionysiaka* XXI. 289.

[22] A. Meineke ed., 629. 10-13. Reference to Torone's namesake also appears in Dionysios Periegetes, *Περιήγησις τῆς οἰκουμένης* (G. Bernhardy ed., *Εὐσταθίου Ὑπομνήματα* [1974]) 327, 25.

[23] A. Cambitoglou, *PAE* 1975, 104-5. This is now fully discussed in J. K. Papadopoulos, "Euboians in Macedonia? A Closer Look," *OJA* 15 (1996) 151-181; *id.*, "Phantom Euboians," *JMA* 10 (1997) 191-219; *cf.* S. Hornblower, *OJA* 16 (1997) 177-186

[24] See, among others, J. Boardman, *The Greeks Overseas* (1980 ed.) 229.

[25] XII. 68. 6.

[26] VII fr. 11; see also X. 1. 8.

[27] IV. 110. 1.

[28] VII. 185. 2; VIII. 127.

testimony, Harrison, as early as 1912, argued that the Chalkidike was inhabited not by Euboian colonists but by a local Greek tribe, the Chalkidians.[29] This view was initially met with mixed reaction: West, having found the idea interesting in 1914, disagreed with it in 1918;[30] Kahrstedt in 1936 appears to have agreed with Harrison,[31] but the opposing view was strongly set out by Bradeen in 1952 who argued that the Euboians colonized the Chalkidike in the eighth century B.C.[32] Bradeen's view has found, in more recent years, a number of adherents, especially Gold and Knoepfler. The former, who discusses the topic at some length, favours the arguments for Euboian colonization and provides an interesting analysis of the testimony of Stephanos Byzantios.[33] Gold notes that Stephanos at first implies that Torone was founded before the Trojan War, since Proteus' or Poseidon's daughter was called Torone, but then adds that the city was established after Troy. Gold suggests that this passage may indicate that the Greeks resettled an earlier native site.[34] More recently Knoepfler has drawn attention to the correspondence of names given to months in the Euboian and Olynthian calendars and sees in this evidence further proof of Euboian colonization.[35] Knoepfler also alludes to the idiosyncratic numbering system used in deeds of sale from Chalkidike, which is similar to the Etrusco-Latin, and concludes that its origin can only be explained by Euboian colonization (even though the local script and dialect of Torone at this time appears to be East Ionic, not Euboian [see below]).[36] In their respective standard reference works, both Hammond[37] and

[29] E. Harrison, "Chalkidike," *ClQ* 6 (1912) 93-103, 165-178. Harrison placed much emphasis on Herodotos' *Chalkidikon genos* and also drew attention to the fact that the sources specifically stating that Chalkis founded colonies in the area are late.

[30] A.B. West, "The Formation of the Chalcidic League,", *ClPh* 9 (1914) 24; *id.*, *The History of the Chalcidic League* (1918, 1973 reprint) 6ff.

[31] U. Kahrstedt, "Chalcidic Studies," *AJP* 57 (1936) 416-417 n. 5.

[32] D.W. Bradeen, "The Chalcidians in Thrace," *AJP* 73 (1952) 356-380, especially pp. 379-80.

[33] R.D. Gold, *A History of Chalcidice to 431 B.C.* (Unpublished PhD Thesis, University of Wisconsin 1974) 105-144 and especially pp. 111-2.

[34] *Ibid.*, 111-2.

[35] D. Knoepfler, "The Calendar of Olynthus and the Origin of the Chalcidians in Thrace," in J.-P. Descoeudres (ed.), *Greek Colonists and Native Populations. Proceedings of the First Australian Congress of Classical Archaeology held in honour of Emeritus Professor A.D. Trendall* (1990) 99-115.

[36] *Ibid.*, 115; and, more recently, *id.*, "Le calendrier des Chalcidiens de Thrace. Essai de mise au point sur la liste et l'ordre des mois eubéens," *Journal des Savants* 1989, 23-58. For the numbering system itself see J.W. Graham, "X = 10," *Phoenix* 23 (1969) 347-58; M. Hatzopoulos, *Actes de vente de la Chalcidique centrale* (*Meletemata* 6, 1988). Knoepfler's reasons for attributing the Chalkidic numbering system to the colonization by Chalkis are not fully explained and are often difficult to follow; see J. K. Papadopoulos in *OJA* 15 (1996) 151-181.

[37] N.G.L. Hammond, *A History of Macedonia* Vol. I (1972) 426.

Graham[38] accept the colonies in Chalkidike assigned to Chalkis as Euboian foundations and, indeed, the Euboian origin of the Thracian Chalkidians is taken for granted in most handbooks dealing with Greek colonization.

The strongest challenge to the generally accepted view has come from Zahrnt in his thorough study of Olynthos and the Chalkidians published in 1971.[39] Denying any link with the Euboian Chalkis, Zahrnt considers the population of Chalkidike, including that of Torone, as a native Greek tribe, Ionian in origin, that had settled in parts of the peninsula at the end of the Mycenaean period. Although strongly contended by Knoepfler,[40] Zahrnt's view was picked up by Bakhuizen who agreed that the Thracian Chalkidians were a native Greek tribe.[41] Zahrnt, unlike his predecessors and more recent commentators like Knoepfler, attempted to review the archaeological evidence pertaining to Chalkidic colonization, not just the historical and linguistic. At the time of writing, however, he was hampered by the lack of any major excavations of the supposed Euboian colonies in Chalkidike. Whatever the vicissitudes of Euboian expansion and Euboian involvement in northern Greece (no-one would seriously question the role of Eretria in the colonization of Mende and Dikaia), the excavations at Torone have revealed a far more complex, if not always conclusive, situation. It is clear, first of all, that there is human presence on the site as early as the Final Neolithic period, that it was inhabited as early as the Early Bronze Age and that it enjoyed strong links with central and southern Greece during the Middle Bronze Age and the Early Mycenaean era (see Chapter 3). Secondly, the Early Iron Age pottery and other small finds, particularly the discovery of the Submycenaean through Early Geometric / Sub-Protogeometric cemetery in 1981 (see Chapter 4), have established the existence of a thriving settlement at Torone predating the era of colonization by several centuries, and displaying strong links with the Aegean in general, not just Euboia. Thirdly, the small quantity of Late Geometric and early Archaic material presented in this volume (see Chapters 5, 6 and 7), now supplemented by material from the more recent excavations, shows that Torone maintained links with cities like Athens and Corinth, well before the period of the Peloponnesian War, and appears to

[38] A.J. Graham, "The Colonial Expansion of Greece," *CAH III, Part 3. The Expansion of the Greek World, Eighth to Sixth Centuries B.C.* (1982) 83-162.

[39] M. Zahrnt, *Olynth und die Chalkidier. Untersuchungen zur Staatenbildung auf der chalkidischen Halbinsel im 5. und 4. Jahrhundert v. Chr.* (1971) especially 12-27.

[40] *Op. cit.* (*supra* n. 35).

[41] S.C. Bakhuizen, *Chalcis-in-Euboea: Iron and Chalcidians Abroad* (1976) 14-15 (reviewed critically by Knoepfler, *MusHelv* 37 [1980] 190-1); and, more recently, in *Nouvelle contribution à l'étude de la société et de la colonisation eubéennes* (1981) 163.

have enjoyed particularly close links with the cities of East Greece, if the imported pottery is anything to go by. In short, there is, to date, no firm archaeological evidence for Euboian colonization in the eighth century or earlier, and abundant evidence of central and southern Greek presence at the site from the Middle Bronze Age on.

The literary *testimonia* referring to the site have been collected in summary form by Oberhummer,[42] while the history of the city in the Classical period and its role in the Chalkidic League have been noted by a number of able commentators and a more thorough study of the literary *testimonia,* by Professor Alan Henry, is in hand.[43] The present overview does not aim to be exhaustive but rather to provide an historical backdrop against which the aims and results of the excavations of 1975-1978 should be seen.

The earliest known reference to Torone is in a fragmentary mid-seventh century B.C. tetrameter by Archilochos preserved in a third-century B.C. inscription from Paros.[44] The fragment points to a connexion between Torone and Thasos and is of interest since the Parian poet had taken part in the colonization of the island and, as such, had some knowledge of the coastal regions of northern Greece.[45] One commentator has even suggested that the fragment refers to a Toronean assault against Thasos.[46] This early connexion between Torone and Thasos is also alluded to in Apollodoros' *Βιβλιοθήκη*. In II.5.9, Apollodoros relates that Herakles, having given Thasos to Androgeos, proceeded to Torone where he was challenged by Polygonos and Telegonos, the sons of Proteus, whom he defeated and killed. A variant of this story is related in a letter believed to have been written by Speusippos to Philip II,

[42] *RE* 6A.2 (1937) 1795-1798.

[43] *Ibid*; see further A.B. West, *The History of the Chalcidic League* (1918, 1973 reprint); *id.*, "The Formation of the Chalcidic League," *ClPh* 9 (1914) 24-34; F. Hampl, "Olynth und der Chalkidische Staat," *Hermes* 70 (1935) 177-196; U. Kahrstedt, "Chalcidic Studies," *AJP* 57 (1936) 416-444; L. Salvo, "Le origini del Koinon dei Calcidesi di Tracia," *Athenaeum* 46 (1968) 47-53. Zahrnt, *op. cit. (supra* n. 39); A. Cambitoglou, *PAE* 1975, 103-111.

[44] F. Lasserre and A. Bonnard, *Archiloque. Fragments* (1958) 26 Frag. 81, line 21; N.M. Kontoleon, "Νέαι ἐπιγραφαὶ περὶ τοῦ Ἀρχιλόχου ἐκ Πάρου," *AE* 1952, 44, Text E2 line 34. For Archilochos' date, which is disputed, see, among others, F. Jacoby, "The Date of Archilochos,", *ClQ* 35, 1941, 97-109 and especially H.D. Rankin, *Archilochus of Paros* (1977) 25-28.

[45] Lasserre and Bonnard *op. cit.* (*supra* n. 44) 26-28; A. Hauvette, *Archiloque. Sa vie et ses poésies* (1905) 32-36. For the colonization of Thasos see, among others, R. Martin, "Relations entre métropole et colonies: aspects institutionnels," in *Φιλίας Χάριν. Miscellanea in onore di Eugenio Manni* (1979) 1435-1445.

[46] A.J. Podlecki, *The Early Greek Poets and Their Times* (1984) 39.

where it is noted that Herakles killed Timolos and Telegonos (the sons of Proteus; Polygonos is not mentioned) near Torone and that he subsequently gave the region to Aristomachos the son of Sithon.[47]

Torone, like many other Greek cities, played only a peripheral role in the Persian Wars, having succumbed quietly to Persian hegemony.[48] As Xerxes' fleet passed Sithonia, the Persians levied ships and men from Torone and other neighbouring cities.[49] We do not hear of any Toronean defecting to the Greek cause, as did Skyllios of Skione before the battle of Salamis,[50] nor does Torone appear to have joined in the uprisings of Potidaia and other Chalkidian cities following the news of the fate of the Persian fleet at Salamis. On the contrary, Torone seems to have remained loyal to the Persians, since following the massacre at Olynthos, the Persian commander Artabazos handed over the devastated city to Kritoboulos of Torone.[51] To what extent, however, Kritoboulos' actions reflect, in reality, a sense of loyalty to the Persians is a moot point, for following the massacre, Olynthos became a Chalkidic town under the control of Torone. As two of the largest and richest cities of Chalkidike (see below), Torone and Olynthos may well have vied with one another for supremacy throughout the later Archaic and Classical periods.

With the withdrawal of the Persian forces from northern Greece, Torone became a member of the Delian League and, according to Meritt *et al.*, was possibly one of the founding members in 478-477 B.C.[52] Gold, on the other hand, suggests that the Chalkidian cities joined the League as late as 470-469 B.C. on account of the influence of the Persian base at Eion which held out until 470.[53] Be that as it may, the earliest extant Toronean payment entered on the Athenian Tribute Lists dates to 454-453

[47] See R. Herscher (ed.), *Epistolographi Graeci. Recensuit recognovit ad notatione critica et indicibus instruxit* (1873) 629-32, especially 631 section 7; see further L.E. Bickermann and J. Sykutrios, *Speusipps Brief an König Philipp* (1928); *cf. IG XIV* 1293 A85f for Herakles' activities. For a useful overview of Toronean mythology see Gold, *op. cit.* (*supra* n. 33) 46-48.

[48] Gold, *op. cit.* (*supra* n. 33) 167-8 argues that since the Macedonians and Thracians quickly recognized Persian suzerainty, the cities of Chalkidike also had to do so.

[49] Herodotos VII. 122; *cf.* VII. 185.

[50] Herodotos VIII. 8. 1.

[51] Herodotos VIII. 127. Other Chalkidians in the service of the Persian crown at this time, and later, include Timoxeinos, the commander of the Skionian troops at Potidaia who was prepared to betray the city to Artabazos, and Polykritos of Mende who was a physician at the court of Artaxerxes II; on this aspect see J. Hofstetter, *Die Griechen in Persien. Prosopographie der Griechen im Persischen Reich vor Alexander* (1978) 157 no. 272, 187-8 no. 330.

[52] B.D. Meritt *et al., The Athenian Tribute Lists* III (1970) 223.

[53] Gold, *op. cit.* (*supra* n. 33) 180-96.

B.C. In that year, Torone was assessed at twelve talents, a relatively large amount lowered in subsequent years to a more regular six talent payment.[54] In comparison to other Chalkidic cities, the Toronean contribution was large, and only the regular Mendean eight talent payment surpassed the normal six talents of Torone.[55] In 430 B.C. the Toronean payment was again raised to an exacting twelve talents and in 425 B.C. it may have been increased to fifteen. The latter must have fuelled anti-Athenian sentiments within the city.[56] The Athenian Tribute Lists show that Torone must have been a prosperous town and one of the leading cities of the Chalkidike.[57]

In 436 B.C. Torone, along with several other towns of the region, failed to pay tribute to the Delian League, perhaps as a statement of discontent towards Athens.[58] In 432 Perdikkas of Macedonia encouraged the Chalkidians to revolt against Athens and to establish Olynthos as their leading city.[59] Torone, however, did not join the rebels; Zahrnt intimates that the Toroneans' decision was dictated by the fact that there may have been an Athenian garrison in the city,[60] though it is also likely that they feared the proposed status of Olynthos in the ensuing political climate. Torone essentially remained under Athenian hegemony until the winter of 424/3 B.C. when it was captured by the Spartan force led by Brasidas.[61] The Spartan assault and capture of Torone is vividly related by Thucydides who, in the process, provides many details of the topography of the ancient city in the later fifth century B.C (see below). It is also clear from Thucydides' account that the inhabitants were divided into pro-Spartan and pro-Athenian camps. West has suggested that the Toroneans who assisted Brasidas may have had oligarchic leanings and found the tribute exacted by Athens too burdensome.[62] West further suggests that the conflicting loyalties of the pro-Spartans and Athenian sympathizers were indicative of a deeper division of the

[54] B.D. Meritt *et al., The Athenian Tribute Lists* I (1939) 426.

[55] Mende in the first assessment period paid eight talents, the regular payment thereafter being between five and nine talents; see Meritt *et al., ibid.* 340-1; Meritt *et al., op, cit.* (*supra* n. 52) 64.

[56] *Ibid.* 324-5.

[57] Torone was probably the regional centre of southern Sithonia and may have exerted some influence over the neighbouring towns of Sarte and Gale. Sarte first appears on the Tribute Lists in 434-433 (Meritt *et al., ibid.* Vol. I, 471; Vol. III, 218) and Gale in 436-435 B.C. (Meritt *et al.,* Vol. III, 218 n. 109). See further Zahrnt, *op. cit.* (*supra* n. 39) 178-9, 221-3.

[58] West, *op. cit.* (*supra* n. 43) 16 n. 8.

[59] Thucydides I. 58.

[60] *Op. cit.* (*supra* n. 39) 249; *cf.* Thucydides IV. 79 where some of the Chalkidians who had not rebelled secretly plotted with Brasidas.

[61] Thucydides IV. 110-116; Diodorus Siculus XII. 68. 6.

[62] West, *op. cit.* (*supra* n. 43) 53; Zahrnt, *op. cit.* (*supra* n. 39) 249.

inhabitants of the city: those who favoured a democratic regime and those who preferred an oligarchy.[63]

The link between Torone and Athens is further attested by the gravestones of several Toroneans buried in Athens in the course of the fifth century B.C. The first, a certain Mikkos (Μίκκος Καλλικλείδου Τορωναῖος), met his demise sometime before the middle of the fifth century, while his compatriot Nautes (Ναύτης Εὐδημίδο Τορωναῖος) was buried, it seems, during the second half of the same century.[64] A third stele, that of Hermoteles (Ἑρμοτέλης Ἀριστόνο Τορωναῖος) is also dated to the second half of the fifth century B.C.[65] Of significance is the fact that these inscriptions are in East Ionic script which, as Jeffery notes, probably represents the local script of Torone.[66]

Brasidas appears to have used Torone as his headquarters at least for a brief time as he kept returning to the city between various expeditions;[67] he appointed Pasitelidas as commander of the Spartan force during his absence.[68] The winter of 423 B.C. witnessed a period of truce between Athens and Sparta, though hostilities were quickly rekindled with the heat of the summer of 422. According to Thucydides, Kleon got his way with the Athenians; he sailed out against the towns of the Thracian area with a force of 1,200 hoplites and 300 cavalry from Athens, a still larger force from the allies, and thirty ships. Having put into Skione, he increased his own forces by taking some of the hoplites laying siege to that city.[69] Thucydides goes on to state: "He then sailed into the Kophos Limen in the territory of Torone and not far from the city."[70] Having been informed by deserters that Brasidas was not in Torone and that the people within the city were not strong enough to meet him in battle, he set out with his army from the Kophos Limen, and sent ten ships round to sail into the harbour.[71] Kleon made quick work of the attack and set up two trophies commemorating his victory, one by the harbour, the other by the fortification. He made

[63] West, *ibid.*, 147.

[64] L.H. Jeffery, *The Local Scripts of Archaic Greece* (1961, reprint 1990) 363, 369 nos. 7-8. The stele of Mikkos Kallikleidou (*IG* I^2 1044) is dated *ca.* 475-450 B.C., that of Nautes Eudemidou (*IG* I^2 1043) 450-400 B.C.

[65] *IG* I^2 1074. Jeffery, *ibid.*, 363 n. 1 states that this inscription appears to be fifth century; Zahrnt, *op. cit.* (*supra* n. 39) 20 dates it to the second half of the century.

[66] *Ibid.*, 363.

[67] Thucydides IV. 122, IV. 129.

[68] *Ibid.*, IV. 132.

[69] Thucydides V. 2.

[70] *Ibid.*

[71] *Ibid.* This passage clearly indicates that during the later fifth century B.C. the main harbour of the city was the sandy cove east of Promontory 1.

slaves of the wives and children of the Toroneans; the men of Torone, the Peloponnesians and any Chalkidians who were there were imprisoned and sent to Athens.[72] The brutality of Kleon's treatment of the Toroneans in 422 is well reflected in Xenophon; following the news of the Athenian defeat at Aigospotamoi, the Athenians feared that they would now be dealt with as they had dealt with others. Of the states harshly treated by the Athenians, Xenophon singles out Melos, Histiaia, Skione, Torone and Aigina.[73] Isokrates also refers to the Athenian maltreatment of the Toroneans.[74] The Toroneans imprisoned by Kleon returned home later as part of an exchange of prisoners with the Olynthians.[75]

Kleon posted a garrison in Torone following his attack and under the terms of the Peace of Nikias Torone was left in Athenian hands.[76] The city probably remained under Athenian sway until 405-404 B.C., despite the fact that there are no records of Toronean payments in the Athenian Tribute Lists at this time.[77] In 405 the Athenian possessions in Thrace rebelled following the battle at Aegospotami.[78] Lysander[79] restored the Skionians to their city, from which they were ousted by the Athenians in 421,[80] and expelled the Athenian colonists there. It is uncertain whether there were any Athenian colonists at Torone after 422, though both West and Ferguson believe that there were and that they were expelled after the defeat at Aigospotamoi.[81]

The fourth century B.C. saw an era of political instability in the region. In the first half of the century alone, Torone was taken by foreigners three times, twice by storm. By the 380s the Chalkidian League, with Torone's rival Olynthos as the leading city, incorporated a number of towns in the region. Our main source for these events, Xenophon, does not specifically state that Torone was part of the League at this time, though his account suggests that the city may have been a member.[82] It is worth noting that Torone, throughout the first half of the fourth century B.C., contin-

[72] *Thucydides* V. 3; Diodorus Siculus XII. 73. 2-3.
[73] *Hellenika* II. 2. 3.
[74] Panathenaicus (XII). 63.
[75] Thucydides V. 3. Could the Nautes mentioned above (n. 64) and Hermoteles (n. 65) who died in Athens in the fifth century B.C. be two of the Toroneans taken prisoner by Kleon?
[76] *Thucydides.* V. 3; V. 18. 8.
[77] Zahrnt *op. cit.* (*supra* n. 39) 250.
[78] Xenophon, *Hellenika* II. 2. 5.
[79] Plutarch, *Lysander* 14.
[80] Thucydides V. 32.
[81] West *op. cit.* (*supra* n. 43 [1918]) 94; W.S. Ferguson in *CAH* V. *Athens 478-401 B.C.* (1927) 362.
[82] *Hellenika* V. 2. 12, 18.

ued to mint both silver and bronze coinage, perhaps only sporadically, a fact that would indicate a certain level of independence and autonomy.[83] The question of Torone's independence from the Chalkidian League in the earlier fourth century B.C. has exercised Classical scholars of the 20th century. West, for example, has argued that Torone was in fact incorporated in the League following the events of 380 B.C. (see below);[84] Zahrnt, on the other hand, prefers to see Torone as independent.[85] Hampl argued that because the Epidaurian *Theoroi* List does not specifically mention Torone, nor any town in Sithonia, the city had been incorporated into the League.[86] Kahrstedt, however, questioned this line of reasoning and concluded, judiciously, that there is not enough evidence upon which to base any firm conclusion.[87] In any case, in 380 B.C., the Spartans were campaigning against Olynthos at the behest of Amyntas III of Macedonia, supported by Akanthos and Apollonia. The Spartan king Agesipolis ravaged the territory of the Olynthian allies and took Torone by storm.[88] The following year saw a peace settlement between Sparta and the Chalkidian League, but as to the status of Torone within the framework of this accord there is no information.

In 364 B.C. the Athenians returned to the Thracian area in their campaign against the Chalkidian League. In that year Timotheos took Torone, evidently with the aid of mechanical devices.[89] Timotheos' capture of Torone has been seen by some scholars as evidence that the city was indeed a member of the League, but Timotheos' acquisitions in the north included several cities that were never members of the League, such as Methone and Pydna.[90] The aftermath of Timotheos' attack on Torone is shrouded in literary silence and for how long Torone remained under Athenian control is uncertain, though by 357 B.C. Isokrates lamented the fact that all the cities in Thrace had been lost to Athens.[91]

[83] For a useful overview of Torone at this time see Zahrnt *op. cit.* (*supra* n. 39) 99, 250-251. For Toronean silver coinage of the fourth century see *Olynthus* IX, 178-9, 316, pl. 23 no. 1d; U. Westermark, "The Coinage of the Chalkidic League Reconsidered," in *Studies in Ancient History and Numismatics Presented to Rudi Thomsen* (1988) 97. For the Toronean bronze issues see *Olynthus* III, 109-10 nos. 887-95, pls. 22-23; *Olynthus* VI, 35-6 nos. 138-40, pl. 9; pp. 96-7 nos. 859-76, pl. 20.

[84] West *op. cit.* (*supra* n. 43) 108.

[85] *Op. cit.* (*supra* n. 39) 250.

[86] F. Hampl *op. cit.* (*supra* n. 43) 177-96, especially 193; for the *Theoroi* List see *IG* IV^2, 94-5.

[87] U. Kahrstedt *op. cit.* (*supra* n. 43 [1936]) 440-4.

[88] Xenophon, *Hellenika* V. 3. 18.

[89] Diodorus Siculus XV. 81; Isokrates, *Antidosis* 108, 113; Polyainos. *Strategemata* III. 10. 15.

[90] Deinarchos, *Against Demosthenes* I. 14.

[91] *Areopagitikos* 9.

Philip II's ascension to the Macedonian throne in 359 B.C. altered, irrevocably, the political landscape, not only of the north Aegean. Within a decade of his coming to power he marched against the cities of the Chalkidian League, declaring, in the words of Demosthenes, that the world was not big enough for both Macedonia and the Chalkidian League.[92] In 348 B.C. Torone, along with Mekyberna (the port of Olynthos), fell, according to Diodorus Siculus, to Philip by means of "treasonable surrender."[93] Significantly, few scholars would contest that Torone was a member of the League at this time.[94] The fact that Torone offered no resistance to Philip, particularly in the light of Diodorus' estimate of the "treasonable" action, need not necessarily testify to an act of political expedience or sound judgement, but may well provide another case of the constant rivalry between Torone and Olynthos. Later in the same year Philip moved against Olynthos and carried out the notorious massacre of 348-347 B.C.[95] Bloody as this event must have been, its value as a chronological "fixed-point" in Classical Archaeology is well-known, if not always beyond reproach.[96]

With Torone, and the other Chalkidian cities left standing, now firmly under Macedonian control, our main literary sources concerning the site fall silent for the ensuing Hellenistic period.[97] That life at Torone after Philip continued for a time, with little evident disruption, is well attested in the archaeological record, not only as a result of the excavations of the first three seasons, but also of later campaigns at Torone. Worth noting in this context are two fourth-century B.C. inscriptions that post-date Philip's destruction of the Chalkidian League and relate the whereabouts, and escapades, of two Toroneans. The first, an inscription from Samos, honours a certain Gyges of Torone, the son of Menetheos; this Gyges appears to have been an enterprising merchant who brought grain to Samos at a time of shortage.[98] The second inscription, from Epidauros, tells how an unsuspecting Toronean had been tricked by his stepmother into swallowing a potion that contained leeches; he consequently, and

[92] Demosthenes. *Orat.* IX. *Philippic* III, 11.

[93] XVI. 53. 2.

[94] See Zahrnt *op. cit.* (*supra* n. 39) 108.

[95] Diodorus Siculus XVI. 53. 2-3; Demosthenes, *Orat.* IX. *Philippic* III, 56, 66; XIX. 267.

[96] On this aspect see, most recently, W.R. Biers, *Art, Artefacts, and Chronology in Classical Archaeology* (1992) 72, and especially p. 94 n. 4.

[97] Demosthenes, *Orat.* IX, Philippic III. 26, states that Philip destroyed Olynthos, Methone, Apollonia and another thirty-two cities of the Chalkidians.

[98] *SEG* I, 361; for a recent discussion of this inscription see G. Shipley, *A History of Samos 800-188 B.C.* (1987) 170.

understandably, fell ill. After a night in the Sanctuary of Asklepios at Epidauros he learnt in a dream the cause of his ailment and was miraculously cured.[99]

Also worth noting in this context are the gravestones of a number of Toroneans buried in Athens during the second half of the fourth century B.C. These include: Ἀγλώκρ[ιτος] Τορωνα[ῖος],[100] Τιμοκρ[ ] Τορων[ ],[101] and the stele commemorating husband and wife, Πάμφιλος Τορωναῖος, Πρωθὼ Τορωναία.[102]

An important fourth-century B.C. document is the inscription, found by chance at Torone in 1964, which represents the only major inscription on stone recovered from the site.[103] The text, on a schist slab, records the details of a house sale.[104] The stone is dated by Hennig to *ca.* 350 B.C., rather than the first decades of the fourth century;[105] Hatzopoulos dates the inscription to 353-352 B.C.[106] In his discussion of the stone, Hennig points out the extremely low price (112 drachmai)[107] for the house and suspects a more complex transaction lurking under the surface involving, among others, Poseidippos, the brothers Diodoros and Philonichos, and Aristokles,[108] in addition to a list of witnesses. The ἱερεὺς Εὐφραντίδης Ἀριστοτίμο in lines 2-4 of the text is shown by Hatzopoulos to have been a federal priest.[109]

The dearth of literary *testimonia* on Torone throughout the Hellenistic period is perhaps no accident. The excavations at Torone have established a significant con-

[99] *IG* IV^2, 121 (= *SIG*^{3}, 1168); the inscription is discussed at some length by P. Watson, "A Fistful of Leeches or Stepmotherly Ingenuity," in Michael Whitby, P. Hardie and Mary Whitby (eds.), *Homo Viator: Classical Essays for John Bramble* (1987) 69-78. The inscription does not specifically name the unsuspecting man, but simply refers to him as ἀνὴρ Τορωναῖος.

[100] *IG* II/III^2 10453 (=*IG* II^3 3396).

[101] *IG* II/III^2 10455.

[102] *IG* II/III^2 10454 (=*IG* II^3 3397); see further A. Milchhoefer, "Gemalte Grabstelen," *AM* 5, 1880, 193.

[103] M. Karamanole-Siganidou, "Ὠνὴ ἐκ Τορώνης," *AD* 21 (1966) Α′, 151-157, pl. 54; Thessalonike Museum inv. 4396; *SEG* XXIV 574.

[104] For similar deeds of sale elsewhere in Chalkidike see D. Hennig, "Kaufverträge über Häuser und Landereien aus der Chalkidike und Amphipolis," *Chiron* 17 (1987) 143-169; Hatzopoulos, *op. cit.* (*supra* n. 36); I. Vokotopoulou, "Νέα τοπογραφικὰ στοιχεῖα γιὰ τὴν χώρα τῶν Χαλκιδέων," in *Μνήμη Δ. Λαζαρίδη. Πόλις καὶ χώρα στὴν ἀρχαία Μακεδονία καὶ Θράκη. Πρακτικὰ ἀρχαιολογικοῦ συνεδρίου, Καβάλα 9-11 Μαΐου 1986* (1990) 109-131; *SEG* XXXVII 542, 568, 572 (with references); *Olynthus* II, 101; D.M. Robinson, *TAPhA* 59 (1928) 225-232; *id., TAPhA* 62 (1931) 42-53; *id., TAPhA* 65 (1934) 124-131; *id., TAPhA* 69 (1938) 47-56.

[105] Hennig, *ibid.*, 154-155, n. 39. The earlier date was proposed by Karamanole-Siganidou, *op. cit.* (*supra* n. 103). The inscription is further discussed in *SEG* XXXVII 588.

[106] Hatzopoulos, *op. cit.* (supra n. 36) 36, 67, 72-77.

[107] For real estate prices see P. Ducrey and D. Knoepfler (eds.), *Comptes et inventaires dans la cité grecque* (1988) 212-213.

[108] Hennig, *op. cit.* (*supra* n. 104) 154-155; *SEG* XXXVII 588.

[109] Hatzopoulos, *op. cit.* (*supra* n. 36) 67.

traction in the size of the settlement area sometime contemporary with, or soon after, the construction of the massive fortification system in the later part of the fourth century B.C. The vast majority of Hellenistic material recovered from the site so far is largely restricted to Promontory 1 (the Lekythos). Evidence for occupation of the site within the greater part of the area enclosed by the Early Hellenistic fortifications is lacking. Moreover, the one domestic building substantially excavated during the first three seasons, Structure 3 (Chapter 2), was clearly abandoned sometime towards the end of the fourth century B.C.; a similar fate also appears to have befallen other fourth-century houses excavated more recently. The combined evidence of the abandonment of domestic buildings, the substantial contraction in the size of the area of the site inhabited, and the construction of the massive fortifications points to a general evacuation of the larger part of the population and the establishment of a garrison. The one political event at the end of the fourth century B.C. that may account for the situation at Torone is the foundation and *synoikismos* of Kassandreia by Kassander in 316 B.C.[110] According to Diodorus Siculus, the newly founded city, on the site of Potidaia, was populated by Potidaians, Olynthians and other neighbours from Pallene and outside it.[111] Although the Toroneans are not specifically named as one of the groups that had to move to the new city, it is possible that the population of Torone was one of the foundation groups.[112]

The last preserved reference to an event in the history of the site in Antiquity is Livy's account of the failed siege of Torone in 169 B.C. by a Roman force assisted by Eumenes II of Pergamon and Prousias II of Bithynia.[113] The site is listed, however, in a number of geographies compiled in the course of the 1st and 2nd centuries A.C.,[114] while a number of local curiosities pertaining to natural history are preserved in the Elder Pliny (see below).[115] These and other *testimonia* of the Roman period are more fully dealt with in the introduction to Chapter 14.

Perhaps the most salient characteristics of the site reflected in the literary sources are its comparative wealth and its strategic position towards the southern tip of

[110] For the foundation of Kassandreia see especially J.A. Alexander in B. Laourdas and Ch.I. Makaronas (eds.), *Ancient Macedonia. Papers Read at the First International Symposium held in Thessalonike, 26-29 August 1968* (1970) 127.

[111] XIX. 52. 2.

[112] See further Zahrnt *op. cit.* (*supra* n. 39) 112-121.

[113] Livy XLIV.12.7-8.

[114] These are, in chronological order: Pomponius Mela, *Chorographia* II.3.34; Claudius Ptolemaios, *Geographia* III.13.12 (*supra* n. 9); Dionysios Periegetes, *op. cit.* (*supra* n. 22) 327 lines 24-29.

[115] *N.H.* XVIII.30.122; IX.51.100; IX.69.149.

Sithonia, coupled with its fine harbour.[116] For any northern or southern-bound shipping hugging the Thracian coastline, Torone offers one of the most conspicuous anchorages and is ideally situated with regard to the potentially hazardous circumnavigation of the southern tip of Akte where, in 492 B.C., Darius' fleet was wrecked by the storm vividly related by Herodotos[117] and which led to Xerxes' decision to cut a canal through the neck of the peninsula in 483-481 B.C. in order to avoid the passage round Mt. Athos.[118] The geographical setting of Torone with regard to the Aegean, and the Mediterranean and Black Seas beyond, is of paramount importance when considering the relationships of the site during various periods and in this it differs from many Macedonian cities which are often situated more with regard to available arable land and inland communications than with a view to the sea.[119] The strategic importance of the site continues into later periods as is witnessed by Morosini's storming of Promontory 1 in A.D. 1659, when he ousted the Turks[120] and, more recently, by the German submarine base during World War II which was located below Hill 1, to the south-west, near the entrance to Porto Koupho. It is worth noting that prior to the completion of the modern road in 1975, which opened Sithonia's relative isolation to the ravages of tourism, the most natural means of communication between the few villages of the peninsula was by boat,[121] since the mountainous central spine of Sithonia, rising to its highest peak in Mt. Itamos, made the journey by land comparatively more difficult.

Few sites in the north Aegean have as long a history as Torone. The site was first inhabited in the period of transition from the Neolithic to the Early Bronze Age. The earliest material recovered so far is Final Neolithic, represented by a few sherds found in the more recent excavations on Promontory 1.[122] There is no evidence of a

[116] Worth noting is that on a clear day the entire Toronean Gulf and the peninsula of Pallene are in clear view; Mt. Olympos may sometimes be seen behind Pallene, while the summit of Mt. Athos can be viewed from Hill 1 rising above the hills of Sithonia to the east of Torone. On a particularly clear day it is possible to see even as far as the northern Sporades; *cf.* Sophokles, *Fragment* 708, where it is mentioned that Athos casts its shadow on Lemnos at sunset.

[117] VI.44.

[118] *Ibid.* VII.22-24; see also J.K. Papadopoulos, "Roman Amphorae from the Excavations at Torone," *AE* 1989, 78-81.

[119] J. Boardman, *The Greeks Overseas* (1980 ed.) 230.

[120] E. Armao, *In giro per il mare egeo con Vincenzo Coronelli. Note di topologia, toponomastica e storia medievale, dinasti e famiglie in Levante* (1951) 38-39. We are grateful to Pamela Armstrong, who will be publishing the Byzantine and Post-Byzantine material from Torone, for this reference.

[121] *Cf.* Meritt, *op. cit.* (*supra* n. 2) 453 n. 4.

[122] See A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217; *MeditArch* 3 (1990) 93-142; *MeditArch* 4 (1991) 147-171; *MeditArch* 7 (1994) 141-163.

full-fledged Neolithic phase. The establishment of an Early Bronze Age settlement on the promontory, however, reflects a general demographic trend at this time of movement of certain groups of people from inland agricultural areas to the coast, or, more accurately, an important shift in subsistence strategies. It is worth noting that the nearest large Neolithic site in Sithonia is the unexcavated mound below the school-house at Sykia, about a two-hours walk from Torone.[123] A similar trend is observed at many sites throughout the Aegean, such as Aghios Kosmas in Attika, Kolona on Aigina, Aghia Irini on Keos, Pefkakia Magoula in Thessaly, and Beşik Tepe in western Anatolia, to mention only a few. The location and physical appearance of such sites is very similar to those of Torone. The outward looking and maritime character of these sites played an important role in the economic and social developments of the Aegean in the Bronze Age. In the case of Torone this is highlighted particularly in the Middle and early Late Bronze Age periods which witness growing links with the central and southern Aegean region. Prior to the excavations at Torone, the earliest evidence of contact with the Mycenaean World in Macedonia was during the Late Helladic III A2/B1 phase. The discovery of imported Minyan and Early Mycenaean pottery dating to Late Helladic I and II at Torone adds a new dimension to the cultural contacts the north Aegean enjoyed at this time. The continuity of occupation from the Bronze Age into the Early Iron Age at Torone, and its subsequent establishment as one of the largest and richest cities of Chalkidike in the historic era is a pattern shared by few, if any other, sites in northern Greece. Torone is occupied throughout the Hellenistic (although with a significant contraction in size of the inhabited area) and Roman periods (see Chapters 11 and 14), and on into the Byzantine and Post-Byzantine periods.[124]

It remains to consider the resources and economic basis of the settlement at Torone in its various periods of occupation. It is clear from the evidence of the Athenian Tribute Lists that Torone must have been a prosperous city in the Classical period. Its wealth must have depended, in part, on agricultural produce (see below), for which the larger part of the southern region of Sithonia may have been exploited,

[123] D.H. French, *Index of Prehistoric Sites in Central Macedonia and Catalogue of Sherd Material in the University of Thessaloniki* (privately issued, Athens 1967) 66, *s.v.* Sykia. Other well-known Neolithic sites in Chalkidike include Aghios Mamas, Olynthos, Kritsana, Ormylia 2 and Heurtley's sites C5 (=B12) and C6 (=B15), see W.A. Heurtley, *Prehistoric Macedonia* (1939) pp. xxii-xxiii.

[124] It is regretted that the Byzantine and Post-Byzantine pottery and other small finds from the site recovered from the first three seasons are not presented in this volume on account of the limitations of space and in order not to delay its publication.

as well as its trading activities.[125] One commentator has gone as far as to argue, on the basis of Torone's agricultural potential, the information of payments provided in the Athenian Tribute Lists, and the walled area of the city, that Torone in the fifth century B.C. had a population in the range of 7,500 and 9,000.[126] Estimates of this sort are, however, notoriously unreliable and the figure of 7,500 - 9,000 inhabitants for the city has, more recently, been criticized on methodological grounds.[127]

With regard to Torone's trading activities, eloquent testimony is provided by the lead letter published in Chapter 19.[128] The *lamella*, found in the Isthmus in 1976, is dated to the third quarter of the fourth century B.C. and represents one of only eleven known examples of Greek private letters written on lead sheets.[129] It records a commercial transaction involving the purchase of seven talents of wood. The economic importance of Macedonian and Chalkidic timber cannot be underestimated, particularly ship-building timber which was in great demand. When addressing the Spartans in 383 B.C., the Akanthian envoy Kleigenes stated that the region of Olynthos possessed ship-timber and had revenues from many ports and trading places.[130] In an early fourth century B.C. treaty between the Chalkidian League and the Macedonian king Amyntas it is stipulated that the League may export any timber (and pitch) it does not require for its own needs, except fir.[131] If fir is to be exported then Amyntas' permission must be obtained.[132] The latter provision no doubt reflects Amyntas' desire to control the strategically important fir export trade, as it was the timber most suited in trireme construction.[133] On the basis of this treaty, Gold has argued that the

[125] Zahrnt, *op. cit.* (*supra* n. 39) 248.

[126] N.J.G. Pounds, "The Urbanization of the Classical World," *Annals of the Association of American Geographers* 59 (1969) 135-157, especially 140-143 with Table 2; see also *id., An Historical Geography of Europe 450 B.C.-A.D. 1330* (1973). Pounds' calculations of the area enclosed by walls at Torone, Skione and Mende is based on the sketch-maps in Meritt, *op. cit.* (*supra* n. 2); that of Potidaia on J.A. Alexander, *Potidaea: Its History and Remains* (1963), but on the assumption that the Medieval wall of the city followed the line of the ancient one. The figures for Olynthos were calculated on the basis, respectively, of *Olynthus* VIII, 44 and G.E. Mylonas, "Excavations at Mekyberna 1934, 1938," *AJA* 47 (1943) 78-87.

[127] L. Nixon and S. Price, "The Size and Resources of Greek Cities," in O. Murray and S. Price (eds.), *The Greek City from Homer to Alexander* (1990) 137-170, especially p. 146.

[128] See also A. Henry, "A Lead Letter from Torone," *AE* 1991, 65-70.

[129] For the date see *ibid.*, 66; for a full list of other examples see *ibid.*, 65 n. 2. *Cf.* D. Jordan, "Two Inscribed Lead Tablets from a Well in the Athenian Kerameikos," *AM* 95 (1980) 225-239.

[130] Xenophon, *Hellenika* V.2.16.

[131] The treaty is recorded on the inscription: M.N. Tod, *A Selection of Greek Historical Inscriptions* Vol. II. *From 403 to 323 B.C.* (1962) 31-33 no. 111.

[132] *Ibid.*

[133] For fir and ship-building see especially R. Meiggs, *Trees and Timber in the Ancient Mediterranean World* (1982) 118-9.

Chalkidians may have acted as exporters for the Macedonians.[134] The evidence of the Torone lead letter is worth bearing in mind, since [....]tos, unable to buy wood in M[ende?], writes to Tegeas to dispatch, with some urgency, seven talents of timber.[135] The combined evidence of this letter and the testimony of Kleigenes bears witness to the extensive timber resources within the Chalkidike. It is worth adding that native and reforested areas not distant from Torone today are capable of supporting extensive stands of trees, especially pine.[136]

The literary evidence for Chalkidic timber, such as it is, dates to the fourth century B.C.; direct literary testimony for the exploitation and trade of local timber earlier is lacking. Nevertheless, one wonders to what extent the Athenian and Spartan involvement in the Chalkidike, particularly at Torone, was related to timber, not least for ship-building. Be that as it may, the economic value of timber extends well beyond its use in ship-building, and a steady and assured supply would have been crucial to any city in ancient Greece.[137] The importance of firewood in the ancient economy is stressed by a number of scholars.[138] Basic fuel for heating and cooking played its role, but judging from the frequent entries for ἄνθρακες καὶ χσύλα καύσιμα in the accounts of the statue of Athena Promachos,[139] and of the same commodities in the accounts of the statues of Hephaistos and Athena in Athens,[140] wood was an important item in the process of smelting. In Demosthenes' speech against Meidias,[141] Meidias brought back from Styros various materials, including timber, for his silver mines; Henry has noted that this wood may have been used either for Meidias' furnaces or perhaps as pit-props for his mines.[142] Henry further emphasises the need for adequate supplies of wood for religious sacrifices and cites the records of the *epistatai* of the finances of the gods on Delos which record substantial quantities of wood purchased for this purpose.[143]

[134] Gold, *op. cit.* (*supra* n. 33) 8-9.

[135] Unfortunately, that part of the inscription which appears to refer to the type(s) of timber (lines 4-5) is illegible, see Chapter 19.

[136] Meiggs, *op. cit.* (*supra* n. 133) 118 notes that pine was valued in Antiquity for the construction of merchantmen as it was a heavier and more durable timber than fir.

[137] See Chapter 19.

[138] Meiggs, *op. cit.* (*supra* n. 133) 203-206; also S. Douglas Olson, "Firewood and Charcoal in Classical Athens," *Hesperia* 60 (1991) 411-420; Henry, *ibid.*, 69-70.

[139] Henry, *op. cit.* (*supra* n. 128), 69 n. 14; *IG* I^3, 435, lines 17, 49, 75, 110.

[140] Henry, *op. cit.* (*supra* n. 128), 69 n. 15; *IG* I^3, 472, line 151.

[141] 21.167.

[142] Henry, *op. cit.* (*supra* n. 128) 69.

[143] *Ibid.*, 69-70. In the late fourth century B.C. such amounts could exceed 100 talents per year, and even greater amounts are involved for the years after 250 B.C.; *cf.* Meiggs, *op. cit.* (*supra* n. 133) 450-451; W.K.Pritchett, "The

As for Toronean agricultural produce, the most obvious commodity is wine, boldly alluded to in the very emblem the city chose for its coinage.[144] The earliest Toronean tetradrachm obverse types — perhaps dating to the first decade of the fifth century rather than the late sixth century B.C. — show an amphora, with or without vine tendrils entwined round its neck or handles and associated bunches of grapes. The device would have advertised the wine producing capacity of the city or the superiority of its vintage. The earliest issues (Kraay Group B: 500-490 B.C.) were originally struck on the Thraco-Macedonian standard,[145] and slightly later on the Attic-Euboian standard (Kraay Group A: 490-480 B.C.).[146] These early issues of the mint travelled widely as is indicated by their presence in a number of Near Eastern and Egyptian hoards.[147] The majority of emblems on Torone coins depict transport or storage amphorae; a few, however, appear to show table amphorae (*i.e.* footed, lidded or fluted vessels, the latter possibly alluding to metal vases).[148] The other common device on Torone coins was the oinochoe, first minted *ca.* 480 B.C. and continuing at

Attic Stelai Part II," *Hesperia* 25 (1956) 296-7. Henry also cites the evidence of the confiscated property, including χσύλα καύσιμα, of those convicted of parodying the Mysteries and mutilating Hermai; *cf.* W.K. Pritchett, "The Attic Stelai, Part I," *Hesperia* 22 (1953) 265.

[144] *Supra* n. 19. See now J.K. Papadopoulos and S.A. Paspalas, *Hesperia* 68 (1999) 161-188.

[145] C.M. Kraay, "Greek Coins Recently Acquired by the Ashmolean Museum, Oxford," *NumChron*14 (1954) 12-14, nos. 13-16, pl. 2, 5; Price and Waggoner, *op. cit.* (*supra* n. 19) 47-8 nos. 221-223, pl. 12. C.M. Kraay, *Archaic and Classical Greek Coins* (1976) 135 suggests that the coins on the Thraco-Macedonian standard may have been intended for trade with Macedonia and those on the Attic-Euboian for trade with Chalkis.

[146] Kraay, *NumChron* 14 (1954) 10-12, nos. 1-12, pl. 2, 3-4; Price and Waggoner, *ibid.*, 47-8 nos. 224-228. Kraay's Group C types bear letters other than those of the ethnic. Several scholars have suggested that these may refer to a mint other than Torone, though it is clear that the inscriptions are to be understood as abbreviations of Toronean magistrates' names.

[147] Such as: the Egyptian Hoard: H. Dressel and K. Regling, "Zwei äegyptische Funde altgriechischer Silbermünzen," *ZfN* 1927, 1-138, 5 n. 1; Head, *op. cit.* (*supra* n. 19) 107 no. 3; M. Thompson *et al., An Inventory of Greek Coin Hoards* (1973) 227 no. 1634. The Zagazig Hoard: Dressel and Regling, *ibid.*, 115-6 nos. 183-5; Thompson, *ibid.*, 231 no. 1645. The Benha el-Asl Hoard: E.S.G. Robinson, "A Find of Archaic Coins from the Delta," *NumChron* 10, ser 5 (1930) 97 no. 8, pl. 8; E.T. Newell, "Additions to the Delta (Benha el-Asl) Hoard," *NumChron* 11 (1931) 67 no. 5; *Olynthus* III, 9 no. 8; Thompson, *ibid.*, 1973, 229 no. 1640. The Asyut Hoard: Price and Waggoner, *ibid.*, 47-9 nos. 221-231, pl. 12; Thompson *et al., ibid.*, 230 no. 1644. The Decadrachm Hoard: E.S. Fried, "The Decadrachm Hoard: An Introduction," in I. Carradice (ed.), *Coinage and Administration in the Athenian and Persian Empires. The Ninth Oxford Symposium on Coinage and Monetary History* (BAR International Series 343) (1987) 4, 9 Table 1, pl. 2, 14-15. The Malayer Hoard: Kraay, *op. cit.* (1954) 13 no. 14, pl. 2, 5; Thompson *et al., ibid.*, 256 no. 1790.

[148] For footed amphorae see Price and Waggoner, *op. cit.* (*supra* n. 19) pl. 12 nos. 222-3; for a footed amphora with conical lid see Babelon, *op. cit.* (*supra* n. 19) 1159-1162 no. 1656, pl. 52 no. 12. For fluted amphorae see Dressel and Regling, *op. cit.* (*supra* n. 147) 116 and pl. 4 no. 185; Kraay, *op. cit.* (1954) 11 no. 6; Price and Waggoner, *ibid.*, 47 and pl. 12 no. 221. The suggestion that the latter depict metal vessels was proposed by A.W. Johnston in H.A.G. Brijder (ed.), *Ancient Greek and Related Pottery* (1984) 211.

least down to *ca.* 420 B.C. and possibly into the fourth century B.C. Whether adorned with a bunch of grapes or plain, the viticultural associations of the oinochoe, as with the amphora, are clear enough.[149] An alternative fifth-century silver issue has a corresponding device as it depicts a crouching silen about to drink from a largish vessel, identified as an oinochoe[150] or hydria.[151] Although the harvesting of grapes at Torone is not explicitly mentioned by ancient authorities, it is at least implied in Herodotos: in Book VII. 122, the southern tip of Sithonia is referred to as *Ampelos* and Herodotos states that the region belonged to Torone.[152] The viticultural complexities of the region are also alluded to in the *semata* struck on the coins of other Chalkidic states, not least of which is the well-known emblem of Mende depicting Dionysos on his ass.[153] Moreover, the Akanthians, in 424 B.C., facing the prospect of Brasidas' forces destroying their vineyards before the grapes had been collected, were moved to allow the Spartans into their city.[154]

The whole question of Toronean wine production should be viewed against the backdrop of the Mendean wine industry. On the basis of both ancient literary sources and the distribution of "Mendean" amphorae,[155] it is clear that Mendean wine was

[149] For coins bearing oinochoe with bunch of grapes see *Olynthus* III, 27, pl. 4 nos. 69, 71; H. Gaebler, *Die antiken Münzen Nordgriechenlands* III. *Die antiken Münzen von Makedonia und Paionia,* Zweite Abt. (1935) 115 no. 5, pl. 22 no. 11. For unadorned oinochoai see *Olynthus* III, 9 nos. 7-9; *Olynthus* VI, 36 pl. 9 nos. 138-140; *Olynthus* IX, 178 no. 1d, pl. 23; pp. 180 and 228 pl. 25, 1a-c, pls. 30, 35; Gaebler, *ibid.*, 115 nos. 6-8, 10-11, pl. 22 nos. 12-15. Silver coins of this type have also been found in the excavations at Torone (from later campaigns), A. Cambitoglou, *PAE* 1982, pl. 54a; A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 217 ill. 41. Fourth-century bronze coins of Torone may bear, on their reverse, either one or two oinochoai, see *Olynthus* III, 109-110 pls. nos. 887-895; *Olynthus* VI, 96-7 nos. 859-876, p. 35-6 pl. 9 nos. 138-140; *Olynthus* IX, 228 no. 3, pl. 30 no. 36.

[150] Gaebler, *op. cit.* (*supra* n. 149) 115 no. 8, pl. 22, 16.

[151] M. Price, *Coins of the Macedonians* (1974) 42 no. 35, pls. 6-7.

[152] *Cf.* Ptolemy, *Geog.* III.13.12 (s.v. Ampelos); Stephanos Byzantios (*s.v.* Ampelos). Pliny, *NH* IV.37 refers to an *oppidum* called Ampelos, while Hesychios (*s.v.* Ampelos) refers to a *polis* in Thrace by that name. Zahrnt, *op.cit.* (*supra* n. 39) 152, notes that there could not have been a *polis* at the southern tip of Sithonia, though there may have been a village Ampelos that was part of the *chora* of Torone. *Cf.* the recent Loeb edition of Hippokrates, *Diseases* II. 68, where "οἴνῳ Τορνίῳ" is translated as Toronean wine (trans. P. Potter, Hippokrates Vol. V).

[153] For the coinage of Mende see S.P. Noe, *The Mende (Kaliandra) Hoard* (1926); F. Michaux, "Les tetroboles de Mende," *RBN* 127 (1981) 5-18; Kraay, *op. cit.* (*supra* n. 145) 134 and 362 where it is suggested that Mende started striking coins as early as the third quarter of the sixth century B.C. Price and Waggoner, *op. cit.* (*supra* n. 19) 45 consider *ca.* 510-500 B.C. as the more probable starting date. See further M. Price, "The Coinage of the North Aegean," in I. Carradice (ed.), *op. cit.* (*supra* n. 147) 43-47; G.H. Jenkins, *The Coinage of Gela (Antike Münzen und Geschnittene Stein,* Bd. II) (1970) 65-66; E.S.G. Robinson, "The Athenian Currency Decree and the Coinages of the Allies," in *Commemorative Studies in Honor of Theodore Leslie Shear (Hesperia* Suppl. VIII) (1949) 324-340, especially 334-335.

[154] Thucydides IV.84-88.

[155] V.R. Grace, "Standard Pottery Containers of the Ancient Greek World," *Commemorative Studies in Honor of*

highly valued in Antiquity. Many of the extant references to Mendean wine are gathered in the *Deipnosophistai* of Athenaios, who drew on Attic Comedy for most of his source material on the subject.[156] In addition to its palatable qualities, Mendean wine is recommended for medicinal purposes in "internal affections," a work included in the *Corpus Hippocraticum*.[157] Here, as in Athenaios,[158] the wine is referred to as *leukos* and was available in a number of varieties, including *malthakos* (mild or mellow), *melichroos* (honied) and *austeros* (dry, hard or harsh). Athenaios also records, in the context of the foundation of Kassandreia in 316 B.C., that Lysippos, at Kassander's behest, designed a new amphora type for the purpose of exporting Mendean wine.[159] Elsewhere, Athenaios classed the wine of Mende with that of Thasos and Lesbos.[160] By the mid-third century B.C. the Mendean vine, among an assortment of other varieties, appears to have been grown on a Ptolemaic estate in the Fayum indicating the replanting of Aegean vines by Greek settlers in Egypt.[161] The virtues of Mendean wine continue to be praised well into the Roman period by authors such as Pollux[162] and Alkiphron,[163] the latter describing the wine as nectar.[164]

Theodore Leslie Shear (Hesperia Suppl. VIII) (1949) 175-189, especially pp. 178 and 186, pl. 20, 1, was the first to observe that the coin type of Mende (Dionysos on an ass) was used as a stamp on the handles of a distinctive type of amphora. A number of Mendean transport amphorae, as well as a summary listing of others known, were published in C.J. Eiseman and B.S. Ridgway, *The Porticello Shipwreck. A Mediterranean Merchant Vessel of 415-385 B.C.* (1987) 37f. (159-160, n. 3 for the listing). The fullest and most recent discussion of the distribution of Mendean amphorae is in S.A. Paspalas, *The Transport Amphorae and Domestic Pottery from Two Classical Deposits at Torone* (Unpublished MA Honours Dissertation, University of Sydney 1990) especially pp. 58-87. See also now J. K. Papadopoulos and S. Paspalas, "Mendaian as Chalkidian Wine," *Hesperia* 68 (1999) 161-188.

[156] Athenaios I. 29e, I. 31a, IV. 129d-e, IV. 146e.

[157] *Int.* 13, 16, 17. See R. Joly, "Hippocrates and the School of Cos," in M. Ruse (ed.), *Nature Animated. Historical and Philosophical Case Studies in Greek Medicine, Nineteenth-Century and Recent Biology, Psychiatry and Psychoanalysis,* Vol. II (1983) 29-47, especially 42, who places *internal affections* in the corpus of Knidian writing. For the Knidian medical school see further S.M. Sherwin-White, *Ancient Cos. An Historical Study from the Dorian Settlement to the Imperial Period* (1978) 256ff.

[158] IV. 29d.

[159] XI. 784c.

[160] IV. 129d. The occasion was the sumptuous wedding banquet of a Macedonian named Karanos, whose marriage took place two generations after Alexander the Great.

[161] C.C. Edgar, *Catalogue Général des Antiquités Égyptiennes du Musée du Caire. Zenon Papyri,* Vol. 1 (1925) 54-55 no. 59033, line 13. The relevant letter in the Zenon Archive is dated to 257 B.C. *Cf.* Strabo XV.3.11 and the introduction, by Macedonians, of Greek vines to Babylonia and Susiana.

[162] VI.16.

[163] III.5.

[164] M. Lang, *Agora* XXI 73, 86-87 no. I42 (P 12152), pl. 53 has suggested that a partially preserved dipinto (Μεν), on a Late Roman amphora of the sixth century A.C. from the Athenian Agora may refer to Mendean wine.

So entrenched was the reputation of Mendean wine in ancient scholarship that even the grammarian Stephanos Byzantios praises the wine of Mende in his *Ethnika.*

Several other aspects of the Mendean wine industry need to be emphasized. First of all, Mendean wine, on the evidence of the numerous literary references praising it and the distribution of Mendean amphorae, was exported in large amounts. Our clearest literary evidence for this is Demosthenes' *Against Lakritos.*[165] Secondly, on the evidence of graffiti on Mendean amphorae, especially from the Athenian Agora, Mendean wine appears to have fetched comparatively high prices.[166] The third, and perhaps most crucial aspect in this discussion, is the status of Mende and its relationship with the rest of the Chalkidike. The status of Mende following the foundation and *synoikismos* of Kassandreia in 316 B.C. is unclear, but if Athenaios' report that Kassander commissioned Lysippos to design a new amphora type is correct, then it is clear that Kassandreia took part in the trade, and conceivably production, of Mendean wine. In the second century B.C., in the context of the Third Macedonian War, Mende was merely regarded as the port of Kassandreia,[167] at a time when "Mendean" wine was still widely exported and highly praised. A more telling point is made by Demosthenes in his speech *Against Lakritos,* already referred to, where amphorae containing Mendean wine were to have been loaded either at Mende or at the city of Skione to the south. This passage appears to indicate that the wine of Skione may have been classed as "Mendean" or, at least, that Skione, like Kassandreia slightly later on, took part in the trade of Mendean wine. It is clear that more work needs to be done, particularly on Mendean amphorae and the varieties of their shape and fabric. Nevertheless, the combined evidence of the quantity of the product exported, the comparatively high prices it fetched, coupled with the fact that the city of Mende was

[165] XXXV.10-13.

[166] If M. Lang's interpretation in *Agora* XXI, 75-76 (He 1) is correct, then it would appear that one *chous* of Mendean vintage was worth a stater. The same price per *chous* is also interpreted for Chian wine in Athens, *Agora* XXI, 76 no. He2 (P 2366), which was recognized in Antiquity as the best available wine and which commanded the premium price. The graffito on yet another Mendean amphora implies, if the reading is correct, a price per *chous* of one and one-half drachmai (M. Lang, "Numerical Notations on Greek Vases," *Hesperia* 25 [1956] 1-24, especially 15 no. 64 [P 61260]). Such a price is still more than double that asked for the same quantity of Athenian wine on Attic stelai (see Lang, *ibid.,* 14 n. 18). W.K. Pritchett, "The Attic Stelai. Part II," *Hesperia* 25 (1956) 178-317, especially p. 201, argues for significantly lower prices, largely on the internal evidence of the Demosthenic corpus. It should be remembered that doubts may be raised about the validity of numbers preserved in the Demosthenic corpus, as they should for graffiti. More importantly, the Demosthenic corpus is based on prices at one given point of the fourth century B.C.; such prices need not be assumed necessarily for earlier or later periods.

[167] Livy XXXI.45.14.

overshadowed by Kassandreia from the late fourth century B.C. on, would indicate that the adjective "Mendean" may have been applied to wine produced in a more extensive region than the *chora* of Mende itself. If such an interpretation is permissible, then the name "Mendean" may have referred generally to Chalkidic wine, in the fourth century B.C., if not earlier. It is clear that the wine of Chios, Lesbos, Rhodes and Thasos, for example, referred to that produced on each respective island as a whole and not to the product of just one city. To what extent Torone, like other Chalkidic towns, took part in the production and trade of Mendean wine and to what extent Chalkidic wine came to be known as "Mendean" abroad, must remain, for the time being, moot points. It is clear, nevertheless, that the economy of Torone, on the evidence presented above, relied heavily on wine. It is worth adding that direct evidence of domesticated grape seeds is relatively abundant at the site at least as early as the Early Iron Age.[168] It is no coincidence that the region immediately to the north of Torone continues to this day to be famous for its grape, with the wine of the Porto Carras label widely exported throughout Greece and Europe (see *supra* n. 155).

In addition to timber and wine, there are a number of direct literary references, as well as evidence of a more indirect nature, which provide an insight to economic activities at the site. For example, some fifth-century Toronean coins bear on their reverse either a goat or the foreparts of the animal.[169] Though literary evidence for the goat at Torone is lacking, direct evidence for its exploitation is abundant by way of numerous animal bone remains encountered in the successive periods of occupation at the site.[170] Goat herding in Sithonia continues to be an important economic activity. The exploitation of cattle at Torone is also well attested by physical remains and Toronean cattle is referred to, albeit briefly, by Aristotle.[171] A native of Chalkidike, Aristotle would have had first-hand knowledge, if not actual experience, of the local herds. Cattle-raising, like goat-herding, continues to this day in southern Sithonia, particularly in the more marshy areas around Torone and Sykia.[172]

[168] To date the earliest grape seeds from Torone were recovered in the process of water-sieving the tomb pit fills of selected Early Iron Age tombs excavated on Terrace V during the campaigns of 1981-1984.

[169] Gaebler, *op. cit.* (*supra* n. 149) 115 nos. 7-8, 10, pl. 22, 13-16.

[170] The number of identified animal species at Torone, on the basis of the material studied to date by the late Professor Sandor Bökönyi, is 66 (8 domestic mammals, 4 domestic birds, 19 wild animals, 35 wild birds). The more detailed analysis of the fish remains is not yet complete. The above information includes animal bones of all periods of occupation at the site (Early Bronze Age through Post-Byzantine) and incorporates material from later campaigns at the site.

[171] *Hist.An.* III.21.523a.

[172] For the effect of goat herding on vegetation see O. Rackham, "Ancient Landscapes," in Murray and Price, eds., *op. cit.* (*supra* n. 127) 94.

Aristotle also refers to the local sea-urchins[173] and sponges[174] of Torone and his comments are echoed by the Elder Pliny.[175] Although there is no evidence for the exploitation, ancient or modern, of the sponge in the immediate vicinity of the site, the sea-urchin is attested in stratified contexts dating back to at least as early as the Early Iron Age.[176] As for other creatures of the sea, Professor Sandor Bökönyi's untimely death has inevitably delayed the final report. On the basis of his preliminary observations, fishing appears to be an important, though subsidiary, activity at the site from the earliest stages of its occupation. Although the physical remains of wild species are generally rare in comparison to those of domesticated mammals, bird and fish bones are somewhat more frequent, and it would appear that the Toronean diet was in no small measure supplemented by fishing and the hunting of game. With regard to fishing at the site, two pieces of information are here worth noting. The first is Athenaios' reference, quoting Archestratos of Gela, to the tasty slices of dog shark (κύων καρχαρίας) which were available at Torone.[177] The second is the fact that today Porto Koupho is used as the base for seasonal, commercial fishing of tuna. Numerous deep-sea commercial trawlers begin exploratory fishing expeditions from Porto Koupho in September, with the season fully under way in November and December.[178] Although it remains to be seen to what extent tuna was exploited at the site during the prehistoric and historic periods, the antiquity of seasonal tuna fishing in the Aegean can be traced back to the Neolithic period at Franchthi Cave and Saliagos.[179]

Another local delicacy referred to in the literary sources is the bean. Theophrastos states that a bean plant near Torone produces a perfect bean.[180] A similar account is found in Pliny, who refers to the "Egyptian bean" which, apart from Egypt, is found in Syria, Cilicia and Torone.[181]

[173] *Hist.An.* IV.5.530b.

[174] *Ibid.*, V.16.548b.

[175] *N.H.* IX.51.100; IX.69.149.

[176] The marine-shell material awaits closer study and evidence for its earliest exploitation cannot as yet be verified. The sea-urchin, however, is easily identified and is clearly associated with a number of Early Iron Age tombs excavated on Terrace V, see J.K. Papadopoulos, *The Early Iron Age Cemetery at Torone* (forthcoming).

[177] *Deipnosophistai* VII.310 a-c.

[178] Premium prices are apparently paid for the finest tuna by Japanese merchants who oversee the chilling of the fresh catch and its shipment, by air, to Japan.

[179] J.D. Evans and C. Renfrew, *Excavations at Saliagos* (1968) 118-121. See also S. Payne, "Faunal change at Franchthi Cave from 20000 B.C. to 3000 B.C.," in A.J. Clason (ed.), *Archaeological Studies* (1974) 120-131.

[180] *Hist.Plants* IV.8; *cf.* Athenaios III.72d.

[181] *N.H.* XVIII.30.122.

Although not referred to in the literary sources, apart from the indirect references to one of the varieties of Mendean wine already mentioned, the production of honey at the site is well attested through numerous fragments of terracotta bee-hives, including the complete specimen from Structure 3 published here (Fig. 32). Although bee-hives as a separate category of material are not presented in this volume, the occurrence of terracotta bee-hive fragments, particularly in Classical and Late Roman deposits, is noteworthy. A detailed account of bee-hives and bee-keeping in the Classical period is provided by J. E. Jones *et al.*, including bee-hives very similar to 78.3762 (Fig. 32).[182] It is worth adding that bee-keeping is still a thriving industry in Sithonia, as it is elsewhere in the Chalkidike.

A number of fourth or early third century B.C. inscriptions found elsewhere in Chalkidike provide important insights, often through toponyms, on the natural resources of the region and some of the economic activities that took place there. The most recent and systematic account of this evidence is that by the late I. Vokotopoulou,[183] who was able to show the importance of vines, including the sale of a vineyard, apple trees, sheep-grazing, barley fields and, perhaps most significantly, the exploitation of metal.[184]

The whole question of the exploitation of metal in the Chalkidike has, historically, not received the attention it deserves, despite the fact that the location of mines in Macedonia was discussed by Casson in the 1920s,[185] followed by Davies' more thorough account in 1932.[186] In a more recent study, Gale lists various districts in Macedonia and Thrace as one of the four main centres of lead and silver attested by ancient authors.[187] The others listed by Gale are Laurion in Attika, Siphnos and Thasos.[188] Within the *chora* of Torone, as defined by Zahrnt,[189] there are two disused mines within five kilometres of the modern village of Sykia.[190] According to the

[182] J.E. Jones *et al.*, "An Attic Country House below the Cave of Pan at Vari," *BSA* 68 (1973) 397-414.

[183] I. Vokotopoulou, *op. cit.* (*supra* n. 104) 109-131.

[184] *Ibid.* 114 (vines), 126 (sale of vineyards), 116-117 (apple trees and sheep-grazing), 118 (barley fields), and 115, 119-120 for metal exploitation.

[185] Casson, *op. cit.* (*supra* n. 18) 57-97.

[186] O. Davies, "Ancient Mines in Southern Macedonia," *Journal of the Royal Anthropological Institute* 62 (1932) 145-162; *cf. id.*, "Bronze Age Mining Around the Aegean," *Nature* 130 (1932) 985-987; *id., Roman Mining in Europe* (1935) 291ff. See also R.J. Forbes, *Studies in Ancient Technology,* Vol. VIII (1964).

[187] N.H. Gale, "Some Aspects of Lead and Silver Mining in the Aegean," *Miscellanea Graeca,* Fasc. 2 (1979) 15.

[188] *Ibid.,* with figs. 1-3.

[189] Zahrnt, *op. cit.* (*supra* n. 39) 132-133, 136-137, Map 5.

[190] IGME 1978 Map. See further G.A. Wagner, E. Pernicka, M. Vavelidis, I. Baranyi, Y. Bassiakos, "Archaeometallurgische Untersuchungen auf Chalkidike," *Der Anschnitt* 5-6 (1986) 166-186; E. Pernicka,

1978 IGME Map, these are the only outcrops in the Sithonia sub-peninsula, one yielding galena/copper, the other galena/iron pyrites.[191] Other mines are known in mainland eastern Chalkidike, two immediately north of the modern village of Metangitsion, and several further north, near modern Stratonion and Olympias.[192] The latter are rich in both copper and lead/silver ores.[193] Unfortunately, there is, to date, no independent archaeological evidence for the exploitation of these ores in Antiquity,[194] though extensive Byzantine and Post-Byzantine exploitation is proven.[195] Despite this, the lead ores in particular of the Chalkidike, high in silver content, have a lead isotope composition distinct from similar ores from other parts of the Aegean.[196] It has even been suggested that six of the fourteen silver objects from the Shaft Graves at Mycenae analyzed by the Oxford Laboratory reveal lead isotope data consistent with Chalkidike.[197] If the evidence presented by the Oxford Laboratory is correct, and the case as stated by the authors is by no means clear-cut,[198] then the historical ramifications for the Chalkidike are significant. It would suggest that part of the Chalkidike was exploited for metals by southern Greeks as early as the period of transition from the Middle to the Late Bronze Age. The Early Mycenaean pottery (LH I-II) found at Torone (see Chapter 3), may well be direct evidence of this early contact, some seven centuries prior to the era of colonization, which is generally assumed to be the time that this region was "Hellenised" (see

"Erzlagerstätten in der Ägäis und ihre Ausbeutung im Altertum - Geochemische Untersuchungen zur Herkunftsbestimmung archäologischer Metallobjekte" *JRGZM* 34 (1987) 607-714, especially p. 655 fig. 23. *Cf.* G.A. Wagner and G. Weisgerber, *Silber, Blei und Gold auf Siphnos* (1985).

[191] *Ibid.* See also *AR* 39, 1992-1993 [1993], 54; C.E.V. Nixon (ed.), "Recent Australian and New Zealand Field Work in the Mediterranean Region," *MeditArch* 5/6 (1992/93) 184-185.

[192] Wagner *et al., op. cit.* (*supra* n. 190); Pernicka, *op. cit.* (*supra* n. 190).

[193] Z.A. Stos-Gale and C.F. Macdonald, "Sources of Metals and Trade in the Bronze Age Aegean," in N.H. Gale, ed., *Bronze Age Trade in the Mediterranean. Papers Presented at the Conference held at Rewley House, Oxford, in December 1989* (*SIMA* Vol. 90) (1991) 249-288; Pernicka, *op. cit.* (*supra* n. 190).

[194] *Ibid.*, 267, 272, 280; Wagner *et al., op. cit.* (*supra* n. 190).

[195] Stos-Gale and Macdonald, *ibid.*, 267-268; *cf.* K.-P. Matschke, "Zum Anteil der Byzantiner an der Bergbauentwicklung und an den Bergbauerträgen Südosteuropas im 14. und 15. Jahrhundert," *ByzZeit* 84/85 (1991-1992) 49 f.

[196] Stos-Gale and Macdonald, *ibid.*, 272; E. Pernicka, G.A. Wagner, K. Assimenos, C. Doumas, F. Begemann, W. Todt, "An Analytical Study of Prehistoric Lead and Silver Objects from the Aegean," *Beiträge zur Herkunft Prähistorischen Bleis und Silbers aus der Ägäis. Max-Planck-Institut für Kernphysik, Heidelberg* (1983) V. 37.

[197] Stos-Gale and Macdonald, *ibid.*, 273-279; three of the fourteen objects analyzed by Oxford were also analyzed by Pernicka *et al., ibid.*, Table 1, fig. 2. The six objects assigned to the Chalkidike are all from Grave Circle A, Stos-Gale and Macdonald, *ibid.*, 285-287 nos. 151, 479, 481, 605, 863, 867 (with references to G. Karo, *Die Schachtgräber von Mykenai.* 1-2 [1930/1933]).

[198] Stos-Gale and Macdonald, *ibid.*, 272-279.

above). The archaeological evidence is still too meagre to be conclusive, both with regard to the source of the Shaft Grave silver and the fact that Early Mycenaean pottery in the north Aegean is, to date, only known from Torone. Nevertheless, it is clear that there was some form of Mycenaean interest in Chalkidike.

There is another indication for metal-exploitation of the Chalkidike: the very name of the region. It has generally been assumed that Chalkidike derives its name from Chalkis in Euboia;[199] both Chalkis and Chalkidike derive their names from χαλκός, or χαλκ - .[200] In addressing the evidence pertaining to the etymology of Chalkis, Bakhuizen points out that although iron deposits are numerous in central Euboia and northeast Boiotia, copper deposits are not. On the basis of this evidence Bakhuizen rejects the interpretation of the name of Chalkis as "the brazen town."[201] It has to be stressed, however, that the Greeks used the word χαλκός in the general sense of "metal" fairly often, in addition to using it to indicate copper and bronze.[202] Chalkis itself was probably founded in the Protogeometric period at a time when iron is first exploited to any great extent. The fact that there are rich iron deposits in central Euboia, and even richer deposits of copper and silver, along with iron, in the Chalkidike, would support the association of the etymology of both toponyms with the word χαλκός. Whatever the etymology of Euboian Chalkis, a number of scholars, particularly Zahrnt and Bakhuizen (see above), have argued that the names of the Thracian Chalkidians and the Chalkidike were not derived from Chalkis-in-Euboia. In the light of this information, the possibility that Chalkidike ultimately derives its name directly from *chalkos* should not be categorically dismissed. Indeed, the metal sources of Chalkidike may well provide the reason why this part of the Aegean was in contact with central and southern Greece already in the Bronze Age.

THE ANCIENT FORTIFICATIONS

The most conspicuous ruins on the site today are the late fortifications on Promontory 1 which date to the Byzantine and Post-Byzantine periods, and the many

[199] *Supra* n. 24. For ancient authors see, for example, Polybios IX.28.2; Strabo VII, F11; X.1.8. See also Bakhuizen, *op. cit.* (*supra* n. 41) 14 n. 37.

[200] Bakhuizen, *ibid.*, 58-64 argues that the etymology of Chalkis derives from the root chalk-, a pre-Greek word which, he states, had the possible meaning of "something conspicuous which catches the light."

[201] *Ibid.* 63, n. 75.

[202] *LSJ s.v.* χαλκός; R.J. Forbes, *Metallurgy in Antiquity. A Notebook for Archaeologists and Technologists* (1950) 372.

contemporary remains of buildings enclosed therein.[203] Much of the late circuit enclosing Promontory 1 was built of blocks reused from the earlier Archaic/Classical and Early Hellenistic fortifications. The preponderance of large granodiorite blocks reused in the late encircling wall would suggest that most of the stone was taken from the nearby Wall C of the Archaic/Classical system. Providing a ready and comparatively accessible source of worked granodiorite and limestone blocks, the ancient fortification systems and what other monuments may have existed above ground level were systematically dismantled and the stone, and subsequent lime, used in the construction of roads in Thessalonike and Istanbul sometime towards the end of the 19th century A.C.[204] The many lime kilns scattered all over the site provide a sad reminder of the irreparable damage caused. The one substantial inscription on stone from Torone was itself recovered from a lime-kiln in 1964.[205]

On account of the dismantling of the ancient fortification systems and the dense growth covering most of the site in 1975, very little of the lines of the ancient city walls was visible above the surface. Clearance of the growth was begun in 1975 in order to define the ancient city boundaries and the task proved particularly laborious on account of the extent of the fortifications.[206] The siting of the trenches in the later part of the first season was largely dictated by surface observation of the wall lines.

Despite the poorly preserved state of the ancient fortification systems, enough evidence was preserved to warrant the attribution of the various Walls to either the Archaic/Classical period or to the Early Hellenistic system. The primary aim of the following account is descriptive; a more detailed study of the architectural and military aspects of the fortifications is in preparation, while a project involving three-dimensional imaging of the site is being undertaken by Dr. Anthony Sprent.[207]

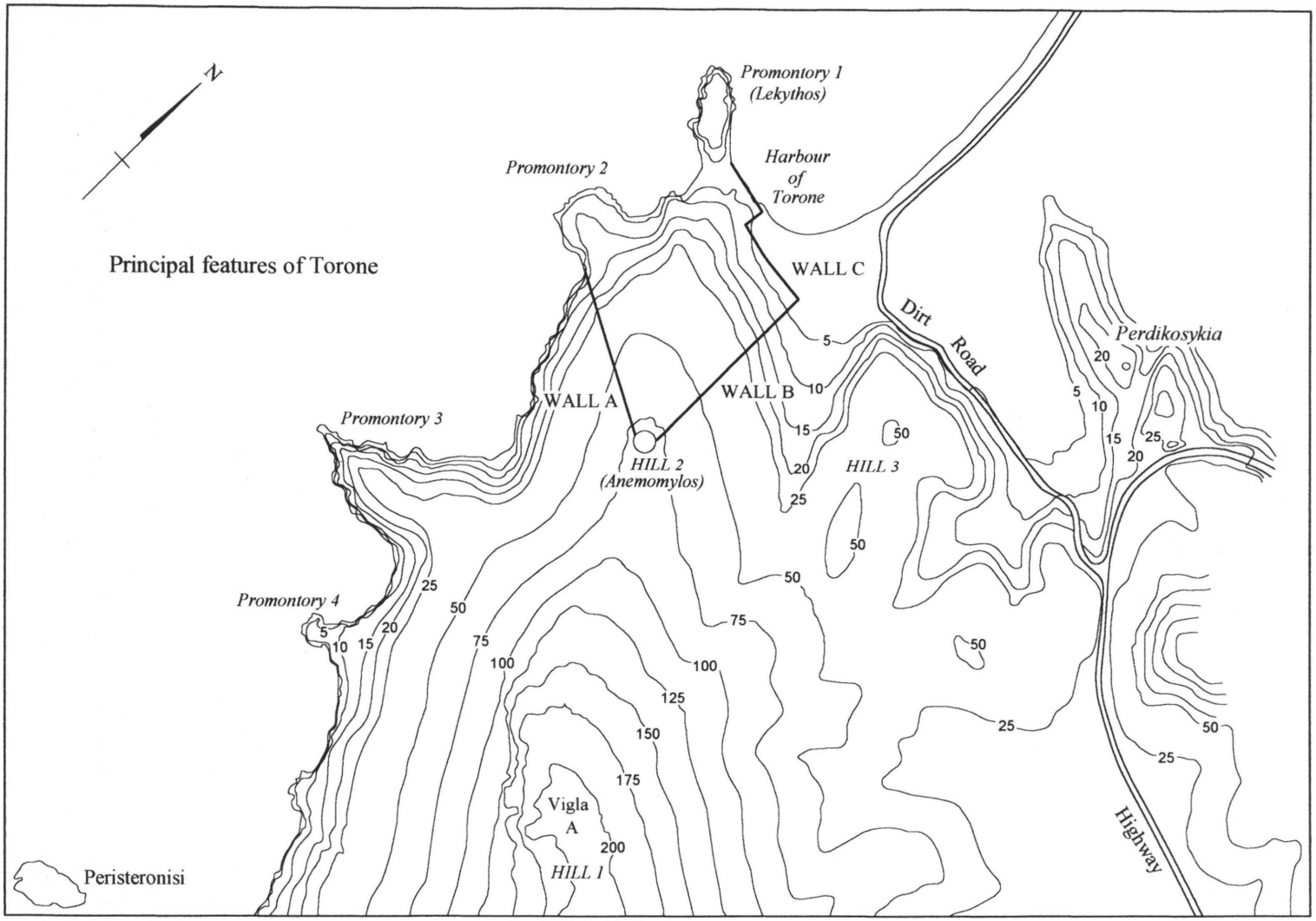
[203] The late fortifications on Promontory 1 are not included in the present report since they are best understood in the light of the more recent excavations on the promontory conducted between 1986 and 1990, see A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217; *MeditArch* 3 (1990) 93-142; *MeditArch* 4 (1991) 147-171; *MeditArch* 7 (1994) 141-163.

[204] I. Papangelos, *Chalkidike* (1981) 157-160; A. Cambitoglou, *PAE* 1975, 106 n. 6.

[205] *Supra* notes 103-109.

[206] A. Cambitoglou, *PAE* 1975, 111-115.

[207] The work on the fortifications of Torone involved many hands. Those parts of the text that follow dealing with the exposed stretches of walls are in part based on the field-books of the surface clearance operations conducted in 1975. The trace of Walls A and B was cleared under the supervision of Professor Jenifer Neils and the mammoth task of tracing the lines of Walls K1-K3, P, O, N1-N2, L and M was carried out under the supervision of the late Mr. Peter Connor. Their descriptions and photographs are sometimes the only remaining record of parts of the fortifications since considerable damage was caused by a great fire in 1985 which engulfed much of the eastern part of the site. The pressures of time during the first season did not permit any major work on the Early


Principal features of Torone
N
Promontory 1
(Lekythos)
Promontory 2
Harbour
of
Torone
WALL C
WALL A
WALL B
Dirt Road
Perdikosykia
Promontory 3
HILL 2
(Anemomylos)
HILL 3
Promontory 4
Vigla
A
HILL 1
Peristeronisi
Highway
5
10
15
20
25
50
75
100
125
150
175
200

Text Fig. 2.

THE ARCHAIC / CLASSICAL CITY WALLS (Figs. 1-2, 4-5; Text Fig. 2)

The earlier fortification system essentially comprises three partially preserved wall lines, those of Walls A, B and C (Fig. 1; Text Fig. 2). Part of the north face of Wall C, immediately to the southeast of Promontory 1, was clearly visible before the commencement of the surface clearance operations (Fig. 5a; Pl. 7a-b), while the round structure on top of Hill 2 was briefly described by Meritt and the summit equated with Thucydides' ἀνωτάτω φυλακτήριον.[208] The circular or semi-circular structure on top of the hill was built (or rebuilt?) as part of the Early Hellenistic system (Pl. 7 c). Consequently, the exact nature of the summit of the hill during the fifth century B.C. and earlier could not be established. Small portions of Walls A, B and C were also visible at certain points prior to surface clearance and it was manifest that those parts of the walls that were actually visible were built in masonry styles different to one another, and in the case of Walls A and B of differing styles within the same wall.

Wall A forms the west curtain of the system (Fig. 4; Pls. 7 d-g, 8 a-c); it extends from the summit of Hill 2, in a line SE-NW, for a preserved length of approximately 250 m., to a point about 50 m. short of the southern edge of Promontory 2, where there was evidence of robbery trenches and a lime kiln. Although destroyed at this lower point, the wall must have extended along the southern edge of Promontory 2 on the evidence of at least two large blocks *in situ* at the SE corner of the promontory, and by further blocks at the west edge. A geophysical survey carried out by Dr. R.E. Jones in 1993 established the existence under the ground surface of a sizable wall along the SW edge of the promontory confirming our hypothesis. A few courses of roughly hewn limestone blocks on the west side of Hill 2 showed where Wall A was connected with the round structure; this area was subsequently partially excavated.[209] The excavation on Hill 2 in 1978 established that the large circular or semi-circular tower at the top of the hill was constructed during the Early Hellenistic period and that the south portion of Wall A was rebuilt at that time. To the NW of this junc-

Hellenistic fortifications on Hill 1 (the *Vigla*). The first plan of these fortifications was completed in 1979 by Mr. Peter Tonkin and Dr. John K. Papadopoulos; this plan was added to and the fortifications studied in a preliminary way by Mr. James Buckley in 1985. The plan of Hill 1 was further added to, with details rechecked and adjusted by Mrs. Christine Winzor-Biggs in 1987 and 1988. Her work was greatly augmented by the excavation surveyor, Dr. Anthony Sprent, in 1988 and 1990.

[208] B.D. Meritt, *op. cit.* (*supra* n. 2) 456.

[209] See below, Chapter 2, Pl. 39. See further A. Cambitoglou, *PAE* 1978, 80-4.

ture, the inner face of Wall A was well preserved, and a few metres further down the hill, both faces were clearly evident, defining an average width of 1.70 m. for the wall (Pls. 7 d, g, 8 b-c). The masonry of Wall A near its junction with Hill 2 was composed of roughly hewn pseudo-polygonal blocks; the inner face was made of smaller blocks than the outer. The outer face was chiselled to form a reasonable surface (Pl. 7 e-f), in contrast to the less carefully hewn or undressed masonry further down the slope (Pl. 8 b-c).[210] Towards the middle and lower portions of the wall individual limestone blocks were considerably larger. The wall fill comprises small pieces of limestone (Pl. 7 g). About half-way down the slope, a probable terrace wall (designated Wall F) was met, preserved to a single course of masonry, in a style similar to that of Wall A. This terrace wall was traced for a length of at least 7.50 m. (Pl. 8 a).[211] Numerous quarry cutting marks preserved in the limestone outcrops toward the summit of Hill 2, on the north side, would suggest that much of the stone for Wall A and the upper stretches of Wall B was quarried locally. The nearest deposits of granodiorite to the site are located a few kilometres to the north, and it is possible that much of the granodiorite used for the lower stretches of Wall B and much of Wall C was transported to the site by ship.[212]

Wall B defines the east curtain of the system (Pl. 8 d-f). It is only intermittently preserved, although its line may be seen, especially from a distance, as a prominent brow running down the north slope of Hill 2 (Pl. 37 a). No stretch of Wall B has been excavated. The south end of the wall begins at the round structure on Hill 2, but the actual junction, and precise relationship of the two could not be determined by surface observation. From the summit of Hill 2 Wall B runs in a north-south line and, despite extensive robbing, approximately 150 m. of its trace could be followed before it disappeared altogether towards the north. The best preserved portion of the wall (Pl. 8 e-f) is located about 90 m. north of Hill 2 and about 20 m. west of a lime kiln (Fig. 4). Three courses of well-dressed granodiorite blocks in isodomic masonry

[210] *Cf.* H.J. Kienast, *Samos* XV. *Die Stadtmauer von Samos* (1978) pl. 30, 3-5; pl. 33, 3-4, and see also pl. 9, 2-3; J.-P. Adam, *L'architecture militaire grecque* (1982) 16 fig. 5 (Kydna in Lykia); *cf.* also the south wall at Samothrace, Lawrence, *infra* (n. 216) pl. 36; R.L. Scranton, *Greek Walls* (1941) 17 fig. 2, *cf.* also 32 fig. 6.

[211] Traces of further terrace walls were detected along the NE flank of Wall A.

[212] For the carrying of stone by ship see A.K. Orlandos, *Τὰ ὑλικὰ δομῆς τῶν ἀρχαίων Ἑλλήνων* (1958) 98 fig. 39. See also P. Throckmorton, "The Torre Sgaratta Ship," in H. Tzalas (ed.), *Tropis* I. *First International Symposium on Ship Construction in Antiquity, Proceedings* (1985) 263-274 (primarily the shipment of unfinished stone sarkophagoi) and A. M. Snodgrass, "Heavy Freight in Archaic Greece" in P. D. Garusey, K. Hopkins and C. R. Whittaker (eds.), *Trade in the Ancient Economy* (1983) 16-26.

remain. It is at this point that a wall jog, to the east, is preserved.[213] A similar jog was encountered 17 m. to the south; both jogs are situated on terrace wall lines. To the south extends a large robbery trench, throughout which all of the outer wall face was missing and much of the inner, though portion of the latter was visible at certain points. Here the inner face was constructed of alternating granodiorite and limestone blocks with a fill of compacted limestone pieces and earth. At the end of the robbery trench as traced, a cross-section of the wall was met. The inner and outer faces were built of medium-size, roughly dressed limestone blocks with a fill of unhewn limestone ranging in size from small chips to large pieces. From this point to the summit of Hill 2 the wall was built mostly of medium-size, roughly dressed limestone blocks, although some granodiorite blocks were found scattered in the vicinity.[214] Toward the upper stretches of Hill 2 the outer face of Wall B was reasonably well preserved. As it nears the summit of Hill 2, the wall turns in slightly towards the west at which point both faces are preserved, defining a width of 2.25 m. About 34 m. north of Hill 2 a line of large limestone blocks, perpendicular to Wall B, was noted which extended at least 6.0 m. to the west. Designated "Wall D" (Fig. 1; Pl. 8 g), only the north face of the wall was roughly dressed and it almost certainly represents a terrace retaining wall.

The lower, northern stretches of Wall B were almost completely destroyed and the trace of the wall towards the north could not be made out. Along a hypothetical line north of the 150 m. of the wall that was traced were slight indications that suggested its continuation. These mainly comprised various groups of granodiorite blocks, along with limestone rubble, for the most part not *in situ*, as well as a number of possible, though unclear, robbery trenches.

A portion of Wall C (Figs. 1, 5 a-b; Pl. 7 a-b) was clearly visible along the modern beach front prior to the commencement of clearance operations on account of erosion on the northern side of the Isthmus. The trace of the wall could be followed from the Medieval wall separating Promontory 1 from the Isthmus to a point approximately 100 m. to the east. The wall is oriented SE-NW, and there is a jog, to the south, some 10 m. to the east of a lime kiln at the Isthmus (Fig. 4); this jog accommodates and follows the natural contour of the land. A small portion of Wall C was excavated further east in Lower City Trench 1 in 1978 (see Chapter 2). Wall C forms

[213] At an angle of about 103° (Fig. 4).

[214] One granodiorite block measured 0.71 x 0.58 x 0.43 m. and preserved a cutting for the placement of another block in the next course up.

the northern curtain of the Classical *enceinte*, extending to the presumed juncture with Wall B (not visible). The best preserved stretch of the wall at the Isthmus (Fig. 5 a; Pl. 7 a-b) is built predominantly of granodiorite and is preserved to a maximum height of 1.20 m. The outer face comprises granodiorite blocks laid in five preserved irregular courses. The larger blocks have been fitted together with precision and at a number of points corners have been cut out of some of the blocks to enable the tighter interlocking of the courses. Block faces have been shallow drafted, with hammer-work producing a slightly pitted and generally flat surface. Intentional gaps between larger blocks were filled with small rectilinear slabs, of assorted material including granodiorite, limestone and schist, placed horizontally one on top of the other in a characteristic stack-work or ladder-pattern. The gaps now hollow between the larger blocks show the rough finish of the slab sides as they converge inwards; as a consequence, one advantage of the stack-work was that the sides of larger blocks did not have to be worked extensively in order to fit with the next block. The resulting face of Wall C is aesthetic and makes use of all available material, including very small slabs. The technique is not uncommon elsewhere in the Greek world in the fifth and fourth centuries B.C.[215] It is worth noting that as this wall directly faces the harbour of Torone, it is the most conspicuous of the walls of the city. The fact that Wall C was built in a masonry style generally neater than that of Wall A and much of Wall B, may well have been to impress any visitor to the city, an occurrence which, as Lawrence notes, is especially noticeable in smaller towns.[216]

Limited cleaning of the well-preserved external north face of Wall C, as well as that part of the wall that was robbed out, revealed several features worth noting. The first is that the lowest course (*euthynteria*) projected for a slight distance beyond the face proper. A similar foundation course, along with the characteristic stack-work masonry, was subsequently revealed in some of the Classical walls excavated at the Isthmus in 1976 and 1978 (Pls. 35 f-g, 36 a, b, d). Another feature, encountered along the robbed out section of Wall C to the west of the well-preserved face shown on Fig. 5 a and Pl. 7 a-b was a water-channel or drain running through it. This feature, as preserved, consists of a large, but comparatively narrow granodiorite slab, with concave upper face, laid diagonally, and at a slight incline, through the wall. The blocks above this slab were carefully cut to provide a channel, resembling a false

[215] *Cf.* W. Wrede, *Attische Mauern* (1933) pls. 27, 90, 112, and *cf.* pls. 95-96, 100; Scranton, *op. cit.* (*supra* n. 210) 170, C3; A.K. Orlandos, *op. cit.* (*supra* n. 212) 219 f; J. Pouilloux, *La Forteresse de Rhamnonte* (1954) pls. XXI:2, XXV:4, XXVI:2, XL:3-4, XLI:1; see also F.E. Winter, *Greek Fortifications* (1971) 161 n. 41 (for the date of Rhamnous); *Olynthus* VIII, pl. 10,2; Kienast, *op. cit.* (*supra* n. 210) pl. 14, 3 *(proteichisma)*.

[216] A.W. Lawrence, *Greek Aims in Fortification* (1979) 232-245.

arch.[217] The most substantial feature encountered along Wall C is that shown in plan on Fig. 5 b.[218] As preserved the feature comprises nine large granodiorite blocks, laid lengthways through the width of the wall, for a length of about 6.50 m. The flat upper surface of these blocks is uniformly even. Unlike the rest of the wall to the east and west, these blocks were placed not on a foundation course but directly on fill and have suffered partial collapse as a result of sea action. The lack of a well-laid *euthynteria* suggests that this portion was never designed to carry any substantial structural weight. Moreover, the northeastern face of the feature was not regular, unlike the remainder of the wall, with the faces of the individual blocks jutting out at odd angles. This would indicate that the irregular face, as preserved, was not original but that other blocks, now lost or displaced, were fitted against those preserved. Although this part of Wall C has never been excavated, the combination of features encountered along this stretch would suggest a possible gate or, conceivably, some sort of landing platform associated with an opening in the wall. It is worth mentioning here that the results of an underwater and geophysical survey conducted in the 1990s have established that the water line in the Classical period was at some distance to the northeast of the external face of Wall C.[219]

The SW side of the Isthmus has suffered greatly both from stone-robbing and erosion and, as such, it is unclear whether this part of the site was ever fortified. Directly opposite Wall C, on the SW shore of the Isthmus is a wall line, still visible, comprising six worked blocks *in situ,* which define a clear wall face. Little, however, can be said about it, except that it is clearly not Byzantine or later. Whether it represents the poorly preserved counterpart of Wall C on the opposite side of the Isthmus is at present a matter of speculation.

Any ancient fortification system on Promontory 1 is now completely obscured by the later Byzantine and Post-Byzantine remains which are largely built of reused ancient blocks. Thucydides' account, however, suggests that, apart from a defensive line across the neck of Promontory 1, there was no encircling wall around it.

[217] For similar water-channels or drains through fortification walls see Lawrence, *ibid.*, 270-272; Winter, *op. cit.* (*supra* n. 215) 149-151, especially pls. 128-129 (notably fig. 129, Proerna in Thessaly); R. Ginouvès, *Dictionnaire méthodique de l'architecture grecque et romaine* II (1992) pl. 9; Adam, *op. cit.* (*supra* n. 210) 44-45 figs. 68-71.

[218] This is located at a short distance to the east of the well-preserved stretch of the wall shown on Fig. 5 a.

[219] For the underwater survey see *Ergon* 1993, 63-65 and 1994, 55-56; *PAE* 1993, 120-127 and 1994, 143-148. See also C. Samiou *et al.*, "The Underwater Survey of Torone: A Preliminary Report of the 1993 Season," *MeditArch* 8 (1995) 89-100 and C. Samiou in "On a Swift Ship Past Sandy Shores;" Exhibition, Niokastro Pylos, August 1999, p. 9.

The earlier fortification system consisting of Walls A, B and C defines a roughly triangular city plan (Fig. 1; Text Fig. 2). Hill 2 is of focal importance as an upper stronghold from which Walls A and B descend. This *enceinte* incorporated Promontories 1 and 2 and the entire terraced north slope of Hill 2 and must represent the basic lines of the city walls referred to by Thucydides in the later fifth century B.C. In Book IV.110.2, Thucydides states: "οἳ διαδύντες διὰ τοῦ πρὸς τὸ πέλαγος τείχους καὶ λαθόντες τούς τε ἐπὶ τοῦ ἀνωτάτω φυλακτηρίου φρουρούς, οὔσης τῆς πόλεως πρὸς λόφον, ἀναβάντες διέφθειραν καὶ τὴν κατὰ Καναστραῖον πυλίδα διήρουν." The sea wall (τὸ πρὸς τὸ πέλαγος τεῖχος) should refer either to the line of Wall C or alternatively to that of Wall A, while the postern gate on the side facing *Kanastraion* (the southern tip of the Pallene peninsula) can only refer to Wall A. Thucydides also refers to the gates, in the plural, facing the agora: "κατὰ τὴν ἀγορὰν πυλῶν;"[220] the "uppermost watchpoint" must refer to Hill 2.[221]

As for the Lekythos, Thucydides provides the following statement: " .... ἐς τὴν Λήκυθον τὸ φρούριον.....ἄκρον τῆς πόλεως ἐς τὴν θάλασσαν ἀπειλημμένον ἐν στενῷ ἰσθμῷ."[222] In the ensuing battle between the Athenians and Spartans reference is made to the Athenian defenses of the *Lekythos* which consisted of a poorly constructed wall and wooden defenses "τὰ ξύλινα παραφράγματα."[223] In describing these buildings, Thucydides uses the word οἰκήματα instead of οἰκίαι. Alan Henry has intimated that the use of the word οἰκήματα in this context may suggest that the building was one of the business premises associated with the port, rather than a residential house.[224] An interesting aspect of the Spartan assault on the Lekythos as related by Thucydides is the "fire-hurling engine" brought up against the Athenian defenders of the promontory. According to Winter, the only original creation in siege-warfare recorded in the period of the Peloponnesian War was the "blowtorch" by means of which the Boiotians set fire to the Athenian rampart at Delion.[225] Winter wonders whether the engine used by Brasidas at Torone was the

[220] IV.111.2.

[221] See above n. 12 for the tentative equation of Hill 3 with Thucydides' προάστειον.

[222] IV.113.2.

[223] IV.115.2.

[224] A. Henry, "Thucydides and the Topography of Torone," *AE* 1993, 107-120.

[225] Winter, *op. cit.* (*supra* n. 215) 308; *cf.* Y. Garlan, *Recherches de poliorcétique grecque* (1974) 125-127, 148-149, 169 (Torone); 88, 126-127, 141, 148, 276 (the *Lekythos*); there appears to be some confusion between "Torone" and "the *Lekythos*" in Garlan's synthesis.

same as that used at Delion;[226] the near-contemporaneity of the two battles is noteworthy, as is the fact that in both cases the "fire-hurling engine" was used against the Athenians.

Thucydides also informs us of a Temple of Athena on the Lekythos,[227] now shown to have been a Doric temple built in the sixth century B.C., as a result of the more recent excavations on Promontory 1.[228] The other temple mentioned by Thucydides — the Dioskoreion — is said to be at a distance of three stades from the city.[229] The poorly constructed wall and wooden part of the fortifications of the Lekythos, as well as Thucydides' account of the recapture of Torone by the Athenians in 422 B.C., especially the passage "καὶ πρὸς τὸ περιτείχισμα πρῶτον ἀφικνεῖται, ὃ προσπεριέβαλε τῇ πόλει ὁ Βρασίδας ἐντὸς βουλόμενος ποιῆσαι τὸ προάστειον καὶ διελὼν τοῦ παλαιοῦ τείχους μίαν αὐτὴν ἐποίησε πόλιν,"[230] would indicate not only that temporary additions to the fortifications were common, but also the amount of rebuilding which may account for the variance in the masonry styles of Walls A, B, and C.

The date of construction of the earlier fortification system of Torone, or of any wall within the system, could not be established on the basis of the work carried out at the site during the first three seasons. The small portion of the exterior face of Wall A on the west side of Hill 2 excavated in 1978 showed that it was rebuilt at this point and incorporated into the Early Hellenistic fortification system (Fig. 37 [Trench 3], Fig. 40 b; Pl. 39 c-g). The small portion of Wall C exposed in Trench 1 in the Lower City Area (Fig. 42 a-b; Pl. 40 f, h) was also of limited value with regard to construction date, since the trench was not excavated to sufficient depth to uncover the foundations. Although a good deal of Archaic and earlier Classical material was recovered from the Lower City Area in 1978, and in subsequent excavations in the vicinity during later seasons, none of it could be associated with Wall C with certainty. Moreover, the fact that the system as a whole is poorly preserved and extensively

[226] Winter, *ibid.*, 308 n. 61.

[227] IV.116.2: "ἔστι γὰρ ἐν τῇ Ληκύθῳ Ἀθηναίας ἱερόν."

[228] See especially A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 7 (1994) 141-163.

[229] IV.110.1. The location of the Dioskoreion remains uncertain; the blocks illustrated by Meritt, *AJA* 27 (1923) 457 fig. 9 belonging perhaps to the temple, have been damaged and displaced since his visit, nor was the site ever verified with certainty. The most likely spot of the site, described by Meritt, is the small knoll immediately to the north known as *Tis Kalogrias To Aloni*. This site is certainly within the radius of three stades from the city.

[230] V.2.4.

robbed, made it difficult to ascertain details of any of the walls of the system. Although several jogs were recorded along the trace of Wall B, and at least one along the line of Wall C, other features such as gates, towers and posterns could not be verified, with the possible exception of the feature noted along the line of Wall C which is plausibly a gate, or conceivably some sort of platform (see above).

A comparison of the extant remains of the earlier fortification system accords well with the topographical details provided by Thucydides in his account of the Spartan assault on the city in 424/3 B.C. and the Athenian recapture in 422 B.C. On the basis of this evidence it is clear that the basic lines of Walls A, B and C must have been built before the attack of 424/3 and the fact that Thucydides notes that part of the *enceinte* was in the process of being rebuilt may imply that the walls stood for some time prior to the Spartan and Athenian assaults. The question, however, of when the system was first built remains, for the time being, a matter of speculation. Winter has noted that the Peloponnesian War must have been a period of great activity in the construction of fortifications, and that the circuits constructed during the years of the Pentekontaetia were far more efficient than the first city-circuits of the Archaic period.[231] Winter argues that the most significant innovation of the Pentekontaetia, destined to last for some time to come, was the *Geländemauer* type of circuit, which reaches its zenith in the era of mechanical warfare of the fourth century B.C.[232] It is possible that the Toronean *enceinte* was built in response to the turbulent years of the later fifth century B.C., though its overall design does not appear to show any of the new developments. There is nothing in the Torone fortification system of this period even vaguely approaching the most famous fifth-century military projects, such as the Long Walls of Athens and Megara, or the fortifications of Corinth and Thebes. An important aspect of the Torone enceinte is the apparent lack of any real acropolis. The ἀνωτάτω φυλακτήριον referred to by Thucydides, both on the evidence of the literary account and the research carried out at the site, appears to be little more than an uppermost watch-point, and there is certainly no evidence for a distinct acropolis during the fifth century B.C. This fact may suggest that the elements of the early *enceinte* at Torone are more in keeping with the earlier city-circuits of the Archaic or earlier Classical periods than with those built during the years of the Pentekontaetia. Indeed Walls A, B and C appear to have been built simply to enclose the immediate area of the settlement, rather than designed with any clear military principles in mind. An important feature of the settlement of Torone in this

[231] Winter, *op. cit.* (*supra* n. 215) 305-308.
[232] *Ibid.*, 304.

respect is that the city appears to have expanded in size in a rather organic fashion, spreading from the earliest settlement on Promontory 1, onto the Isthmus area and the lower ground facing the harbour to the north, as well as on Promontory 2, finally extending onto the northern slopes of Hill 2. Subsequent excavations at the site in later campaigns, along with the evidence of the geophysical survey initiated in 1993, have shown that Torone was never built on a Hippodamian plan, as was nearby Olynthos.[233] The city seems to have grown in a natural way, largely defined by the physical terrain of the site.

THE EARLY HELLENISTIC FORTIFICATION SYSTEM (Figs. 1, 6-7; Text Fig. 3)

Built almost exclusively of limestone quarried locally[234] and, wherever preserved, in a fairly consistent masonry technique is the large system, several kilometres in circumference, comprising Walls H, K1-K3, P, O, N1-N2, L and the Hill 1 circuit. Dating evidence for the construction of this massive fortification was offered by the excavations at the Gate Area (Chapter 2), by way of a posthumous coin of Alexander the Great (**20.19**) recovered from the fill of the foundation trench for the wall in Trench 1. The coin is dated to 323-310 B.C. and provides a useful *terminus post quem* for the construction of the Gate Area complex. The small quantity of pottery recovered from the foundation trenches is in keeping with this date. The excavations on Hill 2 (Chapter 2) showed that at least Wall A of the earlier fortification system was partially rebuilt and incorporated into the later; the portion of the earlier Wall C at the Isthmus may also have been incorporated, since there is no trace of a Late Classical/Early Hellenistic wall in this area.

The Western Flank

The junction of City Wall A of the earlier system and Wall H of the later fortification was excavated in 1978 and is fully described below (Chapter 2).[235] Wall H, which forms the western curtain of the later system, linking Hills 1 and 2, was traced for most of its length in 1975. Although built in a masonry style similar to that of the

[233] See, among others, W. Hoepfner and E.-L. Schwandner, *Haus und Stadt* (1994 edition) 68ff.

[234] Numerous preserved quarry mark cuttings, particularly along the eastern flank of Hill 1, would indicate that the majority of stone used in the system derives from the immediate vicinity of the site. The evidence for local quarrying will be presented elsewhere; for quarrying comparable to that of Torone *cf.* H.R. Reinders, *New Halos: A Hellenistic Town in Thessalia, Greece* (1988) 60-64, figs. 28-31.

[235] See Figs. 37, 40; Pl. 39 c-g.

contemporary Walls K1-K3, P, O, N1-N2 and the Hill 1 circuit, Wall H lacks the more complex indented trace which is a feature of part of the eastern flank of the system. This is largely due to the nature of the terrain on the western side of the site. After an area of comparatively even ground extending as a ridge to the south of Hill 2, a steep slope leads sharply upwards, in a series of limestone outcrops, to the NW corner of Vigla A (see below). Wall H (Fig. 1; Pls. 11 c-f, 12 a-c) closely follows the western edge of the gradient for a length of about 450 m. For most of its length the configuration of the natural rock drops sharply down towards Promontories 3 and 4 and to the sea. The terrain at this point would obviate a more complex defensive system. The trace of Wall H keeps to a straight path, changing direction, towards the west, at one point some three-quarters of its way to Hill 1 (Fig. 1; Pl. 12 b). The state of preservation of the wall varies. Immediately south of Hill 2 its course could be traced intermittently by cuttings in bedrock (that is squared cuttings against which the outer or inner face of the foundation course was placed),[236] as well as by blocks *in situ* between outcrops of the rock. At some points both faces are visible, defining a width of approximately 2.40 m. The wall fill is predominantly composed of small, unhewn pieces of limestone.

At the end of the comparatively flat plateau south of Hill 2, the wall encounters a vertical cliff and continues on above it; the trace of the wall can be seen by step-like cuttings in the sloping bedrock (Pl. 11 c). Further south the line of the external face of the wall is preserved in the shallow bedrock cuttings, while the internal face survives to one course of masonry (Pl. 11 d). Beyond the first cliff of limestone to the south of Hill 2 there is a long and somewhat better preserved section of Wall H (Pl. 11 e-f). Here the wall survives up to three courses of masonry and defines a width of 2.00-2.40 m. The masonry style is similar to that of the contemporary walls on the eastern flank and the Hill 1 circuit, though individual blocks vary more considerably in size; the same hammer-chiselled cushion-like external face is visible wherever the wall is better preserved (Pl. 11 e-f).[237]

[236] *Cf.* R. Ginouvès, *Dictionnaire méthodique de l'architecture grecque et romaine* II (1992) pl. 1 no. 3 (Herakleia by Latmos, for which see further F. Krischen, *Die Befestigungen von Herakleia am Latmos [Milet. Ergebnisse der Ausgrabungen und Untersuchungen seit dem Jahre 1899* Bd. III, Heft 2] [1922]); see also Adam, *op. cit.* (*supra* n. 210) 18 figs. 11-12; Lawrence, *op. cit.* (*supra* n. 216) pls. 20-21. *Cf.* also F. Stählin, E. Meyer and A. Heidner, *Pagasai und Demetrias. Beschreibung der Reste und Stadtgeschichte* (1934) pl. XXI, D (for Thessaly see further F. Stählin, *Das hellenische Thessalien. Landeskundliche und geschichtliche Beschreibung Thessaliens in der hellenischen und römischen Zeit* [1924]).

[237] *Cf.* R. Martin, *Manuel d'architecture Grecque* I. *Matériaux et Techniques* (1965) pl. XV no. 3 (Dodone), 180 fig. 70 (Marteaux de tailleur de pierre); Orlandos, *op. cit.* (*supra* n. 212) 221 fig. 179. The masonry style, furthermore, is especially close to that used at a number of sites in Attika, *cf.* Wrede, *op. cit.* (*supra* n. 215) pls. 67

At the end of this stretch of Wall H is a small tower or bastion measuring, as far as can be ascertained by surface observation, about 3 x 3 m. in plan. It projects to the west, at right angles to the line of Wall H (Pl. 12 a) and appears to be the only such feature along the wall.[238] It offers an excellent observation platform from which much of the Toronean Gulf and the east coast of the Pallene peninsula may be viewed. The foundations of this tower or bastion are constructed of large limestone blocks, only a few of which are preserved *in situ*. To the south of this feature the line of Wall H continues intermittently for a short distance until it approaches the sheer cliffs just to the north of Vigla A. At the point where Wall H meets the tall vertical cliff, some eight courses of roughly hewn and crudely stacked limestone blocks are preserved abutting the face of the cliff (Pl. 12c). Here the terrain is so steep that a more substantially constructed wall was not deemed necessary. That Wall H did continue above this point in order to join the Vigla A perimeter is indicated by scattered blocks and occasional cuttings in the bedrock outcrops. The juncture of Wall H and the Hill 1 circuit appears to be at the NW tower of the Vigla A perimeter (Text Fig. 3). The poor state of preservation of Wall H is the result of stone-robbing activity. Scattered limestone blocks can still be seen at various points down the western slope of the site and it seems that the stone-robbers simply dismantled and pushed or rolled the blocks down the sheer west slope. Several lime kilns on the lower western flank of the site, not far from the water's edge, were the recipients of most of the blocks of Wall H and the western part of the Hill 1 circuit.

The Eastern Flank

On the eastern landward side of the site clearance of dense growth was begun on Hill 3 and the wall designated K1 (Fig. 1) was first met at a point immediately to the south of another lime kiln, where several blocks in two courses were visible (Pl. 9 a). Nothing of the likely continuation of Wall K1 survives to the west, in the area between Hill 3 and Walls B and C of the earlier fortification system.

Wall K as a whole represents the NE curtain of the system, running along the north, east and south sides of Hill 3. As is the case with the rest of the Early Hellenistic fortification system, Wall K is built of limestone blocks which are mostly

(Phyle), 69-70 (Peiraieus), 97 (Oinoe), 86 (Gyphtokastro [Panakton]), 88 (Rhamnous); *cf.* also Lawrence, *op. cit.* (*supra* n. 216) pl. 32 (Aigosthena), pls. 85-88 (Messene), 90 (New Pleuron). See also Kienast, *op. cit.* (*supra* n. 210) especially pl. 28; Scranton, *op. cit.* (*supra* n. 210) 105 fig. 21 (Orchomenos).

[238] The almost sheer cliff on the western side of the site would make any enemy approach a difficult prospect, in contrast to the somewhat more gentle slopes on the landward side.

large, cut straight on four sides, with a pronounced, roughly hewn, cushion on the outer face. The blocks often have angled cuttings in order to key-in other blocks and strengthen the masonry. The wall consists of three sections designated Walls K1-K3. K1 represents the north flank of Hill 3, K2 the east flank, while the small stretch of Wall K3 on the south side of the hill forms the northern part of the Gate Area complex which was subsequently excavated (Chapter 2).

Wall K1 follows the contour of the ridge of Hill 3 and its trace was, in part, made clear by a number of blocks *in situ,* though some of them appeared to be deeply buried. Where both the internal and external faces of the wall were preserved at one point along the north side of the hill, Wall K1 had an average width of about 2.70 m. This was somewhat more substantial than the average width of Wall H on the western flank. It was also clear that, in addition to following the line of the ridge, Wall K1 had an indented trace which was noticed at two points along the northern side of Hill 3. The first could be seen in a deep robbery trench where the line of the wall, in negative as it were, was preserved despite the fact that the blocks had been removed. The second was where the join of the blocks, at the corner, was cut back to form a rectangular space.

Walls K1 and K2 are separated from each other by a rectangular structure which must be a tower or bastion (Fig. 1), though its exact nature was difficult to determine on account of the fact that yet another lime kiln was partly built into it. The line of Wall K2 closely follows the natural contour of the east side of Hill 3; its trace, as determined in 1975, defines a retrograde "S" in plan (Fig. 6 a). To the south of the rectangular tower or bastion at the juncture of Walls K1 and K2, and not far from it, two courses of the external face of Wall K2 were partly preserved (Pl. 9 c). Further south a characteristic, though poorly preserved, indent was noticed (Pl. 9 b). The join of the two blocks defining the corner of the jog were cut in such a way that the normal cushion of the outer faces of the wall did not interfere with each other.

Wall K 3, oriented east-west and almost at right angles to the north-south line of Wall K 2 (Figs. 1, 6b and 8), was situated on the north side of the saddle over which a modern path passes that forms the most natural route between Torone and Porto Koupho. The natural configuration of the terrain at this point suggested the probable existence of a gate and the decision was therefore made to initiate excavations here during the second half of the 1975 campaign. These excavations, continued in 1976, 1978 and 1981, defined the Gate Area complex, which is described more fully in Chapter 2 (Figs. 8-27; Pls. 13 f-22 f). A schematic plan of the Gate Area complex is given on Fig. 6 b. It comprises Walls K 3, P and O, and is flanked, on both sides, by a tower. The entrance itself was along the line of Wall P.

The SE flank of the system, extending from the Gate Area to the Hill 1 circuit, comprises Walls N 1 — N 2, L and M (Fig. 7 a). The junction of Wall N 2 with Wall O of the Gate Area, along with the northern part of Wall N 2 was very poorly preserved and could not be clearly determined by surface observation except for minor traces. Wall N 2 was picked up approximately 45 m. south of the south tower of the Gate complex. It was at this point that the best preserved stretch of the wall was revealed, surviving in places to several courses of masonry (Pl. 9e-g); further south Wall N 2 was less well preserved (Fig. 7a; Pl. 9d). Although extensively robbed, many of the blocks that still remain intact *in situ* are hewn with the characteristic cushion on the outer face, although some, particularly those at the well preserved stretch illustrated on Pl. 9e-g have flat faces. The width of the wall at this point is approximately 2.74 m. There is at least one jog visible along the line of Wall N 2, and there were perhaps others, though the state of preservation was such that it was difficult to reconstruct the exact line with certainty. Be that as it may, it is clear that Wall N 2 was not as elaborately indented as Wall N 1.

At a point about 210 m. south of the Gate Area are the remnants, also extensively robbed, of a presumed tower or bastion at the junction of Walls N 2, N 1 and L (Pl. 10 a-b), described more fully below. From this point two distinct curtains extend to Hill 1: Wall L essentially continues the NNE-SSW line of Wall N 2, whereas Wall N 1, oriented NW-SE forms an obtuse angle to the line of Wall N 2 (Fig. 7 a). The subsequent clearance of the dense growth along the lines of Walls L and N 1 may be seen in the dramatic "Y" on the east flank of the site (Pl. 4 a-b).[239]

Wall L can be traced with certainty from the top of Hill 1 to about the level of Wall M (Figs. 1 and 7 a). The wall, preserved only in patches, forms a straight line with no apparent jogs. The best preserved stretch of Wall L is located towards the north, near its juncture with Wall M, where a length of approximately 10m was traced (Pl. 10 f). Towards the south blocks *in situ* are scarce, although there are, as elsewhere, traces of cuttings in the exposed bedrock (Pl. 10 g). At one point these cuttings indicate the position of the inner and outer wall faces, which provide an approximate width of 2.15 m.; this is substantially smaller than the width of N2 further to the north. At the top of Hill 1 part of the internal face of Wall L was preserved to a single course (Pl. 11 a), near to the juncture with the NE corner of Vigla A (Text Fig. 3).

[239] See also Pl. 10 a-b. The "Y" as cleared was visible for a number of years until the 1985 fire consumed much of the growth. The trace of these two walls is still partly visible today.

Wall M is perpendicular to Wall L and was traced towards the west for a length of about 8 m. The blocks of this wall are, for the most part, squared off and the faces are vertical (Pl. 11b). The larger blocks are trapezoidal and average about 0.60 m. in length. The wall extends to the west only so far as a sheer outcrop of natural rock. The exact function of Wall M remains uncertain, though it is likely it served as a terrace wall.

Although badly damaged and extensively robbed, Wall N 1 is clearly among the more impressive curtains of the Early Hellenistic system. A length of approximately 300 m. of the wall was traced in 1975, both by means of blocks *in situ* (Pl. 10 d-e) and by cuttings in the bedrock (Pl. 10 c), from its juncture, to the north, with Walls N 2 and L, to a point towards the south where it evidently petered out (Fig. 7 a). Subsequent investigation in later campaigns revealed a further length of over 200 m. and established that the wall extended to the south and joined the Vigla B circuit thus forming an integral part with it (Text Fig. 3). Unlike Wall L, Wall N 1 ascended the hill in an indented trace (Fig. 7 a; Text Fig. 3).[240] One of the better preserved indents is illustrated on Pl. 10 d; here the corner blocks, as was also the case with the corner blocks of towers and posterns, were carefully drafted with vertical channels framing the corner proper.[241] The preserved blocks of Wall N 1 were, on the whole, larger than those of Wall L, and larger than those of Wall H on the western flank of the site. At certain points up to three courses of masonry survive (Pl. 10 e). Among the larger blocks preserved *in situ* one has a length of 1.60 m., another *ca.* 2.00 m. Moreover, the step-like cuttings on the rock which received the foundation course of the wall (Pl. 10 c) tended to be deeper than those cut for Wall H. At least one possible tower or bastion was revealed along the eastern flank of Wall N1 (Text Fig. 3), near the southern limit of the wall as exposed in 1975 (Fig. 7 a). It projects from the outer face of the wall approximately 2.50 m. and has a length of about 6.20 m.

As noted above, Walls N 1 and N 2 meet at a tower or bastion roughly midway between the Gate Area and Hill 1 (Fig. 7 a; Pl. 10 b). The structure is badly damaged and was largely visible on account of a robbery trench laid across it. Nevertheless a corner block, evidently *in situ*, towards the north and several blocks in line belonging to one of the walls, suggest that this was originally a fairly substantial structure. The

[240] For similarly indented traces see, among others, Winter, *op. cit.* (*supra* n. 215) 102-103, 117-118, 122, 152, 165, 191, 237-242, and especially 122 n. 50, 323; Adam, *op. cit.* (*supra* n. 210) 66-67; R. Martin, "Les enceintes de Gortys d'Arcadie," *BCH* 71-72 (1947-1948) pl. XIII (for the heavily indented trace of the north circuit wall); see also Scranton, *op. cit.* (*supra* n. 210) 149-157.

exact relationship of Walls N 1 and L is uncertain, although it is clear that Wall N 1 was built either to supplement or to replace the protection offered by Wall L.

The Hill 1 Circuit

The summit of Hill 1 (225 m. above sea level) is the highest point of the Torone headland and served as the acropolis of the Early Hellenistic system. A complex circuit of walls, some thirteen towers and three or four postern gates (Fig. 7 b; Text Fig. 3) fortified the hill which, like the contemporary walls of the eastern and western flanks of the site, was badly damaged and extensively robbed. During the course of the first three seasons little work was carried out on the summit of the hill, except for the basic recording of some of its most salient features.[242] The impressive plan of the Hill 1 circuit, which is divided into three distinct units, was clearly the result of considerable thought and manpower. The surface clearance operations conducted during the first half of the 1975 season established that Walls H and L were connected with the Hill 1 fortifications: Wall H to the NW tower of Vigla A, Wall L to the NE tower. It was also later established that Wall N 1 extended to the SE of Hill 1 and was connected to the Vigla B circuit (Text Fig. 3). The terrain of the site was such that the military emphasis of the Early Hellenistic fortications was aimed at securing the north and east flanks of the hill.

The northern enclosure of the Hill 1 circuit, designated Vigla A (Text Fig. 3), enclosed a large flat plateau, roughly rectangular in plan, measuring approximately 90 m. (north-south) x 70 m. (east-west). From this enclosure, which overlooks the inhabited area of the city, all approaches to the site from the north, NE and NW could be viewed. The once impressive north and east walls survive to one or two courses of masonry, in a style similar to that of the contemporary walls on the eastern and western flanks of the site and at the Gate Area. As already noted, the NW and NE towers (Towers III and V)[243] were connected, respectively, with Walls H and L. A third tow-

[241] For drafted corners see Orlandos, *op. cit.* (*supra* n. 212) 259 fig. 228.; R. Martin, *Manuel d'architecture Grecque* I. *Matériaux et Techniques* (1965) pl. XV, 3; pl. XLIV,1 (Dodone); Adam, *op. cit.* (*supra* n. 210) 30-31 figs. 41-45. See also B. Powell, "Oeniadae, I: History and Topography," *AJA* 8 (1904) 137-173, especially 160 fig. 11, *cf.* 148-149 figs. 2-3, 151 fig. 4; A.S. Arvanitopoulos, *Γραπταὶ στήλαι Δημητριάδος-Παγασῶν* (1928) 84 figs. 98-99, 124 figs. 153-154; L. Lerat and F. Chamoux, "Voyage en Locride occidentale," *BCH* 71-72 (1947-1948) 47-80, pl. VI no. 3; Lawrence, *op. cit.* (*supra* n. 216) pls. 9-10, 25, 28, 32-33, 38, 65, 82, 85, 88-90; Stählin *et al., op. cit.* (*supra* n. 236) pls. VIII, A; XI,B; Kienast, *op. cit.* (*supra* n. 210) pls. 22,1; 24,1; 26,2; 30,2; 35,1; Scranton, *op. cit.* (*supra* n. 210) 75 fig. 15.

[242] As is noted above, a more thorough study of the Hill 1 circuit and the fortifications of Torone will be presented elsewhere.

[243] The number given to towers (Roman numerals) and those given to the posterns (Arabic numerals) are those indicated on Fig. 7 b.

er or bastion (IV) is located along the central portion of the north wall of Vigla A, about 25 m. from Towers III and V respectively. A similar tower or bastion (II) is centrally located along the eastern wall of Vigla A, at a distance of about 25 m. from both Towers I and III. A narrow postern or sally port (Postern 1) is situated at the NE corner, on the eastern side, barely wide enough for one person to pass through at a time.[244] Where preserved, the corners of the towers and posterns were carefully drafted.[245] The largest tower (I), roughly trapezoidal in plan, is that at the SE corner which flanks the main entrance to Vigla A (Text Fig. 3; Pl. 12 d-e). This entrance, less than 5 m. wide, provided access between Vigla A and the area enclosed by the eastern and western saddle walls, which were at a slightly lower level.[246] In contrast to the north and east walls of Vigla A, the west and south walls were less well built, except for that stretch of the west wall connected to, and in the vicinity of, Tower V and the stretch of the south wall near Tower I. Much of the south and southwest walls were crudely built of unhewn, or only roughly worked, pieces of limestone stacked between outcrops of bedrock (Pl. 12 f).

The enclosed natural summit of Vigla A offers a substantial area of relatively even ground. The large number of blocks, primarily limestone but also some granodiorite slabs, scattered on the surface, particularly towards the north end, may indicate that part of the area was built in antiquity. This, however, could not be established and must remain a matter of speculation until such time as excavations, or geophysical work, are carried out. The most clearly visible feature on the summit of Vigla A is a large oval depression on the north side (Fig. 7 b; Text Fig. 3), about 15 m. to the west of the postern gate, largely filled with limestone and granodiorite blocks. This depression, about 8 m. long and 5 m. wide, is most probably a cistern.[247]

The saddle between the two natural summits of Vigla A and B was fortified by Walls enclosing a fairly large area approximately 190 m. long (north-south), with a

[244] Postern 1 (Fig. 7 b) is flanked by Tower III and appears to be further protected by a line of blocks, poorly preserved, approximately 17 m. in length, perhaps serving as a *proteichisma* (Text Fig. 3). For *proteichismata* see Winter, *op. cit.* (*supra* n. 215) 228 f., 247-248; for posterns see Winter, *op. cit.*, 234-252; *cf.* also R. Martin, "Les enceintes de Gortys d'Arcadie," *BCH* 71-72 (1947-1948) 81-147, especially 91 fig. 6.

[245] Only one of the drafted corners is here illustrated (Pl. 13 a) on one of the towers along the eastern saddle wall connecting Vigla A and B (*cf.* Pl. 12 d). For similar, and often better preserved, drafted corners at the Gate Area see Fig. 16 a-b; Pls. 13 g, 14 a, 16 d-e, 18 f. For drafted corners at gates or posterns see Winter, *ibid., passim*; also Powell, *op. cit.* (*supra* n. 241).

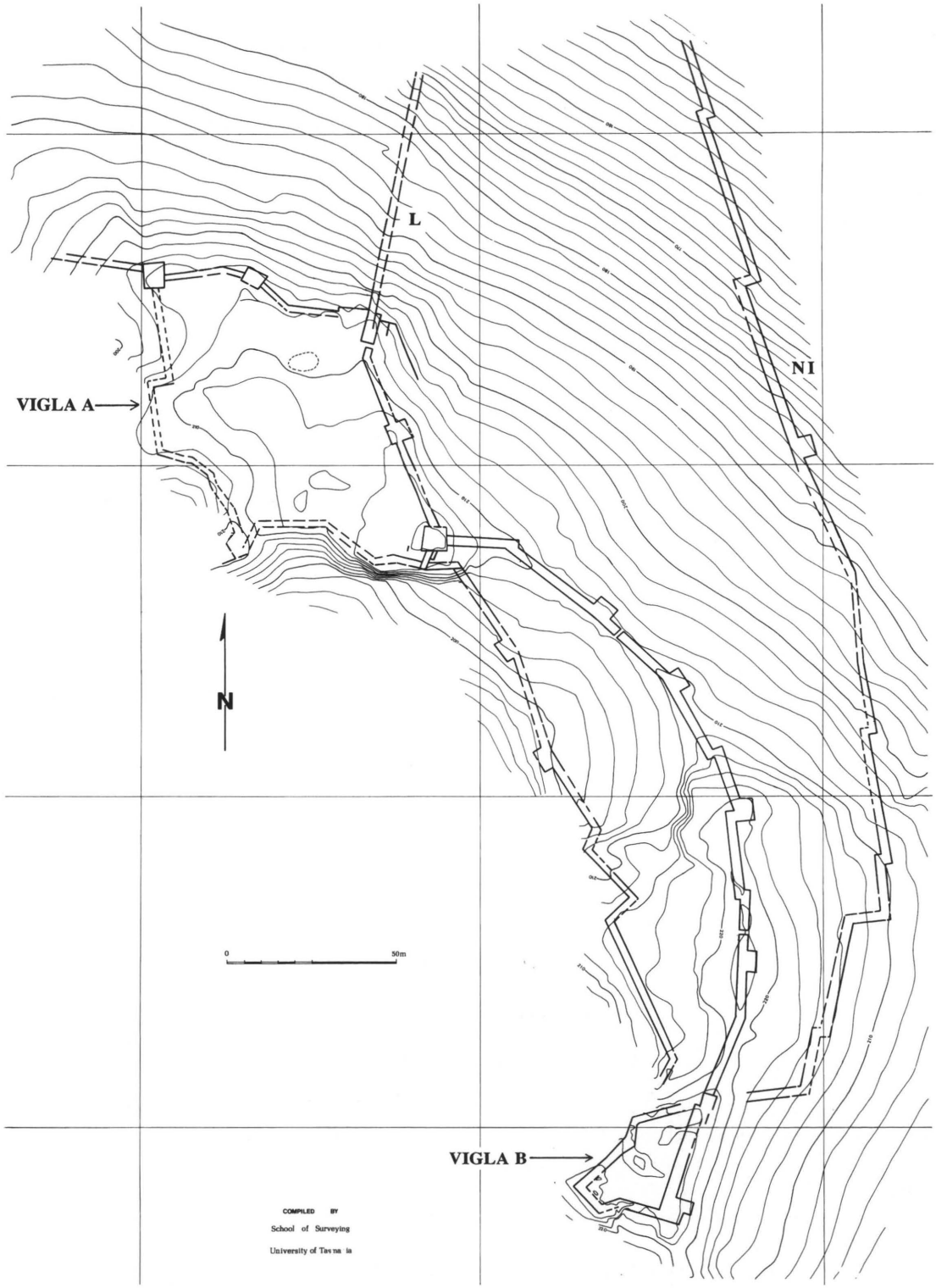
[246] Subsequent work on Hill 1 carried out in 1985-1987 revealed a substantial threshold for the entrance with a large circular socket for the pivot of a gate. For a similar threshold *cf.* Reinders, *op. cit.* (*supra* n. 234) 97-100 figs. 59-62.

[247] There is no natural water supply on Hill 1, nor on the site in general.

maximum width of about 40 m. Of the two saddle walls, the more substantial is that on the east side. There are at least four towers along the east saddle wall (Towers X-XIII), which are supplemented by a series of indents. The distance between any two towers, or the distance between a tower and an indent, is never greater than 20-25 m. The corners of the towers are all carefully drafted (Pl. 13 a). There are at least two certain posterns or sally ports along the eastern saddle Wall (3 and 4 on Fig. 7 b), both flanked by a tower situated at a distance of no more than 5 m. A third possible, though far from certain, postern might be located on the north side of the east saddle wall, near Tower I of Vigla A (Postern 2). Although extensively robbed, parts of the eastern saddle wall are preserved to three courses of masonry (Pl. 13 b-c), which provide a useful glimpse of what the system may have looked like in its heyday.[248] In comparison to the Wall on the east side, the west saddle wall is very poorly preserved and it would appear that it suffered a fate similar to that of Wall H, namely that most of its stone was pushed over the precipitous cliff on the west side of the site down to one of the lime kilns near the shore below. The west saddle wall closely follows the contour of the cliff by means of a number of rather abrupt jogs, particularly at the more precipitous central part of the saddle (Text Fig. 3). Towards the north two towers were noticed (Towers VI and VII), about 25-30 m. apart; the northernmost tower was located about 25 m. from the entrance to Vigla A. No certain posterns were observed, though it should be stressed that the Wall is in a very poor state of preservation.[249] The ground enclosed by the two saddle walls narrowed considerably towards the respective entrances of Vigla A and B.

Vigla B encloses the highest point of the Torone headland, a sheer outcrop of limestone which offers an unparalleled view of the entrance to Porto Koupho, down to the southern tip of Sithonia and the Aegean beyond. From this point the summit of Mt. Athos is in clear view, though most of the Akte peninsula is obscured by the hills to the east of Torone. To the west, the southern end of Pallene, with the coast of Macedonia and northern Thessaly beyond, is in clear view, while to the south the north Sporades can be seen on a clear day. Roughly triangular in plan, the Vigla B enclosure is considerably smaller than Vigla A, with a maximum length of about 50 m. and maximum width of 22 m. towards the south. The narrow entrance to the enclosure has been mostly robbed out, and the foundations have suffered subsequent collapse. It is reasonably clear, however, that the entrance was flanked, on the east

[248] The well-preserved stretch illustrated on Pl. 13 b-c is of the inner face of the wall between Towers X and XI.
[249] It is possible, though uncertain, that there was a postern on the SW side, at the junction of the west saddle wall with Vigla B.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School of Surveying
University of Tasmania

Text Fig. 3.

side, by a tower or bastion (IX). It is also reasonably clear that Wall N 1 was originally connected to this tower or bastion, though the juncture itself is not preserved (Text Fig. 3). A larger tower (VIII, Fig. 7 b), clearly one of the most substantial on the site, is located at the SE corner of Vigla B overlooking the entrance to Porto Koupho. A portion of the external north face of the tower survives to several courses of masonry (Pl. 13 e), whereas the internal, west, face is preserved to a single course (Pl. 13 d); both the external and internal block faces preserve the characteristic hammer-chiselled cushion.

CONCLUDING REMARKS

The Early Hellenistic fortification system of Torone falls into the category of *Geländemauer*. This type of circuit, also referred to as "great circuit," was developed in response to contemporary methods of attack, particularly artillery.[250] The catapult was invented by artificers of Dionysios of Syracuse *ca.* 398-397 B.C. and the *helepolis* is believed to have been first introduced to the Greek world by the Carthaginians during their invasion of Sicily in the late fifth century B.C.[251] The result of these developments in methods of attack was a fortification system built in direct response. The earliest *Geländemauern* of the artillery age proper, as opposed to the earlier *Geländemauern* of the Pentekontaetia, include Epipolai, and a number of circuits built by the Hekatomnids in Caria (Halikarnassos, Myndos, Alinda, Alabanda). The most basic defensive principle followed in these fortifications was to enclose as much high ground as possible, from which the lower lying settled areas could be dominated. Builders of great circuits went far beyond the immediate settlement area of the town in search of the best possible natural line of defense.

Some time after 350 B.C. the catapult was improved by the engineers of Philip II. The new torsion catapult and ballista, with their improved range, were powerful

[250] F.E. Adcock, *The Greek and Macedonian Art of War* (1957); E.W. Marsden, *Greek and Roman Artillery*, I. *Historical Development* (1969); Winter, *op. cit.* (*supra* n. 215); A.W. McNicoll, *Hellenistic Fortifications from the Aegean to the Euphrates* (Dissertation, Oxford University 1971); *id.*, "Some Developments in Hellenistic Siege Warfare," *Proceedings of the Xth Congress of Classical Archaeology* (1978) 406-419; *id.*, "Developments in Techniques of Siegecraft and Fortification in the Greek World *ca.* 400-100 B.C.," in P. Leriche and H. Tréziny (eds.), *La fortification dans l'histoire du monde grec. Actes du Colloque International, Valbonne, Décembre 1982* (1986) 305-313; Y. Garlan, *Recherches de poliorcétique grecque* (1974); Lawrence, *op. cit.* (*supra* n. 216); see also B.H. Liddell-Hart, *The Strategy of Indirect Approach* (1941).

[251] See especially Winter, *op. cit.* (*supra* n. 215) 169-170 for the *helepolis* and pp. 218-220, 316 for the date of the invention of the catapult and its appearance in Greece.

weapons, capable of seriously damaging thick walls from a greater range than was previously possible. Moreover, Alexander's siege of Tyre and Demetrios Poliorketes' siege of Rhodes showed the effectiveness of torsion artillery mounted on ships for naval assaults.[252] In response, walls were not only built more solidly, but towers were constructed in order to house artillery so that the defenders, not only the attackers, could deploy their new arsenals.[253] The first recorded use of artillery by defenders was during Philip's siege of Perinthos in 340 B.C., a conflict which shows how quickly new defensive measures were adopted in the light of new siege artillery.[254] From this time on, towers were primarily, though not exclusively, built as artillery emplacements. Post torsion-artillery great circuits include, among others, those of Knidos, Herakleia by Latmos, Ephesos, and Seleukeia in Pieria. At sites such as Demetrias in Thessaly, existing towers were evidently progressively enlarged.[255] The new great circuits often bore little or no relationship to the area of the town actually occupied.[256] Another defensive response, which was to become increasingly important in the second half of the fourth century B.C., was the mounting of sorties. This type of active defense, aimed at disrupting the attackers' dispositions, assumed a greater importance towards the end of the fourth century.[257] It necessitated the construction of posterns or sally-ports throughout the system, best seen in the Koressos front of the Ephesos circuit (built *ca.* 290 B.C.), where there are at least sixteen posterns, nearly one for every two towers.[258]

It is clear that the Early Hellenistic fortification system of Torone, built towards the end of the fourth century B.C. (see above and Chapter 2), was designed with many of the new defensive principles in mind. This is especially true of the Hill 1 circuit, with its various lines of defense and retreat, and its numerous towers and posterns. Although poorly preserved and much robbed of stone, the eastern and western flanks of the system clearly do not have the quantity of towers and posterns that are built into the Hill 1 circuit. This may well have been a cost-effective measure, which placed the greatest military emphasis of the fortification on the most naturally

[252] *Ibid.*, 318-324.
[253] McNicoll, *op. cit.* (*supra* n. 250) (1986) 308-309.
[254] Winter, *loc. cit.*, 319-320, 323.
[255] McNicoll, *op. cit.* (*supra* n. 253) 309.
[256] *Ibid.*, 308. *Cf.* also some of the Attic fortified camps assembled by J.R. McCredie, *Fortified Military Camps in Attica, Hesperia* Suppl. XI (1966).
[257] McNicoll, *ibid.*, 309.
[258] *Ibid.*

dominant and defensible part of the site. The success of the great circuit of Torone is amply born out in the extant literary *testimonia*. An easy prey to any belligerent power, the city of Torone was taken by invaders twice during the Pentekontaetia, and on several different occasions during the first half of the fourth century B.C.; its existing walls were easily breached and afforded little defense. The one recorded siege of the site during the time of its new fortifications, saw a substantial force bringing together the might of Rome, assisted by Eumenes II of Pergamon and Prousias II of Bithynia. Although Livy provides no details of the siege, and it is possible that an armed exchange never took place, the would-be besiegers gave up their undertaking and made for Demetrias in Thessaly.[259]

[259] See above n. 113.

2. THE EXCAVATIONS OF 1975, 1976, 1978

Alexander Cambitoglou and John K. Papadopoulos

INTRODUCTION

The surface-clearance operations, following the lines of the ancient city walls, conducted in the first half of the first season provided much useful information on the topography and extent of the fortified ancient city of Torone. The subsequent excavations begun in the second half of the 1975 season and continued in 1976 and 1978 were predetermined by the study of the visible remains above surface which defined a number of areas likely to prove productive if further explored. The nature of the excavations of the first three seasons was essentially that of test-trenching and the aims were basically twofold: firstly to investigate details of the ancient fortification systems at points that appeared to be of focal importance, as well as to gain information of their dates. The decision to excavate the Gate Area, Hill 2 and, initially, Structure 1 and part of the Lower City was made with this in mind. The second aim of the excavations was to test the nature of occupation and its chronological range in those parts of the site within the ancient city boundaries that appeared to be significant; it was to this end that excavations were begun at Structures 1 and 3, the Isthmus, the Lower City and on Promontory 1. It should also be noted that the evidence of Thucydides' account pertaining to the topography of Torone in the later 5th century B.C. provided something of a guide to the key areas of the site at that time.

The 1975, 1976 and 1978 excavation seasons should be viewed as a unified project which, in turn, provided the basis for further archaeological exploration of the site conducted from 1981 on.

The system of excavation in individual areas was essentially that of trenches and baulks. Trenches were originally located by the grid laid out in 1975 but are here relocated according to the consolidated grid laid out in 1981 by the late John Harwin. In keeping with the aims of the excavations of the first three seasons, individual trenches were sited in each area more with the view of testing features clearly visible above surface rather than with regard to any predetermined scheme of digging. The size and orientation of individual trenches within each area varied and was dictated by the nature and configuration of the specific features encountered. Trenches were numbered consecutively in each area, hence there is a "Gate Area Trench 1," a "Lower City Area Trench 1" and so on. To maximise the results of test soundings in some areas, larger trenches were subdivided into a series of smaller ones (e.g. TR1

tr1, TR1 tr2 etc.). Excavation was by cultural layer but with many subdivisions into arbitrary vertical passes and horizontal spits, following unit and *zembili* (rubber bucket) designations. Any given stratum in any one trench may have been dug in two or more unit designations arbitrarily defined either vertically or horizontally, with the number of *zembilia* (buckets) normally determined by the quantity of pottery recovered. These arbitrary divisions of the deposits allowed for greater overall control of the archaeological material.

Finds were divided in the field into four categories: (1) pottery, along with fragments of roof-tiles; (2) bone, shell, charcoal, and other organic material; (3) special finds (artefacts of interest or of contextual significance, including objects of stone, metal, bone and terracotta); (4) soil and stone samples.

All archaeological material was kept in the first instance, washed, qualitatively and quantitatively analysed, and subsequently stored in context tins. Owing to their great quantity, only representative samples of roof-tile fragments were kept; the remainder (along with scraps of non-identifiable pottery, normally under 2 cm. in size) was thrown away, but only after the fragments were strewn, analysed, and recorded with all the material from the same deposit. All fragments were weighed before being discarded. Inventoried objects include the special finds, as well as pottery of interest gleaned from the context lots.

In the following account of the excavations, a deposit summary of all material encountered is presented at the end of each trench summary or deposit description; catalogued items are listed and all the material that was inventoried but not catalogued or just stored in context lots is briefly noted according to categories. The quantities in terms of weights of non-diagnostic pottery and roof-tile fragments thrown are also noted in the deposit summaries. A brief note is also made, where necessary, of any bone, shell or other organic material recovered in a deposit.[1] In the course of excavation most units were selectively dry-sieved; topsoil and clearly disturbed strata were not sieved.

In those parts of the site where sufficient area and depth were excavated, the general character of the stratigraphy had emerged fairly clearly, and with such areas soil units were comparatively predictable. For individual areas, such as the Gate Area, the term *deposit* is used to denote a specific type of excavated unit in the same way the term is used in the excavation reports for Zagora.[2] In more com-

[1] The animal bone material has been studied by the late Professor Sandor Bökönyi.

[2] A. Cambitoglou *et al., Zagora* I (1971) 37 f.; *Zagora* 2 (1988) 47 f.

plex, multi-phased, areas such as the Lower City, or in areas only partially excavated, as Structure 1 and Promontory 1, the deposits encountered are simply presented in numerical sequence; this is explained more fully in the summary for each area.

The results of the excavations of the first three seasons have shown Torone to be a large and complex site. The present volume on these excavations aims primarily at providing a detailed description of the stratigraphy and excavated features encountered in each area and to present a selection of all the main categories of small finds recovered. The contexts of all the small finds selected and presented under various chapter headings are all discussed in this chapter. In order to prevent even further delay in the publication of this volume, certain categories of small finds, such as the Byzantine and Post-Byzantine pottery, are not included here, while with other categories, such as the terracotta objects, only a brief overview of the material is provided.[3] It should also be noted that considerable work was carried out on the architecture of Torone in seasons subsequent to those covered in this report. Since significant new information is now available on the various fortification systems of the site and on the domestic architecture of Torone during different periods, and since space is short in the present volume, it has been decided to publish detailed interpretative studies of the architecture in forthcoming volumes.

1. THE GATE AREA (1975, 1976 and 1981)[4]

Grid reference 12Q and 13Q (Fig. 3)

By the end of the surface clearance it became obvious that the line of the trace of Walls K2 and N2 (Fig. 1) was interrupted at the low saddle immediately south of Hill 3 by an indent comprising several wall lines which were subsequently designated Walls K3, P and O. On account of these and the fact that this low saddle formed the only natural, and most direct, route from Porto Koufo to Torone, as well as a logical route for entering the city from the north, the area was designated as the "Gate Area" and a number of trenches were sited there with the purpose of ascertaining the pre-

[3] Both of these categories will be more fully treated in forthcoming publications.
[4] A. Cambitoglou, *PAE* 1975, 115-126; *id.*, *PAE* 1977, 77-102.

sumed gate. A total of five trenches were laid out in 1975 (Trenches 1, 2, 3, 4 and 5), with an additional two trenches (Trenches 6 and 7) opened in 1976, as well as extensions to Trench 4 of the previous season in the form of Trench 4a. During the 1976 campaign the excavation of TR7 tr1 appeared to have exposed part of the actual gate entrance; in order to investigate more fully this feature two smaller trenches (Trenches 17 and 20) were excavated in 1981;[5] the baulk separating the two was subsequently cleared and TR7 tr1 re-opened and dug to bedrock. The results of these excavations are also presented here in order to complete the account of the work carried out at the Gate Area.

By the end of the 1975 campaign the character of the stratigraphy had emerged fairly clearly and seven main deposit types could be distinguished. *Deposit type 1* represented dumped soil overlying accumulated topsoil at several points and clearly the result of stone robbing activity. *Deposit type 2* was topsoil encountered, at various depths, over the entire area; somewhat more compact than deposit type 1, it assumed a mid-brown colour, though in places a darker hue was met, while in others it was somewhat more yellow. *Deposit type 3* was tumble, almost exclusively limestone, met at several points, fallen from the ancient walls. *Deposit type 4* represented a layer of limestone chips mixed with earth usually encountered along a face of a wall; this deposit was further subdivided into 4a and 4b, the former comprising mainly smaller chips of limestone mixed with earth, the latter of larger chunks of the stone, sometimes with an admixture of small chips of schist. It soon became evident that the limestone chips were of the same stone as that used in the fortification walls of deposit type 4, and were conceivably the result of the final dressing of the blocks *in situ*; deposit type 4 was also used as fill for the foundation trenches. *Deposit type 5* was a schisty red-green soil met in the lower levels over much of the area and comprising a good many chips of the rock, which is the natural bedrock in this part of the site, mixed with earth. The occurrence of schist in deposit type 5 was the result of the digging of the bedrock for the foundation trenches of the walls. In certain parts of the area deposit type 5 overlay bedrock, whereas in others a further soil until, *Deposit type 6*, was exposed below. Where encountered, deposit type 6 directly overlay bedrock; it was characterised by a mid-brown colour, sometimes darker, usually free of stones, representing the existing earth of the area prior to the commencement of building of the fortification system. In certain parts, notably in the vicinity of the presumed gate entrance, a yellow-coloured earth containing many small to medium-

[5] A.Cambitoglou, *PAE* 1981, 33, 35 fig. 2 and pl. 51α.

sized stones (occasionally more stone than earth) was met immediately above bedrock which had been worked. Designated *Deposit type 7*, the unit represented an intentionally laid packing or fill in order to provide the required level, associated with the construction of the Gate Area complex.

The architectural and other features encountered may be described by beginning with Trench 3 and working in an anticlockwise order around the area (Fig. 8).

Trench 3 (Figs. 3, 6, 8-10 a; Pls. 13 f-g, 14 a-d) was laid out as a 10.05 m. north-south x 5.06 m. east-west trench in order to clarify the corner formed by Walls K2 and K3 which was partially visible above surface. The trench was excavated in three sectors (designated the W, E and S sectors),[6] with the intervening baulks subsequently removed. Excavation brought to light the SE corner of a tower or bastion on the north side of the gate complex at the junction of Walls K2 and K3 and provided valuable information on its construction. The exposed parts of the south and east walls of the bastion measured 3.15 m. and 6.28 m. in length respectively and had an average width of 1.10 m. (Fig. 9a);[7] they were founded directly on bedrock with foundation trenches exposed along both external faces (Pls. 13 g, 14 a-c). The walls were built of dressed limestone blocks in pseudo-isodomic ashlar masonry, preserved to three or four courses (Fig. 9 b-c).

The corner block of the first course above the foundation course bore a draughted corner consisting of a groove at each edge framing the angle formed (Pl. 13 g). Both the external and internal faces were clearly defined (Pl. 14 d), providing added strength, especially since the SE corner of the bastion was located on the downhill side of the saddle and was required to withstand the greatest thrust from the weight of the internal fill (Fig. 10 a). Behind the walls, in the NW quarter of the trench, a solid stone and earth packing was exposed comprising a higher proportion of stone, and more carefully packed, than was the case with the fill of the curtain walls themselves (Fig. 9 a; Pl. 14 d). This internal packing was first revealed at a depth of 0.33 m. below surface with the removal of topsoil deposit type 2, which covered the entire area of the trench. In those parts of the trench south and east of the corner of the bastion, removal of topsoil brought to light two different deposits defined horizontally: the limestone chips mixed with earth of deposit type 4 were met against the external faces of the structure, petering out towards the south and east, where they were replaced by the schisty soil of deposit type 5. Along the wall faces deposit type 4

[6] A. Cambitoglou, *PAE* 1975, 119-120.

[7] As opposed to the width of the actual curtains which were normally 2.0 m. or more.

overlay bedrock, with larger chips of limestone used to fill the lowest level of the foundation trenches. Below deposit type 5 the brown earth of deposit type 6 was encountered overlying bedrock and clearly dug into for the foundations of the bastion.

DEPOSIT SUMMARY

TR3 Deposit type 2.[8] High proportion of 5th century B.C. pottery, with some of the 4th century; sprinkling of Archaic material also present and at least one fragment of Early Iron Age date.

Catalogued items:

Early Iron Age pottery:	**4.9.**
Geometric and Archaic pottery	**5.36.**
Attic Black-figure	**7.26.**
Red-figure:	**8.70, 8.86.**
Black-glaze:	**9.11, 9.16.**
Stamped black-glaze:	**10.108.**
Coin:	**20.9** (Amyntas III, 381-369 B.C.).

Inventoried items not in catalogue:

Red-figure:	1 body fr.: 75.507.
Domestic pottery:	3 rim frr.: 75.514, 75.531, 75.535; 1 base fr.: 75.537; 1 body fr.: 75.382.
Tiles:	2 frr.: 75.506, 75.536.
Metal object:	75.307.

TR3 Deposit type 4.[9] High proportion of 5th century B.C. material, with some 4th century B.C. pottery.

No catalogued or inventoried small finds.

TR3 Deposit type 5.[10] Preponderance of 5th century B.C. material; sprinkling of earlier material.

Catalogue items:

Early Iron Age Pottery:	**4.3, 4.6.**

[8] Deposit type 2 in Trench 3 incorporates the following excavation unit numbers: TR3 (1); TR3 (2); TR3 W sector "Fill;" TR3 S (1); TR3 S (2); TR3 Baulk (surface); TR3 Baulk (1); TR3 Baulk (2).

[9] Deposit type 4 in Trench 3 incorporates the following excavation unit numbers: TR3 E (2); TR3 S (4); TR3 Baulk (3).

[10] Deposit type 5 in Trench 3 incorporates the following excavation unit numbers: TR3 E (3); TR3 S (5); TR3 Baulk (4).

Attic Black-figure:	**7.12.**
Greek lamp:	**15.54.**

Inventoried items not in catalogue:

Geometric/Archaic:	1 body fr.: 75.375.
Black-glaze and related:	1 lid fr.: 75.367
Domestic pottery:	1 pithos fr.: 75.371

TR3 Deposit type 6.[11] Mainly pottery of the 5th century B.C.; latest identifiable piece perhaps about 430 B.C. (?)

No catalogued or inventoried small finds.

Trench 1 (Figs. 8, 10 b-c, 11 a-b; Pl. 14 e-f) was originally laid out as a rectangle measuring 10.8 m. north-south x 6.30 m. east-west, but was quickly subdivided into two smaller trenches designated TR1 tr1 and TR1 tr2.

TR1 tr1 (Fig. 10 b) was the first of the Gate Area trenches to be dug;[12] it measured 4.0 m. north-south x 2.40 m. east-west, with an irregular extension opened at its NW corner, and was sited 2.20 m. west of Trench 3 (Fig. 8). Excavation brought to light a continuation, to the west, of the south wall of the tower (Figs. 8, 10 b), preserved to three courses along the south face, founded on bedrock (Fig. 11 b; Pl. 14 e). A stone robbery pit in the NW quarter of the trench, necessitating the irregular extension, destroyed any evidence for the junction of the south and west walls of the tower, although the line of the latter wall was subsequently exposed in TR1 tr2. The stratigraphy encountered is best illustrated along the west scarp section (Fig. 11 a). The dumped soil of deposit type 1 was excavated to a maximum depth of 0.32 m. petering out towards the north, south and east, below which topsoil deposit type 2 was cleared to a maximum depth of 0.46 m. to the north and a minimum of 0.13 m. towards the south; the preserved top of the south wall of the structure was first met with the removal of topsoil 0.63 m. below surface. Below this the limestone chips of deposit type 4 were encountered along the external face of the wall, extending for a distance of 1.17 m. to the south at which point the schisty soil of deposit type 5 was revealed. Deposit type 4 could be further subdivided into 4a and 4b, the former comprising smaller chips of limestone mixed with earth overlaying the larger chips of 4b.

[11] Deposit type 6 in Trench 3 incorporates TR3 E (4).

[12] A. Cambitoglou, *PAE* 1975, 115-119.

Deposit type 4 constitutes the fill of the foundation trench for the south wall of the structure which was dug through deposits type 5 and 6 and into bedrock, with the limestone chips indicating that the final dressing of the blocks was perhaps performed *in situ*. Although yielding almost no pottery, a useful *terminus post quem* was provided by the bronze coin **20.19**, found in the deposit, being a posthumous issue of Alexander the Great (dated 323-310 B.C.). In the area south of the foundation trench, deposit type 6 was revealed below deposit type 5 and overlying bedrock and it was shown that the configuration of the natural rock in the area sloped downhill from north to south.

TR1 tr2 (Fig. 10 c) was a 3.65 m. north-south x 5.00 m. east-west trench laid out to the north of TR1 tr1 and 2.05 m. west of Trench 3. The trench proved to be particularly informative as it exposed the junction of the east end of Wall K3 with the west wall of the tower both to the north and south. The returns consist of only one stone in each direction, but both are on line with each other and *in situ*.[13] The internal fill of the tower (Pl. 14 f) was at the same level as, and consistent with, that exposed in Trench 3, while the fill of Wall K3, in the western half of the trench, consisted of stones which were, on the whole, smaller. The width of Wall K3 averaged 2.70-2.75 m. and was significantly greater than that of the tower walls. Both the preserved top of Wall K3 and the fill of the tower were exposed with the removal of topsoil deposit type 2, and only in the NW quarter of the trench, north of the external face of Wall K3, was there sufficient space for excavation to continue. In that space, below deposit type 2, the limestone chips of deposit type 4 were met, and, as was the case in TR1 tr1, this deposit could be further divided into 4a and 4b with the somewhat larger chips of 4b providing the lower fill of the foundation trench; a certain amount of schist chips were also noted in the fill. Plate 14 f shows how the bedrock at this point slopes sharply up towards the north and had to be cut almost vertically for the placement of the foundations of Wall K3.

The excavation of Trenches 1 and 3 established that the tower on the north side of the gate complex, at the junction of Walls K2 and K3, had an east-west dimension of 7.30 m.[14] Its north-south dimension remains uncertain; at least 6.28 m. were

[13] Two further blocks, one only partially exposed, 1.20 m. west of the SE corner of the trench preserve the internal face of the west wall of the tower (Fig.10 c) and define a width of 1.04 m., although a slight cutting in the first block of Wall K3 may indicate that the second course could have been fractionally to the west, defining a width of about 1.20 m.

[14] As measured over TR1 tr2 and Trench 3.

exposed of the east wall in Trench 3 and surface observation would suggest that it would be no less than 7.30 m. and perhaps more.

DEPOSIT SUMMARY

TR1 tr1

TR1 tr1 Deposit type 1.[15] Pottery recovered very worn and preserved in small fragments. Identifiable material exclusively of Classical date.

Catalogued items:

Red-figure pottery:	**8.155.**
Black-glaze:	**9.4.**

Inventoried items not in catalogue:

Black-glaze and related:	1 rim fr.: 75.520; 1 base fr.: 75.515; 1 handle fr.: 75.510; 1 body fr.: 75.511.
Domestic pottery:	3 rim frr.: 75.532, 75.538, 75.541.
Loomweight:	75.542.
Tiles:	75.540.

TR1 tr1 Deposit type 2.[16] Diagnostic pottery exclusively Classical.

No catalogued or inventoried small finds.

TR1 tr1 Deposit type 4.[17] Almost no pottery.

Catalogued item:

Coin:	**20.19** (Posthumous Alexander III, 323-310 B.C.).

TR1 tr1 Deposit type 5.[18] Classical pottery, predominantly 5th century B.C. but with a sprinkling of Archaic sherds.

Catalogued items:

Attic Black-figure:	**7.33.**
Red-figure:	**8.135.**

[15] Deposit type 1 in TR1 tr1 incorporates TR1 tr1 (1) and TR1 Sp. 1 FG 1.

[16] Deposit type 2 in TR1 tr1 incorporates TR1 tr1 (2).

[17] Deposit type 4a was dug in TR1 tr1 as Unit (3); 4b as Unit (4); the latter yielded no finds. The excavator retained the designation Unit (4) for Deposit type 5. Deposit type 4 yielded almost no pottery; the excavator noted one fragment of black-glaze and three small coarse-ware body sherds.

[18] Deposit type 5 incorporates TR1 tr1 Unit (4), see *ibid.*

Inventoried items not in catalogue:

Black-figure:	1 body fr.: 75.131.
Black-glaze and related:	5 rim frr.: 75.521, 75.522, 75.523, 75.529, 75.533; 1 base fr.: 75.119.
Domestic pottery:	1 rim fr.: 75.125; 1 handle fr.: 75.132; 2 body frr.: 75.134, 75.787.

TR1 tr1 Deposit type 6.[19] Identifiable pottery predominantly Classical, but with some Archaic material.

Inventoried items not in catalogue:

Black-glaze and related:	3 rim frr.: 75.139, 75.512, 75.525; 1 base fr.: 75.140; 1 handle fr: 75.143; 1 body fr.: 75.524a and b.

TR1 tr2

TR1 tr2 Deposit type 2.[20] Identifiable pottery predominantly 5th century B.C. but with a good quantity of Archaic material and some even earlier (Protogeometric and Geometric).

Catalogued items:

Early Iron Age pottery:	**4.1.**
Geometric and Archaic pottery:	**5.25.**
Corinthian:	**6.6.**
Attic Black-figure:	**7.6, 7.19, 7.21.**
Red-figure:	**8.73.**
Black-glaze:	**9.24.**
Stamped black-glaze:	**10.11.**
Figurines:	**16.15, 16.32.**
Objects of glass and bone:	**17.90.**
Metal object:	**18.100.**

Inventoried items not in catalogue:

Geometric pottery:	1 handle fr.: 75.370.
Black-figure:	1 body fr.: 75.374.
Black-glaze and related:	1 fr.: 75.380.
Domestic pottery:	1 rim fr.: 75.378, 75.798.
Loomweight:	75.384.

[19] Deposit type 6 in TR1 tr1 incorporates Unit (5).

[20] Deposit type 2 in TR1 tr2 incorporates Units (1) and (2).

TR1 tr2 Deposit type 4.[21] Very little material recovered, mostly non-identifiable.

No catalogued or inventoried small finds.

Trench 5 (Fig. 12 a-b; Pls. 14 g, 15 a-c) was sited in an area slightly uphill from Trenches 1 and 3 (Pl. 14 g); it was originally laid out as a 10.0 m. north-south x 5.0 m. east-west trench, 5.20 m. to the west of the SW corner of TR1 tr2, with the view of exposing the continuation of Wall K3, the line of which was partially visible above surface prior to excavation. Because of lack of time, however, the southernmost 2.50 m. (north-south) of the trench were not dug resulting in a final trench plan measuring 7.50 m. north-south x 5.0 m. east-west. As anticipated, excavation exposed a further 5.0 m. stretch of Wall K3 across the north portion of the trench; both faces were clearly preserved defining a width of 2.70 m. (Fig. 12 a). Approximately 1.40 m. of the south face of the wall was revealed (Fig. 12 b; Pl. 15 a), with 2-3 preserved courses. The stratigraphy encountered along the south face of Wall K3 was straightforward; with the removal of topsoil, deposit type 2, which varied in colour from mid-brown through yellow-brown, tumble from the wall (deposit type 3) was revealed in the SE quarter of the trench, whereas in the SW quarter the limestone chips of deposit type 4 were met. Deposit type 3 was left unexcavated, as is clearly seen on Plate 15 b-c, with deposit type 4 continuing below. Clearance of deposit type 4 in the SW quarter of the trench brought to light the red-green schisty earth of deposit type 5 which was only partially dug, with the excavation terminating at that point; bedrock was not reached. In the excavated area north of the wall the topsoil encountered (deposit type 2) was somewhat darker in colour and looser in texture than that south of the wall because of root action and decayed vegetation (humus). Removal of the topsoil here revealed a mass of limestone pieces and blocks (Pl. 15 c); much of this was in the nature of tumble (deposit type 3), although the very quantity of stone suggested at the time the possibility of an intentional packing along the north face of the wall.[22]

DEPOSIT SUMMARY

Surface

Catalogued item:

Coin: **20.22** (Marcus Aurelius or Commodus, A.D. 161-192).

[21] Deposit type 4 in TR1 tr2 incorporates the following excavation unit numbers: TR1 tr2 (3), (4) and (5).

[22] See below (Trench 6) and Fig.13c where the continuation of the tumble deposit type 3 was revealed overlying deposit type 4 and as such arguing against an intentional packing.

TR5 Deposit type 2.[23] Identifiable material mainly of the 5th century B.C. but with a sprinkling of earlier, Archaic, material and some 4th century B.C. sherds. Majority of pottery very worn and preserved in small fragments.

Catalogued items:

Black-glaze: **9.86.**

Inventoried items not in catalogue:

Archaic pottery:	1 body fr: 75.479.
Terracotta figurine(?):	75.784.
Loomweight:	75.386.
Architectural terracotta:	75.783.
Stone:	75.793.

TR5 Deposit type 4.[24] Very little pottery recovered; identifiable material evidently Classical but not more precisely datable; higher proportion of small, worn roof-tile fragments.

No catalogued or inventoried small finds.

TR5 Deposit type 5.[25] Only partially excavated with very little pottery recovered; identifiable material evidently Classical.

No catalogued or inventoried small finds.

Trench 6[26] was sited with the view of further exposing the line of Wall K3 as well as investigating the presumed junction of Walls K3 and P which was indicated by surface observation. The trench was subdivided into three smaller trenches designated TR6 tr1, tr2 and tr3, which are best dealt with separately.

TR6 tr1 (Figs. 13 a-c, 14 a-b; Pls. 15 d-f, 16 a) was laid out as a 5.0 m. north-south x 3.0 m. east-west trench, with 1.0 m. wide baulks separating it from Trench 5, TR6 tr2 and TR6 tr3. A stone robbery pit about 0.30 m. deep ran diagonally across the trench (NNW-SSE) exposing a small portion of the north face of Wall K3 (Pl. 15 d), including a large block 1.45 m. in length oriented north-south which suggested that the junction of Walls K3 and P may have been located at this point. Dumped soil

[23] Deposit type 2 in TR5 incorporates the following excavation unit numbers: TR5 tr1 (1); TR5 tr1 S (2); TR5 tr2 Wall Fill; TR5 tr2 N (1).
[24] Deposit type 4 in TR5 was excavated as TR5 tr1 S (3).
[25] Deposit type 5 in TR5 was excavated as TR5 tr1 S (4).
[26] A. Cambitoglou, *PAE* 1977, 78-87.

from the pit was confined to the SW quarter of the trench and consequently the surface of the area was horizontally divided into three sectors which were dug separately.[27] Clearance of the upper layers more clearly exposed the preserved top of Wall K3, which ran east-west right across the southern portion of the trench (Fig. 13 a) and the previously noted long block which presented its short end at the north face. The deposits north and south of the wall were cleared to bedrock revealing that the natural rock had been sharply cut in order to receive the foundations of the wall (Pl. 15 e-f); three courses of masonry were preserved along the south (outer) face (Fig. 14 a) and up to five along the north (inner) face (Fig. 14 b). The upper courses of the wall defined a width of 2.70 m.,[28] whereas the lowest foundation course defined a width of about 3.0 m. The stratigraphy encountered is best illustrated in the west and east scarp sections (Fig. 13 b-c). As noted, the dumped soil from the robbery pit, deposit type 1, was confined to the SW quarter of the trench and only appears along the west scarp section, where it was dug to a maximum depth of 0.50 m. Below this, topsoil (deposit type 2) was cleared to a depth of 0.19-0.34 m.; the south face of Wall K3 was first met with the removal of the topsoil, whereas in the NE sector of the trench the topsoil formed the upper-most layer. To the south of the wall the limestone chips of Deposit type 4 were first encountered at the same level with the upper preserved blocks of the wall and extended down into the bedrock cutting, constituting the fill of the foundation trench. As in other parts of the Gate Area where encountered, deposit type 4 comprised two layers: in this case an upper layer of smaller limestone chips mixed with earth (deposit type 4a), and a lower layer of slightly larger chips with an admixture of schisty soil (deposit type 4b). In the lowest part of deposit type 4a, level with the lower edge of the uppermost preserved course, an intact black-glaze salt cellar (**9.133**), a fragmentary but near complete black-glaze kantharos (**10.46**) and a small plain bowl (76.105) were found hard up against the face of the wall (Pl. 16 a). Both the salt cellar and the kantharos may be dated to *ca.* 325 B.C. and confirmed a late 4th century date for the construction of the gate complex already established by the bronze coin **20.19** in deposit type 4 in Trench 1.[29] Below deposit type 4a, immediately south of the foundation cutting in bedrock, the schisty earth of deposit type 5 was exposed, and cleared to a depth of 0.50 m.

North of the internal face of Wall K3, and of the robbery pit, a thin layer of topsoil, deposit type 2, (0.02-0.14 m. deep) overlay a more substantial layer of tumble,

[27] A. Cambitoglou, *PAE* 1977, 78-80.

[28] Consistent with the width of the wall exposed in the 1975 season.

[29] See above TR1 tr1 deposit type 4.

deposit type 3. This wall tumble was not encountered south of the wall, a situation similar to that in Trench 5, 1.0 m. to the east, where substantial tumble was exposed north of Wall K3 with only a few fallen blocks on the south side.[30] Deposit type 3 was cleared to a maximum depth of 0.58 m. revealing the limestone chips of deposit type 4 below. Deposit type 4a comprised the smaller chips of limestone mixed with earth to a maximum depth of 0.65 m., level with the cutting in bedrock; deposit type 4b, constituting the lower fill of the foundation trench, comprised larger chunks of limestone but with none of the schist chips encountered in 4b south of the wall. North of the foundation cutting a thin layer of deposit type 5 was revealed below deposit type 4a overlying bedrock.

DEPOSIT SUMMARY

TR6 tr1 Deposit type 1.[31] The pottery recovered was almost exclusively of Classical date with a little earlier material.

Catalogued item:

Red-figure pottery:	**8.114**.

Inventoried items not in catalogue:

Black-figure:	1 base fr.: 76.125.
Red-figure:	1 body fr.: 76.123.
Black-glaze and related:	1 rim fr.: 76.124; 3 handle frr.: 76.120, 76.121, 76.122.
Domestic pottery:	1 body fr.: 76.128.
Loomweight:	76.126.
Tiles:	76.127, 76.129.

TR6 tr1 Deposit type 2.[32] Latest identifiable pottery Classical but not more precisely datable.

Catalogued items:

Greek lamp:	**15.45.**
Terracotta figurine:	**16.37.**

Inventoried items not in catalogue:

Red-figure:	1 rim fr.: 76.2009; 2 body frr.: 76.2000, 76.2008.

[30] See Pl. 15 b-c.

[31] Deposit type 1 was excavated as TR6 tr1 Robbery Dump (SW corner).

[32] Deposit type 2 in TR6 tr1 incorporates the following excavation unit numbers: TR6 tr1 N (1); TR6 tr1 C; TR6 tr1 (1) Wall fill.

Black-glaze and related:	2 rim frr.: 76.720, 76.2010; 1 salt-cellar fr.: 76.1099.
Domestic pottery:	1 rim fr.: 76.2004; 2 handle frr.: 76.1097, 76.1098.
Amphorae:	1 stamped handle fr.: 76.2006.
Greek lamps:	76.2002, 76.2005, 76.2007a and b.

TR6 tr1 Deposit type 3.[33] Identifiable pottery Classical but not precisely dated. One of the painted body fragments stored in context may be of Geometric or Archaic date.

No catalogued or inventoried small finds.

TR6 tr1 Deposit type 4. The material recovered north and south of Wall K3 is presented separately:

Deposit type 4a north of Wall K3.[34] Pottery Classical; latest identifiable material is of the 4th century B.C.

Catalogued items:

Black-glaze:	**9.82, 9.176.**
Metal object:	**18.14.**

Inventoried items not in catalogue:

Domestic pottery:	1 rim fr.: 76.722; 1 handle fr.: 76.721; 1 other fr.: 76.723.
Metal object:	76.728.

Deposit type 4b north of Wall K3. Only a few fragments of non-identifiable coarse-ware body fragments.

No catalogued or inventoried small finds.

Deposit 4a south of Wall K3.[35] Pottery Classical with the latest identifiable material belonging to the last quarter of the 4th century B.C.

Catalogued items:

Black-glaze:	**9.133.**
Stamped black-glaze:	**10.46.**
Terracotta figurine:	**16.14.**
Metal object:	**18.104.**

Inventoried items not in catalogue:

Black-glaze and related:	1 handle fr.: 76.130.
Domestic pottery:	1 bowl fr.: 76.105.
Plaster:	1 fr.: 76.132.

[33] This was excavated as TR6 tr1 N (2).
[34] This was excavated as TR6 tr1 N (3).
[35] This was excavated as TR6 tr1 S (2).

Deposit 4b south of Wall K3.[36] Deposit comprises predominantly roof-tile fragments; small quantity of pottery recovered Classical but not precisely datable.

No catalogued or inventoried small finds.

TR6 tr1 Deposit type 5. Where encountered in the trench, both to the north and south of Wall K3, the deposit was sterile.

TR6 tr2 (Figs. 14 c-16 b; Pls. 16 b-g, 17 a) was laid out as a square measuring 5.0 m. to the side, 1.0 m. west of TR6 tr1 and 1.0 m. north of TR7 tr2. Clearance of topsoil deposit type 2 quickly brought to light the corner formed by the junction of Walls K3 and P, as well as tumble at points along the inner faces of both (Pl.16 b-c). Excavation of the trench to bedrock exposed more fully the junction of the walls as preserved (Fig. 14 c; Pls. 16 d-f), with Wall K3 preserved up to five courses (Fig. 16 a) and Wall P mostly up to four (Fig. 16 b). Foundation trenches for both were sharply cut into bedrock with the natural rock at a somewhat lower level to the west of Wall P and higher north of Wall K3; the foundation cutting into bedrock for Wall K3 had a width of 0.20-0.44 m. whereas that for Wall P was narrower at 0.06-0.22 m. The corner blocks had draughted corners (Pl. 16 d) as those of the tower at the junction of Walls K2 and K3.[37] Walls K3 and P do not quite define a perfect right angle but form a very slightly acute angle of 89°. Moreover, the excavation of this trench and the evidence of Trenches 1, 3, 5 and TR6 tr1 established that the masonry style was identical for both the internal and external faces of the fortification system.

In the SW quarter of the trench, along the south scarp, a small portion of a wall was encountered at a depth of 0.53 m. below surface (Figs. 14 c, 15 b; Pl. 16 g).[38] This poorly preserved wall, constructed primarily of smaller, crudely-worked pieces of schist, was founded on bedrock and was clearly cut across, at its eastern preserved end, by the foundation trench for Wall P. The wall was therefore earlier than the construction of the gate complex and represents the remains of a pre-existing structure; its exact date, however, could not be established, nor was any trace of the structure picked up in the area excavated to the south.

The stratigraphy encountered was consistent with that in other trenches and best illustrated along the east and south scarp sections, north and west of Walls K3 and P (Fig. 15 a-b). Along the east scarp section removal of topsoil, deposit type 2, at a

[36] This was excavated as TR6 tr1 S (3).

[37] See Pls. 13 g, 14 a.

[38] And at about the same depth below the preserved top of Wall P (Fig. 15 b).

depth of 0.09-0.42 m., revealed the limestone chips of deposit type 4; a certain amount of tumble, deposit type 3, was exposed in the area north of Wall K3 but this did not extend to the east scarp. As elsewhere, deposit type 4 comprised an upper layer (deposit type 4a) of smaller limestone chips mixed with earth and a lower layer of larger chips mixed with schist chips (deposit type 4b), primarily confined to the foundation trench cutting; deposit type 4b was excavated to a depth of 1.26 m. Below deposit type 4a in the area north of the foundation trench for Wall K3 the schisty soil of Deposit type 5 overlay bedrock for a depth of 0.15-0.45 m. Along the south scarp section removal of topsoil brought to light tumble, deposit type 3, which was cleared to a depth of 0.12-0.25 m., below which the limestone chips mixed with earth of deposit type 4 were exposed. The preserved top of the schist-constructed wall was met with the removal of deposit type 4, although the westernmost block was exposed with the clearance of deposit type 3. As only the northern face of the schist-constructed wall was exposed and the area much disturbed by the construction of Walls P and K3, there was no undisturbed deposit associated with the wall.

Although the internal faces of Walls K3 and P were revealed (that is to the north and west of the junction), the external faces, and corner, were not clearly exposed in the SE quarter of the trench (Fig. 14 c). As excavated, the preserved width of Wall K3 was 2.44 m. along the east scarp, but 2.70 m. further west, where one block of pinkish limestone (Pl. 17 a), evidently *in situ,* appeared to define the external face of the wall. This block, which measured 0.77 x 0.49 m. and had a height of 0.63 m., bore a vertical cutting about 0.16-0.20 m. wide on the external face. The junction of this cutting, which was not dissimilar to the guidance groove on Wall H near the junction with City Wall A (Fig. 40 b; Pl. 39 f-g), was not immediately clear. The preserved width of Wall P in TR6 tr2 was 2.30 m., with no blocks preserved *in situ* on the external face. The width, however, of this wall was the normal 2.70 m. where exposed in TR7 tr2 to the south (see below). A measurement, however, from the eastern edge of the vertical cutting to the inner, western face of Wall P in TR6 tr2 would give the normal wall width of 2.70 m. and would therefore mark the line of its external face at its junction with Wall K3.

DEPOSIT SUMMARY

TR6 tr2 Deposit type 2.[39] Identifiable pottery predominantly Classical with the latest fragments dating to the 4th century B.C.; small quantity of earlier, Archaic, sherds. One possible but uncertain fragment of Late Roman semi-coarse-ware vessel stored in context. Large proportion of roof-tile fragments.

[39] This was excavated as TR6 tr2 (1).

Catalogued item:

Black-glaze:	**9.136.**

Inventoried items not in catalogue:

Black-glaze and related:	2 rim frr.: 76.730, 76.733; 1 base fr.: 76.725.
Loomweight:	76.729.
Metal object:	76.732.

TR6 tr2 Deposit type 3.[40] Identifiable pottery Classical but not more precisely datable. A few sherds are perhaps pre-Classical. Large proportion of roof-tile fragments.

Inventoried item not in catalogue:

Metal object:	76.742.

TR6 tr2 Deposit type 4.[41] Incorporating deposit types 4a and 4b. Deposit Classical with the latest identifiable sherds belonging to the 4th century B.C. A few sherds may be pre-Classical(?) Large proportion of roof-tile fragments.

Catalogued items:

Red-figure:	**8.72, 8.186.**
Black-glaze:	**9.69.**
Stamped black-glaze:	**10.39.**
Metal objects:	**18.45, 18.66.**

Inventoried items not in catalogue:

Black-glaze and related:	1 base fr.: 76.739; 1 body fr.: 76.873.
Domestic pottery:	1 handle fr.: 76.746.
Loomweights:	76.743, 76.745.
Metal object:	76.372.

TR6 tr2 Deposit type 5.[42] Latest identifiable pottery Classical but not more precisely datable.

Inventoried items not in catalogue:

Black-glaze and related:	1 rim fr.: 76.766; 1 base fr.: 76.767.
Domestic pottery:	1 rim fr.: 76.768; 1 body fr.: 76.765.

[40] Deposit type 3 in TR6 tr2 incorporates the following excavation unit numbers: TR6 tr2 N (2); TR6 tr2 W (2); TR6 tr2 Baulk (2).

[41] Deposit type 4 in TR6 tr2 incorporates the following excavation unit numbers: TR6 tr2 (3); TR6 tr2 N (3); TR6 tr2 W (3); TR6 tr2 Baulk (3).

[42] Deposit type 5 in TR6 tr2 incorporates the following excavation unit numbers: TR6 tr2 (4); TR6 tr2 N (4); TR6 tr2 Baulk (4).

TR6 tr3 (Fig. 8; Pl. 17 b-c) was laid out as a 3.0 m. east-west x 2.0 m. north-south trench 1.0 m. to the south of TR6 tr1 in order to investigate more fully the area south of Wall K3 and east of Wall P.

With the removal of topsoil deposit type 2 (intermixed with a small amount of tumble), the limestone chips of deposit type 4 were revealed, which were especially concentrated in the NW quarter of the trench. Below deposit type 4 the schisty earth of deposit type 5 was met and cleared to bedrock; the upper passes of deposit type 5 yielded a good amount of Classical pottery predominantly of the 5th century B.C. whereas the lower passes, although containing much similar material, yielded increasing quantities of Archaic and even earlier material. In the SW quarter of the trench portion of a pit cut into bedrock was exposed (Pl. 17 c), in which fragments of a human skull and other human bones, including portions of the arms and ribs were found; more fragments of human bone, including teeth were noted in the lower passes of deposit type 5. As excavated, the pit was about 0.50 m. wide and 0.50 m. long, clearly extending into the baulk separating TR6 tr3 from TR7 tr2 and, as such, was probably, in its original state, a rectangular pit with rounded ends, representing the poorly preserved remains of a simple pit grave, designated *Tomb 8*.[43] Oriented east-west, with the head to the east, the remainder of the tomb is located in the unexcavated baulk; no trace of the lower parts of the skeleton were encountered in TR7 tr2 to the west, since sufficient depth was not reached in the course of excavations (see below). The stratigraphical location of the tomb below deposit type 4 established that it was earlier than the construction of the gate complex, although its precise date could not be determined as no *kterismata* were found in it.

DEPOSIT SUMMARY

TR6 tr3 Deposit type 2.[44] Pottery primarily coarse-ware sherds of Classical varieties; at least one or two fragments of Post-Byzantine date.

Inventoried item not in catalogue:

Domestic pottery: 1 rim fr.: 76.734.

TR6 tr3 Deposit type 4.[45] Identifiable pottery exclusively Classical but not datable more precisely.

[43] The large quantity of roof-tile fragments encountered in deposit type 5 raised the possibility of the tomb being a tile grave, although this could not be established and seems unlikely on the evidence at hand.

[44] Topsoil intermixed with small amount of tumble; excavated as TR6 tr3 (1) and (2).

[45] Excavated as TR6 tr3 (3).

Inventoried item not in catalogue:

Domestic pottery:	1 body fr.: 76.737.

TR6 tr3 Deposit type 5.[46] The deposit yielded many fragments of Classical pottery with an increasing amount of Archaic material noted in the lower passes; at least one fragment of Early Iron Age pottery. As no distinct soil change was encountered, the material from the upper and lower passes is listed together.

Catalogued item:

Early Iron Age pottery:	**4.2.**

Inventoried items not in catalogue:

Black-figure:	1 body fr.: 76.2117.
Black-glaze and related:	1 rim fr.: 76.762; 1 base fr.: 76.736; 1 body fr.: 76.756.
Domestic pottery:	7 rim frr.: 76.755, 76.757, 76.758, 76.759, 76.760, 76.761, 76.763; 1 lid(?) fr.: 76.753.
Loomweight:	76.752.
Metal object:	76.751.

Trench 7 was sited with the view of further exposing Wall P as well as trying to locate the position of the actual gate, the location of which along this wall seemed logical both on account of Walls K3 and O flanking Wall P and on the evidence of the modern path from Torone to Porto Koupho which traverses Wall P in an east-west line immediately south of TR7 tr1. Trench 7 was divided into two smaller trenches designated TR7 tr1 and TR7 tr2 which were separated by a 1.0 m. wide baulk (Fig. 8; Pl. 17 d). The latter of these may be described first.

TR7 tr2 (Fig. 17 a; Pls. 17 d, f, 18 a) was laid out as a 5.0 m. east-west x 4.0 m. north-south trench 1.0 m. to the south of TR6 tr2. Removal of topsoil deposit type 2 exposed both faces of Wall P only centimetres below surface; in the central portion of the trench the wall was preserved to two courses and up to three in the NW quarter, whereas to the south only the foundation course was preserved, protruding slightly from the face of the upper courses (Pl. 17 f).[47] The width of the wall averaged 2.70 m. To the east and west of the wall the limestone chips of deposit type 4 were met below deposit type 2; deposit type 4 was not excavated except for a small portion at

[46] Excavated as TR6 tr3 (4).
[47] See *PAE* 1977, pl.55 γ-δ.

the SE corner of the trench in order to expose the foundation block of the external face of Wall P.

DEPOSIT SUMMARY

TR7 tr2 Deposit type 2.[48] Identifiable pottery Classical with a sprinkling of Archaic sherds.

Catalogued item:

Greek lamp: **15.42.**

Inventoried items not in catalogue:

Black-figure: 1 body fr: 76.2014.
Domestic pottery: 1 body fr: 76.2016.

TR7 tr2 Deposit type 4.[49] The small portion of this deposit actually excavated yielded mainly roof-tile fragments and a few coarse-ware sherds.

No catalogued or inventoried small finds.

TR7 tr1 (Fig. 17 b; Pls. 17 d-e, 18 b-e) was a 5.0 m. east-west x 4.0 m. north-south trench sited 1.0 m. south of TR7 tr2 and slightly to the north of the modern path from Torone to Porto Koupho. A robbery dump in the NW quarter of the trench and a corresponding robbery pit in the NE quarter were clearly visible prior to excavation (Pl. 17 e). Clearance of the robbery dump (deposit type 1) and of some topsoil (deposit type 2) brought to light a scatter of small to medium unworked stones in the central portion of the trench; these were primarily schist and probably represent stone discarded by the stone robbers. To the east of this scatter, patches of grey earth with traces of carbon were met (still part of topsoil deposit type 2), while to the west the limestone chips of deposit type 4 began appearing. Clearance of the stone scatter revealed the continuation of Wall P, but with bedrock quickly exposed within the presumed wall line near the north scarp of the trench. It was soon evident that the preserved top of Wall P as excavated at this point was considerably different to those parts of the wall uncovered in other trenches[50] and consequently the various blocks were numbered alphabetically (Fig. 17 b). The northernmost block along the east face of the wall, Block W, was of limestone, but the one immediately to its south,

[48] Excavated as TR7 tr2 (1).
[49] Excavated as TR7 tr2 (3).
[50] See above TR6 tr2 and TR7 tr2.

Block X, was of granodiorite, a stone not employed elsewhere in the Gate Area complex. Moreover, Block X was resting on levelled bedrock, the southern portion of which had been cut (Pl. 18 d), with the result that Blocks W and X were at a higher level than Blocks A, B, C, D, E and F to the south (Pl. 18 b-c). To the west of Block X, and at the same level, two more worked granodiorite blocks were encountered (Blocks Y and Z) right in the middle of the wall, which defined a clear east-west line through it (Fig. 17 b). The fill between Blocks W and X and Y and Z was similar to that exposed in Walls P and K3 elsewhere in the area. No blocks were preserved *in situ* in the north half of the trench along the west face of the wall, but only a shallow vertical cutting in the natural rock, about 0.03 m. deep, which defined the line of the west face (Fig. 17 b; Pl. 18 e). This was an unusual feature, since wherever exposed, the bedrock along the faces of Walls P and K3 was usually sharply cut into in order to receive the foundations.

Blocks A, B and C defined the preserved west face in the southern half of the trench and Blocks D, E, and F the east; all six blocks were of limestone. The internal fill between the faces here, however, was not the normal packing of smaller stones but consisted of packed earth. Neat cuttings were noted on the upper faces of Blocks B and E which were roughly in line, while along the south scarp of the trench two further blocks (Blocks H and G) were partially exposed in the middle of the wall which appeared to define an east-west line similar to that of Blocks Z and X, but at a lower level.

The narrow space between the east face of the wall and the east scarp yielded a thin layer of limestone chips, deposit type 4, overlying a darker soil with limestone chips at the SE corner where bedrock was at a lower level than it was to the north (Pl. 18 b). The larger space between the west face of the wall and the west scarp proved revealing: below topsoil, deposit type 2, the limestone chips of deposit 4 were encountered more or less level with the upper faces of Blocks A, B and C. Clearance of deposit type 4 here revealed a mass of stone, predominantly limestone but with an admixture of schist (Pl. 18 c), which clearly formed a packing creating a surface level with the higher bedrock in the NW quarter of the trench (deposit type 7).[51] It was at this point that excavations were concluded in 1976.

The unusual features encountered in this trench, namely the cutting in bedrock immediately south of Block X and Blocks Y and Z forming an east-west line running through the wall; the corresponding lower level of blocks A, B, C, D, E and F; the use

[51] This was subsequently cleared in 1981, see below.

of granodiorite blocks, as well as the apparent absence of normal foundation trenches along the wall faces, suggested the possibility that the actual gate entrance was perhaps located at this point. It was evident that this area warranted further investigation and accordingly part of TR7 tr1 was re-opened during the 1981 season, with two further trenches sited to the south, Trenches 17 and 20 (see below). The illustrations reproduced on Plate 18 f and g are general views of the trenches in the immediate area excavated by the end of 1976.

DEPOSIT SUMMARY

TR7 tr1 Deposit type 1.[52] Identifiable fragments exclusively of Classical date.

Inventoried item not in catalogue:

Metal object: 76.748.

TR7 tr1 Deposit type 2.[53] Identifiable material Classical.

No catalogued or inventoried small finds.

TR7 tr1 Deposit type 4.[54] Identifiable pottery Classical including 4th century B.C. material and a sprinkling of Archaic sherds.

Catalogued item:

Coin: **20.5** (Chalkidian League, 398-348 B.C.).

Inventoried items not in catalogue:

Black-glaze: 1 rim fr.: 76.750.
Metal object: 76.744.

Trenches 17, 20 and TR7 tr1 (1981).[55] (Figs. 8, 17 b, 18, 19 a-b; Pl. 19 a-f). A return was made to the Gate Area in 1981 in order to investigate further the possibility of a gate entrance in the immediate vicinity of TR7 tr1 and to complete work begun in 1976. Two trenches were initially laid out just to the south of TR7 tr1,

[52] Excavated as TR7 tr1 (1).
[53] Excavated as TR7 tr1 (2).
[54] Deposit type 4 in TR7 tr1 incorporates the following excavation unit numbers: TR7 tr1 (3); TR7 tr1 NW; TR7 tr1 (limestone chips); TR7 tr1 S; TR7 tr1 W; TR7 tr1 SW Spit; TR7 tr1 SE Spit.
[55] A. Cambitoglou *PAE* 1981, 33.

Trenches 17 and 20; both measured 5.0 m. east-west x 1.40 m. north-south, separated by a baulk 0.60 m. wide (Figs. 6 b, 8, 18). The baulk was subsequently cleared, at which time it was decided to re-open portion of TR7 tr1, partially excavated in 1976, in order to expose a longer stretch of the wall. Because of the difference in the orientation of the trenches in 1976 and 1981, this involved the further excavation of two small areas: firstly, the intervening space between TR7 tr1 and Trench 20, and secondly the extension of TR7 tr1 eastward which became necessary so that the trench could be brought in line with the east scarps of Trenches 17 and 20. In the course of the season, Trench 17 was extended towards the south, almost as far as the edge of Trench 4 excavated in 1976 (Fig. 8), resulting in a final trench plan as shown on figure 18.

Removal of topsoil, deposit type 2, exposed the preserved top of Wall P at a depth of 0.06-0.40 m.; a thin layer of limestone chips, deposit type 4, was revealed especially along the west face of the wall. A small quantity of similar limestone chips was also met above the preserved top of Wall P, whereas little or no trace of these was encountered to the east of the wall. Clearance of deposit type 4 to the west at a depth of only 0.10-0.25 m.[56] and of deposit type 2 to the east brought to light yellow-coloured earth containing a great many small to medium-sized stones, which was consistent with the packing or fill encountered along the west face of Wall P in TR7 tr1 (Fig. 17 b; Pls. 17 d, 18 c). This deposit - deposit type 7 - was cleared over the entire area exposed (including TR7 tr1), revealing levelled bedrock below (Pl. 19 b).

The uncovering of about ten continuous metres of the wall yielded significant results: 5.35 m. to the south of granodiorite Block X exposed in 1976 were two blocks set side by side through the length of the wall (Fig. 18; Pl. 19 a-b, d). These were designated Blocks M and L; the former, set along the west face of the wall, was of limestone, the latter of granodiorite; a further block, preserving a cutting on its upper face, near the east face of the wall was not *in situ*, but probably originally continued the line of Blocks L and M. Similar cuttings were noted on Blocks B and E of TR7 tr1 (Figs. 17 b, 18 a), as well as on two blocks exposed in Trench 20 (Block S along the west face and Block P along the east). Blocks L and M were at the same level as Blocks X and Z, about 0.40 m. higher than the upper face of the intervening 5.35 m. stretch of the wall. These features indicated that this was the actual gate opening. The preserved top of the intervening stretch, comprising packed earth towards the north and levelled fill of limestone chunks towards the south, suggested

[56] Fig. 18 shows the unexcavated chips of deposit type 4 in the small space between the west face of Wall P and the west scarp of TR17 Extension.

that the threshold or original surface of the opening was lost. This was confirmed by the cuttings on the upper faces of Blocks B, E, P and S which may have received the presumed threshold blocks,[57] as well as the layer of limestone chips to the west of the wall face which could hardly have been level with the original entrance surface. Along the west face of the stretch between Blocks X, Z and L-M, two courses of masonry were preserved toward the south and only one toward the north where bedrock was higher (Fig. 19 a; Pl. 19 c), whereas two courses were preserved along the east face (Fig. 19 b; Pl. 19 e); the width of the wall averages about 2.85 m. No trace, however, of the ancient ground level was encountered and it remains difficult to establish its precise position, but the packing, deposit type 7, met on both sides of the wall clearly showed that the greater part of both faces of the stretch would have been below ground level at the time when the gate was in use. An unusual feature of the entire Gate Area complex is that well-dressed masonry was consistently employed for the lower courses below ground level and even in foundation trenches cut into the natural rock.[58] Perhaps the best evidence for the ancient surface level was offered by the grave-marker for Tomb 5 in relation to Wall O (Figs. 20 c, 22, 27), the top of which was almost level with the uppermost preserved course of masonry, both of which were clearly visible above the modern surface, in addition to the evidence of deposit type 7 in TR2 tr2.[59]

To the south of Blocks L and M the small stretch of Wall P exposed in the extension of Trench 17 was marked by a west face comprising four preserved blocks which protruded slightly from the normal line and defined a width, with the regular east face, of about 3.00 m. This protrusion may indicate a slight thickening of Wall P near the junction with Wall O, although no corresponding thickening of the wall was encountered at the junction with Wall K3.[60] The only other feature to be encountered was Tomb 7, located along the east scarp of the re-opened TR7 tr1, 2.00 m. south of the north scarp. The tomb was a tile grave only partially exposed, extending into the east scarp (Pl. 19 f). It comprised a pit cut into bedrock about 0.30 m. deep, with a

[57] Another possibility, suggested by the excavator, was that these cuttings may have been for vertical supports of a hypothetical lintel; a possibility which seems less likely since the preserved top of the stretch was probably not the original surface of the entrance. For a useful overview of ancient gates see F. E. Winter, *Greek Fortifications* (1971) 205-233.

[58] See Figs. 8-20.

[59] See below.

[60] Note also that the southernmost visible block along the east face extends much further back into the wall fill than is usual. It should also be noted that the angle of the junction of Walls P and O, unlike that of Wall P and K3, is obtuse.

maximum width, at the east scarp, of about 1.0 m.; the pit narrowed towards the east face of Wall P. The body of the deceased was inhumed within the pit and covered by a number of roof-tiles set to form a gable. Two roof-tile fragments covered the opening at the exposed west end; small pieces of limestone and schist were used to chock the tiles in place. The top of the tomb was at a level just below that of the bottom of Wall P. The west end of the tomb was at a distance of about 0.18 m. from the face of the wall; the pit itself, however, extended under the wall establishing for the tomb a date earlier than that of the construction of the Gate Area complex. Partial removal of the exposed cover tiles brought to light the legs of the skeleton, showing that the deceased was oriented basically east-west, with the head to the east. The fill of the tomb consisted of a light-coloured sandy soil containing limestone and schist chips as well as some sea-worn pebbles; a number of sea-shells were encountered at the west end. No *kterismata* were found although the fill of the grave yielded a small quantity of sherds, all evidently Classical, including a rim fragment of a black-glaze vessel.[61] Other graves may have existed in the immediate vicinity; the excavator noted a good quantity of bone in the lower levels, some of which was clearly human, probably representing the remains of graves destroyed by the construction of Wall P.

Small Finds

Since material from the 1981 campaign is not presented in this volume, a deposit summary, as for other trenches, is not given here. The pottery encountered in the various deposits in Trenches 17, 20 and TR7 tr1 was predominantly coarse-ware, much of which was non-diagnostic. A good quantity of roof-tile fragments, mostly worn and preserved in small pieces was also collected. There was a small quantity of Classical black-glaze and painted wares, more common in the lowest level, deposit type 7. There was nothing clearly pre-Classical and the latest identifiable material appeared to date to *ca.* 320 B.C. Plotted finds include an iron nail, a terracotta loomweight and a silver coin of Amyntas III (389-383 or 381-369 B.C.).

Trenches 4 and 4a.[62] (Figs. 6 b, 8, 19 c-d, 20 a-c, 21 a-c, 22; Pls. 19 g-h, 20 a-f, 21 a-d). Trench 4 was laid out, in 1975, as a 6.50 m. SW-NE x 4.90 m. NW-SE trench, 6.70 m. to the west of Trench 2, with the purpose of investigating the line of Wall O, partially visible above the modern surface, and its junction with Wall P. A number of granodiorite blocks were also visible in the northern half of the trench prior excavation, while a robbery dump could be seen in the SW quarter, with a corre-

[61] For tile-covered graves (including ones with different arrangements of the tiles) which are common in the Classical period in various parts of the Greek world see especially *Corinth* XIII, 73-74; *Olynthus* XI, 160 f.
[62] A. Cambitoglou, *PAE* 1975, 125-126, pl. 106α; *id., PAE* 1977, 92-102, pls. 56β, 57-60β.

sponding robbery pit, roughly oriented east-west immediately to the north. Clearance of the upper layers quickly brought to light the preserved top of Wall P and a small part of the external face of Wall O, as well as exposing a number of more modest lines of stone to the north and east (Fig. 19 c; Pl. 19 g). The latter suggested the possible existence of tombs which could not be adequately explored in the 1975 season owing to the lack of time. The stratigraphy encountered to the level dug by the end of the first season comprised the robbery dump, deposit type 1, confined to the SW quarter, and a layer of topsoil, deposit type 2, over the entire area to a depth of 0.05-0.34 m. The latter was characterised by a dark, rich earth with decayed vegetation and many stones. Below this, a yellow-coloured earth with stones, only partially dug, had the appearance of sub-topsoil.

In 1976 the trench was partially re-opened primarily to explore further the existence of tombs to the north of Wall O. This subsequently necessitated an extension, to the east, in the form of Trench 4a (Fig. 19d), measuring 5.0 x 2.0 m. (Fig. 8).[63] The actual juncture of Walls P and O, located under the robbery dump, was only partially revealed with a small portion of the NE face of Wall O visible along the SW scarp of the trench (Fig. 20 a), and only the east face of Wall P in the SW corner; the westernmost block of Wall O, at the preserved upper level, was lost. The angle at which Walls P and O meet is obtuse - 132° - and it may be that the protrusion, to the west, of the four southernmost visible blocks of Wall P in Trench 17 extension (Fig. 18) and the projection of the southernmost visible block of the east face of the wall in the same trench further into the wall-fill than was normal,[64] are both features specifically designed to strengthen the fortification at this corner.

The stratigraphy encountered in the enlarged Trench 4 was the same as that of the previous season. Below the dark-coloured topsoil, deposit type 2, which contained many stones, the layer of yellow-coloured earth was met (Fig. 20 b) and excavated to various depths in the different parts of the trench; no other stratum was noted.[65] This soil unit appeared to be much disturbed as was confirmed by the discovery of a 1912 five *lepta* coin (**20.49**) within the unit at a depth of 0.80 m., near the face of Wall O. Limestone blocks fallen from the wall, as well as limestone chunks from the wall fill were scattered throughout the deposit, especially in the western part of the

[63] What is here referred to as Trench 4a was originally excavated in two sectors designated Trench 4 extension tr1 and tr2; see A. Cambitoglou, *PAE* 1977, 94 n. 1.

[64] *Supra* note 60.

[65] Except for the stratigraphy encountered within the enclosure for Tomb 5.

trench along the external face of Wall P. The unit also yielded many roof-tile fragments. The lower levels of this deposit, especially below the level of Tombs 3 and 4 (see below), yielded pottery exclusively of Classical date.

In the area north of Wall O attention was concentrated on several constructed lines of stone which defined a rectangular enclosure in the middle of which a thin granodiorite slab was set upright. This proved to be a grave marker (Pl. 19 g-h). Only the west and parts of the north and south walls of the enclosure were exposed in 1975, necessitating the extension to the east in 1976. Clearance of topsoil in the extension (trench 4a) brought to light many broken roof-tile fragments lying flat, interspersed with human bone, which were above the level of the enclosure to the west (Pl. 20 a). Cleaning around the tiles revealed more human bone (Pl. 20 b-c, e), including fragments of two skulls, one of which was somewhat better preserved than the other (Pl. 20 c). Moreover, the excavator noted two distinct types of roof-tiles. It was therefore clear that the tiles and the human bone represented the poorly preserved remains, only centimetres from the surface, of two tile burials, which were designated Tombs 3 and 4. The original arrangement of the tiles could not be determined; therefore it was unclear whether the tombs were gabled tile graves like Tomb 7 described above, or had their tiles arranged according to some other system.[66] *Kterismata* associated with these tombs were not found and their date remains unknown. They were undoubtedly later than Tomb 5, although it could not be determined how much later. The tiles were immediately below topsoil within the unit of yellow-coloured earth. Clearance of the tiles and bone brought to light the anticipated east wall of the enclosure of Tomb 5, as well as another possible enclosure (see below) against the face of Wall O (Fig. 19 d).

The west side of the enclosure for Tomb 5 was a wall with two clearly defined faces, but only one course deep; the north wall was built of two large worked blocks supported on a row of small stones, with clearly defined internal and external faces. The south and east sides were formed by rows of small stones in single course (Pl. 20 d). The overall dimensions of the enclosure, measured from the external faces of the walls, were 4.10 m. east-west x 2.50 m. north-south. Excavation of the enclosure revealed the lid of a sarcophagus at a depth of 1.10 m. below the top of the granodiorite marker (Fig. 20 c; Pl. 19 h). The lid measured 2.18 x 0.70 m.; it was carved from a single piece of limestone in the shape of a low gable, with the underside slightly concave. The upper face of the lid had an intentionally pitted surface, with

[66] For other systems of tile-covered tombs see *Corinth* XIII, 73-75. Note that the human bone was encountered both mixed with the tiles and lying under them.

the central ridge and edges carefully smoothed, creating a sort of panelling effect.[67] The lid was cracked across its width, with another crack at the NE corner. Removal of the lid revealed the skeleton of an adult male within the sarcophagus. The sarcophagus itself was carved from a single piece of stone, cracked at several points, measuring 2.18 x 0.67 m., with the sides measuring 0.08 m. in thickness (Fig. 21 a; Pl. 21a-c).

Although laid out in a fully extended supine position, with arms by the side of the body, a certain amount of disturbance to the skeleton was clearly visible. The legs and arms lay in order, but the skull was upside-down with the upper jaw facing the east side of the sarcophagus. Ribs, vertebrae and feet were somewhat disordered, with fragments of vertebrae encountered above and beside the left knee (Pl. 21 b-c). The skeleton was oriented east-west with the head to the east. The deceased was estimated to have been an individual about 1.85 m. tall. The only *kterisma* was an iron ring worn on one of the fingers of the left hand.

The stratigraphy within the enclosure is illustrated along its west and south scarps (Fig. 21 b-c), with bedrock having been exposed along the SW and west sides, showing that the natural rock had been cut into in order to receive the sarcophagus. The fill comprised an upper and lower layer of yellow soil, separated by a thin layer of grey clayey soil. Many roof-tile fragments were encountered within the grey soil, found level with the lid of the sarcophagus, which may have served as a tomb cover (Fig. 21 b). The rim and handle fragment of the large pot inv. 76.905 (Fig. 24 b) was also found in the grey soil (Pl. 20 f). A pocket of small stones was noted along the eastern half of the south scarp, between the grey clayey earth and the upper fill of yellow earth (Fig. 21 c). More roof-tile fragments were noted in the upper and lower layers of yellow earth, along with fragments of Classical pottery and, significantly, many fragments of animal and human bone. The existence of the latter might indicate that earlier burials existed in the area before the sarcophagus was set in place, and that these had been disturbed by the digging and/or filling of the enclosure. The possibility that the tile burials Tombs 3 and 4 were disturbed by, and carefully placed over, Tomb 5 should not be discounted. The diagnostic pottery recovered from the tomb enclosure was all of Classical date with the latest material belonging to the years of the late 5th century B.C.

[67] *Cf.* the sarcophagus lid from the North Cemetery at Corinth, *Corinth* XIII, 71, pl. 15 Grave 222; similar sarcophagi from sites in the Chalkidike are stored in the courtyard of the Polygyros Museum.

In the area immediately north of the enclosure, three worked blocks, clearly *in situ,* were encountered parallel to the north wall of the enclosure (Fig.19 d). The westernmost of the three blocks was neatly placed above one of the lower two, with its upper face almost level with the lower edge of the west block on the north wall of the enclosure; the two other blocks were at a lower level (Pls. 20 d, 21 d). A little further to the north two more blocks with flat upper faces were encountered level with the two lower blocks previously mentioned (Figs. 19 c-d, 22). All these blocks appeared to be related to each other and to the north wall of the enclosure forming a single architectural feature; this relationship is best rendered in the isometric drawing of the trench on Fig. 22. Although it is obvious that some of the blocks of this feature are not preserved, it seems reasonable to assume that it was a built passageway or *dromos* leading to the enclosure and that the enclosure was approached by at least one step from the north.

South of Tomb 5 the partially preserved remains of what appeared to be a second, smaller, tomb enclosure were encountered (Fig.19 d; Pl. 20 d). The enclosure consisted of a north wall built of a single row of small stones similar to, parallel with, and at the same level as the south wall of the Tomb 5 enclosure, with the difference that at its eastern preserved end it began to form a curve. One small stone, evidently *in situ* near the face of Wall O, was all that remained of the west wall. In the middle of this presumed enclosure a single worked granodiorite block, set on edge, appeared to have been placed as a grave marker in a position corresponding to that of the marker for Tomb 5. Because of this correspondence the enclosure was designated "Tomb 6", although the identification of these features as a tomb was not verified by excavation; because of lack of time at the end of the season, work at the trench was stopped at the level of the base of the presumed marker. A line of small unworked stones, oriented north-south, was encountered between the north wall of "Tomb 6" and the south wall of the enclosure of Tomb 5. This row of stones, along with the eastern end of the north wall of the "Tomb 6" enclosure, was stratigraphically located below the tiles of Tombs 3 and 4.

The exact relationship of "Tomb 6" to Wall O remains unclear. More particularly, it is not certain whether the tomb was later than the wall and used the external face of the fortification as the southern boundary of its enclosure, or earlier and had its enclosure cut by it. On the whole we believe that, because of the same orientation with Tomb 5, "Tomb 6" is earlier than Wall O and that the builders of Wall O did not cause greater damage to the enclosure of the tomb because they were aware of the existence of graves in the area and made an effort to cause as little damage to them as possible. Although further excavation is required before the question can be settled

conclusively, the examples of Tombs 7 and 8 and the appearance of the enclosure of "Tomb 6" which seems to have been cut by Wall O, would indicate that the graves predate the construction of the fortification walls at the Gate Area.

The stratigraphy of Trenches 4 and 4a yielded little conclusive information about the relationship of the graves and the construction of the fortification system. The "yellow" earth with stones below deposit type 2 resembled deposit type 7 encountered to the east and west of Wall P in Trench 17, Trench 20 and TR7 tr1. The fact that it partially overlay at least the enclosures of Tombs 5 and 6 would suggest that these predate the fortification system. If this is correct, the following sequence of events is likely: 1) the builders of Wall O partially exposed the tombs causing some damage to the enclosure of "Tomb 6," 2) they filled the area with deposit type 7 to create the desired level which covered the tombs, except for the marker of Tomb 5.[68] This sequence seems to be confirmed by the stratigraphical location of Tomb 2 (see below) and it would appear that Tombs 3 and 4 may postdate the construction of Wall O. In the deposit summary below the disturbed upper levels of the "yellow earth with stones" are presented separately from the same soil unit encountered below Tombs 3 and 4. This deposit yielded diagnostic material of Classical date with the latest sherds dating to about the middle of the 4th century B.C.[69]

DEPOSIT SUMMARY

TR4 and 4a Deposit type 1.[70] All identifiable fragments Classical but very worn.

Catalogued items:

Red-figure:	**8.42, 8.165.**
Stamped black-glaze:	**10.12.**

Inventoried items not in catalogue:

Red-figure:	1 body fr.: 75.732.

[68] Indeed the marker may have been set by the builders of Wall O.

[69] Two details are worth noting in Tomb 5: firstly, the partial disarray of the bones of the skeleton in the sarcophagus (especially the ribs and the vertebrae between the thighs and the head) which seemed odd and which may have been the result of rodents, earth tremors, or even root action through the cracks, as is suggested in A. Cambitoglou, *PAE* 1977, 98; secondly, the dearth of *kterismata* in an otherwise well appointed tomb. These two details, along with the cracked sarcophagus lid, raise the possibility that the sarcophagus was opened by the city wall builders when the enclosure was exposed and its *kterismata* stolen, an act which caused the partial disturbance to the bones, but otherwise little damage.

[70] Excavated as TR4 (1) and TR4 (2a).

Black-glaze:	1 rim and handle fr: 75.411.
Domestic pottery:	1 rim fr.: 75.730; 1 base fr: 75.418.

TR4 and 4a Deposit type 2.[71] Identifiable pottery predominantly Classical; many roof-tile fragments.

Catalogued items:

Red-figure:	**8.151.**
Stamped black-glaze:	**10.24.**
Coin:	**20.12** (Philip II, 359-336 B.C.).

Inventoried items not in catalogue:

Black-glaze and related:	2 rim frr.: 75.694, 76.290; 5 base frr.: 75.391, 75.494, 75.674, 75.711, 75.739.
Domestic pottery:	1 rim fr.: 75.392; 1 base fr.: 75.416; 1 handle fr.: 75.393, 1 body fr.: 75.416; 1 lid(?) fr.: 75.388.
Greek lamp:	75.712.
Perirrhanterion:	75.792.
Tiles:	75.394, 75.713.
Metal object:	75.257.
Stone object:	75.256.

TR4 and 4a "yellow earth with stones below Deposit type 2".[72] (*Cf.* Deposit type 2). Identifiable pottery predominantly Classical with a sprinkling of Archaic or earlier material. Latest diagnostic material is, however, Post-Byzantine, including some pottery and a 1912 coin.

Catalogued items:

Architectural terracotta:	**16.42.**
Metal object:	**18.46.**
Coins:	**20.10** (Philip II, 359-336 B.C.), **20.49** (Modern Greek, George I [A.D. 1863-1913] A.D. 1912).

Inventoried items not in catalogue:

Geometric(?):	1 body fr.: 75.729.
Black-glaze and related:	2 rim frr.: 75.499, 75.709; 3 base frr.: 75.692, 75.738, 76.288; 4 handle frr.: 75.673, 75.707, 75.708, 76.242; 1 spout fr.: 75.706.
Domestic pottery:	4 rim frr.: 75.710, 76.239, 76.241, 76.834; 3 base frr.: 75.737, 76.243, 76.289; 3 handle frr.: 75.693, 75.726, 75.728; 1 lid fr.: 76.246; 1 body fr.: 76.240; 1 other: 76.871.

[71] Excavated as TR4 (2); TR4a (2); TR4 Ext. 1 (1) and (2); TR4 Ext. 2 (1) and (2).

[72] Excavated as TR4 (3); TR4 Ext. 1 (3); TR4 Ext. 2 (3); these designations refer to units dug in 1975 and 1976.

Loomweights:	75.727, 76.237.
Metal objects:	75.465, 75.467, 76.860, 76.861, 76.862, 76.863, 76.864, 76.865, 76.866, 76.867, 76.868.

TR4 and 4a Tombs 3 and 4.[73] Roof-tile fragments from Tombs 3 and 4, including the fragmentary pottery recovered with them, as well as material from "yellow soil below the level of the burials" is here presented together. Identifiable pottery Classical with some earlier wares; latest material dates to around the middle of the 4th century B.C. This deposit is probably the same as Deposit type 7.

Catalogued items:

Archaic:	**5.19**.
Black-glaze:	**9.200.**
Domestic pottery:	**12.23.**
Metal object:	**18.86.**

Inventoried items not in catalogue:

Corinthian pottery(?):	1 base fr.: 76.811.
Red-figure:	1 body fr.:76.813.
Black-glaze and related:	3 rim frr.: 76.244, 76.365, 76.814; 3 base frr: 76.367, 76.368, 76.810; 2 body frr.: 76.366, 76.812.
Domestic pottery:	6 rim frr.: 76.283, 76.815, 76.816, 76.817, 76.831, 76.835; 2 base frr.: 76.370, 76.809; 2 handle frr: 76.284, 76.808; 1 body fr.: 76.285.
Metal object:	76.355.

TR4 and 4a Tomb 5 Enclosure. A good deal of Classical pottery was encountered in the stratified fill of this enclosure. The latest identifiable material appears to belong to the years of the late 5th century B.C.

(i) Upper Level (Yellow Earth)[74]

Catalogued items:

Black-glaze:	**9.13, 9.186.**
Stamped black-glaze:	**10.4, 10.19.**
Amphora:	**13.9.**

Inventoried items not in catalogue:

Red-figure:	1 fr.: 76.851.
Black-glaze and related:	3 rim frr.: 76.199, 76.846, 76.847; 6 base frr.: 76.200, 76.833, 76.837, 76.852, 76.853, 76.855; 7 handle frr.:

[73] Excavated as TR4 Ext. 1 (4).

[74] Excavated as TR4 (4) and TR4 Ext. 1 (4).

	76.196, 76.198, 76.202 76.203, 76.841, 76.842, 76.843; 2 body frr.: 76.208, 76.838.
Domestic pottery:	6 rim frr.: 76.207, 76.839, 76.840, 76.844, 76.845, 76.848; 5 base frr.: 76.194, 76.197, 76.201, 76.206, 76.227; 3 handle frr.: 76.195, 76.209, 76.850; 2 body frr.: 76.204, 76.849.
Greek lamp:	76.856.
Metal object:	76.869.

(ii) Grey Clayey Earth[75]

Inventoried items not in catalogue:

Black-glaze and related:	3 rim frr.: 76.822, 76.829, 76.830; 2 base frr.: 76.821, 76.828.
Domestic pottery:	3 rim frr.: 76.818, 76.825, 76.826; 4 base frr.: 76.819, 76.820, 76.823, 76.824; 1 body fr.: 76.878; 1 stopper: 76.827.
Pithos:	1 rim and handle fr.: 76.905.

(iii) Lower Level (Yellow Earth)[76]

Catalogued item:

Greek lamp:	**15.5.**

Inventoried items not catalogued:

Corinthian pottery(?):	2 body frr.: 76.216, 76.221.
Chian pottery:	1 body fr.: 76.232.
Red-figure(?):	1 rim fr.: 76.218.
Black-glaze and related:	2 rim frr.: 76.215, 76.219; 2 base frr: 76.220, 76.229; 4 handle frr.: 76.213, 76.214, 76.225, 76.228.
Domestic pottery:	4 rim frr.: 76.193, 76.217, 76.233, 76.234; 1 base fr.: 76.230; 2 handle frr.: 76.224, 76.235; 2 body frr.: 76.226, 76.231.
Greek lamp:	76.222.

TR4 and 4a "Tomb 6" Enclosure.[77] Upper level of fill down to base of granodiorite marker. Identifiable fragments Classical, mainly of the 5th century B.C.

Catalogued items:

Black-glaze:	**9.68.**
Greek lamp:	**15.57.**

[75] Excavated mainly as TR4 Ext. 1 (5).
[76] Excavated as TR4 (5).
[77] Excavated as TR4 Ext. 2 (4).

Inventoried items not in catalogue:

Black-figure:	1 body fr.: 76.361.
Black-glaze and related:	2 base frr.: 76.357, 76.360; 1 body fr.: 76.362.
Domestic pottery:	1 rim fr.: 76.292; 2 base frr.: 76.291, 76.358.
Metal object:	76.371.

Trench 2 (Figs. 8, 23 a-c, 24 a, 25 a-b, 26 a-c, 27; Pls. 21 e-h, 22 a-f)[78] was originally pegged out as a large trench measuring 19.0 SW-NE x 5.0 m. NW-SE but was quickly subdivided into four smaller trenches.

TR2 tr1 (Fig. 8; Pl. 21 e) measured 3.0 SW-NE x 2.0 m. NW-SE. A robbery trench, following the line of Wall O, was visible immediately to the south prior excavation and extended, well beyond the area of the trench, to the SE.[79] Removal of topsoil, deposit type 2, brought to light tumble, deposit type 3, which was mostly cleared.[80] Two preserved courses of masonry along the NE, external, face of Wall O were exposed (the uppermost partly visible above surface), at which point the excavation of the trench was concluded on account of the fragile state of the blocks *in situ* and the danger of their collapse.

DEPOSIT SUMMARY

TR2 tr1 Deposit type 2.[81] Only a very small quantity of sherd material was recovered; all identifiable fragments are of Classical date but much worn.

Catalogued item:

Red-figure pottery: **8.196**.

TR2 tr1 Deposit type 3.[82] The small quantity of material recovered was exclusively of Classical date.

No catalogued or inventoried small finds.

TR2 tr2 (Fig. 23 a-c; Pl. 21 f-h) was laid out as a 6.20 SW-NE x 2.30 m. NW-SE trench, 0.80 m. to the NW of TR2 tr1, primarily with the view of investigat-

[78] A. Cambitoglou, *PAE* 1975, 120-124.

[79] This robbery trench is visible in the background on Pl. 21 e.

[80] Deposit type 3 is visible along the scarps of the trench on Pl. 21 e.

[81] Excavated as TR2 tr1 (FG 1).

[82] Excavated as TR2 tr1 (2) and (3).

ing further the line of Wall O, which was partially visible above the surface, beyond the area of the robbery trench to the south of TR2 tr1. In order to conserve the wall better during excavation, a narrow baulk was left immediately to the SW of the external face (Pl. 21 f), which created two sectors. Removal of topsoil, deposit type 2, in both sectors exposed better the internal and external faces of Wall O, which defined an average width of almost 3.0 m. (Fig. 23 a).[83] Subsequent excavation of the trench was confined to the area NE of the external face of the wall, and bedrock was exposed against the wall face at a depth of 2.30 m. below surface.

Excavation revealed three main layers (Fig. 23 c): the removal of topsoil, deposit type 2, to a depth of 0.08-0.56 m., brought to light the tumble of deposit type 3, which was cleared to a maximum depth of 0.60 m. (Pl. 21 f). Below deposit type 3, deposit type 7 was met; this comprised an upper layer of yellow earth intermixed with small stones, and a lower layer of more compact yellow earth without the stones. Deposit type 7 was cleared to bedrock in the area near the face of Wall O showing that the natural rock dipped down towards the NE (Pl. 21 g); bedrock was not exposed in the northeasternmost part of the trench. Along the SE scarp of the trench (not illustrated), a small pocket of limestone chips, deposit type 4, was revealed immediately above bedrock. The latter would indicate either that a certain amount of the final dressing of the face of the wall was done after the blocks were set in place, or that the limestone chips were brought in as fill. The exposed external face of Wall O was preserved to four courses, to a maximum height of 2.30 m. (Fig. 23 b). The excavation of the trench showed that bedrock, at this point, was not cut into in order to receive the foundations of the wall as was the case with the exposed stretches of Wall K3 in Trenches 1, 3, 5 and 6. In this respect Wall O resembled more closely the construction of the exposed stretch of Wall P in Trenches 17, 20 and TR7 tr1. The builders of the city wall at this point dug down to bedrock and worked only partially the surface of the natural rock so that they could lay on it the foundations. Subsequently they filled in to the desired level the area to the NE of the wall with deposit type 7, the surface of which should represent, more or less, the ancient ground level after the construction of the city wall.

Along the NW scarp of the trench, about 0.12 m. from the face of Wall O and only 0.06 m. above bedrock, the Pot Burial Tomb 2 was exposed (Fig. 23 c; Pl. 21 g). As encountered, the burial comprised the complete two-handled pot 75.773 (Fig. 24 a), which had been set in place in an upright position and covered by a thin grano-

[83] This measurement represents the maximum width, including the "cushions" of the blocks.

diorite slab laid flat. The location of the tomb in the scarp of the trench meant that the SE edge of the tomb pit was not picked up along the scarp and is therefore not indicated on Fig. 23 c. The removal of the vessel, however, showed that a tomb pit had been dug through deposit type 7 and into this the burial urn was placed. The tomb, as found, was therefore later than the construction of the fortification wall.

The burial urn contained the inhumed remains of an adult or adolescent (Pl. 21 h), in a state of disarray. Although fragments of the skull, long bones of the arms and legs, some vertebrae, and other fragments, could be discerned, nothing like a complete skeleton was preserved; the bones displayed no sign of having been cremated. *Kterismata* encountered among the fragments of bone included the bone bead 75.768 and five fragments of iron (75.769, 75.770, 75.771, 75.772, 75.779), perhaps from a single object.[84]

The incomplete state of the skeleton in the urn suggested that it could only have been a secondary burial. Consequently, the possibility suggested itself that the human remains may have been from an earlier inhumation disturbed by the city wall builders, cleared and subsequently placed in the urn within a pit dug through their backfill.

DEPOSIT SUMMARY

TR2 tr2 Deposit type 2.[85] The small quantity of identifiable material recovered appeared to be exclusively of Classical date.

No catalogued or inventoried small finds.

TR2 tr2 Deposit type 3.[86] The small quantity of pottery recovered appeared to be exclusively of Classical date.

Catalogued item:

Stamped black-glaze: **10.9.**

TR2 tr2 Deposit type 4.[87] Deposit only encountered along the SE scarp of the trench immediately above bedrock; it yielded no small finds whatsoever.

[84] In A. Cambitoglou, *PAE* 1975, 123, fragments of pins are suggested as a possibility.
[85] Excavated as TR2 tr2 (1) and TR2 tr2 "Top of Wall N 1."
[86] Excavated as TR2 tr2 (2) and (3).
[87] Excavated as TR2 tr2 (7).

TR2 tr2 Deposit type 7.[88] The deposit yielded a good quantity of 5th century B.C. material in addition to some earlier fragments. At least one red-figure fragment (**8.46**) may be dated to *ca.* 370-330 B.C.; **9.60** is dated to the second half of the fourth century B.C.

Catalogued items:

Attic black-figure:	**7.2, 7.11.**
Red-figure:	**8.46.**
Black-glaze:	**9.60, 9.102.**
Object of glass:	**17.87.**
Metal object:	**18.40.**

Inventoried items not in catalogue:

Geometric pottery:	1 rim fr.: 75.725; 1 body fr.: 75.719.
Corinthian pottery:	1 rim fr.: 75.245; 1 base fr.: 75.679; 2 body frr.: 75.259, 75.415.
Black-figure:	2 body frr.: 75.397, 75.400.
Red-figure:	1 rim fr.: 75.401; 1 body fr.: 75.724.
Black-glaze and related:	12 rim frr.: 75.225, 75.229, 75.231, 75.232, 75.239, 75.253, 75.404, 75.408, 75.409, 75.718, 75.720, 75.722; 5 base frr.: 75.226, 75.398, 75.412, 75.413, 75.420; 1 handle fr.: 75.230; 1 stem fr.: 75.717; 4 body frr.: 75.227, 75.234, 75.235, 75.463; 1 bowl: 75.395.
Domestic pottery:	11 rim frr.: 75.101, 75.105, 75.222, 75.242, 75.260, 75.399, 75.410, 75.414, 75.421, 75.672, 75.715; 6 base frr.: 75.240, 75.252, 75.254, 75.255, 75.403, 75.675; 1 handle fr.: 75.402; 7 body frr.: 75.243, 75.244, 75.405, 75.406, 75.417, 75.500, 75.723.
Metal objects:	75.110, 75.258, 75.306, 75.464.

Tomb 2:

Burial urn:	75.773.
Metal objects:	75.769, 75.770, 75.771, 75.772, 75.779.
Bone bead:	**17.92** (75.768).

TR2 tr3 (Fig. 27; Pl. 22 a) was laid out as a 2.0 m. square 1.0 m. to the SW of TR2 tr2 and on the same alignment, primarily with the view of testing the nature of the deposits in the area uphill from the internal face of Wall O.[89] Owing to the lack of

[88] Excavated as TR2 tr2 (4), (5), (6), (6a) and (6b).

[89] The trench is not indicated on Fig. 8.

time, however, excavation of the trench was terminated with the partial removal of topsoil. The latter, deposit type 2, was cleared in two layers: an upper layer of rich, dark earth (humus) and a lower layer of somewhat lighter earth.[90] The deposit as a whole yielded only a handful of non-diagnostic scraps of pottery, all of which were discarded.

TR2 tr4 (Figs. 8, 25 a-b, 26 a-c, 27; Pl. 22 b-f) was originally laid out as a 5.0 m. NW-SE x 4.30 m. SW-NE trench, 1.50 m. to the NE of TR2 tr1 and TR2 tr2, and on the same alignment. The discovery of Tomb 1, however, necessitated a slight extension measuring 0.20 x 3.0 m. in the SE quarter. The removal of topsoil, deposit type 2, brought to light a certain amount of tumble intermixed with yellow earth, deposit type 3, as well as the cover slabs for Tomb 1 (Pl. 22 b). The latter, encountered only centimetres from the surface, consisted of three well-worked granodiorite blocks, neatly laid flat side by side (Fig. 25 b; Pl. 22 c), defining a length (east-west) of 1.50 m. and a maximum width of 1.23 m.[91] Attention was concentrated on Tomb 1 and, consequently, the remainder of the trench, at the level of deposit type 3, remained unexcavated.

Removal of the cover slabs exposed a neatly defined rectangular patch of black earth, contrasting to the lighter surrounding soil (Pl. 22 d). Clearance of the black soil, along with a small amount of the surrounding lighter soil, revealed the four lines of stones which formed the sides of the tomb (Fig. 25 a; Pl. 22 e). The tomb was oriented east-west; the maximum external dimensions of the stone walls lining the tomb pit were 1.60 x 1.20 m. Excavation of the pit fill revealed an upper layer which was loose-textured, containing a small quantity of light ashy debris, becoming harder and more compact lower down with clear remains of ash and two small pieces of fire-affected limestone. A small quantity of sherds, exclusively of Classical date, along with two fragments of iron and four fragments of bone, were recovered from the fill (see below). The bones of a skeleton were first encountered at a depth of about 0.80 m. below surface,[92] and it soon became clear that the skull and upper body of the deceased extended below, and to the east, of the east wall of the tomb (Figs. 25 a, 26 a; Pl. 22 e-f). It also became clear that although the two long sides of the tomb, to the north and south, were lined with stones up to several courses and to a height of 0.65 and 0.63 m. respectively (Figs. 25 a, 26 a-c), the shorter east and west sides were less

[90] Excavated as TR2 tr3 (1) and (2).

[91] The largest of the three blocks measured 1.23 x 0.48 x 0.23 m.; the smallest 1.14 x 0.49 x 0.26 m.

[92] The skull itself was subsequently encountered at a slightly higher level, 0.63 m. below surface.

substantial, comprising only a few stones each which did not extend as far down as the north and south walls (Pl. 22 e-f). The extension of the skeleton below and beyond the east wall of the tomb necessitated the removal of the east stone lining as well as further excavation to the east, which quickly revealed the eastern end of the burial pit proper. The internal dimensions of the pit, which was rectangular in plan, measured 1.97 x 0.52 m. The deceased was laid out in a fully extended supine position, arms by the side of the body; the head was to the east and was slightly tilted facing south. A total of 17 iron nails around the skeleton attested the existence of a coffin or bier which was otherwise not preserved.[93] The tomb pit was therefore dug so that it could receive the deceased in a coffin or bier, with the long sides lined with stone, and the shorter sides only partially lined to support the cover slabs. The skeleton was about 1.50 m. long *in situ* and was evidently of a rather young adult male because of the *kterismata* which included an iron strigil next to the left thigh, two small iron spear ends by the pelvis on the left side and two iron arrowheads near the left forearm. These offerings, however, allowed only a broad dating of the tomb within the Classical or Early Hellenistic periods. The fact that the remainder of the trench was left unexcavated denied the evidence of the stratigraphical relation of the tomb to the surrounding deposits.

Immediately to the northwest of Tomb 1, three blocks in line, evidently *in situ*, may possibly represent the remains of the upper part of another tomb (Fig. 25 a), so too a number of blocks to the east, and slightly north, along the SE scarp of the trench.

DEPOSIT SUMMARY

TR2 tr4 Deposit type 4.[94] Identifiable fragments are of Classical date, with the latest material dating *ca.* 400-350 B.C. There is one possible, but uncertain, fragment which may be of Late Roman(?) date in the context lots.

Catalogued items:

Red-figure:	**8.148, 8.152, 8.194, 8.197.**
Stamped black-glaze:	**10.53.**
Greek lamp:	**15.7.**

[93] The nails, found *in situ*, were at regularly spaced intervals around the skeleton.

[94] Excavated as TR2 tr4 (1) and (2); the latter represents topsoil in the immediate vicinity of the tomb.

Inventoried items not in catalogue:

Red-figure (?):	1 body fr.: 75.688.
Black-glaze:	4 rim frr.: 75.387, 75.677, 75.686, 75.703; 2 base frr.: 75.237, 75.704; 1 handle fr.: 75.223.
Domestic pottery:	7 rim frr.: 75.228, 75.236, 75.241, 75.683, 75.696, 75.699, 75.702a-b; 6 base frr.: 75.685, 75.689, 75.690, 75.695, 75.697, 75.698; 1 amphora toe: 75.691.
Loomweight:	75.407.
Stone:	75.389, 75.390.

Tomb 1:

Kterismata

Iron strigil:	**18.38.**
Iron spearends:	**18.12**, 75.774.
Iron arrowheads:	75.776, 75.777.
Nails from coffin (seventeen in all):	75.749-75.756, 75.758-766.

Tomb Pit Fill:[95]

a) Black earth immediately below cover slabs.[96] Only four non-diagnostic chips of pottery recovered.

b) Upper and lower ashy tomb pit fill.[97]

Inventoried items not in catalogue:

Black-glaze and related:	3 base frr.: 75.495, 75.680, 75.734.
Domestic pottery:	2 base frr.: 75.735, 75.721.
Metal objects:	75.466, 75.761.

LIST OF TOMBS

Tomb 1 (TR2 tr4). Inhumation in coffin or on bier in pit, partially stone-lined. Oriented east-west, head to the east. Young adult male.
Kterismata: iron strigil (**18.38**); iron spearends, both with impressions of wood on shaft (**18.12**, 75.774); iron arrowheads (75.776, 75.777).
Date: Classical/Early Hellenistic.

[95] The small portion of yellow earth around the eastern end of the grave, which was not tomb pit fill (excavated as TR2 tr4 [5]), yielded a small quantity of fragmentary pottery of Classical date, as did the removal of the east stone lining of the tomb (designated TR2 tr4 [6]).
[96] Excavated as TR2 tr4 (3a). TR2 tr4 (3b) represents partial clearance of yellow earth near the tomb.
[97] Excavated as TR2 tr4 (4) within the area defined by the stone walls, and as TR2 tr4 (7) to the east in the area above the skull and upper body of the deceased.

Tomb 2 (TR2 tr2). Inhumation in urn, secondary burial. Adult or adolescent.
Burial urn (75.773).
Kterismata: fragments of iron, perhaps from one object (75.769, 75.770, 75.771, 75.772, 75.779); bone bead (**17.92**).
Date: Early Hellenistic, as found; post-dating construction of City Wall O. Probably secondary burial of earlier disturbed tomb.

Tombs 3 and 4 (TR4a). Tile burials (inhumations); at least two burials suggested by fragments of two skulls. Very poorly preserved; arrangement of tiles uncertain.
No *kterismata* found.
Date: Post-dating Tomb 5 and "Tomb 6;" exact date not determined.

Tomb 5 (TR4). Inhumation in limestone sarcophagus within a stone constructed enclosure, approached by stepped passageway (*dromos*) from the north.
Adult male, oriented east-west, head to the east.
Kterismata: iron ring (on finger of left hand).
Date: Tomb stratigraphically located below Tombs 3 and 4.
Probably pre-dating construction of City Wall O.

"Tomb 6" (TR4 and 4a). Presumed tomb in enclosure with granodiorite tomb marker. Enclosure excavated only to level of base of marker; enclosure evidently cut across by City Wall O and therefore earlier.

Tomb 7 (TR7 tr1). Tile burial (inhumation), only partially excavated, with eastern end not dug. Inhumation placed in pit cut into bedrock and covered by tiles arranged to form a gable. Tomb oriented east-west, head to the east.
No *kterismata* found.
Date: Classical; western end of tomb pit below foundation of City Wall P and therefore earlier.

Tomb 8 (TR6 tr3). Inhumation in pit cut into bedrock; rather poorly preserved, with only the eastern end encountered in TR6 tr3; remainder of the tomb not excavated. Inhumation evidently of adult, oriented east-west, head to the east.
No *kterismata* found.
Date: Although not verified since the entire western end of the tomb remains unexcavated, it seems likely that it once extended below the line of the east face of Wall P and is therefore earlier than the construction of that wall.

Evidence for additional tombs

A number of blocks, evidently *in situ,* encountered to the NW and NE of Tomb 1 in TR2 tr4 may represent the upper parts of two graves which remain unexcavated. The presence of human bone fragments within the enclosure for Tomb 5, and of a few other fragments especially in the area of Trenches 4 and 2, may indicate the existence of earlier, disturbed tombs.

A tomb found in 1959 at Torone, which yielded a bronze hydria now in the Archaeological Museum of Thessalonike, briefly mentioned by Makaronas, is said to have been located near this area.[98]

[98] Ch. Makaronas, *AD* 16 (1960) *Chr.*, 212, pl. 181α-γ; the hydria is also illustrated in: *Treasures of Ancient Macedonia, Archaeological Museum of Thessalonike* (1978) pl. 48, no. 338.

2. STRUCTURE 1 (1975)[99]

Grid reference: 9K and 8K[100]

The place referred to as "Structure 1" is located on one of the lower terraces on the eastern side of Hill 2 in the area between the Classical City Wall B and the Early Hellenistic Gate (Fig. 1 and *PAE* 1975, 108, fig. 3). Surface clearance in the earlier part of the 1975 season had suggested the possibility of an ancient road on one of the broad lower terraces of the site (Pls. 22 g, 23 a), on a similar line with a modern path between the gate of the Early Hellenistic fortification system described above and a hypothetical gate along the poorly preserved trace of Wall B. A wall line, clearly visible above surface (Pl. 23 a), following the contour of the terrace embankment and oriented roughly east-west (Wall A), was thought to have been associated either with the hypothetical road, or else to have served as a retaining wall of the terrace.[101] Further traces of walls were noted to the east and west. It was therefore decided to lay out a long test trench, perpendicular to the line of Wall A, in order to establish its function, as well as to test the nature of deposits to the north and south. Trench 1 (Fig. 28 a-c) was laid out as a 17.0 m. (SW-NE) x 5.0 m. rectangle which was partially excavated in a series of five smaller sectors designated TR1 tr1 through tr5, for a period of three weeks in the later half of the 1975 season; excavation was not resumed in subsequent campaigns because of the lack of co-operation on the part of the owner of the area. Although the trench was oriented SW-NE, a formal north point shall be used for the purpose of this report; consequently, the NE side of the trench will be referred to as the north side, the NW side as the west side and so on.[102]

An account of the development of the excavation at Structure 1 may be summarised as follows: TR1 tr1 (3.0 m. north-south x 2.0 m. east-west) was sited in the northern half of the original Trench 1 at a point towards the middle of the broad terrace thought initially to have been a possible road. The test was dug to natural rock revealing a good depth of deposits, but no indications whatsoever of an ancient, or more recent, road surface. Along the north scarp of the trench, and parallel to it, a

[99] A. Cambitoglou, *PAE* 1975, 126-8.

[100] Grid reference N26/E13 according to the 1975 Grid Plan.

[101] Excavation showed it to be the north wall of a presumably domestic building, with the actual terrace wall located about 3.50 m. to the north.

[102] For the relationship of true north to formal north see Fig. 28a-b.

regular cutting in the bedrock was exposed, a few centimetres higher than the level of trimmed bedrock to the south, with a similar cutting partially encountered along the east scarp, which evidently defined a corner (Fig. 28 b, Pl. 23 b); this feature was subsequently designated "Wall D." Attention was then concentrated in the northern half of the original trench in the form of TR1 tr2, measuring 6.0 m. north-south x 2.0 m. east-west, with the view of exposing more fully Wall A and the area between it and the north scarp. Unworked bedrock was quickly exposed with the removal of topsoil and so too the preserved top of Wall B. The latter runs parallel to Wall A, approximately 1.0 m. to the south of the north scarp; a significant depth of soil was encountered in the small area to the north of Wall B. TR1 tr3 (4.0 m. north-south x 2.0 m. east-west) was then opened in order to determine the width of Wall A by better defining its south face; a baulk measuring 1.0 m. wide was left between TR1 tr3 and TR1 tr1. As in TR1 tr1, the southern portion of TR1 tr3 revealed a good depth of deposits which dipped down the embankment of the terrace towards the north, becoming shallow as Wall A was approached. The test also brought to light two limestone blocks *in situ,* oriented north-south, and forming a corner with Wall A; the two blocks were designated Wall C (Fig. 28 b). Although poorly preserved, the line of Wall C was clear on account of a foundation trench which extended to the south, along the east scarp of TR1 tr3, for some 2.0 m. (Pl. 23 c). Bedrock in the area south of Wall A and west of Wall C had been trimmed back to provide a level surface (see below), and it became clear that these two walls defined the NE corner of a building which extended to the west. TR1 tr4 (6.0 m. north-south x 3.0 m. east-west) was laid out to the east of Tr 1 tr2 (with no intervening baulk) to expose more of Wall B and to define better the external corner of Walls A and C. As was the case in TR1 tr2, bedrock was quickly met in the area south of Wall B (Pl. 23 d), while to the north of the wall the deposits were more substantial (Pl. 24 a). Towards the end of the 1975 season TR1 tr5 (1.0 m. north-south x 3.0 m. east-west), essentially a southern extension of TR1 tr4, was excavated with the purpose of defining better the east face of Wall C, while the baulk between TR1 tr1 and TR1 tr3 was removed to expose more fully the feature "Wall D" (Pl. 23 e). Bedrock was revealed in all sectors of the trench except in the narrow area to the north of Wall B.

Walls A and C and "Wall D" which were encountered in the excavated area defined the poorly preserved remains of a building, while Wall B was clearly a retaining wall of the terrace. The latter (Pls. 23 g, 24 a), which ran the entire 5.0 m. width of the trench, and clearly extended beyond its boundaries to the east and west, was first met at a depth of a few centimetres below surface and was preserved to a height of almost 1.50 m. at the conclusion of the excavations. Only the packing behind the destroyed north face was preserved in the uppermost 1.0 m. of the wall, comprising

small unworked stones, predominantly limestone, and earth (Pls. 23 g, 24 a).[103] The better preserved lower face of Wall B was built of thin, roughly rectangular and crudely worked slabs of green schist, with an admixture of limestone and at least one granodiorite block. Although not strictly coursed, about five well jointed rows of stone were met. The width of the wall at its preserved top did not exceed 0.60 m. and averaged 0.50 m.; it was built up against the bedrock scarp of the terrace which had been presumably cut back in order to provide a near vertical edge. At the conclusion of excavations, neither the base of the wall nor bedrock had been reached and both may have extended considerably further than the 1.50 m. of depth below surface actually reached.[104]

Approximately 3.50 m. to the south of Wall B, and on a similar east-west orientation, was Wall A, which was partially visible above surface prior to the excavation (Pl. 23 a). The wall has a preserved length of 2.05 m. from the juncture with Wall C to the west scarp of the trench. Two courses founded on bedrock were revealed along the north face, though the south face, as preserved, was ill-defined and only the wall packing was actually met (Pl. 23 c, g); the maximum preserved width was 0.82 m. Oriented north-south, and bonded with Wall A, was the poorly preserved Wall C, comprising two worked limestone blocks *in situ*, defining a width of 0.52 m. These blocks preserve a length of 0.70 m., although a foundation trench, cut into bedrock and continuing the line of the wall, extended for a further 2.0 m. to the south (Pl. 23 c).[105] About 5.0 m. to the south of Wall A and on exactly the same east-west orientation, was "Wall D" (Pl. 23 b, e, f). It consisted of a projecting strip of bedrock with two cut faces to the north and south; it defined a width of 0.52 m. (that is, the same as the width of Wall C), and extended the width of the excavated area. At its NE end the cutting of the north face splays out (Fig. 28 b; Pl. 23 f), to a point from which if a line were projected northwards, it would connect with the line of Wall C. At the SE end of "Wall D" a cutting oriented north-south corresponding to the splaying out of the north face was revealed extending to the south and more clearly defining something of a corner with the east-west line of the "wall" (Fig. 28 b; Pl. 23 b). The feature appeared to be the foundation of a wall, described by the excavator as a foundation trench in reverse; no trace, however, of any constructed wall could be seen either

[103] For a similar packing *cf.* City Wall C as encountered in the Lower City Area, see Pl. 40 f, h; also A. Cambitoglou, *PAE* 1978, pl. 72γ.

[104] *Cf.* the much better preserved retaining wall separating Terraces IV and V excavated in 1981 and 1982, A. Cambitoglou, *PAE* 1982, pl. 53β

[105] The west edge of the foundation trench was encountered along the east scarp of TR1 tr3, while most of the east edge remains unexcavated.

along the west or east scarps of TR1 tr1 and along the baulk between TR1 tr1 and TR1 tr3 immediately to the north of "Wall D," apart from the raised strip of bedrock itself. The natural rock between Walls A and "D" had been carefully trimmed to provide a good level surface, contrasting to the unworked bedrock in the area between Walls A and B (Pl. 23 d, g). A shallow circular hollow about 1.0 m. south of Wall A (Fig. 28 b), approximately 0.40 m. in diameter, seemed too shallow to have served any structural purpose within the building and is best seen as a natural depression which could have been evened up with mud if necessary.[106] A very clear mud filling, Deposit 6 (see below), was used to pack the more uneven surface of the rock between those parts which had been levelled in the area south of "Wall D" (Fig. 28 c);[107] the respective floors north and south of "Wall D" were at the same level. About 0.85 m. north of "Wall D" another small hole in the bedrock, not exceeding 0.20 m. in diameter, was probably also a natural depression.[108]

The combination of features uncovered would indicate a fairly substantial building, presumably domestic,[109] with Walls A and C forming its NE corner. The cutting for "Wall D" and its apparent return to the south would indicate at least two rooms or internal divisions, both preserving floor surfaces, with "Wall D" itself forming an internal partition resulting in a north room about 5.0 m. long and a south room with a preserved length of at least 2.70 m., but clearly extending to the south beyond the south scarp of TR1 tr1. The flat upper surface of the cutting for "Wall D" seems an unlikely foundation for a stone wall, but is perhaps better suited for mud brick, though no real traces of such were encountered in the excavated area,[110] and it is evident that further digging is required to clarify the extent and details of construction of this feature. It is worth noting that unexposed internal walls, particularly partitions between rooms, required only the lowest of socles,[111] and this may be seen in a num-

[106] The possibility of it serving as a post-hole is further negated by its close proximity to Walls A and C. For post-holes see, most recently, J. J. Coulton, "Post Holes and Post Bases in Early Greek Architecture," *MeditArch* 1 (1988) 58-65.

[107] This contrast between the more uneven bedrock levelled with mud south of "Wall D," and the trimmed surface to the north is best seen on Pl. 23 f.

[108] *Supra* n. 106.

[109] The building is presumed to be domestic on account of its proximity to other established domestic buildings such as Structure 3. Its location with respect to both the Archaic/Classical (Wall B) and Late Classical/Early Hellenistic (Walls M, N, O, P and K) fortifications, coupled with its distance from the harbour of the ancient city and the Gate Area, would also argue for a domestic function.

[110] *Cf.* the mud brick walls on stone socles in the better preserved Structure 3 (see below).

[111] J.E. Jones, A.J. Graham, L.H. Sackett, "An Attic Country House below the Cave of Pan at Vari," *BSA* 68 (1973) 425.

ber of houses at Olynthos.[112] Moreover, it would appear that a common unit for the socles of mud brick house walls was a width of 0.40-0.50 m.[113] The large quantity of roof-tile fragments encountered in the various deposits both within the building and outside would indicate the existence of a tiled roof.[114]

The stratigraphy encountered is best seen in the reconstructed west scarp section (Fig. 28 c); seven deposits could be distinguished as follows: *Deposit 1* was topsoil, brown-grey in colour and largely washed down from the upper terraces, covering the entire excavated area. Pottery largely of the 5th and 4th centuries B.C. was recovered from it, but nothing later than *ca.* 320 B.C. *Deposit 2* was sub-topsoil encountered below Deposit 1 and immediately above bedrock in the area between Walls A and B and to the north and east of Wall C; the identifiable material recovered from Deposit 2 was similar to that of Deposit 1.

The deposits in the area between Wall A and the south scarp of Trench 1, within the building, were significantly deeper. *Deposit 3* was a lens of yellowish soil confined to the far SW edge of TR1 tr1, and only partially excavated; it was met below topsoil (Deposit 1) and cleared to a maximum depth of 0.35 m.[115] *Deposit 4* was encountered in the area from the south scarp of the trench, where it was excavated to a maximum depth of 1.08 m., to the south face of Wall A in the north. The deposit was characterised by a mid-brown sandy soil with small pieces of limestone throughout and a copious quantity of debris including fine and coarse-ware pottery of the 5th and 4th centuries B.C., as well as many roof-tile fragments, animal bone and sea shell material. In the west scarp section (Fig. 28 c), the deposit is subdivided into an upper layer (4a), essentially confined to TR1 tr1, and a lower layer (4b), which becomes progressively thinner as it dips down towards the north. The distinction between the two is probably of little significance, and numerous joins were noted between sherds recovered from both; 4b was slightly lighter in colour while 4a (encountered only where the deposit was thickest) had a somewhat heavier concentration of debris. The material from 4a and 4b is presented together in the deposit

[112] *Ibid.*, 425 n.171 where Olynthian and Attic examples are cited; for the former *cf. Olynthus* XII, 184, 215, pls. 158-166 and 176-181.

[113] That is, in keeping with the width of "Wall D;" *cf. supra* n. 111, p. 425 and *Olynthus* VIII, 214, 227-8.

[114] Roof-tiles of both the Corinthian and Lakonian systems were recovered, with a preponderance of the former.

[115] Due to a regrettable accident in the storage of the context lots, the bags containing sherds from TR1 tr1 Deposits 1 and 3 had split and were inadvertently mixed. Although unfortunate, the accident was probably of little consequence on account of the character of the lower strata and also the fact that Deposit 3 was confined to such a very small area. In the Deposit summary below the material that would have derived from Deposit 3 had to be listed with that of Deposit 1.

summary below; the latest diagnostic pottery in it dates to *ca.* 325/320 B.C., but a good deal of earlier 4th and 5th century B.C. material is also included, in addition to a sprinkling of earlier residual wares. *Deposit 5* was encountered below Deposit 4 and above the floor surfaces of the north and south rooms of Structure 1. As "Wall D" was met only centimetres from the trimmed bedrock on either side, it was not possible to separate the material horizontally from the two rooms. Deposit 5 was thickest in the baulk between TR1 tr1 and TR1 tr3, that is immediately above "Wall D," where it was excavated to a maximum depth of 0.70 m. The deposit clearly formed a mound, in section, above "Wall D," petering out to the north and south. Deposit 5 was characterised by a fine, rather compact, yellow soil which yielded a few tiny stone chips and a significantly smaller quantity of material than was encountered in Deposit 4. Of the identifiable material there was a clear preponderance of 5th century B.C. pottery, including red-figure and black-glaze wares, as well as lamps; the latest material could be dated to the years of the first half of the 4th century B.C., with the very latest fragment (**8.44**) dated within the range of 380-340 B.C.[116] *Deposit 6* represents the mud packing, mainly encountered in TR1 tr1, laid in the natural depressions of bedrock in order to create a level floor surface; this packing proved sterile.

In broad terms, Structure 1 was overlain by two main strata, Deposits 4 and 5, over which topsoil had formed; the lower deposit consisted of a fine yellow earth with moderate quantities of sherd material while the upper deposit was a mid-brown sandy earth with some rubble and a good deal of pottery and other small finds. Both strata formed a mound over the floor of the building, dipping to the north and south against the lie of the land, indicating that they represent debris associated with the building and its collapse and not hill wash. It is worth noting that there were a few joining fragments belonging to both deposits, which came mostly from the lower passes of 4b and the upper pass of 5. A small quantity of Archaic material was also encountered in Deposits 4 and 5, including Attic and Corinthian black-figure, a few fragments of which were also recovered from topsoil. There was, in addition, a very small quantity of Early Iron Age material: two terracotta spindlewhorls, beads or buttons, **4.10** and **4.11,** were found in Deposit 4b, as was the rim fragment of the wheel-made lekanis **4.7**; fifteen fragments (mostly non-joining) of a hand-made jug with cut-away neck were encountered mainly in Deposit 4b.[117]

[116] The soil from the foundation trench for Wall C could not be readily distinguished from Deposit 5 on account of the shallowness of the cutting and the fact that the greater part of Wall C was not preserved.

[117] At least one fragment from the same vase derives from the upper pass of Deposit 5.

It would appear, therefore, that Structure 1 was probably occupied during part of the 5th and 4th centuries B.C., though conclusive evidence for an exact construction date was not at hand. The building appears to have gone out of use, or to have been abandoned, towards the end of the 4th century B.C., with the Archaic and Early Iron Age pieces representing residual material.

Another significant deposit in Trench 1 was only partially excavated in the small area between Wall B and the north scarp of the trench. Removal of topsoil here revealed the preserved top of the terrace wall and a rich, brown-coloured fill to the north containing tumble and a good deal of pottery and other small finds, notably a number of terracottas, again of the 5th and 4th centuries B.C. This fill, designated *Deposit 7*, was excavated in four vertical passes as indicated on Fig. 28 c; the material from all of them was similar, with numerous joining fragments noted between the different arbitrary divisions. Although a good deal of 5th century B.C. pottery was recovered, the latest identifiable fragments, including those from the lowest pass, could be dated to *ca.* 325 B.C. The lowest pass of Deposit 7 also yielded the first Torone coin to be found on the site (**20.1**), being a 4th century B.C. bronze issue with a laureate head of Apollo on the obverse and an oinochoe on the reverse. By the end of the season, Deposit 7 was excavated to a depth of 1.50 m. below surface, at which point the deposit was not exhausted, nor had the base of Wall B been reached.

DEPOSIT SUMMARY

Deposit 1(topsoil).[118] Quite a bit of pottery of the 5th and 4th centuries B.C. with a sprinkling of earlier Archaic material; nothing clearly later than *ca.* 320 B.C. or so.

Catalogued items:

Red-figure:	**8.54, 8.89, 8.150, 8.154.**
Black-glaze:	**9.18, 9.113, 9.212.**
Stamped black-glaze:	**10.6.**
Domestic pottery:	**12.10.**

Inventoried items not in catalogue:

Black-figure (Corinthian):	1 lid fr.: 75.18.
Red-figure:	1 body fr.: 75.457.
Black-glaze and related:	4 base frr.: 75.49, 75.545, 75.781, 75.782; 2 spout frr.: 75.20, 75.29.

[118] Excavated as TR1 tr1 FG 1; TR1 tr1 (1)-(3); TR1 tr2 (2); TR1 tr3 (2); TR1 tr4 (1); TR1 tr4 (2); TR1 tr5 (2).

Painted pottery:	1 rim fr.: 75.24.
Coarse-wares:	5 rim frr.: 75.27, 75.32, 75.36, 75.422, 75.448; 1 body fr.: 75.544, 1 handle fr.: 75.09; 1 amphora toe: 75.322; 1 leg fr.: 75.167.
Pithos:	1 body fr.: 75.17.
Greek Lamps:	3 spout frr.: 75.25, 75.26, 75.583.
Loomweights:	75.08, 75.15, 75.16, 75.44, 75.354, 75.573.
Roof-tiles:	1 fr.: 75.455.
Metal nails:	1 fr.: 75.19.

More pottery, including a few small frr. of terracottas, some roof-tile frr. and a possible beehive fr., in context lots.

Thrown:	120.10 kgs. roof-tile frr. and non-identifiable sherds.
Bone and shell:	1 small bag of each.

Deposit 2 (subtopsoil).[119] Identifiable material similar to that of Deposit 1.

Catalogued items:

Attic black-figure:	**7.30.**
Metal object:	**18.80.**

Inventoried items not in catalogue:

Black-glaze:	1 fr.: 75.578.
Coarse-wares:	1 cup: 75.582; 1 amphora toe: 75.576.
Architectural terracotta:	75.786 a and b.

More black-glaze and related pottery in context lots, along with various Classical coarse-ware pottery.

Thrown:	34.05 kgs. roof-tile frr. and non-identifiable sherds.
Bone and shell:	2 animal bone frr.; 5 sea-shells.
Slag:	3 pieces.

Deposit 3. See note 115. The material that would have been recovered from Deposit 3 (i.e. TR1 tr1 [3]) has been incorporated into the summary for Deposit 1.

Deposit 4.[120] The following summary incorporates material from Deposits 4a and 4b (see above). The deposit yielded a large quantity of pottery and other small finds of the 5th and 4th centuries B.C. and a good quantity of earlier material (Archaic and Early Iron Age). The latest identifiable material can be dated to *ca.* 325-320 B.C.

[119] Excavated as TR1 tr2 (3); TR1 tr5 (4); TR1 tr5 (6)-(7).

[120] Excavated as TR1 tr1 (4), (5), (6), (7); TR1 tr3 (4), (5), (6); TR1 tr1/3 Baulk (4), (5), (6), (7). Joining frr. of the lamp **15.51** were encountered in Deposit types 4 and 5, as were joining frr. of the Early Iron Age jug **4.8**.

Catalogued items:

Early Iron Age:	**4.7, 4.8, 4.10, 4.11.**
Geometric and Archaic pottery:	**5.21, 5.22, 5.23, 5.26, 5.29, 5.31.**
Corinthian:	**6.7, 6.10, 6.15.**
Attic black-figure:	**7.31.**
Red-figure:	**8.2, 8.4, 8.5, 8.6, 8.31, 8.47, 8.48, 8.98, 8.115, 8.124, 8.127, 8.139, 8.144, 8.178, 8.195.**
Black-glaze:	**9.1, 9.2, 9.12, 9.14, 9.15, 9.31, 9.33, 9.37, 9.40, 9.74, 9.83, 9.90, 9.94, 9.100, 9.108, 9.175, 9.187.**
Stamped black-glaze:	**10.1, 10.2, 10.17, 10.18, 10.21, 10.86, 10.133, 10.134.**
Domestic pottery:	**12.4, 12.6, 12.8, 12.21, 12.29, 12.32, 12.53.**
Amphorae:	**13.13.**
Greek lamps:	**15.1, 15.6, 15.12, 15.16, 15.19, 15.51, 15.56, 15.63, 15.74, 15.75.**
Terracotta figurine:	**16.6.**
Metal objects:	**18.44, 18.112.**

Inventoried items not in catalogue:

Early Iron Age:	1 rim fr.: 75.795; 1 body fr.: 75.796.
Archaic:	2 rim frr.: 75.59, 75.287; 1 body fr.: 75.294.
Corinthian:	1 handle fr.: 75.487; 1 body fr.: 75.156.
Red-figure:	1 base fr.: 75.215; 4 body frr.: 75.207, 75.265, 75.295, 75.336.
Black-glaze and related:	8 rim frr.: 75.77, 75.192, 75.278, 75.302, 75.574, 75.631, 75.643,75.645; 19 base frr.: 75.34, 75.37, 75.85, 75.157, 75.190, 75.191, 75.200, 75.203, 75.210, 75.219, 75.266, 75.567, 75.568, 75.632, 75.638, 75.641,75.646, 75.651, 75.658; 2 body frr.: 75.197, 75.483; 4 handle frr.: 75.40, 75.75, 75.637, 75.657; 2 lid frr.: 75.43, 75.634; 1 spout fr.: 75.61.
Painted pottery (mostly Classical):	8 rim frr.: 75.42, 75.299, 75.333, 75.335, 75.338, 75.339, 75.650, 75.652; 9 base frr.: 75.33, 75.81, 75.188, 75.277, 75.291, 75.292, 75.298, 75.341, 75.343; 11 body frr.: 75.60, 75.176, 75.189, 75.201, 75.308, 75.310, 75.314, 75.328, 75.351, 75.644, ,75.655; 2 handle frr.: 75.348, 75.350.
Coarse-ware pottery:	8 rim frr.: 75.31, 75.168, 75.264, 75.276, 75.296, 75.297, 75.633, 75.642,; 13 base frr.: 75.28, 75.35, 75.39, 75.62, 75.196, 75.211, 75.309, 75.320, 75.323, 75.331, 75.625, 75.628, 75.639; 3 body frr.:75.286, 75.290,75.788; 11 handle frr.: 75.73, 75.170, 75.171, 75.263, 75.269, 75.279, 75.329, 75.330, 75.340, 75.346, 75.640; 1 perforated fr.: 75.72; 1 leg fr.: 75.57; 2 lid frr.: 75.74, 75.653; 2 amphora toe frr.: 75.174, 75.332.

Mortars:	2 handle frr.: 75.169, 75.172.
Beehive:	1 fr.: 75.214.
Lamps:	7 frr.: 75.46, 75.51, 75.53, 75.83, 75.282, 75.337, 75.344.
Architectural terracotta:	1 fr.: 75.785.
Terracotta figurines:	2 frr.: 75.79, 75.662.
Loomweights:	32: 75.10, 75.11, 75.12, 75.45, 75.63, 75.64, 75.65, 75.66, 75.67, 75.68, 75.69, 75.70, 75.71, 75.90, 75.91, 75.92, 75.94, 75.95, 75.96, 75.177, 75.178, 75.179, 75.180, 75.181, 75.182, 75.183, 75.184, 75.185, 75.186, 75.349, 75.425, 75.571.
Other weight:	75.175.
Metal objects:	6 frr.: 75.30, 75.76, 75.80, 75.161, 75.165, 75.166.

Similar range of material, but in greater quantity, in context lots, including 59 roof-tile frr. kept as sample.

Thrown:	374.70 kgs. roof-tile frr. and non-identifiable sherds.
Bone and shell:	A large quantity of animal bone and sea shell material was recorded, as well as some land-snail shells. There were, in addition, at least 2 heavily calcinated bone frr. resembling cremated human bone (not analyzed).
Slag:	1 lump and 3 smaller pieces recorded.

Deposit 5.[121] Among the identifiable material there was a clear preponderance of pottery of the 5th and early 4th century B.C., with some earlier wares. The latest material could be dated within the range of *ca.* 380-340 B.C.

Catalogued items:

Early Iron Age:	**4.8**.
Geometric and Archaic pottery:	**5.5**.
Corinthian:	**6.4.**
Attic black-figure:	**7.9, 7.27**.
Red-figure:	**8.44, 8.56, 8.57, 8.82, 8.158.**
Black-glaze:	**9.70, 9.77, 9.79, 9.87, 9.88, 9.104, 9.190**.
Stamped black-glaze:	**10.20, 10.22, 10.23, 10.131**.
Domestic pottery:	**12.11, 12.22, 12.26, 12.30, 12.34.**
Greek lamp:	**15.51**.
Bone object:	**17.94**.
Metal object:	**18.24.**

Inventoried items not in catalogue:

Archaic:	1 fr.: 75.461.

[121] Excavated as TR1 tr1 (8), (9), (10); TR1 tr3 (7); TR1 tr1/3 Baulk (8), (9), (10).

Black-glaze and related:	10 rim frr.: 75.423, 75.432, 75.436, 75.443, 75.445, 75.450, 75.460, 75.550, 75.556, 75.557; 10 base frr.: 75.204, 75.444, 75.446, 75.497, 75.554, 75.559, 75.560, 75.561, 75.564, 75.667; 3 body frr.: 75.547, 75.549, 75.555; 2 handle frr.: 75.431, 75.451.
Painted pottery:	1 rim fr.: 75.438; 1 handle fr.: 75.424.
Coarse-ware pottery:	11 rim frr.: 75.268, 75.271, 75.289, 75.433, 75.440, 75.441, 75.447, 75.453, 75.562, 75.563, 75.579; 12 base frr.: 75.213, 75.270, 75.312, 75.345, 75.347, 75.426, 75.429, 75.430, 75.449, 75.548, 75.551, 75.665; 5 body frr.: 75.316, 75.435, 75.456, 75.553, 75.565; 1 handle fr.: 75.434; 1 (lid?) knob: 75.427.
Pithoi:	1 rim fr.: 75.261; 1 body fr.: 75.334.
Loomweights:	2: 75.342, 75.353.
Other weight:	1 fr.: 75.321.
Terracotta spool:	1 fr.: 75.468.
Roof-tile:	1 fr.: 75.581.
Metal objects:	3 frr.: 75.159, 75.160, 75. 163.

Similar range of material in context lots, including a sample of 17 roof-tile frr. and one possibly worked stone (unidentified).

Thrown:	93.30 kgs. roof-tile frr. and non-identifiable sherds.
Bone and shell:	Small quantity.

Deposit 6.[122] Mud-packing laid to even up natural depressions in bedrock in order to provide level floor surface; deposit sterile.

Deposit 7.[123] Some material of the 5th century B.C., but mainly of the 4th; latest identifiable fragments date to *ca.* 325 B.C.

Catalogued items:

Red-figure:	**8.59, 8.74, 8.84, 8.136.**
Black-glaze:	**9.138.**
Stamped black-glaze:	**10.85.**
Domestic pottery:	**12.20, 12.43, 12.52.**
Amphorae:	**13.10, 13.11, 13.12.**
Greek lamps:	**15.10, 15.67, 15.77.**
Terracotta objects:	**16.1, 16.5, 16.16.**

[122] Excavated as TR1 tr1 (11).

[123] Excavated as TR1 tr2 "Below B" (3), (4), (5), (6); TR1 tr4 "Below B" (2), (3), (4), (5), (6). The designation "Below B" is sometimes referred to in the catalogues as B or b: e.g. TR1 tr2b (3), (4) etc.

Metal object:	**18.116**.
Coin:	**20.1** (Torone, 400-350 B.C.).

Inventoried items not in catalogue:

Black-glazed and related:	4 base frr.: 75.603, 75.610, 75.611, 75.613; 3 handle frr.: 75.359, 75.604, 75.605.
Coarse-ware pottery:	5 rim frr.: 75.358, 75.596, 75.600, 75.616, 75.622a and b; 3 base frr.: 75.504, 75.590, 75.617; 1 body fr.: 75.594; 1 handle fr.: 75.615; lid fr.: 75.619; 1 toe: 75.620; 1 near complete body profile: 75.621.
Pithoi:	1 rim fr.: 75.791; 3 body frr.: 75.595, 75.601, 75.606.
Lamps:	2 frr.: 75.480, 75.624.
Roof-tiles:	3 frr.: 75.591, 75.593, 75.612.
Spool:	1 fr.: 75.608.
Mould(?):	1 fr.: 75.592.
Loomweights:	6: 75.357, 75.584, 75.587, 75.598, 75.599, 75.607.

Similar range of material in context lots including one possible(?) Prehistoric lug handle fr., and a very large quantity of coarse-ware pottery, including amphora and cooking-ware frr.; 31+ frr. of roof-tiles kept as sample.

Thrown:	152.55 kgs. roof-tile frr. and non-identifiable sherds.
Bone and shell:	Only a small quantity of animal bone and sea shell recorded, in addition to one land-snail shell.

3. STRUCTURE 3 (1976 and 1978)[124]

Grid refence: 12N and 12M

Structure 3 is located on the lower eastern slopes of Hill 2, about 100 m. due west of the Gate Area, overlooking the small valley between Hills 2 and 3. This valley forms the natural route between Torone and the Kouphos Harbour and narrows towards the low saddle where the gate complex was built (Fig. 3). The natural contour of the land on which Structure 3 was constructed slopes sharply away both to the north and east[125] with the result that parts of the walls on those sides were visible above surface prior to excavation. A number of blocks, especially along the more impressive North Wall, were in a masonry style similar to that of the Early

[124] A. Cambitoglou, *PAE* 1977, 102-125; *PAE* 1978, 80, 82 fig. 2.

[125] This is best seen on Pl. 24 b-c.

Hellenistic fortifications at the Gate.[126] This initially suggested a possible link between Structure 3 and the fortification system,[127] but excavation quickly revealed a large domestic building which, on the basis of the small finds recovered from the floor deposits, could be dated to the years of the late 4th century B.C., contemporary, or near-contemporary, with the construction of the Early Hellenistic defense system. Excavations were conducted there for the duration of the 1976 and 1978 seasons. A total of 13 trenches were opened in 1976 (Trenches 1-13), exposing a good part of the northern half of the building, while a further three trenches (Trenches 14-16) were dug in 1978 in the southern half of the Structure.[128]

The nomenclature applied to the rooms and walls of Structure 3 is set out diagramatically on the plan Fig. 30 a, but since the building was not completely excavated, and since parts of it were were never fully exposed at any one time,[129] an account of the development of the excavation is here necessary.[130]

TRENCH SUMMARIES

Trench 1 (3.20 x 2.0 m.) was sited against the external face of the North Wall, near the NW corner (Fig. 29). Two courses of well-dressed limestone blocks were preserved, founded directly on bedrock which had been worked in order to receive them, but with no distinct foundation cutting extending beyond the wall face. At this point the wall has a maximum width of 0.85 m.

Trench 2 (3.0 x 2.50 m.) was sited along the external face of the West Wall primarily to expose the line of the wall, as well as to test the nature of the deposits to its west. The wall, which had an average width of 0.40 m. (*i.e.* less than half the width of the North Wall as exposed in Trench 1), was constructed of an admixture of stone. The lower courses comprised small crudely worked pieces of limestone and, to a lesser extent, schist and granodiorite, above which larger, neatly trimmed limestone blocks, roughly rectangular, were set along the faces (Pl. 25 a). A foundation trench,

[126] Including a draughted corner block at the NW corner of Structure 3 which is similar to that at the SE corner of the North Bastion at the Gate Area and that at the junction of Walls K3 and P, Pls. 13 g, 14 a, 16 d-e.

[127] A. Cambitoglou, *PAE* 1977, 102-103.

[128] Structure 3 is oriented, almost exactly, to the points of the compass; the relationship of "true north" to "formal north" is indicated on the plan Fig. 29.

[129] The 1976 trenches were backfilled at the end of that season and were not subsequently re-opened in 1978.

[130] A fuller account of the development of the 1976 campaign is provided in *PAE* 1977, 103-118.

cut into the natural rock about 0.20 m. deep, was exposed along the external face of the wall to a width of 0.10 m.

Trench 3 (2.50 x 2.50 m.) was sited 7.50 m. to the south of Trench 2, and on the same alignment, in order to test for the continuation of the West Wall further up-hill. As was subsequently shown with the excavation of Trench 16, the internal face of the wall at this point had been built up against a deep cutting in the natural rock (Pl. 28 f-g), and was, in fact, located in the baulk between Trenches 3 and 16; the external face, at this level, was not clearly defined.

Trench 4 (originally 4.40 x 2.50 m.)[131] was opened with the view of better defining the line of the East Wall, which was partially visible above surface prior to excavation (Pl. 24 f). The wall, met in the eastern quarter of the trench, was constructed with large dressed limestone blocks along its external face (Pl. 24 f-g), whereas the internal face was built in a variety of small stones, roughly coursed (Pl. 25 b-c). The wall had a width of 0.65-0.70 m. and was founded on bedrock, with a narrow foundation trench exposed along the internal face; the natural rock dipped sharply away to the north. The preserved top of the East Wall was well below the floor level of Room I, which was subsequently exposed to the west (Pl. 25 d, f).[132] Parts of two further walls were encountered in Trench 4: Wall 1 was bonded at right angles to the East Wall and had a width of 0.55 m. It was constructed in a variety of small stones similar to those of the internal face of the East Wall and was founded on bedrock (Pl. 25 b-c). In the NW quarter of the trench a small portion of a cross wall, designated Wall 3, was revealed, bonded with Wall 1. Wall 3 had a similar width of 0.55 m. and was constructed in the same manner as Wall 1.

Trench 5 (2.50 x 2.00 m.) was laid out along the internal face of the West Wall, on the same alignment as Trench 2, in order to test for the continuation of Wall 1 at a level higher than the portion of the wall exposed in Trench 4. The trench proved revealing; a plaster coating, albeit poorly preserved, was exposed against the internal face of the West Wall (Pl. 26 e), while the continuation of Wall 1 turned out to be an unbaked mud-brick wall, poorly preserved, which could be traced by its plaster faces to its junction with the West Wall (Pl. 26 d). At this point Wall 1 had a width of 0.53

[131] The trench was subsequently extended slightly to the east to a length of 5.0 m.

[132] The level of the floor on Pl. 25 f is indicated by the threshold blocks in Wall 1 which are visible towards the top of the photograph.

m.; its line may also be seen on Pl. 26 f.[133] The plaster preserved *in situ* along the internal face of the West Wall and along both faces of Wall 1 was painted white, whereas fallen fragments of red-painted plaster were encountered on the floor of Room I (Pl. 26 g). This would indicate that this part of the room was decorated in a two-colour scheme with white along the lower wall edges and red, conceivably in a band, above. The mud-brick superstructure of Wall 1 would have been built on a stone foundation, though sufficient depth was not reached in order to expose the socle.

Trench 6 (3.00 x 2.50 m.) was sited in the area between Trenches 4 and 5 to expose Wall 1 more fully. The threshold of a door between Rooms I and II was soon revealed, consisting of two blocks (Pl. 25 e), the eastern one of pink limestone, the western one of grey. Both blocks were cut to a uniform width of 0.67 m. of which 0.16m on the north side constituted the width of the step; the step was 0.05 m. deep. The eastern block was 1.26 m. long, the west 1.24 m. as exposed on the south side and 1.30 m. on the north side. There were three small cuttings in the step, the westernmost with a lead casing forming the post-socket (Pl. 25 g), which are described more fully below. The western portion of Wall 1, exposed more fully in Trench 5, ran over the top of the west block of the threshold, with white plaster preserved along both faces. The south face of Wall 1 was aligned with the face of the threshold block, and the plaster could be traced along it for at least 0.20 m. On the north side the plastered face of the wall ran along the step, 0.16-0.18 m. south of its north edge, and could be traced for a length of 0.32 m. to the east. Although not preserved, the termination of Wall 1 above the upper face of the west block probably coincided with the incised lines observed on its upper face (Pl. 26 a-b), which would bring the termination of the wall (and therefore the jamb of the door) almost in line with the lead-cased post-socket. The upper face of the eastern end of the east threshold block was roughly finished, as opposed to the rest of the block (Pl. 25 e). This feature would suggest a mud-brick superstructure for the eastern continuation of Wall 1 at this point, although no traces of such a wall, or plaster, were noted in the immediate vicinity. The preserved continuation of Wall 1 to the east consists of the stone socle, more fully exposed in Trench 4, the upper preserved part of which was level with the threshold (Fig. 31 b; Pl. 25 b).

[133] The rectangular cutting visible on Pl. 26 f along the south face of Wall 1 was done by the excavation conservator with the purpose of preserving a sample of the mud-brick wall.

Trench 7 was originally laid out as a rectangle measuring 2.50 x 3.50 m., but was subsequently extended to measure 5.0 x 4.0 m.; it was sited 1.0 m. to the south of Trench 4 and on the same alignment, in order to expose more fully the continuation of the East Wall towards the south. As was the case in Trench 4, the external face of the East Wall was here also built of large dressed limestone blocks, whereas the internal face consisted of a variety of smaller stones only crudely worked. A narrow foundation trench cut into bedrock was revealed along the inner face. Bonded with the East Wall and parallel to Wall 1 was Wall 2 (Pl. 27 a). Wall 2 has a width of 0.45-0.50 m. and was built in the same manner as Wall 1, with a narrow foundation trench on either side. The width of the East Wall up to its juncture with Wall 2 averaged 0.70 m., whereas it narrowed considerably towards the south, beyond the juncture.

Trench 8 (3.75 x 2.50 m.)[134] was sited over the top and along the internal face of the West Wall primarily with the view of exposing the presumed continuation of Wall 2 and its juncture with the West Wall. At this point Wall 2 has a width of 0.40-0.45 m. and is preserved to several courses, as was more fully revealed with the excavation of Trench 16 (see below).

Trench 9 (2.50 x 2.0 m.) was sited as a northern extension of Trench 5 primarily with the view of testing the nature of deposits in the northern half of the building (Pl. 26 f). Since the natural lie of the land dipped sharply down-hill towards the north, further excavation of the northern portion of Room II was considered unwise for fear of the collapse of the structure at this point. Consequently, the area between the north scarp of Trench 9 (and with it the north scarp of Trench 12) and the internal face of the North Wall was not excavated.

Trench 10 (5.0 x 1.0 m.) was sited along the external face of the North Wall, 1.0 m. east of Trench 1; the width of the wall here measured 0.75-0.80 m. Its foundations comprised smaller dressed blocks of limestone above which larger, well draughted, blocks were set, in a masonry style almost identical to that of the Early Hellenistic fortification system (Fig. 31a). The precarious location of the wall along the down-hill slope necessitated immediate supporting to prevent its collapse (Pl. 24 b-c).

Trench 11 (3.75 x 3.0 m.) was sited on the same east-west alignment as Trench 8, in the area between Trenches 7 and 8, in order to expose more of Wall 2. Excavation brought to light a second threshold, opposite that uncovered in Trench 6,

[134] Trench 8 was on the same alignment as Trench 5 and was separated from it by a baulk measuring 1.25 m.

consisting of two blocks which, unlike those of Wall 1 which were founded on fill, were founded on bedrock within a foundation trench visible on either side (Pl. 27 b). The western block of the threshold was of limestone and was well draughted, measuring 0.94 x 0.41 m., whereas the longer eastern block, 1.74 x 0.33 m., was of granodiorite. Neither block preserved cuttings and both were at a slightly lower level than the threshold in Wall 1. This seemed to suggest that both blocks probably only formed the base for the actual threshold, which was not preserved.[135] The western block of the threshold was subsequently partially re-exposed in 1978 with the excavation of Trench 15 (Pls. 28 g, 29 b), where it was shown that its upper face was more or less level with the floor of Rooms IV and V. Consequently, if the preserved blocks of the Wall 2 threshold were only the foundations for a threshold, the level of the floor in Rooms IV and V would have been slightly lower than that of Room I, and a slight step would have existed at the door connecting the latter with Room IV.[136] The possibilty, therefore, that these two blocks represent the actual threshold and that the door - if there ever was one - operated in a manner different to that of the Wall 1 door, cannot be dismissed. The excavation of Trench 11 also brought to light a small portion of a cross wall, Wall 4, bonded with Wall 2, immediately to the west and south of the west threshold block. The exposed portion of Wall 4 had a width of 0.40-0.43 m.; the wall was more fully uncovered in 1978 (see below).

Trench 12 (3.0 x 2.0 m.) was sited to the north of Trench 6, on the same alignment and separated by a baulk of 0.50 m., in order to investigate further the internal stratigraphy of Room II. As was the case with Trench 9, however, the down-hill slope effectively prevented further excavation to the north. The baulk separating Trenches 12 and 6, that between Trenches 6 and 4, as well as the one between Trenches 12 and 5/9 on the north side of Wall 1, were subsequently cleared. So were the baulks between Trenches 4 and 7, 7 and 11, and that between Trenches 11 and 8 on the south side of Wall 2.

Trench 13, which was divided into two sectors, was originally sited along the external faces of the North and East Walls in order to expose the NE corner of the building. A 1.0 m. wide strip (the first sector) was excavated along the external faces of both walls, while a second sector, extending 1.20 m. south of the North Wall, was excavated along the interior of the corner (Pl. 24 d). Little remained of the portions of

[135] See A. Cambitoglou, *PAE* 1977, 116.

[136] *Cf.* the 0.05 m. step down of the threshold in Wall 1.

the North and East Walls that were exposed, though a large foundation block was uncovered *in situ* at the NE corner. In the western part of the second sector excavated along the internal face of the North Wall, the junction of Wall 3 to the North Wall was uncovered. As preserved, Wall 3 had a width at this point of 0.50 m. and was built of a variety of smaller roughly hewn stones, similar to those of the parts of Walls 1 and 2 exposed in Trenches 4 and 7 respectively.

When excavations were resumed in 1978, it was decided to lay out three further trenches in the southern, up-hill part of Structure 3 (Fig. 29).[137]

Trench 14 (5.0 x 5.0 m.) was sited to the south of Trench 7 and quickly revealed the SE corner of the building, which was poorly preserved (Pl. 28 a). The South Wall of the building, as preserved at this point, was constructed of a variety of small stones, defining a maximum width of 0.60 m. The East Wall, also built of small stones, had a width of 0.45-0.50 m., which was considerably more narrow than the continuation of the wall to the north of Wall 2. Approximately 1.10 m. north of the internal corner of the East and South Walls, a break of 1.0 m. was encountered in the East Wall, which initially suggested the possibility of an external entrance to Room IV, approached from the east. The wall, however, was very poorly preserved at this point and little conclusive evidence for an entrance could be established. The existence of an entrance here seemed highly unlikely on account of the location of the well-shaft in the SE corner of Room IV (Fig. 29; Pls. 27 e, 28 a), which would render any passage through it somewhat hazardous. The cutting for the upper shaft of the well has a diameter as great as 2.15 m., narrowing to 1.19 m. with depth. The well had been filled in Antiquity and its fill, down to the level excavated, is described more fully below.

Trench 15 (5.0 x 3.0 m.) was sited 1.0 m. to the west of Trench 14 and on the same alignment. Excavation exposed the floor surface of Room IV as well as uncovering the eastern half of Wall 4. It was also shown that the continuation of the South Wall towards the higher ground to the west comprised only an internal face built up against a deep vertical cutting in the natural rock (Pl. 28 d).

[137] See A. Cambitoglou, *PAE* 1978, 80. The 1978 trenches were sited slightly off the alignment of those excavated in 1976 (Fig. 29). They were also sited slightly to the south of the south scarps of Trenches 7, 11, and 8, about 0.50 m. to the east and almost 1.0 m. to the west, which permitted a diagonal east-west section to be drawn through Rooms IV and V (Fig. 30 b).

Trench 16 (5.0 x 2.50 m.) was sited 1.0 m. to the west of Trench 15 and on the same alignment. Excavation uncovered the greater portion of the small Room V which proved to be a kitchen by virtue of a terracotta barrel oven (**12.65**), found *in situ* along the southern face of Wall 2 (Fig. 31 e; Pl. 29 a), with ample traces of burning all round. Since Room V was situated further up-hill than other parts of the building, the cutting of bedrock required to make the floor level consistent with that of the other rooms was considerably deeper. As a result, the internal faces of the walls in the SW corner were preserved to a height of up to 2.15 m. (Fig. 31 c-d; Pl. 28 d-f). Traces of burning were encountered around the lower parts of most of the walls in the room and especially in the SW corner (Pl. 28 d). The baulks separating Trenches 14 from 15, and 15 from 16, were subsequently cleared, the latter more fully revealing Wall 4 and the internal passageway connecting Rooms IV and V (Pls. 28 f-g, 29 b-c).

In the later part of the 1978 season it was decided to dig a series of narrow trenches over the top of the lines of those walls not uncovered previously in order to complete the plan of the building. Only the tops of the walls themselves were exposed, primarily in the northern half of the building where further digging would have endangered the preservation of the structure. The stretch of the East Wall between Trenches 4 and 13 was uncovered (Fig. 29), so was the NW corner of the building (Pl. 24 e). It was hoped that the narrow trench over the top of Wall 3 (Figs. 29-30) would yield some evidence of an internal doorway between Rooms II and III, but as the preserved top of the wall was below floor level, the position of a doorway could not be established.

STRATIGRAPHY

Five basic types of deposit were met: *Deposit type 1* represents topsoil overlying most of the excavated area. The deposit ranged in depth from 0.05 to 0.15 m. and was characterised by a greyish-brown to black soil, usually with a good deal of root action; it contained small pebbles and tended to have a somewhat loose texture. *Deposit type 2* was encountered below topsoil over the entire area and represents wash levels from the higher ground to the south. In the various parts of the area excavated within the building, either one or two strata of the deposit were met; the two strata are indicated as *deposits type 2a* and *2b*. The designation *deposit type 2c* is reserved for the wash levels outside the building.[138] Wherever encountered, deposit

[138] A certain quantity of limestone chips was encountered in deposit type 2c, especially along the external face of

type 2 was characterised by a light yellow-brown soil; where it was met as 2a and 2b it normally consisted of an upper layer containing a quantity of pebbles and small limestone pieces and a lower one which tended to be finer and somewhat more compact in texture.

Deposit type 3 represents fallen building debris as is illustrated in the section through Rooms IV and V (Fig. 30 b). The deposit contained tumble from the various walls (Pl. 27 d), as well as traces of decayed, unburnt, mud-brick. Traces of plaster were also noted, especially in the western portion of Room I where clear remains of a mud-brick wall with plaster faces were met along the western part of Wall 1, in addition to the plaster found *in situ* along the internal face of the West Wall (Pl. 26 d-g). The lowest pass of deposit type 3 normally contained collapsed roof-tiles intermixed with grey-coloured mud, strewn on the floors of the rooms (Pl. 27 e-f). *Deposit type 4* represents the actual floor surface. The floor make-up itself consisted of a thin layer of hard-packed grey clay; therefore, the distinction between it and the lowest pass of deposit type 3 was not always clear.[139] In the up-hill parts of the building bedrock had been trimmed back to create a level surface on which the thin layer of packed mud was applied (Fig. 30 b). In the down-hill parts of the building to the north and east, where the natural rock dipped away sharply, a levelling fill, *Deposit type 5* (not indicated in the section Fig. 30 b) was encountered below the floor make-up (the latter often not preserved), which was laid to provide a uniform level with the trimmed bedrock up-hill. Deposit type 5 primarily comprised small decayed chips of schist (which is the natural rock in this part of the site), mixed with earth, and evidently derived from cutting the bedrock further up-hill to make the floors and to construct the South and West Walls near the SW corner of the building. As the walls of Structure 3 were founded either on levelled bedrock or in foundation trenches cut into the rock prior to the laying of Deposit type 5, the deposit itself comprised the fill of the foundation trenches. For the purposes of this report, deposit type *5a* refers to the sub-floor packing within the structure; *5b* to essentially the same deposit but outside the building, laid in order to provide the desired level.

The material derived from deposits type 3, 4 and 5a within the building is presented below according to the rooms of the structure in which it was found; the material from deposits 1, 2 and 5b is listed here.

the North Wall, which initially raised the possibility that they were the result of trimming the blocks *in situ*, as was the case in the Gate Area *(cf.* Gate Area deposit type 4). With hindsight, this possibility is highly unlikely in view of the nature of the deposit.

[139] In the deposit summaries presented below, some of the sherd material listed under deposit type 4 (*i.e.* floor deposit) may, in fact, represent material from the lowest pass of deposit type 3.

DEPOSIT SUMMARY

Deposit type 1 (topsoil).[140] All identifiable pottery appears to be of Classical date and evidently all of the 4th century B.C.; one bronze coin, Philip II (359-336 B.C.).

Catalogued items:

Black glaze:	**9.198.**
Coin:	**20.11.**

Inventoried items not in catalogue:

Coarse-wares:	1 rim fr.: 76.03; 1 base fr.: 76.412; 1 amphora toe: 78.1327.
Loomweight:	76.11.

More pottery, predominantly coarse-wares and some black-glaze, in context lots, though not in great quantity; 7 small roof-tile frr. kept as sample.

Thrown:	19.12 kgs. small roof-tile frr. and non-identifiable sherds.
Bone and shell:	1 bag sea-shells and small quantity of animal bone.

Deposit type 2a and 2b (wash levels accumulated over the building).[141] Identifiable pottery of Classical date, including material of the 5th and 4th centuries B.C., with a sprinkling of Archaic sherds.

Catalogued items:

West Slope Ware:	**11.4.**
Amphorae:	**13.5, 13.8.**

Inventoried items not in catalogue:

Black-glaze:	76.80.
Coarse-ware	1 rim fr.: 76.79; 2 base frr.: 76.81, 76.82.
Pithos:	1 body fr.: 78.2430.
Metal object:	1 bronze nail: 76.411.

More pottery in context lots, though not in great quantity; predominantly coarse-wares, some black-glaze and 5 small body frr. of Archaic Chian (?) chalices. At least two body frr. of bee-hive(s); 7 roof-tile frr. kept as sample.

[140] Deposit type 1 incorporates the following excavation unit numbers: TR1 (1); TR2 (1); TR3 (1); TR4 (1); TR4/7 Baulk (1); TR5 (1); TR5/8 Baulk (1); TR6 (1); TR6/4 Baulk (1); TR7 (1); TR7 Ext. 1 (1); TR8 (1); TR9 (1); TR10 (1); TR11 (1); TR11 S Ext. (1); TR11 2nd Ext. (1); TR12 (1); TR12/6 Baulk (1); TR13 (1); TR13/10 Baulk (1).

[141] Deposit types 2a and 2b incorporate the following excavation unit numbers: TR5 (2); TR6 (2); TR9 (2); TR11 (2); TR11/7 (2)-(3); TR12 (2); TR14 (2); TR15 (2); TR16 (2).

Thrown:	7.95 kgs. roof-tile frr. and non-identifiable sherds.
Bone and shell:	Very small quantity of animal bone, sea-shell and land-snail shell recorded.

Deposit type 2c (wash levels accumulated outside the building).[142] Small quantity of pottery recovered mostly Classical, as 2a and 2b, with at least one fragment of Attic black-figure.[143]

Catalogued items:

Attic black-figure:	**7.8.**
Metal object:	**18.51**.

Inventoried items not in catalogue:

Black-glaze:	2 base frr.: 76.399, 76.542.
Painted pottery:	1 body fr.: 76.548.
Domestic Pottery:	76.83.

Similar material in context lots, but in very small quantities.

Thrown:	0.40 kg. roof-tile frr. and non-identifiable sherds.

Deposit type 5b (levelling fill outside the building).[144] The small quantity of identifiable pottery included material of the 5th and 4th centuries B.C. The latest diagnostic fragments are dated to *ca.* 400-375 B.C.

Catalogued items:

Black-glaze:	**9.5, 9.20, 9.36, 9.76, 9.209**.
Amphora:	**13.53**.
Greek Lamp:	**15.3**.

Inventoried items not in catalogue:

Red-figure:	1 body fr.: 76.447.
Black-glaze:	3 base frr.: 76.04, 76.07, 76.94; 2 rim frr.: 76.443, 76.446; 1 handle fr.: 76.95; 1 body fr.: 76.86.
Painted pottery:	3 rim frr.: 76.90, 76.92, 76.96; 2 body frr.: 76.89, 76.93.
Coarse-ware:	5 base frr.: 76.85, 76.88, 76.398, 76.444, 76.445; 3 rim frr.: 76.84, 76.405, 76.442; 1 handle fr.: 76.09.
Loomweight:	76.441.

[142] Deposit type 2c incorporates the following excavation unit numbers: TR1 (2); TR10 (2); TR13 (2).

[143] See also A. Cambitoglou, *PAE* 1977, pl. 75β.

[144] Deposit type 5b incorporates the following excavation unit numbers: TR1 (3); TR2 (2); TR2 (3); TR3 (2); TR3 (3); TR10 (3); TR13 (3).

Similar material in context lots.

Thrown: 10.58 kgs. roof-tile frr. and non-identifiable sherds.

DESCRIPTION OF STRUCTURE 3 AND DEPOSITS WITHIN ROOMS

Structure 3, essentially oriented north-south, was built diagonally into a bank which runs NW-SE; bedrock rises highest in the SW corner of the building, and falls away sharply to the north and east. The plan of the building is rectangular, with external measurements of 11.80 m. for the shorter North and South Walls and about 18.20 m. for the longer East and West Walls (Fig. 29).[145] The difficulty of coping with the natural contour of the land necessitated the builders to make a deep cutting into bedrock in the SW, against which portions of the South and West Walls were built directly (Pl. 28 d), as well as to build the North and East Walls, which had to support the down-hill thrust of the building, much stronger than the West and South Walls. The width of the North and East Walls averaged 0.75-0.80 m., as opposed to a width of 0.40-0.45 m. for most of the West Wall and 0.50-0.60 for the eastern portion of the South Wall. There is a slight thickening of the West Wall near its junction with the North Wall to make it cope with the down-hill slope and a corresponding narrowing of the East Wall near its junction with the South Wall, at a point where the natural level of bedrock was that of the desired floor level. In addition to their greater width, the North and East Walls were built in a masonry style different to that of the South and West Walls. Once the gradient had been evened up with smaller stones set in mud, the external faces were built of limestone ashlar blocks with convex outer faces, similar to those used in the Early Hellenistic fortification system (Fig. 31 a). The similarity may be further seen in the existence of a draughted corner block preserved in the NW corner of the building.[146] As preserved the internal faces of the North and East Walls were constructed of a variety of smaller stones (Pl. 25 c), and would have been well below floor level for the entire preserved length of the North Wall, and for most of the East Wall.

There are four internal walls dividing the structure into its constituent rooms. Walls 1 and 2, running the length of the building from east to west, define the long central hall, Room I. Threshold blocks, founded on fill, were encountered *in situ* in

[145] *Cf.* the external dimensions of the Attic country house at Vari, J.E. Jones *et al.*, "An Attic Country House below the Cave of Pan at Vari," *BSA* 68 (1973) 360, 362 fig. 2.

[146] *Supra* n. 126; the corner block itself, though not the draughted corner, is visible on Pl. 24 e but was only partially exposed for fear of the collapse of the wall at this point.

Wall 1, 5.35 m. from the internal face of the East Wall, and allowing passage between Rooms I and II. The eastern portion of Wall 1, the preserved top of which was mostly below floor level (Fig. 31 b), was built of a variety of small stones set in mud, defining a width of 0.35-0.55 m.; the western portion of the wall, above floor level, and extending for a short distance over the top of the western threshold block, was built of unbaked mud-brick, coated on both sides with white-painted plaster, defining a width of 0.53 m. Although excavation did not continue below the level of the floor in Trench 5,[147] it would seem reasonable to assume that the mud-brick wall was built on stone foundations resembling those of the eastern portion of the wall. The plaster itself was only about 0.004 m. thick, with small particles of quartz behind a smooth face. The dimensions of the Wall 1 threshold blocks are noted above; the eastern block was of pink limestone, the western one of grey. Both blocks have a cut step down on the north side 0.05 m. deep and 0.16 m. wide; the drop to the step, the step itself, and the north face were finished with a pointed tool to provide an intentionally pitted surface. The tops of the blocks, along with the south faces were draughted flat but preserve clear finishing marks of a claw chisel (Pl. 26 a);[148] the ends of both blocks, under the door jambs (the terminations of which were not preserved), were more crudely roughened with a pointed tool, apparently to allow for better adhesion of the mud-brick superstructure of the wall.[149] There are three cuttings in the step, into which a two-leaved door would have been fitted;[150] two presumably for door posts 1.40 m. apart and the third for a vertical locking bar; the latter is 0.78 m. from the eastern cutting and 0.62 m. from the western cutting which preserved its lead casing. The lead (Pl. 25 g) appears to have been poured into the cutting in a molten state, into which a triangular post was inserted, leaving its impression and assuring stability. The lead which appears to have spilled out of the cutting onto the step with the

[147] See above.

[148] See especially A.K. Orlandos, *Τὰ ὑλικὰ δομῆς τῶν ἀρχαίων Ἑλλήνων καὶ οἱ τρόποι ἐφαρμογῆς αὐτῶν κατὰ τοὺς συγγραφεῖς, τὰς ἐπιγραφὰς καὶ τὰ μνημεῖα* Vol. 2 (1959-60) 124-5 figs. 63 and 65, pl. A, 1-2; R. Martin, *Manuel d'Architecture Grecque* I (1975) pl. XVI especially nos. 1, 4 and 5. For the claw chisel see further S. Adam, *The Technique of Greek Sculpture in the Archaic and Classical Periods* (1966) 4 fig. 1 (top row right), 18-22.

[149] The termination of the jamb over the west block is indicated by incised lines. The excavator noted claw chisel finishing marks at both ends, which suggested that the tops of the blocks were intentionally draughted flat and smooth and were subsequently re-worked at both ends after they had been set in place.

[150] For representations of two-leaved doors in South Italian red-figure see, among others, A.D. Trendall - A. Cambitoglou, *The Red-Figured Vases of Apulia* I (1978) pl. 9 no. 2a (2/10), pl. 60 no. 3 (8/4) (both temples of Apollo). See further W. Hoepfner and E.L. Schwandner, *Haus und Stadt im klassischen Griechenland* (1986) 117 fig. 115; *cf.* the marble door from Kalydon, p. 117 fig. 117 (= Trendall - Cambitoglou, *ibid.* 213 8/157).

insertion of the post was flattened and neatly worked in place with a pointed tool.[151] The presumed lead casing for the corresponding cutting of the eastern threshold block was not preserved, although its existence may reasonably be assumed on account of its relationship to the other two cuttings.[152] The two cuttings for the door posts were both hard-up against the step-down of the threshold, whereas the cutting for the locking bar was set slightly further out allowing space for the wooden leaf of the door; the doors would have opened out into Room II.

The position of the corresponding threshold in Wall 2 is indicated by two large blocks placed on bedrock, with a foundation trench slightly wider than them clearly visible on either side (Pl. 27 b). The actual threshold blocks, which are not preserved, would have rested on the surviving blocks (see above). The small, well draughted west block, cut from grey marble, measured 0.94 m. in length, whereas the larger east block, cut from granodiorite, has a length of 1.74 m.; the east end of the latter was situated 4.55 m. from the internal face of the East Wall as distinct from the east end of the Wall 1 threshold, which is at a distance of 5.35 m. from the same wall. The top of the preserved blocks forming the foundation for the Wall 2 threshold is at a slightly lower level than that of the Wall 1 threshold (Pl. 24 b), and its relationship to the floor level of Room IV, into which it provided access from Room I, as exposed in Trench 15 (Pl. 29 b-c), was such as to indicate a slight step down from one room to the other. The thresholds of Walls 1 and 2, directly opposite each other at their western ends, provided a neat symmetry to Room I.

Wall 3, only partially exposed,[153] was built in a variety of smaller stones bonded with mud, identical in appearance to the eastern portions of Walls 1 and 2. The wall has a length of 6.80 m. and a width of 0.50-0.55 m. It provided the internal partition between Rooms II and III, but as its preserved top was below floor level (as was the case with the eastern portions of Walls 1 and 2) no evidence of a passage communicating between the two rooms was encountered. The similarity to Walls 1 and 2 may indicate that it formed the foundation for a mud-brick superstructure. The fact that the northern face of Wall 1 (on the Room II side) near its junction with the West Wall had a coating of plaster indicates that all the internal faces of Room II were also almost certainly similarly coated.

[151] The pitted surface of the step (Pl. 25 g) allowed for better adhesion of the lead.

[152] The intentional roughening of the eastern end of the east block would indicate that the mud-brick superstructure of the wall would have extended almost to the point of the cutting (as it clearly does on the western block, Pl. 25 e).

[153] See above and Pl. 27 c .

Wall 4 was founded directly on levelled bedrock and formed the internal partition between Rooms IV and V. The wall, preserved to a height of almost 1.0 m., was built of large, medium, and small worked blocks, predominantly limestone but with an admixture of granodiorite and some smaller pieces of schist. The masonry is well-jointed but only roughly coursed, with only the blocks presented in the faces, as well as those in the termination of the wall on the south side, worked flat (Fig. 31 f; Pl. 29 b-c). The wall has a width of 0.40-0.43 m. and was built in a similar masonry style to that of the internal faces of the South and West Walls (Pl. 28 d-f), which contrasted to the sub-floor masonry of Wall 3 and the eastern portions of Walls 1 and 2. There was no evidence whatsoever for plastered faces in Rooms IV and V and the blackening observed along the lower parts of the South and West Walls in Room V, up to a height of at least 0.70 m. above floor level, which was the result of fire and smoke from cooking (see below), might reasonably preclude the existence of plastered walls at least in Room V.[154] Wall 4 terminated, in a neatly defined edge, 1.25 m. from the internal face of the South Wall, allowing passage between Rooms IV and V. This passageway preserved no clear evidence for a door, with the packed mud floor continuing from Room IV into Room V at the same level. Particularly well preserved were the internal faces of the South and West Walls near the SW corner of the Structure (Fig. 31 c-d), as well as the internal south face of Wall 2 in Room V (Fig. 31 e). The latter was founded on levelled bedrock like Wall 4; in the SW corner of the building, however, the worked blocks of the South and West Walls were built against a vertical edge to a depth of slightly over 2.0 m. formed by deep cutting into the bedrock, which rose here much higher. Like Wall 4, Wall 2 was built predominantly of limestone with an admixture of granodiorite and smaller pieces of schist (Fig. 31 d, e).

Evidence for a pitched tiled roof was established by the abundant quantity of terracotta roof-tiles found in the various deposits within the building; a well-defined area of tile smash was uncovered on the floor of Room IV, especially against the eastern face of Wall 4 (Pl. 27 f) and it was over this that collapsed building debris from the walls had subsequently formed (Fig. 30 b; Pl. 27 d). Roof-tiles were exclusively of the Lakonian system,[155] and their quantities are noted in the deposit summary for each room given below. The evidence of parts of the roof that had collapsed directly

[154] Worth noting is that the preserved top of Wall 4 appeared to be even and fairly well-defined and almost at the same level for its entire length. This may indicate that the upper part of the wall was not built in stone, although this could not be established with certainty.

[155] For Lakonian roof-tiles see J.J. Coulton, *Ancient Greek Architects at Work* (1985 ed.) 34 fig. 6c; Orlandos *op. cit.* (*supra* n. 148) Vol. 1 (1955) 104 fig. 56; Martin *op. cit.* (*supra* n. 148) 66-7 figs. 20-2.

onto the floor, the narrow width of the South and West Walls, and the unbaked mud-brick walls on stone foundations for the internal Walls 1, 2 and perhaps also 3,[156] would seem to argue against the existence of an upper storey, at least for part of the building. The total lack of evidence for an internal stairway would seem to corroborate this impression.

There is no conclusive evidence for an external entrance to the building, largely because the preserved tops of the walls are below floor level in the parts most suitable for a door. There is a ragged break near the south end of the East Wall, about 1.0 m. wide, which the excavator considered a possible subsidiary entrance. Although the natural lie of the land is suitable for an entrance at this point, the break in the wall preserved no evidence of clearly built terminations, and any passage through the gap would have involved a narrow, and somewhat hazardous, squeeze past the well in the SE corner of Room IV. The natural lie of the land would also preclude there having been an entrance in certain parts of the building; the NE part of the structure, where the gradient of the slope is considerable, could be ruled out, unless there had been steps up to the level at which the North and East Walls supported the floor; no traces of such steps were encountered. Conversely, there could not have been an entrance in the SW part, where the floor level was considerably lower than the surface of the ground and where the South and West Walls were preserved to heights approaching 2.0 m.[157] The only possible alternative positions for an entrance would then be in the west wall toward the NW part of the building and along the central part of the East Wall. The former seems most unlikely since portion of the West Wall was clearly preserved with no break encountered at the corresponding level of the floor in Room II as excavated in Trench 9 (Pl. 26 f); similarly, an entrance along the North Wall, near the central portion of Room II, would be difficult to imagine because of the gradient and would almost certainly require some steps up to the level of the floor. The most logical position for an external entrance, therefore, appeared to be in the central portion of the East Wall, which would have provided passage into the long central hall, Room I (Pl. 24 f-g); the natural contour of the land was suitable here and any approach to the building from the north or east would have led to this point.[158] Moreover, the plan itself of the building suggests that the main external entrance

[156] See above n. 154 for the possibility of a mud-brick superstructure for Wall 4.

[157] An entrance in the SW part would have required steps through a wall down to the floor level.

[158] An approach from due west, following a modern foot-path, leads one to a point along the West Wall more or less in the position of Trench 9 (Fig. 29). It should be noted, however, that the most natural approach from the west would have been through the small valley between Hills 2 and 3, and this approach, along with that from the Gate Area (both also following modern foot-paths) would lead one directly to the central portion of the East Wall.

would have led through this central portion of the East Wall into Room I, from which access into the other rooms was provided by the doorways in Walls 1 and 2.

The finds encountered on the floors (where preserved) are listed more fully below, providing some information for the function of each room. The central, and most impressive one was the long hall Room I, with its red and white-painted plaster walls. Access to Room IV, and from there into Room V, was provided by the doorway in Wall 2. The larger Room IV had a well shaft cut into its SE corner, while the smaller Room V had a terracotta barrel oven preserved *in situ* near the NW corner. The latter, along with ample traces of burning, established its function as a kitchen. As noted above, the blackening of the walls of the room, especially in its SW corner, along with traces of burnt debris on the floor, were most probably the result of cooking, although the possibility of a more substantial fire, confined to this room only, cannot be categorically dismissed. Together, Rooms IV and V would have been largely used for the preparation of food and perhaps also for storage. Although the well in Room IV suggests that the space may have been an open courtyard rather than a roofed room, such a possibility seems less likely on account of the packed mud floor which would require continual re-laying following rain, and especially the fact that collapsed roof-tiles were found on the floor.[159]

Unfortunately, little was preserved of Room II above floor level and nothing of Room III. The larger square, Room II would almost certainly have had plaster wall faces, although the situation in Room III in this respect remains less certain. Given the lack of evidence about the use of Rooms IV and V, it is tempting to speculate that Rooms II and III may have been used as bed rooms and living rooms. A specific, non-variable, function for each architectural unit should not, however, be assumed.

ROOM I (CENTRAL HALL)

Internal dimensions: 10.60 x 4.80 m.
External entrance probably from the east.
Stratigraphical sequence: Removal of topsoil (Deposit type 1) and wash levels (Deposit types 2a and 2b), revealed building collapse debris (Deposit type 3) mostly confined to the western portion of the room, whereas to the east removal of Deposit type 2 in Trenches 4 and 7 revealed the sub-floor packing, Deposit type 5a. Clearance of Deposit type 3 in Trenches 5, 6, 8 and 11 brought to light the floor deposit (Deposit type 4); the floor make-up itself was largely left unexcavated. Sub-floor packing (Deposit type 5) was met below Deposit type 4 in parts of Trenches 6 and 11.

[159] Open courtyards of Greek houses are often paved with stone or pebbles set in a clay matrix, see, among others, Jones *et al., op. cit.* (*supra* n. 145) 366ff. At Olynthos open courtyards are often lined with hydraulic cement, *Olynthus* VIII.

DEPOSIT SUMMARY

Deposit type 3.[160] Diagnostic pottery primarily of the 4th century B.C., with a sprinkling of 6th and 5th century B.C. material. One fragment of West Slope Ware, dated to the late 2nd century B.C., is probably intrusive.

Catalogued items:

Corinthian pottery:	**6.3**.
Black-glaze:	**9.71**.
West Slope Ware:	**11.4.**

Inventoried items not in catalogue:

Corinthian pottery:	1 handle fr.: 76.448.
Black-figure:	1 body fr.: 76.418; 1 rim fr.: 76.419.
Black-glaze:	3 base frr.: 76.69, 76.417, 76.436; 1 rim fr.: 76.22; 1 body fr.: 76.414.
Painted pottery:	1 base fr.: 76.71; 3 rim frr.: 76.19, 76.23, 76.422.
Coarse-ware pottery (including amphorae):	4 base frr.: 76.21, 76.24, 76.25, 76.72; 4 rim frr.: 76.20, 76.48, 76.73, 76.423; 2 body frr.: 76.13, 76.68.
Roof-tiles:	76.62, 76.63, 76.64, 76.65, 76.66, 76.103, 76.396, 76.400, 76.401, 76.402, 76.403, 76.404.

More pottery in context lots, primarily small quantity of black-glaze and coarse-ware pottery; 13 roof-tile frr. kept as samples in addition to those inventoried.

Thrown:	40.79 kgs. roof-tile frr.; 3.65 kg. non-identifiable sherds; total = 44.44 kgs.

Deposit Type 4.[161] The floor level in Room I was only preserved in its western portion. In addition to roof-tiles found smashed on the floor and fragments of fallen plaster, there was little in the way of well-preserved finds *in situ*. Most notable are three black-glaze bowls, including the fragmentary **10.79** which dates within the limits of 375 and 325 B.C.; the other two more fragmentary bowls, 76.395 and 76.397, are evidently contemporary. The remainder of the sherd material, which was minor in quantity, may represent intrusion from Deposit type 3; among the latter there was a marked predominance of cooking-ware fragments. One loomweight was also found.

Catalogued items:

Stamped black-glaze:	**10.79**.
Amphora:	**13.33**.

[160] Deposit type 3 in Room I incorporates the following excavation unit numbers: TR4 (2); TR7 (2); TR11 (3); TR6 (3); TR8 (2); TR8 (3); TR5 (3); TR5/8 Baulk (3).

[161] Deposit type 4 in Room I incorporates the following excavation unit numbers: TR11 (4); TR8 (4); TR5 (5); TR8/11 baulk (6); TR11/7 Baulk (4).

Inventoried items not in catalogue:

Black-glaze:	2 rim frr.: 76.395, 76.397.
Coarse-ware:	1 body fr.: 76.407.
Loomweight:	76.406.

Minor quantity of sherds stored in context lots, including 5 roof-tile fragments.

Thrown:	5.30 kgs. roof-tile frr.; 0.85 kg. non-identifiable sherds; total = 6.15 kgs.

Deposit Type 5a.[162] Recovered material very fragmentary and particularly worn; diagnostic fragments of Classical date, including quite a few fragments of black-glaze, few of which - if any - could be precisely dated.

Inventoried items not in catalogue:

Black-glaze:	7 base frr.: 76.49, 76.53, 76.55, 76.59, 76.97, 76.424, 76.426; 4 rim frr.: 76.56, 76.57, 76.428, 76.430; 1 handle fr.: 76.26.
Painted pottery:	1 base fr.: 76.429.
Coarse-ware:	2 base frr.: 76.50, 76.60; 3 rim frr.: 76.58, 76.425, 76.427; 1 handle fr.: 76.54.
Cooking-ware:	2 rim frr.: 76.51, 76.52.
Pithos:	1 rim fr.: 76.61.

Similar material, in very small quantity, stored in context lots, including two roof-tile fragments.

Thrown:	0.92 kg. small roof-tile frr.; 0.55 kg. non-identifiable sherds; total = 1.47 kgs.
Sea-shell:	1 only.

ROOM II (SQUARE ROOM)

Internal dimensions: 6.80 x 6.80 m.
Internal entrance from door in Wall 1.
Stratigraphical sequence: Only a very small portion of the room was excavated on account of the gradient of the slope. Removal of topsoil and wash levels (deposit types 1 and 2) revealed building collapse debris, deposit type 3, below which the floor deposit, deposit type 4, was encountered especially along the north face of Wall 1 (Pls. 25 e, 26 c). In the northern parts of both Trenches 9 and 12 the sub-floor packing, Deposit type 5a, was met and partially cleared; sub-floor packing was also partially excavated in the northern portion of Trench 6 in order to expose more fully the Wall 1 threshold.

[162] Deposit type 5a in Room I incorporates the following excavation unit numbers: TR4 (4); TR6 (5); TR7 (2) - (3); TR11 (6).

DEPOSIT SUMMARY

Deposit type 3.[163] Very little material recovered, totalling 3 coarse ware body sherds and 0.95 kg. roof-tile fragments; the latter were discarded.

Deposit type 4.[164] Of the diagnostic material recovered all was Classical, but little could be precisely dated, although much appears to be of the 4th century B.C. Notable among the finds were two fragmentary lead sheets 76.12 and 76.876, similar in appearance to the inscribed lead sheet **19.1**, but themselves preserving no clear traces of lettering. There were also two loomweights.

Catalogued item:

Amphora: **13.28**.

Inventoried items not in catalogue:

Black-glaze: 1 base fr.: 76.75; 2 rim frr.: 76.76a-b; 1 body fr.: 76.77.
Loomweights: 76.17, 76.18.
Lead sheets: 76.12, 76.876.
Roof-tile: 76.74.
Very small quantity of pottery and one roof-tile fragment stored in context lots.

Thrown: 1.35 kgs. roof-tile frr.; 0.10 kg. non-identifiable sherds; total = 1.45 kgs.

Deposit type 5a.[165] Little pottery was recovered from the sub-floor packing and less which could be dated precisely; of the latter, the black-glaze skyphos fragment **9.35** belongs to the first half of the 4th century B.C.

Catalogued item:

Black-glaze: **9.35**.

Inventoried items not in catalogue:

Black-glaze: 1 base fr.: 76.432.
Coarse-ware: 2 rim frr.: 76.78, 76.433.
Eight very small fragments of pottery stored in context lots.

Thrown: 0.42 kg. small roof-tile frr.; 0.31 kg. non-identifiable sherds; total = 0.73 kg.

[163] Deposit type 3 in Room II incorporated the following excavation unit numbers: TR5 (3) (North of Wall); TR9 (3); TR12 (2); TR12/6 Baulk (3).
[164] Deposit type 4 in Room II incorporated the following excavation unit numbers: TR5 (4); TR6 (4); TR9 (4) - (5); TR12 (4); TR12/6 Baulk (3) - (4).
[165] Deposit type 5a in Room II incorporates the following excavation unit numbers: TR6 (6); TR9 (6).

ROOM III (NE ROOM)

Internal dimensions: 6.80 x 3.10-3.25 m.[166]
Entrance not preserved; internal entrance from Room II probably in Wall 3.
Stratigraphical sequence: Excavation quickly revealed the sub-floor packing deposit type 5a; the preserved top of Wall 3, along with the North and East Walls at this point, were below floor level. Only a very small portion of the room was excavated.

DEPOSIT SUMMARY

Deposit type 5a.[167] Considering the small area actually excavated, the deposit yielded quite a lot of material which was mostly very fragmentary and extremely worn; identifiable pottery included sherds of the 5th century B.C. as well as a sprinkling of earlier Archaic fragments. Among the latest diagnostic pieces were the red-figure sherds, **8.126** and **8.141**, the former dated to 450-375 B.C., the latter to 375-350 B.C.; also the black-glaze olpe fr., **9.205**, dated 375-325 B.C.

Catalogued items:

Attic black-figure:	**7.1.**
Red-figure:	**8.126, 8.141.**
Black-glaze:	**9.205.**
Metal object:	**18.115.**

Inventoried items not in catalogue:

Black-glaze:	7 base frr.: 76.408, 76.409, 76.450a, 76.456, 76.457, 76.458, 76.459; 1 handle fr.: 76.33; 4 rim frr.: 76.28, 76.29, 76.38, 76.405b.
Painted pottery:	4 base frr.: 76.27, 76.30, 76.42, 76.43; 6 rim frr.: 76.32, 76.35, 76.36, 76.461, 76.464, 76.465; 1 lid fr.: 76.40.
Coarse-ware:	4 base frr.: 76.31, 76.34, 76.37, 76.46; 8 rim frr.: 76.39, 76.41, 76.44, 76.47, 76.454, 76.460, 76.462, 76.463; amphora handle fr.: 76.28.
Pithos:	1 base fr.: 76.45.
Loomweight:	76.452.
Metal object:	1 nail: 76.449.

Similar range of material stored in context lots, including two roof-tile fragments.

Thrown:	11.17 kgs. small roof-tile frr.; 1.0 kg. non-identifiable sherds; total = 12.17 kgs.

[166] Wall 3 was slightly diagonal to the line of the East Wall, resulting in the width of the room varying from 3.10 m. towards the north to 3.25 m. towards the south. This alignment of Wall 3 did not affect the internal dimensions of Room II on account of the varying width of the West Wall (Fig. 29).
[167] Deposit type 5a in Room III incorporates the following excavation unit numbers: TR13 (4); TR4 (3) and (5).

ROOM IV (SE ROOM)

Internal dimensions: 7.55 x 4.20 m.
Internal entrance from doorway in Wall 2.
Stratigraphical sequence: The removal of topsoil and wash levels (deposits type 1 and 2) exposed collapsed building debris, deposit type 3, primarily concentrated against the east face of Wall 4 (Fig. 30 b) and against the north (internal) face of the South Wall (Pl. 27 d). Clearance of deposit type 3 uncovered the floor level (deposit type 4); in the NE corner of the room the floor level was exposed with the clearance of deposit type 2b. The well-shaft located in the SE corner (Pl. 28 a-c) was excavated to a depth of 4.02 m.; the cutting for the upper shaft of the well, at the level of the floor, had a diameter as great as 2.15 m., narrowing down to 1.19 m. at the point where excavation was concluded. The circular cutting for the shaft and its diameter was more consistent with wells such as those in the Athenian Agora,[168] rather than the "silos" of Olynthos.[169] The well had been filled in Antiquity, and although excavated in four vertical passes, there was little apparent stratification. An animal skull, together with other bones, was met at a depth of 1.60 m.; three limestone blocks were uncovered at 2.20 m. and a further two at 4.0 m.; a near complete skeleton of a dog was revealed at 3.50-3.60 m.,[170] while a smashed, but near complete, bee-hive was encountered at about 4.0 m. The remainder of the dumped fill of the well is listed below; excavation did not exhaust the fill, nor was water level reached.

DEPOSIT SUMMARY

Deposit type 3.[171] The small quantity of diagnostic material recovered was of the 4th century B.C. Nothing catalogued.

Inventoried item not in catalogue:

Black-glaze: 78.245.
Very small quantity of coarse-ware pottery and some black-glaze stored in context lots, together with 10 roof-tile frr.

[168] The numerous wells in the Athenian Agora normally comprise a wide upper shaft which narrows with depth to a consistent diameter, usually in the vicinity of slightly over 1.0 m.; *cf. Agora* VIII, 107 fig. 7 for a section through a typical well, and see further the diameters of wells noted in the index of deposits (pp. 125-131), especially B 18:6 (depth 5.50 m.; diam. *ca.* 1.20 m.); D 11:5 (depth 16.95 m.; diam. 1.90 m.); I 14:1 (depth 10.45 m.; diam. over 1.0 m.); J 14:5 (depth 5.0 m.; diam. 1.25 m.); J 15:1 (depth 6.50 m.; diam. *ca.* 1.10-1.20 m.); J 18:8 (depth 3.10 m.; diam. 1.15 m.); K 9:1 (depth 3.60 m.; diam. 1.20 m.); L 18:2 (depth 4.55 m.; diam. 1.50 m.); M 11:3 (depth 6.0 m.; diam. 1.10 m.); N 11:3 (depth 5.05 m.; diam. 1.0 m.); O 12:1 (depth 6.70 m.; diam. 1.10 m.); P 7:2 (depth 7.20 m.; diam. 1.15 m.); P 14:2 (depth 4.90 m.; diam. 1.40-1.50 m.); Q 12:2 (depth 5.65 m.; diam. 1.10 m.); R 8:2 (depth 10.80 m.; diam. at bottom 0.88 m.); R 12:2 (depth 2.50 m.; diam. 1.10 m.); R 17:3 (depth 7.20 m.; diam. 1.05 m.); S 19:7 (depth 10.50 m.; diam. 0.97 m.).
[169] Often referred to as "granaries" in the *Olynthus* vols. I-XIV, *passim.*
[170] Pl. 28 b.
[171] Deposit type 3 in Room IV incorporates the following excavation unit numbers: TR14 (3); TR15 (3).

Thrown:	1.55 kgs. roof-tile frr.; 1.18 kgs. non-identifiable sherds; total = 2.73 kgs.
Bone:	1 small bag of animal bone recorded.

Deposit type 4.[172] Prominent among the identifiable fragments recovered from the floor were a number of black-glaze bowls dating to the later 4th century B.C. including **10.78** (dated *ca.* 375-325 B.C.) In addition, 11 frr. preserving portion of a cooking-ware lid (78.246) may be noted and an iron nail (78.520).

Catalogued items:

Black-glaze:	**9.195, 9.198**.
Stamped black-glaze:	**10.78**.
Domestic Pottery:	**12.63**.

Inventoried items not in catalogue:

Black-glaze:	4 base frr.: 76.438, 76.439, 76.614, 78.519; 1 rim fr.: 76.392; 1 body fr.: 76.879.
Painted pottery:	1 base fr.: 76.410.
Amphorae:	2 base frr.: 76.545, 78.979.
Cooking-ware:	1 fragmentary lid: 78.246.
Loomweight:	76.440.
Metal object:	1 iron nail: 78.520.

Similar range of material stored in context lots; 50 roof-tile frr. kept as samples.

Thrown:	12.80 kgs. roof-tile frr.; 2.68 kgs. non-identifiable sherds; total = 15.48 kgs.

The Well in the SE Corner. Excavated in four vertical passes designated TR14 (5), (6), (7), and (8). The diagnostic material recovered from the dumped fill was exclusively of the second half of the 4th century B.C. and almost certainly from the very latest years of that century. There was no apparent stratification. Excavation of the shaft was concluded at a depth of 4.02 m. below floor level, at which point the dumped fill was not exhausted, nor had water level been reached. Notable among the finds was the near complete bee-hive (78.3762, Fig. 32), the semi-complete amphora, **13.16**, as well as a significant quantity of animal bones. The latter included the skeleton of a dog (Pl. 28 b-c) at a depth of 3.50-3.60 m., in addition to more fragments of animal bone, including a skull, at a depth of 1.60 m.[173]

Catalogued items:

Amphorae:	**13.16, 13.17**.

[172] Deposit type 4 in Room IV incorporates the following excavation unit numbers: TR7 (4); TR11 S Ext. (5); TR11/7 Baulk S of Wall 2 (5); TR14 (4); TR15 (4).

[173] A comprehensive report on the animal bone remains from Torone is to be published separately elsewhere. The identification of species presented here is the work of the late Professor Sandor Bökönyi.

Inventoried items not in catalogue:

Amphorae:	2 body frr.: 78.1216, 78.521.
Bee-hive:	Near-complete: 78.3762.

A few fragments of black-glaze and some coarse-ware sherds stored in context, in addition to two roof-tile fragments.

Thrown:	3.33 kgs. small roof-tile frr.; 2.05 kgs. non-identifiable sherds; total = 5.38 kgs.

Animal bone (all animal bone kept):

According to the late Professor S. Bökönyi, the well yielded a total of six dog skeletons (five with skulls), in addition to small pieces of sheep and goat bones. The break-down according to unit numbers is as follows:

(5)	2 dog skulls with incomplete skeletons; dog skull plus mandible.
(6)	Incomplete dog skull and skeleton.
(7)	Dog skull and incomplete skeleton.
(8)	Fragmentary skeleton without skull.

ROOM V (KITCHEN)

Internal dimensions: 4.20 x 2.6O m.
Internal entrance from Room IV.
Stratigraphical sequence: The best preserved of all rooms with perhaps the most informative sequence. Removal of topsoil and wash levels (deposit types 1 and 2) revealed a significant layer of collapsed building debris (deposit type 3), excavated to a maximum depth of 1.12 m., at which point the floor deposit (deposit type 4) was revealed (Fig. 30 b). Notable finds on the floor include the terracotta barrel oven **12.65** *in situ* near the NW corner of the room (Fig. 31 e; Pls. 28 f, 29 a) and the bronze coin **20.20**, being a posthumous issue of Alexander the Great (*ca.* 323-310 B.C.). Areas of burnt debris were encountered on the floor, in addition to blackening of the walls, especially at the SW corner, to a height of at least 70 cm. above floor level; these traces of fire are best seen as the result of cooking.[174]

DEPOSIT SUMMARY

Deposit type 3.[175] The small quantity of diagnostic material recovered was of the 4th century B. C.

Catalogued items:

Amphora:	**13.34.**
Metal object:	**18.84.**

[174] The possibility, mentioned above, of a more substantial fire confined to this room only, seems unlikely.
[175] Deposit type 3 in Room V incorporates the following excavation unit numbers: TR8 (5); TR16 (3); TR16 Baulk (3).

Very small quantity of coarse-ware pottery and a black-glaze kantharos spur handle stored in context lots, together with 16 roof-tile fragments.

Thrown:	5.0 kgs. of roof-tile frr.
Shell:	1 land-snail shell.

Deposit type 4.[176] All of the material recovered from the floor was exclusively of the late 4th century B.C. including the posthumous issue of Alexander the Great (**20.20**), dated 323-310 B.C. The function of the room as kitchen was established by the oven **12.65**, burnt debris on the floor in addition to frr. of animal bone (which were rare in other rooms).

Catalogued items:

Black-glaze:	**9.164**.
Domestic pottery:	**12.65**.
Amphorae:	**13.31**, **13.42.**
Coin:	**20.20**.

Inventoried items not in catalogue:

Black-glaze:	3 rim frr.: 76.416, 78.1329, 78.1330; 1 body fr.: 78.1331.
Coarse-ware:	1 base fr.: 76.615; 1 rim fr.: 78.1333; 1 body fr.: 78.1328; other: 78.975.
Roof-tile:	1 fr.: 78.1332.

Similar range of material stored in context lots as well as 28 complete and fragmentary roof-tiles.

Thrown:	21.95 kgs. roof-tile frr.; 4.05 kgs. non-identifiable sherds; total = 26 kgs.
Bone:	1 bag animal bone recorded.

UNSTRATIFIED FINDS FROM STRUCTURE 3.

Loomweight:	78.1477.
Coins:	**20.16**, **20.17** (both Philip II [359-336 B.C.]).

CONCLUDING REMARKS : THE DATE OF STRUCTURE 3 AND ITS ABANDONMENT

Of the individual houses that have been investigated thus far, the plan of Structure 3, though only partially preserved, is perhaps the most interesting. The building is rectangular with external measurements of 18.20 x 11.80 m. In plan it is neither consistent with the *pastas* type of house so common at Olynthos and else-

[176] Deposit type 4 in Room V incorporates the following excavation unit numbers: TR8 (6)-(7); TR8/16 Baulk (4); TR16 (4).

where,[177] nor with the *prostas-oikos* type as seen especially at Priene.[178] The apparent, though not certain, absence of a courtyard and porch is a noteworthy feature.[179] Moreover, the plan of Structure 3 does not appear to be consistent with the lay-out of the so-called "Herdraumhäuser" as defined by Hoepfner and Schwandner, thought to be prevalent in north-west Greece, particularly at the site of Kassope.[180] It should be stressed, however, that such formally defined house-types are more a feature of cities planned on the Hippodamian system and there is no evidence for such town-planning at Torone.

The construction of Structure 3 was of mud-brick on a stone socle. It should be noted, however, that there is, generally speaking, a much greater use of stone in domestic architecture at Torone than at nearby Olynthos, and that in many cases a good deal of care and skill was involved in the masonry of the Torone house walls.[181] This is clearly seen in the construction of the north wall of Structure 3, the masonry style of which so closely resembles that of the fortication wall nearby. There are many other differences in general plan and in architectural details between the houses of Olynthos and Torone, some of which are determined by the different physical settings of the two sites, as well as the availability of raw materials.

Of the internal furnishing of the building, little can be said on account of the fact that a large part of the structure was only preserved below floor level, and also because the building appears to have been systematically cleared at the time of its abandonment (see below). Assigning labels or establishing the function of each room or internal division on the basis of small finds is therefore difficult. The exception to this is Room V with the barrel oven (**12.65**) found *in situ,* along with traces of fire, establishing its function as a kitchen. Of interest is also the nearly complete bee-hive encountered in the fill of the well in Room IV. Although no other bee-hives are presented in this volume, the occurrence of bee-hive fragments in Classical and Roman deposits, particularly from later campaigns at the site, is noteworthy. The bee-hive is illustrated in Fig. 32; it may be described as follows:

[177] For *pastas* houses see especially J.W. Graham, *Phoenix* 20 (1966) 4 f.; Jones *et al., op.cit. (supra* note 145) 430 ff.; also B.C. Rider, *The Greek House* (1916) 229f.

[178] Graham, *op. cit.* (*supra* n. 177) 5; T. Wiegand and H. Schrader, *Priene. Ergebnisse der Ausgrabungen und Untersuchungen in den Jahren 1895-1898* (1904) 285-328.

[179] *Cf.* Vitruvius, *De Architectura* VI.c.7,1; Apollonius Rhodius I. 789.

[180] W. Hoepfner and E.L. Schwandner, *Haus und Stadt im klassischen Griechenland* (1986) 108-114, 267-270 and (1994) 146 f., 156, 160, 322 f.

[181] *Cf.* A. Cambitoglou, *PAE* 1982, pl. 53β.

BEE-HIVE. Wheelmade (78.3762)
H. 0.546; D. (rim) 0.374; D. (at top) 0.300.
Many joining frr. reconstructed and partially restored; near complete except for about one quarter of the rim and portion of the body near rim. Surface on exterior somewhat worn.
Clay coarse with many small white inclusions and much silver and golden mica. Clay and surfaces evenly fired close to light red and red 2.5YR 6/6-5/6; surface on exterior partially blackened at points only.
Rim knobbed, almost square in profile; lower body flaring out slightly to point of max. D; upper body sloping slightly in; flat top.
Interior surface bears series of vertical striations, especially prominent on one side, with several deeper gouges and many lightly incised lines in between.
Exterior surface smoothed but worn.
A detailed account of bee-hives and bee-keeping in the Classical period is presented by J.E. Jones *et al., BSA* 68 (1973) 397-414, including bee-hives similar to 78.3762. It should be noted that bee-keeping is still a thriving industry in Sithonia and elsewhere in the Chalkidike.

The important deposits for the date of construction of Structure 3 and of its subsequent use are: the sub-floor packing deposit type 5 (which also constitutes the fill of the foundation trenches) and the floor levels of the various rooms (deposit type 4). The material recovered from the latter was consistent: a number of black-glaze vessels, primarily bowls but also some fishplates and kantharoi, which could all be dated to the last quarter of the 4th century B.C. This date was further verified by the posthumous bronze issue of Alexander III (**20.20**; 323-310 B.C.) found on the floor of the kitchen (Room V). No other coins were encountered *in situ,* but worth noting are three bronze issues of Philip II (359-336 B.C.), **20.11**, **20.16** and **20.17**. The first was found in topsoil; the other two were unstratified. They were, however, excavated in the course of 1978 and definitely derived from deposits type 1, 2, 3 or in Rooms IV and V.[182] Where excavated, the sub-floor packing, deposit type 5, yielded a quantity of sherds, all of which were particularly fragmentary and much worn. The diagnostic material included some 5th century B.C. pottery with a sprinkling of earlier wares, but the latest material belonged to the 4th century B.C. Of the latter, a number of worn black-glaze fragments belonged to the first half of the century, while a few fragments may belong to the second half. The combined evidence of deposits type 4 and 5 would narrow the construction date of the building to the second half of the 4th century B.C. and probably to the years of the later third or early fourth quarter of that century. As for the abandonment of the building, none of the material on the floor was later than *ca.* 300 B.C., while the pottery recovered from the collapsed debris (deposit type 3) dated consistently to *ca.* 325-300 B.C. Similarly, there was nothing

[182] They were recovered from the sieve.

later than *ca.* 300 B.C. from the topsoil and the wash levels (deposits type 1 and 2); it would therefore be reasonable to conclude that the building was occupied for a relatively short period in the last quarter of the fourth century B.C.

Concerning the abandonment of the building two facts should be taken into consideration. The first is that with the exception of the terracotta barrel oven found in Room V, the material recovered from the floor deposits that had survived in that room, in Room IV and in the western portion of Room I - little was preserved of the floor deposits in Rooms II and III and in the eastern portion of Room I - was meagre and fragmentary.[183] The second fact is that the dumped fill of the well-shaft comprised the smashed but nearly complete bee-hive 78.3762 (Fig. 32), the fragmentary amphora **13.16**, some late fourth century sherds together with the skeleton of a dog and the bones of another animal (or animals). The pottery recovered from the well-shaft showed that its fill could have been dumped at the time of the construction or occupation of the building, but the fact that the shaft did not appear to be covered with the packed mud of the floor make-up, suggested that the well must have been in use or open at least during the greater part of the occupation of the building. Furthermore, since the shaft was overlain by fallen tiles from the roof at floor level, it should have been filled prior to the collapse of the roof and presumably not much later than the abandonment of the building.

The lack of great quantities of material from the floor surfaces of Rooms IV and V suggests that the inhabitants of Structure 3 cleared the building of its contents before abandoning it, leaving behind only some unimportant objects. In the light of the evidence obtained about the habitation of Torone in general, not only from the first three seasons dealt with in this volume but also from subsequent digs, it is clear that the occupation of the city shrank during the Hellenistic period and was largely confined to the Lekythos and the Isthmus which connected it with its mainland part. It would therefore appear that the abandonment of Structure 3 is not an isolated case but rather part of a massive evacuation of the city caused perhaps by the foundation of Kassandreia by Kassander in 316 B.C.,[184] which Diodorus Siculus mentions.[185] According to that writer, the newly founded city at the site of Poteidaia was populated by Poteidaians, Olynthians and other neighbours from Pallene and outside it.[186]

[183] Contrast the rather more copious quantity of material recovered from the debris of the partially excavated Structure 1.

[184] See especially J.A. Alexander in: B. Laourdas and Ch. I. Makaronas (eds.), *Ancient Macedonia. Papers Read at the First International Symposium held in Thessalonike, 26-29 August 1968* (1970) 127.

[185] XIX 52:2.

[186] See further M. Zahrnt, *Olynth und die Chalkidier* (1970) 112-121.

Although the Toroneans are not named as one of the groups that had to move to the new city, it is possible that the population of Torone was one of the foundation groups.

The contraction of the population of Torone and its concentration on the Lekythos so soon after the construction of its huge fortification system in the latter part of the fourth century B.C. can only be explained by the dramatic political changes in Chalkidike and more generally in Greece following Alexander's conquests in the East.

4. THE ISTHMUS (1976 and 1978)

Grid reference: 3D-3E, 4E-4F

INTRODUCTION

The Isthmus forms the natural bridge between Promontory 1 (the Lekythos) and the main part of the site,[187] and is one of the more extensive areas of level ground within the Archaic and Classical city.[188] At its most narrow point it measures 43 m. across and provides the most direct access to the main harbour of Torone to the NE, as well as to the small bay immediately to the SW. The latter, both sheltered and easily defended, may have been used in Antiquity as a second harbour where ships could be beached.[189] The location of the Isthmus with regard to Promontory 1, the Classical City Wall C, the constructed feature thought to be a landing platform or gate (Fig. 5 b), and the sheltered bays on either side suggested that the area was a focal part of the site and conceivably one of the more important civic areas. It was here, in the winter of 424/3 B.C., that the battle between the Athenians and Spartans was fought after the Athenians, and their allies among the Toroneans, had taken refuge on the Lekythos, and it was here too that Brasidas brought up his siege engine.[190]

[187] Thucydides IV.113, 2.

[188] For preliminary reports on the excavations at the Isthmus see A. Cambitoglou, *PAE* 1977, 125-134; *PAE* 1978, 86-91.

[189] This small bay is particularly sheltered from the north winds, though not from those of the south and west.

[190] Thucydides IV.115. For Brasidas' siege engine and the battle fought between the Athenians and Spartans see, among others, F.E. Winter, *Greek Fortifications* (1971) 308 n. 61; Y. Garlan, *Recherches de poliorcétique grecque,* BEFAR Vol. 223 (1974) 88, 125-127, 141, 148-149, 169, 275-276 (discussion under "Torone" and "Lekythos"); A.W. Lawrence, *Greek Aims in Fortifications* (1979) 55, 57.

The area of the Isthmus was surveyed and partially cleared of dense growth of shrubs at the beginning of the 1976 season (Pl. 29 d-e).[191] The preserved remains of several buildings were clearly visible above surface prior to excavation and a number of these are indicated on the sketch plan Fig. 33 as Structures A-F. Surface pottery was abundant, varying in date from the Archaic through the Post-Byzantine periods, with heavy concentrations of Classical, Late Roman and Post-Byzantine sherds. Three trial trenches were laid out and partially excavated during the 1976 season (Pl. 30 b, d-g): TR1 tr1, TR1 tr2, and TR2 tr1 (Fig. 34 a-b).[192] Their excavation was continued in 1978, at which time a further six trenches were laid out and partly dug: TR1 tr3, TR2 tr2, TR3 tr1, TR3 tr2, TR4 tr1, and TR4 tr2 (Fig. 35; Pl. 36 g), bringing the total to nine trenches.[193] All nine trenches should be viewed as trial trenches inasmuch as the main aim of their excavation was to test for the nature of occupation and its chronological range in this area. Accordingly, exposed walls were not removed and consequently the area available to investigate diminished as greater depth was reached. Of the buildings partly visible above ground surface prior to excavation, only a portion of Structures A, B, and E (see below) fell within the excavated area and no attempt was made to investigate fully any of them, nor any of the earlier structures encountered at lower levels. Excavation quickly revealed good depths of deposits and a complex stratigraphical sequence associated with several building phases. With one minor exception, bedrock was not reached in any of the trenches opened and a full account of the cultural horizons in this part of the site could not be established. Such an account will only prove possible when excavation here is greatly extended. Nevertheless, the trial excavations of 1976 and 1978 showed the Isthmus to have been a densely inhabited part of the site from perhaps as early as the Archaic period through to the later Post-Byzantine era, yielding a very large quantity of pottery and other small finds. The continual process of excavation over the centuries for

[191] Grid co-ordinates are indicated on the plan Fig. 2.

[192] Their dimensions were as follows: TR1 tr1, 2.5 x 4.0 m.; TR1 tr2 was originally sited as a 2.50 x 5.50 m. trench, but was later extended to 2.70 x 5.50 m.; TR2 tr1 was originally cited as a 5.0 x 2.50 m. trench, but was later extended to 7.70 x 2.50 m.

[193] The dimensions of the trenches laid out in 1978 are as follows:

TR1 tr3: 4.12 x 2.63 m. on the east side and 4.12 x 2.35 m. on the west side;
TR2 tr2: 4.80 x 3.0 m., but with a 1.20 x 1.70 m. extension on the west side in order to expose more fully a well-shaft (see below);
TR3 tr1: 3.80 m. along the south side, the other three sides being determined by the layout of Structure B;
TR3 tr2: 4.90 x 3.90 m., but extended slightly to the south in order to expose the north face of Structure B;
TR4 tr1: 4.60 x 2.95 m.;
TR4 tr2: 3.95 x 2.95 m.

foundation trenches, wells and rubbish pits, coupled with stone-robbing and general clearance of earlier structures, involved considerable displacement of material.[194] Many small finds were therefore found out of their original context and, indeed, the later a deposit or stratigraphical unit, the more likely it was to contain earlier material. With the earlier deposits encountered this dilution naturally decreased but was still apparent throughout.[195] This situation, coupled with the discovery in the lowest levels reached of a very small quantity of Geometic pottery, and a few possible sherds of Bronze Age date, would indicate earlier periods of occupation than those actually exposed.

There were five main phases of occupation revealed by the end of the 1978 campaign. Since bedrock was only reached at one small point in TR1 tr3, and since there may be considerable depths of earlier deposits elsewhere, these phases have been numbered I - V, beginning with the latest (Phase I).

PHASE I consists of the preserved remains of buildings visible above surface prior to excavation. Of these, six were labelled Structures A-F and indicated in plan on Fig. 33; more buildings were noted in the heavy growth of bushes to the east and west. As stated above, three of these structures (A, B and E) fell partly within the area excavated. Deposits associated with these buildings, including a number of refuse pits, established a Post-Byzantine date for them. On the basis of coins and other datable material, such as clay tobacco pipes,[196] recovered from associated deposits, Phase I appears to be not earlier than the 16th century A.C., while its upper chronological limit may have extended into the 18th or early 19th century.[197]

PHASE II consists of thick strata of what was evidently hill wash, particularly apparent in TR1 tr1, TR1 tr2, and TR2 tr1 and best seen in the east scarp section of

[194] *Cf.* the even more complex sequence encountered on Promontory 1 in the course of the later excavations begun in 1986, A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217, especially 188-190.

[195] *Cf.* G. Webster, *Practical Archaeology: An Introduction to Archaeological Field-Work and Excavation* (1974 ed.) 55-56.

[196] For the chronology of Turkish clay tobacco pipes see J.W. Hayes in P. Davey (ed.), *The Archaeology of the Clay Tobacco Pipe* IV, *Europe* I, BAR Int. Series Vol. 92 (1980) 3-10; R. Robinson, *AM* 98 (1983) 265-285; *ead., Hesperia* 54 (1985) 149-203.

[197] A large quantity of late glazed fine pottery along with various coarse and cooking-wares were recovered from these deposits. In the current state of knowledge, these wares are difficult to date in themselves and can only be generally assigned to the period between the 16th and early 19th centuries A.C. A definitive study of the Byzantine and Post-Byzantine pottery from Torone, particularly that from the well-stratified deposits excavated on Promontory 1 between 1986 and 1990, is being prepared by Pamela Armstrong and will appear as a monograph in the Torone series.

TR1 tr2 as deposits (2) and (3) (Fig. 34 c). These strata were encountered at a higher level towards the east and sloped downwards towards the west at an angle of about 20°. The lowest stratum (deposit [3] on Fig. 34 c) showed considerable signs of burning and yielded a large quantity of Late Roman pottery ranging in date from the 2nd century A.C. through to the years of the early 7th century,[198] along with a small quantity of earlier residual material primarily of Classical date. The uppermost levels contained predominantly Late Roman pottery, a small quantity of Classical sherds and some Post-Byzantine pottery representing intrusive material. There were no architectural features which could be confidently assigned to this phase, though the small stretch of Wall 1 uncovered in the west corner of TR1 tr1 may be of contemporary date (see below; Fig. 35). This evidence suggests that there may have been Late Roman buildings in the unexcavated higher ground to the east and SE.

PHASES III and IV are building phases of the Classical period, distinguishable from each other mainly by the orientation of their architecture, but also by their stratigraphical interrelationship. Phase III buildings are mainly located at the NE end of the excavated area, and include Walls 2, 3, and 4 (Fig. 35); Wall 7 in TR1 tr3, oriented on a more or less similar alignment to Walls 2 and 3, appears to be contemporary.[199] The area between Walls 2 and 3 in TR3 tr1 and TR3 tr2, approximately 1.50-1.80 m. wide, was probably a road or street since traces of a pebble surface were noted in places. This thoroughfare would have provided access from the Lower City and main harbour of Torone to the Lekythos.

The main architectural feature of Phase IV is Wall 10, oriented SW to NE, and exposed to a length of 17.50 m., but clearly extending further on either side. Wall 10 also appears to have been the border of a street, defining the SE side; the NW side was defined by Wall 11, the SE face of which projects slightly from the NW scarp of TR1 tr1.[200] The width between Walls 10 and 11 is approximately 2 m.[201] Between Walls 10 and 11, and on a similar alignment, is Wall 9, parts of which were encountered in TR1 tr1, TR1 tr2 and perhaps also TR2 tr1 (Fig. 35; Pls. 31 d-e, 32 c-d). The wall is more substantial towards the west where it has a maximum width of 0.50 m.; further to east in TR1 tr2, Wall 9 is little more than a single line of small stones with an average width under 0.20 m. The wall has something of a neatly defined SE face,

[198] See below Chapter 14.

[199] Note also the feature designated "Wall 6," only a small part of which was exposed in TR1 tr2.

[200] Since only the SE face of Wall 11 was visible in the scarp of the trench it could not be indicated on the plan Fig. 35.

[201] *Cf.* the width of the thoroughfare between Walls 2 and 3.

but no clear NW face. The latter suggested a retaining wall slightly earlier than Wall 10, though its function remains uncertain. Alternatively, it may have formed part of a water drainage system, under the road level, which is otherwise largely lost.

Wall 7, along with the feature designated "Wall 6" (both assigned to Phase III) clearly overlies Wall 10 of Phase IV. The relationship of Phase III to Phase IV is interesting as it represents a major structural change between the two phases. The earlier Phase IV street defined by Walls 10 and 11, which provided access between the harbour of Torone to the east and the smaller bay to west, appears to have gone out of use sometime during the second half of the fourth century B.C. A large levelling fill, designated the "Amphora Deposit" was subsequently laid in order to raise the ground level to the required height and at least two Phase III structures were built over Wall l0 of Phase IV: that represented by Wall 7 in TR1 tr3, and the building (labelled Structure 1) comprising Walls 3 and 4 in TR3 tr1 and TR3 tr2.[202] During Phase III a new thoroughfare was created, running SE-NW and providing access to Promontory 1. The various buildings of Phases III and IV, along with their associated deposits, are described more fully below. Although Phase III may be dated by its associated deposits, as well as by the levelling fill laid over Phase IV, to the second half of the fourth century B.C., a precise construction date for Phase IV within the Classical period was not established.

The earliest phase uncovered by the end of the 1978 campaign (PHASE V) was confined to the SW of the area under excavation, in TR1 tr3. The only architectural feature associated with it is Wall 8 (Fig. 35; Pl. 32 b), encountered at a level lower than that of Phase III Wall 7, and on a similar but slightly different alignment. Built in a masonry style unlike that of all other walls in the excavated area, Wall 8 clearly terminates towards the NW in such a way that it seems to have been cut by the foundation trench for the construction of Wall 10 of Phase IV. The exact relationship, however, between Wall 8 and 10 was not established because of the fact that the baulk between TR1 tr1 and TR1 tr3 was not excavated. The deposits associated with Wall 8 were not exhausted. Although a good deal of 4th century B.C. pottery was encountered in the area - primarily associated with Wall 7 - a greater quantity of earlier Classical and Archaic pottery and other small finds was recovered in the immediate vicinity of Wall 8, including the Gorgon head antefix (**16.43**). Further excavation is required to establish the precise date of Wall 8, but the evidence at hand would suggest an earlier Classical or perhaps even Archaic date for Phase V.

[202] That the structure was built over Wall 10 is clear enough, even though the exact relationship between the two phases was partially obscured by the overlying Post-Byzantine Structure B (Fig. 35).

Two features uncovered in the area under excavation cannot be securely assigned to any of the above phases. The first is Wall 1 uncovered in the West corner of TR1 tr1 (Fig. 35). The wall is clearly later than those of Phases III and IV and predates the nearby Structure A of Phase I. It may be part of the Late Roman Phase II, but the evidence is insufficient for its assignment to a particular period with certainty. The second feature is the well and its associated paving in TR2 tr2 (Fig. 35; Pls. 31 b-c, 33 d). For reasons outlined below, the well is likely to be of a 4th century B.C. date, but it remains uncertain whether it was built in Phase III or IV.

The complex, multi-phased character of the Isthmus and the fact that the very large quantity of fragmentary pottery and other small finds recovered from it was mixed, do not permit the straightforward presentation of the material, as was the case with the Gate Area, Structure 1 and Structure 3. A great part of the datable pottery and the other datable objects was found out of its original context. Consequently, the main deposits are described below according to phases with emphasis put on the material published in Chapters 3-20. The Byzantine and Post-Byzantine pottery and other small finds are an exception to this rule, since their study is not completed and they are not included at all in this volume. This applies also to a few other small finds which are not dealt with in chapters 3 to 20 but are of contextual significance. These small finds and the Byzantine and Post-Byzantine material are listed below by inventory numbers. Because of the great quantity of fragmentary pottery found in the trenches only a brief indication is offered of the total range of material from each deposit.

The respective starting and closing levels above sea level (ASL) at the conclusion of the 1978 season are as follows:

TR1 tr1: Starting level: 4.80 m. ASL
Closing level: 2.63-2.72 m. ASL

TR1 tr2: Starting level: 5.05 m. ASL
Closing level: 2.70 m. ASL

TR1 tr3: Starting level: 4.81 m. ASL
Closing levels: 2.85-3.17 m. ASL

TR2 tr2: Starting level: 4.69 m. ASL
Closing level: 3.53 m. ASL

TR3 tr1: Starting level: 4.86-4.90 m. ASL

TR3 tr2: Starting levels: 5.28-4.59 m. ASL

TR4 tr1: Starting levels: 4.82-4.63 m. ASL

TR4 tr2: Starting levels: 5.02-4.63 m. ASL

ISTHMUS PHASE I (Post-Byzantine)

During the surface cleaning operations conducted at the beginning of the 1976 campaign, the preserved remains of a number of buildings were clearly visible above the modern surface. Of these, six were labelled Structures A-F and are indicated on the sketch plan Fig. 33.[203] Their approximate dimensions, as recorded prior to excavation, are as follows:

Structure A:	6.50 x 5.20 m.+
Structure B:	8.00 x 5.00 m.
Structure C:	8.00 x 4.40 m.
Structure D:	9.30 x 6.50 m.
Structure E	8.00 x 7.80 m.
Structure F:	13.00 x 5.20 m.

With the exception of Structures E and F, no internal divisions were apparent in the buildings as exposed, and most appeared to be single-roomed.[204] Small finds recovered from those structures which were partially excavated (see below) would suggest that Structures A, B, and perhaps E were domestic.[205] Similarly, Structures C and D appeared to be domestic, and only Structure F differed from the other five. The latter is considerably longer and, in proportion, less wide than Structures A-E; moreover, a substantial lime mortar was used in its construction, whereas the remaining structures were built of dry rubble masonry. The identification of Structure F as a fountain house was made by the Byzantine Ephoreia who conducted independent cleaning operations around the building.[206]

The walls of Structures A-E were constructed of a variety of stone, largely unworked or only very roughly hewn. In the buildings that were partially excavated, there were no clear indications of a second storey, though the possibility of a mezzanine or loft should not be disregarded. Structures A-E were similar to a number of more fully exposed late Post-Byzantine dwellings excavated on Promontory 1

[203] A. Cambitoglou, *PAE* 1977, 125ff. Of the six buildings recorded, only Structure C is not indicated on the plan Fig. 33. Structure C is located in the area between Structures B and D.

[204] A poorly preserved line of stones may represent an internal division of Structure A (Fig. 33), but this could not be precisely determined as the line of stones lay beyond the area under excavation.

[205] Too little of Structure E was exposed to yield a sufficient number of small finds that could indicate its function.

[206] For preliminary notices of the work of the Byzantine Ephoreia at Torone see N. Nikonanos, *AD* 29, B′ 3, 1973-1974 (1980) 770 f., 776; *id.*, *AD* 30, B′ 2, 1975 (1983) 274-276; E. Tsigaridas, *AD* 31, B′ 2, 1976 (1984) 284f; N. Nikonanos, *AD* 33, B′ 2, 1978 (1985) 252-255, pl. 121α-β.

between 1986 and 1990.[207] These buildings are also not unlike a number of simple dwellings (*kalyvia*) built earlier this century at Torone along the beach front not far from the ancient city, in a cluster about 1 km. north of the archaeological site. The latter were noted by Meritt in his survey of Torone in the 1920s.[208] These buildings are modest single-storeyed dwellings built in a variety of stone, including some reused blocks from the ancient city, in dry-rubble technique (ξηρολιθιὰ) and covered by a tiled pitched roof. It should be noted that some of the more recent standing καλύβια have internal divisions built of wattle and daub, but substantial external stone walls. The possibility of the use of wattle and daub internal divisions in the Isthmus Structures A-E cannot be overlooked, in spite of the lack of evidence for their existence in the excavated area.

Structures A, C and D were all oriented N-S, on a similar alignment, but Structure B, located between A and C, was on a different orientation (Figs. 33, 35). A consistent overall plan in terms of the orientation of these buildings was not evident. The spaces between buildings, usually two or more metres wide, would have provided ample access to them. The Isthmus Phase I buildings all lay outside the Post-Byzantine fortification of Lekythos.[209]

PHASE I. EXCAVATED STRUCTURES AND ASSOCIATED DEPOSITS

Structure A (Figs. 33, 34 a, 35; Pls. 29 e-f, 30 c)

The NW portion of Structure A formed the boundaries for TR1 tr2 on all sides except the SE (Figs. 33, 34a, 35) so that the upper levels of the trench fell entirely within the building. Built of an admixture of limestone, schist and granodiorite, in an uncoursed masonry with some use of mud bonding, the walls of Structure A have a width of 0.50-0.65 m. and survive to a maximum height of 0.65 m. A few larger, well dressed granodiorite blocks, in secondary use, were more carefully chosen for the foundation course and especially for the corners of the building. The walls were covered with plaster on the interior only, as was shown by large fallen pieces found in Unit 2 (see below), particularly near the NW wall. The plaster is whitish-grey and quite coarse in texture; most pieces show signs of having been affected by fire.

Three main deposits were encountered, designated TR1 tr2 Units 1, 2 and 2a.

[207] Cambitoglou and Papadopoulos, *op. cit.* (*supra* n. 194); Cambitoglou and Papadopoulos, *MeditArch* 3 (1990) 93-142.

[208] B.D. Meritt, *AJA* 27 (1923) 447-460.

[209] See Fig. 2.

Unit 1 represents topsoil which had accumulated over parts of the building.[210] Pottery and other small finds from it were mostly very worn. The largest component of the fragmentary pottery recovered was of Post-Byzantine date, though smaller quantities of Classical and Late Roman material were also recorded, the latter perhaps representing hill wash deriving from the higher ground to the SE.

Unit 2 was a more substantial layer of debris which had accumulated within Structure A after its abandonment. The deposit yielded much pottery, including a good deal of Post-Byzantine material, but also a large quantity of smaller Late Roman sherds; an occasional fragment of Classical pottery was also noted. Characterized by a greyish-brown colour, with a depth of 0.30-0.45 m., Unit 2 yielded a large amount of animal bone and sea-shell, a little slag, in addition to a copious quantity of roof-tile fragments deriving from the collapsed roof of the building.[211] As noted above, Unit 2 also yielded large pieces of plaster fallen from the walls of Structure A.

The floor of the building, designated *Unit 2a*, was particularly well preserved in the NE part of the trench.[212] The matrix of the floor was composed of a hard, friable clay, which lipped up towards the walls of the building and was variously coloured off-white and red.[213] Objects actually found on the surface, as opposed to the fill above, included, among pottery and other small finds, two grossetti from Ragusa and two jettons from Nürnberg dating to the 17th century A.C.[214] There were, in addition,

[210] Topsoil ranged in colour from dark brown to dark grey and was of a loose texture; a good deal of tumble was encountered in it.

[211] The roof-tiles, like all those thus far recovered from Post-Byzantine deposits, are readily distinguishable from tiles of earlier periods. They are made of a light-coloured coarse clay which contains many visible impurities of various sizes. Their undersides are crudely finished, while their uppersides bear heavy finger smears and other finishing marks. The tiles appear to be exclusively curved, following the Corinthian tradition; the degree of curvature can vary considerably. Specifically articulated tiles such as, for example, eaves tiles cannot be identified with certainty among these deposits, nor are there any specifically made pan tiles. Rather, it would appear that a similar roofing system was used in the Post-Byzantine period to the one used today in the standing traditional huts of Sithonia: a pitched roof supported on wooden beams is covered with large reeds, which are, in turn, covered by a layer of mud, into which the tiles are set. There is no distinction in appearance between pan and cover tiles; the same tile could be used upside-down as a pan tile, or the right-way up as a cover tile.

[212] A small baulk was left in 1976 to indicate the level of the floor; this is clearly visible on Pls. 29 f, 30 c.

[213] Drawing, once more, on traditional local building techniques of the past generation, the common method of creating a floor was as follows: the earth inside a newly built hut was given a top-dressing of cow manure (less commonly grass), in order to prevent cracking. The earth and manure were then well-watered, stamped down, and allowed to dry. To this surface a colour wash was applied either of *kokkinochoma* (*terra rossa*, Dr. I.K. Whitbread has identified a source of *terra rossa* within the area of the fortified Classical and Hellenistic city), or of ordinary whitewash. Such floors, when well tended, develop a shiny, durable surface which could easily be mistaken for plaster.

[214] The two Grossetti are **20.38** and **20.39** respectively dating to A.D. 1649 and 1650. The jettons are **20.40** and **20.41** both dating from 1618-1660.

a number of objects of personal adornment made of metal and glass, in addition to a number of metal implements listed below.

DEPOSIT SUMMARY

TR1 tr2 (1). Latest identifiable material Post-Byzantine; some quantities of Late Roman and smaller quantities of Classical.

Catalogued objects:

Red-figure:	**8.123**.
Roman pottery:	**14.84.**
Metal object:	**18.33**.

Inventoried Byzantine/Post-Byzantine pottery:

Fragments of the following inventoried vessels were encountered in TR1 tr2 (1) and (2):
76.807, 76.2156, 76.2157, 76.2158.

TR1 tr2 (2). Latest identifiable material Post-Byzantine; larger quantities of Roman and some earlier material.

Catalogued items:

Archaic:	**5.27**.
Red-figure:	**8.128**.
Roman:	**14.48, 14.50, 14.125, 14.126, 14.160, 14.164, 14.180, 14.198, 14.210, 14.215, 14.246, 14.247, 14.290, 14.369, 14.372, 14.468, 14.470**.
Objects of glass and bone:	**17.12, 17.17, 17.23, 17.58, 17.77, 17.78**.
Metal objects:	**18.64, 18.99**.
Coins:	**20.26** (Constantius II), **20.45** (Ottoman).

Inventoried Post-Byzantine pottery:

76.566, 76.2122, 76.2123 (also: 76.807, 76.2156, 76.2157, 76.2158).

TR1 tr2 (2) FC I-II. Material lying directly on the floor surface (unit 2a) of Structure A and considered to be from the period of primary use of the building.[215] The deposit yielded a large number of various kinds of metal objects, including jewellery and implements, only some of which were catalogued. The four coins dating to the 17th century A.C., already mentioned, establish a Post-Byzantine date for Structure A.

[215] This was excavated as part of TR1 tr2 (2) but distinguished from unit (2) proper by the designation FC I and FC II.

Catalogued items:

Objects of glass and bone:	**17.89**.
Metal objects:	**18.29, 18.36, 18.75, 18.85, 18.106, 18.107, 18.108, 18.109, 18.110, 18.111.**
Coins:	Ragusa: **20.38** (A.D. 1649); **20.39** (A.D. 1650); Nürnberg: **20.40**, **20.41** (both A.D. 1618-1660).

Inventoried Post-Byzantine pottery:

76.374 (almost complete spouted jug).

Structure B (Fig. 35; Pls. 33 e-g, 34 a-b, 35 d-e)

Partly visible above surface prior to excavation, Structure B has external dimensions of approximately 5.0 m. (NE-SW) x 7.40-8.00 m. (NW-SE). The west corner of the building, as well as part of the SW wall, were better defined in 1976 with the excavation of TR2 tr1. The interior, NW, half of the building was investigated as part of TR3 tr1 in 1978, while the exterior faces of the NW and NE walls were exposed with the excavation of TR3 tr2 and TR4 tr2 respectively.

The dry rubble construction of Structure B was identical to that of Structure A. Surviving to a height of 0.43-0.67 m., the walls have a width varying between 0.55-0.65 m., and were built of an admixture of limestone, granodiorite and schist; a larger, reused granodiorite block marks the west corner of the building. As is clear on Fig. 35, Structure B overlies Structure 1 of Phase III. Large pieces of plaster encountered in *Unit 2* (see below) indicate that the interior walls of Structure B were coated in the same way as those of Structure A.

The level of the floor of Structure B was marked by the semi-circular Feature 1, representing the remains of a hearth or oven, though no real traces of a well-preserved floor surface were met in the excavated area.[216] Semi-circular to horseshoe-shaped in plan, Feature 1 was uncovered parallel to the SW wall of Structure B, in the south sector of TR3 tr1 (Pls. 33 e-g, 34 a). It was built of a line of stones, predominantly schist, set on edge to define a semicircle with a width of about 1.10 m. At the open end of the feature, three tile fragments were set on edge, side by side (Pl. 33 f). Within the semicircle, and below the three tile fragments set on edge, a carefully laid bedding of tiles was encountered (Pl. 33 g). The tiles were laid flat in a matrix of orange-red clay towards the centre, which was fired hard, while around the perimeter

[216] Feature 1 was at the level of the lowest course of the walls of Structure B.

a darker brownish-black soil was noted. Feature 1 closely resembles a number of better preserved Post-Byzantine ovens uncovered on Promontory 1 in 1986.[217]

Although no real trace of a floor was preserved, its level was marked, as noted above, by Feature 1.[218] Two distinct deposits were recorded overlying Feature 1, designated *TR3 tr1 Units 1* and *2*. *Unit 1* was a loose black topsoil and *Unit 2* a somewhat more compact yellow-brown soil containing roof-tile fragments of a type identical to those noted for Structure A,[219] and presumably deriving from the roof of the building. A larger quantity of roof-tile fragments was noted in Unit l along with stone collapsed from the rubble walls of Structure B. The latest identifiable material from both deposits was Post-Byzantine, including a number of pots which were reconstructed almost complete. The latter may represent material from the period of primary use of the building.[220]

DEPOSIT SUMMARY

TR3 tr1 (1).[221] Latest identifiable material Post-Byzantine, but with quantities of earlier residual material, including Classical and Late Roman.

Catalogued items:

Roman pottery: **14.489**.
Terracotta figurine: **16.9**.

Inventoried Byzantine and Post-Byzantine pottery:

78.56, 78.58, 78.146, 78.148, 78.819, 78.2520.

TR3 tr1 (2). Latest identifiable material Post-Byzantine, but with quantities of earlier material, including Classical and Late Roman.

Catalogued items:

Red-figure: **8.62.**
Black-glaze: **9.159.**
Stamped black-glaze: **10.52.**
Transport amphora: **13.19**.
Roman Pottery: **14.52, 14.391**.

[217] A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 198.
[218] The original surface consisted probably of simple earth packing.
[219] *Supra* n. 211.
[220] Especially the following inventoried pots: 78.58, 78.819, 78.1312.
[221] This includes *unit 1* in TR3 tr1, as well as material recovered from TR3 tr1 Extensions 1-3 (unit 1).

Roman lamp: **15.87**.
Objects of glass and bone: **17.43, 17.68**.
Metal object: **18.117**.
Coin: **20.3** (Chalkidian League *ca.* 398-348 B.C.).

Inventoried Byzantine and Post-Byzantine pottery:

78.150, 78.251, 78.266, 78.1312.

Structure E (Fig. 35; Pls. 33 b-c, 35 f)

Only a very small part of Structure E was investigated in 1978 with the excavation of TR2 tr2 and TR3 tr2 (Fig. 35). A small portion of the interior of the building fell into the NW sector of TR2 tr2 and was excavated as *Unit 1a*. Work here, however, was terminated before the foot of the wall was reached, so no floor level was encountered. The deposit yielded many of the usual Post-Byzantine roof-tile fragments similar to those associated with Structures A and B.[222] The only notable small find was the fragmentary bronze knife sheath with stamped decoration **18.65**.

Another small portion of the building was incompletely investigated with the excavation of TR3 tr2.[223] A stretch of wall, approximately 2.0 m. long, oriented NW-SE was revealed along with the NE-SW return wall, which was approximately 0.90 m. long (Fig. 35). The walls of Structure E have a width of 0.40-55 m. and are constructed in dry-rubble similar to that of Structures A and B; the walls survive to a depth of one or two courses only. Though of similar construction to Structures A and B, Structure E differs in that it has more than one room; the overall plan of the building, however, was not recovered. Since no floor level was revealed, the only deposit excavated within the interior of Structure E was TR2 tr2 (1a) which represents debris accumulated following the abandonment of the building.

DEPOSIT SUMMARY

TR2 tr2 (1a). Latest identifiable material Post-Byzantine, with smaller quantities of earlier material.

Catalogued items:

Roman pottery: **14.332**.
Object of glass: **17.3**.
Metal object: **18.65**.

The material recovered from deposits outside the building is listed below.

[222] *Supra* n. 211.
[223] This was cleared as Extension 2 of TR3 tr2.

OTHER PHASE 1 DEPOSITS

Immediately to the ENE of Structure B, in TR4 tr2, a small refuse pit was uncovered full of Post-Byzantine pottery and a good deal of organic debris including seashells, animal bones and charcoal. Roughly elliptical in plan, with a maximum length of just over 1.0 m. (Pl. 34 c), the pit had a maximum depth of about 0.40 m.[224] The pit was dug into the somewhat more compact soil variously coloured red and black designated TR4 tr2 Unit 2. The latter appears to have been levelling fill laid in order to raise the ground level to the required height for the construction of Structure B. The latest identifiable material recovered from Unit 2 was Post-Byzantine, although varying quantities of Late Roman and Classical pottery were also noted. The small pit must have been opened while Structure B was in use, while the material from Unit 2 represents a Post-Byzantine phase earlier than that recovered from the interior, above the floor level, of Structures A and B.

TR4 tr2 Unit 2 continued into TR4 trl and TR3 tr2 where it was also designated Unit 2. The small finds recovered from TR4 tr2 Unit 2, TR4 tr1 Unit 2, and TR3 tr2 Unit 2, therefore derive from the same deposit but are presented below according to trench in order to facilitate cross-reference with the material presented elsewhere in the book.

DEPOSIT SUMMARY

Refuse Pit (TR4 tr2 [2] bothros). Material almost exclusively Post-Byzantine, including large fragments of various Post-Byzantine wares. Minor quantities of earlier material were noted, mostly recovered in small fragments. Catalogued objects include two metal objects listed below; the inventoried Post-Byzantine pottery listed represents only a small selection recovered from the pit.

Catalogued items:

Metal objects: **18.74, 18.76.**

Inventoried Post-Byzantine pottery:

78.1488, 78.1490, 78.1491, 78.1505.

TR4 tr2 Unit 2, TR4 tr1 Unit 2, and *TR3 tr2 Unit 2.* Latest material Post-Byzantine, with quantities of earlier material.

[224] The granodiorite block bordering the pit on the right side on Pl. 34 c is the uppermost preserved block of the earlier Wall 2 (see below).

TR4 tr2 Unit 2

Catalogued items:

Black-glaze:	**9.53**.
Roman pottery:	**14.12**.
Greek lamps:	**15.52, 15.60**.
Object of glass:	**17.27**.
Coin:	**20.32** (Arcadius, A.D. 388-392).

Inventoried Byzantine/Post-Byzantine pottery:

78.1532, 78.2313, 78.2314, 78.2316, 78.2317, 78.2318.

TR4 tr1 Unit 2

Catalogued items:

Roman pottery:	**14.97, 14.228, 14.266, 14.301, 14.400, 14.424, 14.449**.
Greek lamps:	**15.26, 15.46**.
Object of glass:	**17.25**.

Inventoried Byzantine/Post-Byzantine pottery:

78.2960, 78.3229.

TR3 tr2 Unit 2[225]

Catalogued items:

Archaic pottery:	**5.11**.
Red-figure:	**8.102, 8.130**.
Black-glaze:	**9.6, 9.48, 9.118, 9.167, 9.204**.
Stamped black-glaze:	**10.88, 10.106, 10.130**.
Roman pottery:	**14.230, 14.242, 14.272, 14.286, 14.289, 14.454, 14.490**.
Greek lamp:	**15.76**.
Objects of glass and bone:	**17.31, 17.46, 17.63, 17.73, 17.88**.
Metal objects:	**18.48, 18.62**.
Coins:	**20.13** (Philip II, 359-336 B.C.), **20.31** (Arcadius, A.D. 383-388), **20.54** (uncertain).

Inventoried Byzantine/Post-Byzantine pottery:

78.634, 78.905, 78.1303, 78.1478.

TR1 tr2 Unit 3. Also representing levelling fill laid in order to raise the ground level to the required height for the construction of Structure A. This unit, which was encountered below the well-preserved

[225] This unit includes the material from the various extensions of TR3 tr2 unit 2.

floor surface of the building, yielded a good deal of Byzantine/Post-Byzantine pottery, mixed with earlier wares, which pre-dates that found on the floor of the building. The largest component of the fragmentary pottery recovered from the deposit was Late Roman.

TR1 tr2 Unit 3 .

Catalogued items:

Late Geometric pottery:	**5.3**.
Attic black-figure:	**7.7**.
Red-figure:	**8.175**.
Hellenistic pottery:	**11.5**.
Roman pottery:	**14.38, 14.42, 14.54, 14.55, 14.73, 14.104, 14.107, 14.130, 14.147, 14.150, 14.158, 14.159, 14.175, 14.176, 14.191, 14.244, 14.287, 14.292, 14.304, 14.313, 14.319, 14.324, 14.351, 14.361, 14.374, 14.388, 14.428, 14.453, 14.458.**
Roman lamp:	**15.94**.
Objects of glass and bone:	**17.6, 17.9, 17.22, 17.53**.
Metal object:	**18.96.**
Coin:	**20.25** (Constans, A.D. 336-337).

Inventoried Byzantine/Post-Byzantine pottery:

76.602, 76.604, 76.1030. (A total of 146 fragments of Byzantine/Post-Byzantine pottery were recorded from the deposit).

PHASE I. TOPSOIL DEPOSITS

In addition to the deposits presented above, Byzantine/Post-Byzantine pottery was encountered in topsoil in all the Isthmus trenches. In TR1 tr1, TR1 tr3, TR2 tr1 and TR2 tr2 Byzantine/Post-Byzantine material was also encountered in deposits underlying topsoil (usually designated Unit 2 or Unit 3). The latter represents either levelling fill pre-dating, or else debris post-dating, the period of use of Structures A, B and E, though their precise nature could not always be determined.

DEPOSIT SUMMARY

TR1 tr1 (1)

Catalogued items:

Red-figure:	**8.32**.
Roman pottery:	**14.10, 14.139, 14.156, 14.157, 14.171, 14.180, 14.207, 14.293, 14.334, 14.505.**

Greek lamp:	**15.70**.
Roman lamp:	**15.88**.
Objects of glass and bone:	**17.35, 17.70.**
Coins:	**20.43** (Ottoman, A.D. 1703-30), **20.46** (Ottoman, 18th century A.C.).

Inventoried Byzantine/Post-Byzantine pottery:

76.137, 76.140, 76.141, 76.176, 76.177, 76.178, 76.977.

TR1 tr3 Unit 1

Catalogued items:

Late Geometric pottery:	**5.8**.
Red-figure:	**8.14**.
Black-glaze:	**9.22, 9.28, 9.85, 9.122**.
Domestic pottery:	**12.7**.
Roman pottery:	**14.44, 14.74, 14.82, 14.87, 14.111, 14.116, 14.121, 14.136, 14.154, 14.196, 14.197, 14.199, 14.200, 14.215, 14.225, 14.247, 14.274, 14.275, 14.278, 14.316, 14.325, 14.353, 14.355, 14.358, 14.363, 14.377, 14.381, 14.405, 14.450, 14.455, 14.463, 14.465, 14.469, 14.472, 14.485, 14.486, 14.491, 14.494, 14.506.**
Greek lamp:	**15.35**.
Objects of glass and bone:	**17.37, 17.60, 17.69, 17.74, 17.79**.
Metal objects:	**18.57, 18.59**.
Coins:	**20.7** (Chalkidian League, *ca.* 398-348 B.C.), **20.34** (uncertain Emperor, 4th century A.C.).

Inventoried Byzantine/Post-Byzantine pottery:

78.502, 78.562, 78.1792, 78.2286.

TR2 trl Unit 1

Catalogued items:

Late Geometric pottery:	**5.1**.
Stamped black-glaze:	**10.115, 10.116**.
Roman pottery:	**14.28, 14.51, 14.83, 14.114, 14.153, 14.161, 14.169, 14.203.**
Roman lamp:	**15.96**.
Objects of glass and bone:	**17.49, 17.81**.
Metal object:	**18.103**.
Coins:	**20.30** (Theodosius I, A.D. 388-395), **20.42** (Ottoman, A.D. 1623-40).

Inventoried Byzantine/Post-Byzantine pottery:

76.111, 76.167, 76.173, 76.248, 76.295, 76.529, 76.530, 76.2021.

TR2 tr2 Unit 1

Catalogued items:

Late Geometric/Archaic pottery:	**5.30, 5.37**.
Red-figure:	**8.16, 8.25**.
Roman pottery:	**14.63, 14.75, 14.86, 14.95, 14.137, 14.141, 14.142, 14.168, 14.180, 14.190, 14.193, 14.211, 14.243, 14.281, 14.331, 14.333, 14.343, 14.345, 14.380, 14.383, 14.397, 14.425, 14.442, 14.446, 14.447, 14.499.**
Greek lamp:	**15.30.**
Roman lamp:	**15.90.**
Terracotta figurine:	**16.18**.
Metal object:	**18.23**.
Coins:	**20.37** (Byzantine, first half 13th century A.C.), **20.48** (probably Ottoman).

Inventoried Byzantine/Post-Byzantine pottery:[226]

78.597, 78.805, 78.1157, 78.2684, 78.2685, 78.2691, 78.2692, 78.2697, 78.2698.

TR3 tr2 Unit 1

Catalogued items:

Roman pottery:	**14.11.**

Inventoried Byzantine/Post-Byzantine pottery:

78.152, 78.617.

TR4 tr1 Unit 1

Catalogued items:

Roman pottery:	**14.3, 14.41, 14.202, 14.228, 14.253, 14.264, 14.481**.
Roman lamps:	**15.83, 15.85**.
Metal object:	**18.90**.
Coin:	**20.44** (Ottoman, A.D. 1703-30).

[226] See also 76.912, 76.914.

Inventoried Byzantine/Post-Byzantine pottery:

78.1489, 78.1895, 78.1896, 78.1907, 78.1910, 78.2565, 78.2566, 78.2838, 78.2839, 78.2840, 78.2841, 78.2842, 78.2843.

TR4 tr2 Unit 1[227]

Catalogued items:

Red-figure:	**8.131**.
Roman pottery:	**14.135, 14.237, 14.280, 14.291**.

The following are those deposits, already noted above, which represent either levelling fill pre-dating, or else debris post-dating the period of use of Structures A, B and E.

DEPOSIT SUMMARY

TR1 tr1 Unit 2

Catalogued items:

Red-figure:	**8.79, 8.108**.
Black-glaze:	**9.128**.
Stamped black-glaze:	**10.3, 10.92, 10.117**.
Roman pottery:	**14.57, 14.60, 14.110, 14.112, 14.129, 14.145, 14.151, 14.214, 14.249, 14.269, 14.299, 14.357, 14.364, 14.403, 14.460, 14.492.**
Object of bone:	**17.97**.
Metal object:	**18.113**.
Coins:	**20.28** (Theodosius I, A.D. 378-383), **20.33** (Arcadius, A.D. 402-408).

Inventoried Byzantine/Post-Byzantine pottery:

76.185, 76.187, 76.256, 76.262, 76.263, 76.264, 76.265, 76.267, 76.273, 76.274, 76.275, 76.276, 76.304, 76.1064, 76.1065a, 76.1065b.

TR2 tr1 Unit 2

Catalogued items:

Archaic pottery:	**5.28, 5.33**.
Red-figure:	**8.169**.

[227] Although there were no inventoried pieces of Byzantine/Post-Byzantine pottery from TR4 tr2 unit 1, a total of 161 fragments of pottery of the period were noted in the context lots.

Stamped black-glaze: **10.25**.
Roman pottery: **14.88, 14.138, 14.178, 14.221, 14.426, 14.495, 14.502.**
Objects of glass and bone: **17.2, 17.93**.

Inventoried Byzantine/Post-Byzantine pottery:

76.281, 76.524, 76.553, 76.976, 76.1091, 76.1092.

TR2 tr2 Unit 2.

Catalogued items:

Stamped black-glaze: **10.72**.
Roman pottery: **14.65, 14.143, 14.267, 14.322, 14.436.**
Objects of glass and bone: **17.80**.
Metal objects: **18.35, 18.89**.
Coins: **20.59** (uncertain), **20.62** (uncertain).

Inventoried Byzantine/Post-Byzantine pottery:

78.795, 78.796, 78.804, 78.2158, 78.2160, 78.2161, 78.2163, 78.2170, 78.2171.

Isthmus Surface

Catalogued Items:

Attic black-figure: **7.32**.
Red-figure pottery: **8.55**.
Black-glaze: **9.54, 9.127, 9.151**.
Stamped black-glaze: **10.87**.
Roman pottery: **14.165**.
Metal object: **18.98**.
Coins: **20.6** (Chalkidian League, *ca.* 398-348 B.C.), **20.35** (Marcian, A.D. 450-457).

ISTHMUS PHASE II (Late Roman)

Below the Phase I structures and their associated deposits, a series of strata were encountered, met at a higher level in the central part of the area under excavation and dipping down at an angle of about 20° towards the west and SW. Almost certainly representing material washed down from the higher ground towards the east and south, these levels were best preserved in TR1 tr1, TR1 tr2, TR1 tr3 and TR2 tr1. Petering out towards the NW, they were, nevertheless, encountered as a somewhat thinner deposit in the SE sector of TR2 tr2 designated *Unit 3*. The Phase II deposits

are best seen in the east scarp section of TR1 tr2, where they are labelled as *Units (2)* and *(3)* on Fig. 34 c. Where best preserved, these deposits yielded large quantities of Roman pottery ranging in date from the 2nd century through the years of the early 7th century A.C. A good deal of earlier residual material, primarily of Classical date, was also noted, while in the upper levels minor quantities of intrusive Byzantine/ Post-Byzantine pottery were met, particularly in the interfaces with Phase I deposits. It was also clear that the Phase II deposits were disturbed in parts and re-deposited as levelling fill associated with the Phase I building activity, especially that of Structure A. This was particularly the case with the following Phase I deposits which yielded large quantities of Late Roman pottery: TR1 tr2 (2), TR1 tr2 (3), TR1 tr1 (2), TR1 tr3 (2). Large quantities of Late Roman pottery were also recovered from topsoil in all of the Isthmus trenches.

Towards the NE and SE, in TR3 tr1, TR3 tr2, TR4 tr1 and TR4 tr2, undisturbed Phase II deposits were not encountered, but the large quantity of Roman material recovered from the upper levels of these trenches may suggest that any pre-existing Roman deposits were re-deposited by Phase I building activity.

There were no architectural features which could confidently be assigned to Phase II, although the small stretch of TR1 tr1 Wall 1, as noted above, may be of Late Roman date. The combination of levels of hill wash and the lack of architectural features within the excavated area might indicate the presence of Late Roman buildings in the unexcavated higher ground to the east and southeast.

For the sake of facilitating cross-reference, Phase II deposits are presented here according to order of trench. In each case the Roman pottery is presented first, followed by any objects of glass, bone and metal catalogued; the pre-Roman material encountered in these deposits is also listed.

DEPOSIT SUMMARY

TR1 tr1 Unit 3[228]

Catalogued items:

Roman pottery:	**14.140, 14.408, 14.412.**
Objects of glass and bone:	**17.18, 17.102.**

[228] An illegible coin, **20.47**, which is probably Ottoman, along with the fragmentary base of a Byzantine/Post-Byzantine open vessel were encountered in the uppermost pass of TR1 tr1 unit (3) and are clearly intrusive.

Earlier Material:

Corinthian pottery:	**6.11**.
Black-glaze:	**9.72**.
Stamped black-glaze:	**10.13**.
Hellenistic pottery:	**11.17**.

TR1 tr2 Unit 4[229]

Catalogued items:

Roman pottery:[230]	**14.45, 14.56, 14.64, 14.89, 14.92, 14.115, 14.123, 14.128, 14.131, 14.147, 14.158, 14.167, 14.197, 14.256, 14.257, 14.265, 14.296, 14.316, 14.327, 14.339, 14.341, 14.373, 14.382, 14.385, 14.386, 14.395, 14.406, 14.410, 14.418, 14.461, 14.471, 14.507.** Perhaps also **14.188, 14.213, 14.220.**
Roman lamps:	**15.89.** Perhaps also **15.91**.
Objects of glass and bone:	**17.4, 17.10, 17.30, 17.33, 17.55, 17.59, 17.61, 17.64, 17.65, 17.66**. Perhaps also: **17.5, 17.11, 17.57**.
Metal objects:	**18.42, 18.78, 18.118**.
Coin:	**20.53** (uncertain).

Earlier Material:

Red-figure:	**8.23**.
Black-glaze:	**9.145, 9.149, 9.158, 9.199**.
Stamped black-glaze:	**10.40, 10.43, 10.67, 10.74**.
Hellenistic pottery:	**11.2**.
Domestic Pottery:	**12.42, 12.51.**
Amphorae:	**13.3**; **13.23.**
Greek lamps:	**15.34, 15.43**.
Louterion:	**16.50**.

In the course of excavating TR1 tr2, the feature designated "Wall" 6 (Fig. 35) began to appear during the excavation of the Phase II Unit 4. The associated material, confined to the immediate vicinity, was designated *Unit 4a* and is clearly part of the earlier Classical deposits. Similarly, in the east corner of the trench, a number of stones preserved at a higher level of the earlier Wall 10 appeared during the excava-

[229] The interface between TR1 tr2 units 3 and 4, excavated separately, yielded a small quantity of Byzantine/Post-Byzantine material, including the following inventoried items: 78.44, 78.45, 78.2208, 78.2209, 78.2218.

[230] The following pieces were excavated as part of the NE baulk of TR1 tr2 and may belong to either unit 4 or 3: **14.188, 14.213, 14.220, 15.91, 17.5, 17.11, 17.57**.

tion of Unit 4. In this case, the material between these stones of Wall 10 and the SE scarp of the trench was excavated as *Unit 4b*. The latter is also part of earlier Classical deposits. The lower stratum of Phase II hill wash, designated *Unit 5,* was essentially encountered in the NW sector of TR1 tr2. Units 4a and 4b are discussed under Phase III.

The following pieces, excavated as part of Unit 4a or 4b, were encountered in the interfaces between Units 4 and 4a or 4b respectively, and are best seen as Late Roman intrusion.

DEPOSIT SUMMARY

TR1 tr2 Unit 4a

Catalogued items:

Roman pottery:	**14.152, 14.368, 14.402.**
Object of glass:	**17.56.**
Metal objects:	**18.27, 18.70**.

TR1 tr2 Unit 4b

Catalogued items:

Coin:	**20.61** (uncertain).

TR1 tr2 Unit 5[231]

Catalogued items:

Roman pottery:	**14.62, 14.90, 14.155, 14.170, 14.216, 14.248, 14.251, 14.302, 14.314, 14.382, 14.385, 14.418, 14.423, 14.438**.
Roman lamps:	**15.93, 15.97**.
Louterion:	**16.50.**
Objects of glass:	**17.29, 17.34, 17.52**.
Metal object:	**18.61**.
Coin:	**20.58** (uncertain).

Earlier Material:

Red-figure:	**8.26, 8.169a**.
Black-glaze:	**9.153, 9.201, 9.211**.

[231] Unit 5 represents the lower part of the Phase II deposits encountered in TR1 tr2.

Stamped black-glaze: **10.76, 10.99**.
Greek lamp: **15.33.**
Figurines: **16.7, 16.40**.
Metal object: **18.61**.
Coins: **20.21** (Posthumous Alexander III, *ca.* 323-310 B.C.), **20.58** (uncertain).

TR1 tr3 Unit 2

Catalogued Items:

Roman pottery: **14.81, 14.116, 14.195, 14.259, 14.270, 14.312, 14.352, 14.365, 14.384, 14.416, 14.427, 14.479, 14.493, 14.497, 14.498.**
Objects of glass and bone: **17.13, 17.26, 17.38, 17.54, 17.62, 17.75**.

Earlier Material:

Stamped black-glaze: **10.113.**
Domestic pottery: **12.25.**
Greek lamp: **15.50**.
Metal object: **18.43.**

TR2 tr1 Unit 3

Below topsoil and the re-deposited Phase I levels, a slight continuation of the Phase II wash level was encountered in TR2 tr1 where it was designated *Unit 3*. The deposit in this trench, however, was only a very thin one and difficult to distinguish from the earlier Classical deposits, perhaps on account of the fact that it was largely dug into and re-deposited in TR2 tr1 Units 1 and 2.[232] The upper part of Unit 3 contained quite a few fragments of Roman pottery in addition to objects of glass and bone. The lower level of the deposit yielded, almost exclusively, material of Classical and earlier date, which is almost certainly part of the Classical Unit 3a. The latter is presented below under the Classical deposits, while the material from the upper part of Unit 3 is listed here.

Catalogued objects:

Roman pottery: **14.179, 14.218, 14.295, 14.307, 14.311, 14.462**.
Objects of glass and bone: **17.1, 17.48, 17.98, 17.103.**
Metal objects: **18.28, 18.77, 18.87**.

TR2 tr2 Unit 3

Catalogued Objects:

Roman pottery: **14.164, 14.399.**
Coin: **20.64** (uncertain).

[232] Both of these units yielded quantities of Late Roman pottery.

Earlier Material:

Red-figure:	**8.99.**
Black-glaze:	**9.171.**
Figurine:	**16.4.**

ISTHMUS PHASES III AND IV (Classical)

In Phases III and IV there is no lack of architectural remains nor of pottery, but it is difficult to separate the two phases with absolute certainty, especially at a number of points. This is partly due to the fact that later architectural remains, particularly those of Phase I, disturbed earlier levels, and also to the fact that these later buildings were not cleared, thereby limiting somewhat the area in which earlier remains could be investigated.[233] Moreover, although the occasional fragment of Late Geometric and Archaic pottery was recovered from the various Classical deposits, the majority of the pottery of both Phases III and IV is assigned to the last three-quarters of the 4th century B.C. The division into two phases is based primarily on the orientation of buildings and their relationship to one another and this division is to some extent verified by the stratigraphy. The chronological indications that Phase IV predates Phase III are straightforward, but it would appear that Phase III follows on from Phase IV with no significant break in time.

The buildings of Phase III may be securely dated to the second half of the 4th century B.C. by the associated pottery, and by the large levelling fill designated the "Amphora Deposit," which was laid in order to raise the ground level to the required height for construction. There is no stratigraphic evidence, nor was sufficient depth reached in most of the trenches excavated, to establish an exact construction date for Phase IV within the Classical period. All that can be said on the evidence at hand is that Phase IV went out of use and was replaced by Phase III sometime around the middle, or early in the second half of the fourth century B.C.

THE ARCHITECTURE OF PHASE III

The walls of the buildings assigned to Phase III are all oriented SW to NE, with

[233] On account of the work conducted at Torone by the Byzantine Ephoreia of Chalkidike prior to the commencement of the current excavations, and the interest shown in the Byzantine and Post-Byzantine remains, the decision was taken not to clear the later buildings. For preliminary notices of the work of the Byzantine Ephoreia at Torone see *supra* n. 206; for a brief overview of Byzantine and Post-Byzantine Torone see I.A. Papangelos, *Χαλκιδική* (1981) 157-160.

NW to SE returns,[234] and include walls 2-7 (Fig. 35). Wall 2, exposed for a length of almost 11.0 m. in TR3 tr2, TR4 tr2 and partly in TR4 tr1, forms the SW wall of a large building which extends to the NE; for the purpose of this report it is referred to as Structure 2. Walls 3 and 4 form the NE corner of the building referred to as Structure 1 (Fig. 35). The small stretch of the feature designated "Wall 5," as exposed, was located in the area between Walls 2 and 3 (see below).[235] As noted above, Structure 1 clearly overlies the earlier Wall 10 of Phase IV, although the relationship of the two is somewhat obscured by the overlying Structure B of Phase I. Also overlying Wall 10, and on a similar SE to NW orientation as Walls 2 and 3 is Wall 7 encountered to the SW in TR1 tr3 and continuing under the baulk into TR1 tr1. The feature designated "Wall" 6 in TR1 tr2, if indeed part of a building, also overlies Wall 10.

Structure 2 (Wall 2) and Associated Deposits

Wall 2 forms the SW wall of a large building distinguished from other buildings in the Isthmus area by its masonry style. Wall 2 was exposed for a length of 10.70 m. in TR3 tr2 and TR4 tr2, with a very small portion uncovered in the south corner of TR4 tr1 (Fig. 35; Pls. 34 e-g, 35 d, f-g, 36 a-f). The wall has a width, as preserved, ranging between 0.40-0.65 m. The exterior face of the wall was built with large, well-dressed blocks of granodiorite and thin slabs of schist arranged in a ladder-work technique. The interior face by comparison is less regular, constructed of smaller granodiorite blocks and the occasional use of schist in a somewhat rougher ladder-work pattern.[236]

As preserved, Wall 2 seems to have been constructed in three stages. The first stage was the digging of a foundation trench and the laying of a foundation course of rubble. Careful scraping along both the interior and exterior faces of the wall failed to reveal any sign of a foundation trench extending beyond its width and it was clear that only a narrow foundation trench was dug. The second stage was the laying of the *euthynteria*, well built along the exterior face with granodiorite blocks of similar dimensions laid flat. Less well trimmed was the *euthynteria* along the inner face of

[234] A similar orientation was noted for most Classical domestic structures generally at Torone. For dwellings of the Classical period excavated after 1978 see A. Cambitoglou, *PAE* 1981, 35, 37 fig. 4; *id.*, *PAE* 1982, 69ff., fig. 3, pls. 53, 55a, 56b; *id.*, *PAE* 1984, 53ff., figs. 4, 13-15, pls. 62-66, 70-74; J.K. Papadopoulos, *MeditArch* 2 (1989) 9-44, especially 11-17 ills. 4-6.

[235] Wall 5 is not indicated on Fig. 35.

[236] The contrast between the inner and outer faces of the wall is best seen on Pls. 34 f-g (inner face) and Pls. 34 e, 36 b, d (exterior face).

the wall in TR3 tr2 (Fig. 35; Pl. 34 g). The third stage was the construction of the wall proper, set 0.10-0.15 m. in from the *euthynteria* on both the interior and exterior faces of the wall as exposed in TR3 tr2. The wall proper survives to only a single course of granodiorite blocks. The distinction between rubble foundation, *euthynteria*, and wall proper is best seen on Pl. 36 b.[237] The lowest preserved course of the wall proper was built of granodiorite blocks which have an average height of about 0.44 m., a width of 0.18-0.20 m. and a length of 0.60-0.69 m.[238] The granodiorite blocks are set at intervals of about 0.16 m. apart along the exterior face of the wall. These regular interstices are filled with thin slabs of dark grey schist stacked to form a ladder-work pattern. A more or less similar technique is used in some of the Classical dwellings on Terrace IV excavated in later seasons,[239] as well as for the exterior face of City Wall C (Fig. 5 a; Pl. 7 a-b). In both of the latter, however, the masonry style is less regular than that of Wall 2.

In the eastern part of Wall 2 in TR3 tr2, five granodiorite blocks were set horizontally, resting on fill; *euthynteria* and foundations were lacking at this point (Fig. 35; Pl. 36 a-b). This suggested a subsequent alteration to the wall and perhaps the rebuilding of a damaged stretch of it.[240] A small portion of a possible return wall was exposed in TR3 tr2 running at right angles to Wall 2, but encountered only at the level of the *euthynteria* (Fig. 35; Pl. 34 g). The feature consisted of only a few blocks and a continuation was not encountered in TR4 tr1. It remains, therefore, unclear whether these stones were in fact part of a wall or a setting for some other constructed feature otherwise not preserved. It is worth noting that this possible wall or setting is located very close to the five granodiorite blocks set horizontally in the eastern part of Wall 2 in TR3 tr2. This suggested that the five blocks may have been used to fill in a pre-existing entrance or threshold, but this could not be established, especially since the baulk separating TR3 tr2 and TR4 tr1 was not excavated.[241]

[237] An identical construction technique was noted among some of the better preserved Late Classical or Early Hellenistic buildings excavated on Promontory 1 in later seasons. Compare, for example, the construction of the exterior face of Trench 67 Wall 20 as revealed by the end of the 1988 campaign, A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 3 (1990) 116-117 fig. 17, pl. 33:3. This forms a contrast to the earlier Classical buildings of the 5th century B.C., for which see *ibid* 97ff., fig. 4, pl. 30:1-6 Walls D, G, H and I. In the latter, a somewhat simpler construction technique was employed using an admixture of stone with schist predominating.

[238] Six granodiorite blocks are preserved *in situ* in the lowest course of the wall proper; several other blocks of similar dimensions were noted in the immediate vicinity.

[239] A. Cambitoglou, *PAE* 1982, 69ff., pl. 53β, pl. 55α (to the left).

[240] In TR4 tr2 a block of the wall proper was pushed slightly out of place on account of the cutting for the Post-Byzantine *bothros* already described.

[241] The possibility that these five blocks themselves are a threshold is highly unlikely since they are at the level of

Wall 2 clearly extends beyond the area under excavation both to the SE and the NW. Though it must belong to a building of substantial dimensions, it is impossible at present to estimate the original size of the structure and this may only prove possible if excavation is enlarged considerably. In any case, the size of the building as exposed, its careful and well constructed masonry, and its proximity to the feature thought to be a possible gate or landing platform along City Wall C located at a short distance to the ENE suggested the possibility of a non-domestic function for Structure 2. The general impression given by Wall 2 is that of a façade of a public building. Such a possibility, however, could not be verified on account of the limited size of the excavated area. It should also be noted that there was an almost total lack of mud-brick, or decomposed mud-brick, in all of the Isthmus trenches and it is likely that Structure 2 was built entirely of stone.

Traces of a pebble road surface were encountered in TR3 tr1, TR4 tr2, and TR3 tr2 in the area between the exterior face of Wall 2 and the exterior of Structure 1 as defined by Walls 3 and 4. The road and its associated deposits are described below. The area of the interior of Structure 2 was partially investigated with the excavation of TR4 tr1, the north corner of TR3 tr2 and the northern half of TR4 tr2.

In TR4 tr1 (Fig. 35; Pls. 35 a, 36 e-f) a deposit of compact yellow-brown to reddish-yellow soil was met underlying the Post-Byzantine levelling fill Unit 2; this deposit was designated *Unit 3*. The excavation of the trench was terminated, however, before the level of the preserved floor (indicated by the *euthynteria* course) was reached. Unit 3 probably represents accumulated debris which had formed after the abandonment of the building. It yielded a good deal of Classical pottery, with the latest diagnostic fragments dating to the second half of the 4th century B.C. Among the finds recovered, special mention may be made of the fragments preserving the entire base and portion of the fluted shaft of the louterion stand **16.47** (Pl. 35 b-c). The stand may have originally been part of the internal furnishings of Structure 2, but this could not be established with certainty.[242] A similar deposit, also designated Unit 3, was encountered in TR4 tr2, but here a certain amount of Post-Byzantine disturbance was revealed, especially in the NW sector of the trench where the Post-Byzantine

the uppermost preserved part of the wall proper (Pl. 36 a-b); also because they lie directly on fill and lack the well constructed *euthynteria* and foundations of the wall.

[242] A fragment of a fluted shaft of a similar louterion, **16.48**, and conceivably, but not certainly, from the same vessel as **16.47** was found in unit 6 of TR1 tr1. For terracotta louteria see R. Ginouvès, *Balaneutikè. Recherches sur le bain dans l'antiquité grecque* (1962) 86-87.

refuse pit was dug.[243] The excavation of TR4 tr2 was terminated at the level of the *euthynteria* of Wall 2 where vestiges of a possible packed earth surface were noted (Pl. 36 c-d). It remains unclear, however, whether this was the floor of the building during the period of its primary use. Consequently, TR4 tr1 and TR4 tr2 produced no firm evidence for the construction date of Structure 2, since the deposits below the preserved floor level were not investigated.

Only in the north corner of TR3 tr2 (Fig. 35; Pl. 35 f-g) were deposits excavated below the level of the *euthynteria* and the rubble foundation of Wall 2. No trace of a floor surface was encountered, however, and the area excavated was too small to provide any clear evidence for the construction date of the building. The relevant deposit, TR3 tr2 Unit 3 B-13 yielded only a small quantity of Classical pottery, including the red-figure fragment **8.17**.

DEPOSIT SUMMARY

TR4 tr1 Unit 3

Catalogued items:

Attic black-figure:	**7.25**.
Red-figure:	**8.18, 8.168, 8.190**.
Black-glaze:	**9.26, 9.119**.
Stamped black-glaze:	**10.28, 10.38, 10.62**.
Greek lamps:	**15.2, 15.66**.
Figurine:	**16.39**.
Louterion:	**16.47**.
Coins:	**20.15** (Philip II, 359-336 B.C.), **20.67** (uncertain).

TR4 tr2 Unit 3[244]

Catalogued items:

Red-figure:	**8.69, 8.153.**
Black-glaze:	**9.97.**
Stamped black-glaze:	**10.121.**
Greek lamp:	**15.15**.
Coin:	**20.8** (Chalkidian League, *ca.* 398-348 B.C.).

[243] See above.

[244] A fragment of Roman pottery, **14.109**, from TR4 tr2 Unit 3 was found in the NW half of the trench in the immediate vicinity of the Post-Byzantine refuse pit and is therefore best seen as intrusive.

TR3 tr2 Unit 3 (B-13). Unit 3 in this trench was subdivided into various bucket designations, referring to different parts of the trench. The material specifically from the north corner of the trench below the level of the *euthynteria* and foundation was designated B-13. Only two catalogued objects derive from this deposit, the fragment of a red-figure vessel **8.17** and the base fragment of a black-glaze mug, **10.5**; 58 fragments of black-glaze pottery were noted in the context lot of the deposit but provide no firm date for it.

Structure 1 and Associated Deposits

Uncovered in TR3 tr1 and TR3 tr2, Structure 1 comprises Walls 3 and 4 (Fig. 35; Pls. 35 d-g, 36 a) which form the NE corner of the building which extends to the SW. Wall 3 runs parallel to Wall 2 of Structure 2 and is 1.50-1.75 m. south of it. The west end of Wall 3, which was exposed for a length of about 6.0 m. in TR3 trl and TR3 tr2, was destroyed by the later building activity associated with the Post-Byzantine Structure E.[245] Its return wall, Wall 4, was exposed in TR3 tr1 for a length of 3.30 m. Wall 4 clearly extends to the south beyond TR3 tr1 while Wall 3 probably once extended to the west beyond the area of TR3 tr2. The width of Walls 3 and 4 varies between 0.50 m. and 0.65 m. and they are preserved to a height of 0.50-0.73 m. Structure 1 was built of an admixture of limestone, granodiorite and schist either unworked or only roughly hewn, bonded with mud and laid in a neatly jointed, though not very regular, coursing which contrasts to that of Structure 2. As was the case with Structure 2, there was no evidence for foundation trenches extending beyond the width of the wall.[246] Small fragments of red painted plaster were found in the fill outside the building, though these need not be associated with it. Vestiges of a packed earth floor were encountered within the building both in TR3 tr 1 and TR3 tr 2 at which point the digging was stopped (Pl. 35 d-g).

The deposits encountered along the exterior of the building in the area between it and Structure 2 will be discussed separately. The fill encountered in those parts of TR3 tr1 and TR3 tr2 which fell inside the building was a compact reddish-yellow to reddish-brown coloured soil. It probably represents debris accumulated after the structure had been abandoned. The material recovered from this fill is therefore later than the construction of the walls; the latest identifiable material dates into the second half of the 4th century B.C. The fill was designated Unit 3 B-5, B-8 and B-17 in TR2 tr1 and Ext. 2; B-4, B-6 and B-7 in TR3 tr2. A certain amount of disturbance

[245] Part of the collapsed tumble of Wall 3 can be seen on Pl. 34 d.

[246] This is certain only for the exterior of the building, especially in TR3 tr2, but not for the interior, where excavation was terminated at the floor of the building.

had clearly been caused by the construction of the Post-Byzantine Structure E, but also by Structure B. Minor quantities of Post-Byzantine and Late Roman sherds were noted in the interface between Unit 3 and the overlying Unit 2.

DEPOSIT SUMMARY

TR3 tr1 Unit 3 B-5, B-8, B-17 and Feature 1 B-7

Catalogued items:

Red-figure:	**8.30, 8.60, 8.68, 8.76, 8.90, 8.91, 8.92, 8.122, 8.129, 8.133, 8.134, 8.171, 8.172.**
Black-glaze:	**9.46, 9.51, 9.62, 9.64, 9.67, 9.112, 9.160, 9.174, 9.179, 9.180.**
Stamped black-glaze:	**10.57, 10.62, 10.69, 10.102, 10.103, 10.111.**
Domestic pottery:	**12.62.**
Amphorae:	**13.44, 13.46, 13.47, 13.48, 13.54.**
Greek lamps:	**15.21, 15.48.**
Figurines:	**16.22, 16.28, 16.30.**
Metal objects:	**18.20, 18.21, 18.31, 18.34, 18.68.**
Coins:	**20.4** (Chalkidian League *ca.* 398-348 B. C.) and **20.56** (uncertain).

The following two catalogued objects assigned to the above deposit were encountered in the interface with Unit 2 and are best seen as intrusive to Unit 3:

Roman pottery:	**14.285.**
Coin:	**20.36** (Justinian I, A.D. 527-562).

TR3 tr2 Ext. 2 Unit 3 B-4, B-6, B-7

Catalogued items:

Red-figure:	**8.111, 8.181.**
Black-glaze:	**9.45, 9.101, 9.111, 9.178.**
Stamped black-glaze:	**10.73.**
Domestic pottery:	**12.45.**
Greek lamps:	**15.53, 15.72.**
Coin:	**20.69** (uncertain).

The road surface between Structures 1 and 2

Remains of a walking surface in the area between Structures 1 and 2 were encountered. Where better preserved, the surface consisted of small round pebbles, often with pockets of sand underneath, set in a matrix of yellowish clay. It was

encountered in TR3 tr1 in the area north and east of the corner formed by Walls 3 and 4, in TR4 tr2 immediately to the SW of Wall 2, and in a smaller area in the central portion of TR3 tr2.[247] That part of the surface that was preserved in the latter area was important since it extended from the south face of Wall 2, roughly at the level of its *euthynteria*, to the north face of Wall 3.[248] This showed that, for a period at least, Structures 1 and 2 were in contemporary use.

Oriented SE-NW, the road provided access to Promontory 1 - and the Sanctuary of Athena - towards the WNW, and to the main harbour of the city towards the ESE. A subsidiary road, following the line of Wall 4 of Structure 1, may well have existed since remains of the pebble surface were encountered near the south corner of TR3 tr1. Such a road, running perpendicular to the SE-NW road, would have provided direct access to the SW façade of Structure 2. The central location of Structure 2 with regard to these roads and with regard to both the φρούριον of the Lekythos and the harbour may further support the tentative identification of Structure 2 as a public building.

The only reliable deposit directly overlying the road surface that was clearly distinct from the later Phase I deposits in the area, was encountered in TR3 tr1 and designated *Ext. 3 Unit 3 B-3, B-4* and *B-6* and TR3 tr1 *Unit 3, B-6, B-11*. Material excavated directly above the road surface in that part of TR3 tr2 where the surface was best preserved was limited and yielded only one catalogued object, a fragment of black-glaze pottery **9.95**.

DEPOSIT SUMMARY

TR3 tr1 Ext. 3 Unit 3, B-3, B-4, B-6 and TR3 tr1 Unit 3, B-4, B-6, B-11

Catalogued items:

Red-figure:	**8.96, 8.176**.
Black-glaze:	**9.29, 9.95, 9.154, 9.188**.
Domestic pottery:	**12.47, 12.61**.
Greek lamps:	**15.27, 15.80.**
Louterion:	**16.49**.
Metal objects:	**18.56, 18.97**.
Coins:	**20.57, 20.66** (uncertain).

[247] The surface was best preserved in TR3 tr1; it was less well defined in TR4 tr2, and only encountered in a small part of TR3 tr2.

[248] Elsewhere, in the space between Structures 1 and 2, the surface could not be traced because of clear disturbance due to Phase I building.

"Wall 5" and the deposits below road surface

Clearance of the clayey matrix of the road surface in TR3 tr2 revealed a wall-like feature designated "Wall 5" in the area between Structures 1 and 2. Most clearly seen on Pl. 35 g, the feature consisted of rubble on which the clayey matrix with pebbles of the road surface could be laid. Towards the south, nearer to Structure 1, a series of medium-sized stones were found roughly in line, giving the impression of a wall face. The area between this line of stones and Wall 2 of Structure 2 was subsequently filled with smaller stones. By the end of the 1978 campaign the full extent of the feature was not exposed. Sufficient depth was not reached in the neighbouring TR3 tr1 and TR4 tr2 to expose "Wall 5." As can be seen on Pl. 35 g (and also on Pl. 36 a-b), the top of this rubble packing was encountered at the level of the stone foundations for Wall 2 and slightly below it. The material encountered during the excavation of the road surface and in clearing "Wall 5" was designated TR3 tr2 Unit 3 B-5, B-14, B-18, B-19, B-21, B-22, B-23 and B-25. Although the deposit yielded some fragments of Archaic pottery and a good deal of material of the 5th century B.C., the latest identifiable sherds could be dated into the second half of the 4th century B.C. Though the feature designated "Wall 5" was not completely investigated, it must have been laid at a time contemporary with the construction of Structure 2. Minor later contamination was noted in the deposit in the area towards the eastern sector of the trench where Wall 3 of Structure 1 was destroyed by later building activity.[249]

DEPOSIT SUMMARY

TR3 tr2 Unit 3 B-5, B-14, B-18, B-19, B-21, B-22, B-23, B-25

Catalogued Items:

Archaic pottery:	**5.10, 5.34.**
Corinthian pottery:	**6.1.**
Attic black-figure:	**7.10.**
Red-figure:	**8.3, 8.24, 8.33, 8.34, 8.67, 8.93, 8.142, 8.143, 8.167, 8.192, 8.193.**
Black-glaze:	**9.38, 9.109, 9.144, 9.146.**
Stamped black-glaze:	**10.56, 10.75, 10.97.**
Domestic pottery:	**12.27.**

[249] The intrusive material included the following catalogued items:
Roman pottery: **14.77, 14.133.**
Roman lamp: **15.82.**

Amphora:	**13.2.**
Greek lamps:	**15.58, 15.71.**
Object of bone:	**17.99.**

The following pieces were found during the final clearing of the trench, prior to final photography, and are best seen as part of the same deposit.

TR3 tr2 Unit 3 B-24

Catalogued Items:

Stamped black-glaze:	**10.136.**
Figurine:	**16.21.**

The clay matrix of the road surface was also excavated in TR3 tr1 as Unit 3 B-7 and Unit 3 Road Surface B-8. As noted above, sufficient depth was not reached in this trench to expose any continuation of the sub-road packing "Wall 5."

TR3 tr1 Unit 3 B-7, Road Surface B-8

Catalogued Items:

Red-figure:	**8.35, 8.45, 8.75, 8.162, 8.177.**
Black-glaze:	**9.44.**
Stamped black-glaze:	**10.34, 10.83, 10.105.**
Domestic pottery:	**12.5, 12.58.**
Greek lamps:	**15.13, 15.18.**
Metal object:	**18.32.**

Other Phase III Architecture ("Wall 6" and Wall 7)

Little can be said of the feature designated "Wall 6." As exposed, it consists of only two stones which protrude from the SE baulk of TR1 tr2 and which directly overlie Wall 10 of Phase IV (Figs. 35-36; Pl. 32 c-d). Both stones are well-dressed blocks of granodiorite with dimensions not unlike those used in the lower course of the wall proper of Structure 2. As preserved the stones define a length of 0.90 m. and a maximum width of *ca.* 0.25 m. A third similar stone, roughly at right-angles to the other two may be out of its original position.[250] The general impression given by the stones of "Wall 6" as they were found *in situ* is of a wall or other constructed feature

[250] This block was subsequently removed as it was unlikely to have been part of the feature; it does not appear on the plan Fig. 35.

roughly parallel to the nearby Wall 7 in TR1 tr3 and on a similar SE-NW alignment as the better preserved Phase III walls in TR3 tr1, TR3 tr2, TR4 tr1 and TR4 tr2. Rather than representing a structural bearing wall, "Wall 6" may be a feature somehow associated with the building represented by Wall 7; but unless excavations were to be considerably extended to the SE its exact nature and relationship to Wall 7 could not be known.[251] When first encountered it was designated Feature 1; a small quantity of carbon was noted along the SW side of the stones, which suggested the possibility of a hearth or some fire-installation, but this could not be proved. "Wall 6" is here tentatively assigned to Phase III on account of its orientation, but mainly because it clearly overlies Wall 10 of Phase IV.

In the course of excavation the pottery and other small finds recovered from the immediate vicinity of "Wall 6" was designated TR1 tr2 *Unit 4a*. Although the material from Unit 4a is presented here, it is unlikely to represent a deposit of any contextual significance.

In the east corner of TR1 tr2, also overlying Wall 10 of Phase IV, was another concentration of stones designated Feature 2 in the field. Owing to the small area in which these stones were exposed, it could not be established whether they represent a constructed feature or a mere tumble. The material recovered in the immediate area of these stones was designated *Unit 4b.* The pottery and other small finds from Units 4a and 4b were consistently of Classical date. A coin found in TR1 tr2 *Unit 4b* is assigned to Alexander III and is dated to the period 336-323 B. C. (**20.18**). The small quantity of post-Classical material recovered from both is presented above under Phase II.[252]

DEPOSIT SUMMARY

TR1 tr2 Unit 4a[253]

Catalogued items:

Black-glaze:	**9.41, 9.42, 9.114, 9.120, 9.173, 9.215**.
Stamped black-glaze:	**10.127**.
Greek lamps:	**15.22, 15.32**.
Figurine:	**16.24**.

[251] Had TR1 tr3 not been excavated, similarly little could be said of the block projecting from the SE baulk of TR1 tr1, also overlying Wall 10, which is clearly part of Wall 7.

[252] Under TR1 tr2 Units 4a and 4b.

[253] Note also the metal objects **18.27** and **18.70**.

TR1 tr2 Unit 4b[254]

Catalogued items:

Black-glaze:	**9.56.**
Stamped black-glaze:	**10.26, 10.55, 10.128.**
Domestic pottery:	**12.64.**
Coin:	**20.18** (Alexander III, 336-323 B. C.).

The building represented by Wall 7 was largely encountered in TR1 tr3 (Figs. 35-36; Pls. 31 f, 32 a). Wall 7 was exposed for a length of 2.95 m. in TR1 tr3 but continued towards the west underneath the baulk separating TR1 tr3 and TR1 tr1 and emerged from the SE scarp of TR1 tr1 in the form of one large stone only. The base of this stone lay a few centimetres above the preserved top of Wall 10 of Phase IV. Oriented SE-NW, with a width averaging 0.55 m., Wall 7 was built of an admixture of stone, mostly unworked or only roughly hewn, bonded with mud. Towards the SE the wall is much better preserved and survives to a height of about 1.0 m. At this point Wall 7 was built directly onto a large outcrop of bedrock visible at the east corner of the trench along the SW face of the wall (Pls. 31 f, 32 a). In order to provide a more solid footing for the wall, the lower courses were built somewhat wider to a maximum width of 0.80 m. The latter formed a kind of "*euthynteria,*" which was confined to this part of the trench, directly overlying bedrock and did not extend for any distance to the NW.[255] This was the only part of the entire excavated area of the Isthmus where bedrock was revealed, indicating that the natural rock rose sharply in the unexcavated area towards the south and SE.[256]

As can be seen on Pl. 32 a, Wall 7 was constructed in a neatly jointed though not very regular masonry, which closely resembled that of Walls 3 and 4 of Structure 1, and was on a similar orientation to Wall 3. The base of the wall was only revealed towards the SE where it was built onto bedrock; further to the NW the base of the wall was not reached by the conclusion of the 1978 campaign. Toward the SE, part of the wall appeared to have collapsed over the outcrop of bedrock.[257]

Except for the single block continuing the line of Wall 7 in TR1 tr1, the NW continuation of the wall was not exposed. The wall may have been robbed out at this point during Phase I, or alternatively it may have been damaged by the construction

[254] Note also the material presented above under Phase II.

[255] This "*euthynteria*" was exposed for a length of 1.80 m.

[256] This can also be gauged by the natural contour of the land as shown in Fig. 2.

[257] The lower stones of this collapse gave the impression of having been laid in place abutting the SW face of Wall 7, whereas those encountered above were more clearly tumble. This suggested that the wall was perhaps intentionally buttressed by a number of stones laid over the bedrock.

of Structure A. Located at a higher level than the walls of the earlier Phase IV in TR1 tr1 the wall may also have suffered from erosion.

There was no evidence of a return wall or any other associated wall, in the area under excavation, and only the feature designated "Wall 6," itself tentatively assigned to Phase III, may have originally been associated with the building represented by Wall 7. It would seem clear, however, that Wall 7 belonged to a building that extended towards the north, east and SE and was largely located under Structure A of Phase I. Any major extenstion of the building towards the west and NW is reasonably precluded by the proximity of the slight cliff which falls away to the beach on the west side of the Isthmus. The area towards the SW, between Walls 7 and 8, had better be seen as lying outside the building represented by Wall 7. This is suggested by the existence of a packed earth surface, with some small pebbles and small chips of stone set in its matrix, uncovered in the small area to the NE of the wall (Fig. 35). If this was an interior surface of the building, then the feature designated "Wall 6" could have been an internal setting of some kind.

The stratigraphy associated with Wall 7 in TR1 tr3 was relatively straightforward. The material recovered from above the floor surface encountered in the NE corner of the trench was designated *Unit 2a*, while that encountered below the floor was designated *Unit 3a*. The small quantity of datable pottery recovered from both deposits was Classical with the latest identifiable material belonging to the 4th century B.C., including material of the second half of the century.

In the larger area SW of Wall 7, a uniform deposit of fill was encountered dipping sharply down from east to west, designated *Unit 3*.[258] Characterised by a compact yellow-brown soil, the deposit yielded a good deal of Classical pottery, again including material of the second half of the 4th century B.C. The deposit also yielded fragments of red and white painted plaster, similar to those encountered along the exterior of Structure 1, which need not, however, be associated with the building. A minor quantity of later contamination was noted in the interface between Unit 3 and the overlying Unit 2 of Phase II. Clearance of Unit 3 brought to light the preserved top of Wall 8, tentatively assigned to Phase V. The stratigraphical sequence on either side of this wall, seems to verify that the area to the NE was indeed the interior of the building.

[258] There was also a slight downward slope from north to south.

DEPOSIT SUMMARY

TR1 tr3 Unit 2a

Catalogued items:

Red-figure:	**8.104.**
Black-glaze:	**9.110.**

TR1 tr3 Unit 3a[259]

Catalogued item:

Red-figure:	**8.50**.

TR1 tr3 Unit 3[260]

Catalogued items:

Archaic pottery:	**5.16, 5.32**.
Corinthian pottery:	**6.16**.
Attic black-figure:	**7.3, 7.18**.
Red-figure:	**8.39, 8.94, 8.113, 8.120, 8.174, 8.183, 8.191**.
Black-glaze:	**9.43, 9.91, 9.92, 9.115, 9.116, 9.126, 9.170, 9.183, 9.202**.
Stamped black-glaze:	**10.16, 10.33, 10.51, 10.104, 10.107, 10.114**.
Greek lamps:	**15.9, 15.36, 15.64.**
Architectural terracotta:	**16.43**.
Metal object:	**18.83**.
Coin:	**20.63** (uncertain).

The following catalogued objects were recovered from the interface between Units 2 and 3 and are best seen as contamination:

Roman pottery:	**14.69, 14.209.**
Objects of glass and bone:	**17.28, 17.76.**

THE ARCHITECTURE OF PHASE IV

The architecture of Phase IV is confined to TR1 tr1, TR1 tr2, and TR2 tr1 (Figs. 35-36; Pls. 29 g, 30 d-e, 32 c-f, 33 a). The most important feature of Phase IV is the large Wall 10. Oriented SW-NE, but on a different alignment to Wall 4 of Phase III, Wall 10 extends through the entire length of TR1 tr1 to the SW, into TR1 tr2, and

[259] At times designated TR1 tr3 N or NE.
[260] Also designated TR1 tr3 SW.

through TR2 tr1. It disappears under Structure B of Phase I, and was not encountered in TR3 tr1 and TR3 tr2, nor in TR4 tr1 and TR4 tr2. Exposed for a length of 17.50 m., the wall clearly continues, for at least a short distance, to the SW. Wall 10 is more substantial in the SW where it was constructed with large, well-dressed blocks of granodiorite (Pl. 31 d-e), becoming progressively less impressive towards the NE. As exposed in TR1 tr2, it was built of an admixture of stone, including granodiorite, limestone and schist, of small to medium size, either unworked or only very roughly hewn, bonded with mud (Pls. 31 d-e, 32 c-d). In TR2 tr1 Wall 10 was largely built of smaller unworked stones and there is a slight tapering in of the wall towards the NE (Pls. 32 e-f, 33 a). Wall 10 has a minimum width of 0.45 m. in TR2 tr1, an average width of 0.50 m. in TR1 tr2, and a width greater than 0.65 m. in TR1 tr1, although its overall width could not be determined in the latter. Wall 10 survives to an average of two courses for most of its length, although the base of the wall was not reached in any of the excavated trenches.

Wall 10 clearly predates Phase III as is shown by the fact that Wall 7, along with the feature designated "Wall 6," overlies it, and its presumed continuation towards the NE was at a level below the floor of Structure 1 of Phase III. No trace of a return wall was revealed along the entire exposed length of Wall 10 and it clearly formed the SE border of a road oriented SW-NE. The larger granodiorite blocks encountered in TR1 tr1 initially suggested that a building may have been attached to this part of Wall 10, but no trace of any contemporary building was encountered in TR1 tr3.

The NW side of the street was defined by Wall 11. The latter could not be indicated on the plan of Fig. 35 as it only just projected from the NW baulk of TR1 tr1 (Pl. 31 d).[261] That part of it that was visible along the NW scarp of the trench was preserved to a height of two courses and constructed in a technique similar to that of the part of Wall 10 exposed in TR1 tr1, with large, well-dressed blocks of granodiorite. As far as could be determined, Walls 10 and 11 are on an identical SW-NE orientation, separated from each other by a distance of about 2.0 m. At a point 2.30 m. along the NW scarp of TR1 tr1 from the west corner of the trench, Wall 11 terminates at a neat corner with a presumed wall running SE-NW (Fig. 35; Pl. 31 d).[262] This corner would imply the existence at this point of a NW return wall for the street or perhaps the existence of a building bordering it; little more, however, can be said about this structure which incorporates Wall 11.

[261] A few of the stones indicated on Fig. 35 along the NW baulk of the trench belong to Wall 11. The projecting stones of the wall are just visible on the right hand side, at the centre of Pl. 31 d.

[262] The corner itself is indicated with interrupted lines on the plan Fig. 35 at the centre of the NW scarp of TR1 tr1.

Running down the centre of the street and roughly equidistant from Walls 10 and 11 was the feature designated Wall 9 (Figs. 35-36; Pls. 31 d-e, 32 c-d). Like Wall 10 it emerged from the SW scarp of TR1 tr1 and extended the length of the trench into TR1 tr2. The overall length of Wall 9 as exposed in these two trenches measures 8.10 m. A small stretch of what is conceivably the same wall was uncovered in TR2 tr1, at a distance of some 4.0 m. from the NE termination of the wall in TR1 tr2. The small stretch of the wall encountered in TR2 tr1 has a preserved length of 1.50 m., and is oriented on a slightly different SW-NE alignment (Figs. 35-36; Pls. 32 e-f). If this small stretch of wall encountered in TR2 tr1 originally continued the line of Wall 9 as exposed in TR1 tr1 and TR1 tr2, then the minimum length of the wall would be in the vicinity of 13.50 m.

Wall 9 has only a well-defined SE face. For most of its length the wall is preserved to a single line of small unworked stones. It has a maximum width of almost 0.50 m. at one point in TR1 tr1, but averages a width of about 0.15-0.20 m. The footing of Wall 9 is at a level slightly higher to that of the lowest course of Walls 10 and 11 reached by the end of the 1978 campaign. Moreover, that part of Wall 9 encountered in TR1 tr2 was at a level slightly higher than that of the SW end of the wall as exposed in TR1 tr1; this slight downwards inclination from NE to SW may have been the result of subsidence due to the natural slope of the land from NE to SW.

The exact function of Wall 9 is uncertain. It may have served as a setting for a drainage system under road level. This theory is perhaps supported by the slight inclination of the wall from NE to SW discussed above, which would have facilitated the channelling of water towards the SW. No trace, however, of any water pipes, nor of any other feature which may have channelled water, was brought to light. The fact that the wall has a fairly neatly defined SE face, but no clear NW face suggests more plausibly that it was built to retain fill to the NW. This view is perhaps supported by the slight downward slope of the land from north to south, particularly in the area of TR1 tr1. The fact that Wall 9 was more substantial towards the SW, where the downwards slope of the land is more pronounced, may further suggest that it was built in an attempt to keep the surface of the road at a more consistent level.

Though less substantial than the sub-surface packing designated "Wall 5" encountered below the surface of the road between Structures 1 and 2, Wall 9 was not unlike it in general appearance. It is worth adding that, like Wall 9, "Wall 5" had a neatly defined face on one side only, that to the SW, but no real NE face (Pl. 35 g). Consequently, it would be best to consider Wall 9 as a sub-surface support similar to "Wall 5."

For most of the area of TR1 tr1, TR1 tr2 and TR2 tr1 no trace of the actual road surface itself survived. In its place, and extending to the limit of the excavations at

the end of the 1978 campaign, a consistent deposit of fill was encountered, designated the "Amphora Deposit," which will be described in greater detail below. This fill was laid to raise the ground level to the required height for the construction of Phase III. Since most of the buildings of Phase III uncovered in the area under excavation were located in the trenches towards the NE (TR3 tr1, TR3 tr2, TR4 tr1 and TR4 tr2) or else in TR1 tr3 to the SW, the "Amphora Deposit" was mostly encountered below the deposits associated either with Phase II or Phase I in TR1 tr1, TR1 tr2 and TR2 tr1.

Although the "Amphora Deposit" provided an invaluable *terminus post quem* for the construction of Phase III buildings, a construction date for Walls 9 and 10 of Phase IV was not established. Consequently, the only firm statement that is permissible concerning the date of Phase IV, is that it went out of use and was subsequently levelled over in the course of the second half of the fourth century B.C.

THE "AMPHORA DEPOSIT"

The so-called "Amphora Deposit" was encountered in TR1 tr1, TR1 tr2 and TR2 tr1 below the deposits associated with Phases I and II and continuing down to the level reached by the conclusion of the 1978 campaign. The deposit was characterised by a dense yellow-brown soil containing many large fragments of Classical transport amphorae and contemporary domestic pottery, which gave it its name. The deposit also yielded many fragments of late Classical pottery and other small finds, in addition to smaller quantities of earlier, residual material. Fragments of red and white painted plaster, in addition to lumps of slag and quantities of animal bones and seashells were noted throughout the deposit.

The deposit was most concentrated in the area SE of Wall 10, particularly in TR2 tr1; it was laid over the top of Wall 10, and on both sides of it, as well as over the top and on both sides of Wall 9. It appears on the NE section of TR1 tr2 as deposits 4 (a-c), 5 and 6 (Fig. 34 c).[263] Prone to slight variances of colour and texture, and also to localised variances in terms of quantities of sherds recovered, the deposit was excavated using many unit and bucket designations, defined both vertically and horizontally, but with numerous joins noted between fragments of pottery often recovered from different trenches and at various depths. Local dumps of large fragments of coarse-ware pottery were particularly numerous in TR2 tr1 (Pls. 29 h, 31 a), while in

[263] Deposit 3a on Fig. 34 c was also probably part of it but contained minor contamination from the overlying Phase II deposits.

TR1 tr1 an almost complete pot was recovered from the uppermost levels of the deposit (**12.57**, Pl. 30 a).

It is impossible to determine where this fill derives from, but it is difficult to imagine that it was brought in from any great distance. It is tempting to suppose that the amphora and domestic coarse-ware fragments represent material from Phase IV, re-deposited by the builders of Phase III as levelling fill; this is, however, purely speculative.

Although the deposit yielded a good quantity of pottery and other small finds dating to the 5th century B.C. and into the first-half of the 4th, in addition to smaller quantities of Archaic and the odd fragment of Late Geometric or Subgeometric, by far the largest component of the pottery recovered could be dated to around the middle of the 4th century B.C. Such a date is based primarily on the plain and stamped black-glaze, and the red-figure fragments. The latest identifiable material could be dated into the second half of the 4th century B.C. Such a date, again, relies on the black-glaze and the red-figure pots, the fragmentary state of which, coupled with the fact that the majority can be assigned only a broad date range into the second half of the century, makes it difficult to determine the exact date of the laying of the deposit. Among the latest fragments are two red-figure sherds, **8.105** (*ca.* 380-330 B.C.) and **8.66** (375-325 B.C.), which could conceivably date late in the first half of the century. Some of the black-glaze fish-plate fragments, such as **9.155**, **9.161-163, 9.168**, and **9.152**, are best accommodated in the third-quarter of the 4th century B.C. or perhaps even slightly later. A date in the third quarter of the 4th century B.C. is also strongly supported by the stamped black-glaze pottery recovered from the deposit in some quantity. Two small fragments of Hellenistic pottery, one recovered from TR1 tr1 *Unit 4* (**11.16**) the other from TR2 tr1 (**11.13**), and both dated to the third century B.C., are almost certainly intrusive (see below).

For convenience, and to facilitate cross reference, the material from the deposit is presented according to trench and original unit designation. The uppermost parts of the deposit in most of the trenches where it was encountered yielded minor quantities of later intrusive material. Owing to the slope of the deposits (Fig. 34 c), it was often difficult to distinguish between them. The later material is noted in relevant places.

TR1 tr1. The "Amphora Deposit" was excavated in this trench using several unit designations. The uppermost part of the deposit was first encountered in 1976 and its excavation was continued in 1978 with the designation *Unit 4*. The interface between Unit 4 and the overlying Unit 3 of Phase II[264] was not always clear and this

[264] See above Phase II.

lack of clarity caused a certain amount of contamination in both units.[265] *Unit 4a* refers to the "Amphora Deposit" proper; it was encountered over most of Wall 10 and over Wall 9. *Units 5* and *5a* refer to the lower parts of the deposit, below the preserved top of Wall 9; Unit 5a refers specifically to the part of the deposit excavated SE of Wall 9, Unit 5 to the part of the deposit excavated NW.

DEPOSIT SUMMARY

TR1 tr1 Unit 4

Catalogued items:

Late Geometric or Archaic pot:	**5.7.**
Red-figure:	**8.21, 8.22, 8.49, 8.58, 8.140.**
Black-glaze:	**9.34, 9.39, 9.52, 9.196, 9.203, 9.214.**
Stamped black-glaze:	**10.101, 10.137.**
Domestic pottery:	**12.3, 12.36, 12.57.**
Greek lamp:	**15.20.**
Figurine:	**16.41.**

Intrusive material (contamination from overlying Phase II Unit 3):

Hellenistic pottery:	**11.16.**
Roman pottery:	**14.164, 14.393.**

TR1 tr1 Unit 4a

Catalogued items:

Late Geometric or Archaic pot:	**5.2.**
Red-figure:	**8.160.**
Black-glaze:	**9.197.**
Stamped black-glaze:	**10.49, 10.58, 10.84.**
Domestic pottery:	**12.40, 12.41.**
Figurines:	**16.23, 16.33.**

The following intrusive material was encountered in the far SW portion of the trench where the deposits sloped down sharply, and is best seen as part of either Unit 3 or 4.

Roman pottery:	**14.467.**
Object of bone:	**17.91.**

[265] It should be remembered that the inclination of the land and of the deposits was more pronounced in this trench.

TR1 tr1 Unit 5

Catalogued items:

Red-figure:	**8.61, 8.63, 8.78, 8.110, 8.118, 8.146.**
Black-glaze:	**9.50, 9.132, 9.166**.
Figurine:	**16.17**.

TR1 tr1 Unit 5a

Catalogued items:

Attic black-figure:	**7.15.**
Red-figure:	**8.85, 8.97, 8.166, 8.179**.
Black-glaze:	**9.61, 9.216**.
Stamped black-glaze:	**10.82.**
Amphora:	**13.22**.

The following pieces were inventoried as *TR1 tr1 Units 4-5a*:

Red-figure:	**8.15, 8.38, 8.65**.

TR1 tr2. The "Amphora Deposit" in TR1 tr2 was essentially excavated as *Unit 6*. Once the darker earth of the Phase II deposits had been cleared, a dense yellow earth was revealed, designated Unit 6 in the area under excavation. With depth, and with the appearance of Walls 9 and 10, the lower levels of the deposit were subdivided into *Units 6a* and *6b*. Unit 6a refers to the lower levels of the deposit NW of Wall 10, Unit 6b to the lower levels of the deposit SE of the wall. A very small quantity of Late Roman contamination was noted in the uppermost part of Unit 6. Unit 6 corresponds to Deposit 4a-c on Fig. 34 c, Unit 6a to Deposit 5, and Unit 6b to Deposit 6.

DEPOSIT SUMMARY

TR1 tr2 Unit 6

Catalogued items:

Attic black-figure:	**7.4**.
Red-figure:	**8.83, 8.121.**
Black-glaze:	**9.105, 9.117, 9.124, 9.156, 9.207**.
Stamped black-glaze:	**10.32, 10.59, 10.63, 10.65.**
Domestic pottery:	**12.44**.
Greek lamps:	**15.17, 15.31, 15.37**.
Louterion:	**16.48**.

The following is material recovered from the interface of Units 5 and 6 and is best seen as part of Unit 5.

Roman pottery: **14.192, 14.219.**

TR1 tr2 Unit 6a

Catalogued items:

Red-figure: **8.1, 8.80, 8.107, 8.157.**
Black-glaze: **9.57, 9.106.**
Stamped black-glaze: **10.27.**

TR1 tr2 Unit 6b

Catalogued items:

Red-figure: **8.43, 8.81.**
Black-glaze: **9.89.**
Stamped black-glaze: **10.8, 10.119.**
Greek lamp: **15.47.**
Domestic pottery: **12.24.**

TR2 tr1. The heaviest concentration of the "Amphora Deposit" was met in this trench (Pls. 29 h, 31 a), yielding a copious quantity of well preserved fragments of Late Classical transport amphorae and domestic pottery, in addition to fine-wares. As was the case in other trenches where the "Amphora Deposit" was encountered, the material from the deposit was dug using unit designations defined both horizontally and vertically. *Unit 3* was assigned to the thin deposit of Phase II wash levels encountered in the trench. During the course of excavating Unit 3, the uppermost part of the "Amphora Deposit" (*Unit 3a*) was inadvertently dug into. The Late Roman material from Unit 3 has been presented above; the Classical material is presented below, but should be regarded with caution as some of the objects listed could derive from wash levels. *Units 3a, 4a, 5a*, refer to the "Amphora Deposit" SE of Wall 10; Unit 4a is below 3a, and 5a is below 4a. *Units 4* and *5* refer to the "Amphora Deposit" NW of Wall 10 in descending stratigraphic order.

DEPOSIT SUMMARY

TR2 tr1 Unit 3

Catalogued items:

Attic black-figure: **7.22.**
Red-figure: **8.36, 8.37, 8.51, 8.161, 8.164.**

Black-glaze: **9.30, 9.47, 9.58, 9.96, 9.129, 9.134, 9.139, 9.157, 9.169, 9.192, 9.213.**
Stamped black-glaze: **10.7, 10.42, 10.44, 10.47, 10.77, 10.81, 10.89, 10.90, 10.93, 10.94, 10.95, 10.112, 10.125.**
Domestic pottery: **12.2, 12.14, 12.17, 12.18, 12.59, 12.60.**
Amphorae: **13.14, 13.18, 13.21, 13.51.**
Greek lamps: **15.29, 15.38, 15.40, 15.65, 15.68, 15.81.**
Figurines: **16.2, 16.3, 16.13, 16.19, 16.20, 16.36.**
Architectural terracotta: **16.44.**
Metal objects: **18.25, 18.63, 18.94, 18.120.**
Lead inscription: **19.1.**

TR2 tr1 Unit 3a

Catalogued items:

Archaic pot: **5.12.**
Red-figure: **8.13, 8.27, 8.28, 8.29, 8.52, 8.138, 8.156, 8.169, 8.173, 8.182, 8.184.**
Black-glaze: **9.98, 9.99, 9.137, 9.143, 9.155, 9.162, 9.163, 9.168, 9.177, 9.181, 9.182, 9.189, 9.193, 9.194.**
Stamped black-glaze: **10.14, 10.37, 10.50, 10.71, 10.100, 10.122, 10.124.**
Domestic pottery: **12.9, 12.12, 12.19, 12.38, 12.54, 12.55.**
Amphorae: **13.7, 13.24, 13.29, 13.32, 13.35, 13.36, 13.38, 13.39, 13.40, 13.41, 13.45, 13.49, 13.50, 13.52, 13.55, 13.56.**
Greek lamps: **15.14, 15.25, 15.39, 15.55, 15.79.**
Figurines: **16.8, 16.12.**
Object of bone: **17.100.**
Metal objects: **18.41, 18.52, 18.53, 18.58, 18.81.**
Coins: **20.51, 20.52** (uncertain).

TR2 tr1 Units 3-4, 3a-4a

Catalogued items:

Red-figure: **8.40, 8.41, 8.71, 8.77.**
Black-glaze: **9.59, 9.130.**
Stamped black-glaze: **10.98.**
Domestic pottery: **12.16, 12.46.**

TR2 tr1 Unit 4

Catalogued items:

Red-figure: **8.95, 8.105, 8.137, 8.170, 8.180.**
Black-glaze: **9.161.**
Stamped black-glaze: **10.64, 10.70, 10.129.**

Figurines: **16.27, 16.31**.
Metal objects: **18.91, 18.92.**

TR2 tr1 Unit 4a

Catalogued items:

Red-figure: **8.103, 8.117, 8.119**.
Black-glaze: **9.121, 9.123, 9.152**.
Stamped black-glaze: **10.54, 10.96, 10.135**.
Domestic pottery: **12.33, 12.50**.
Greek lamps: **15.49, 15.61**.
Metal objects: **18.60, 18.82**.

TR2 tr1 Units 4-5

Catalogued items:

Red-figure: **8.53, 8.64, 8.145**.
Metal objects: **18.55, 18.102**.

TR2 tr1 Unit 5

Catalogued items:

Red-figure: **8.185**.
Greek lamps: **15.28, 15.62**.
Figurine: **16.10.**
Coin: **20.65** (uncertain).

TR2 tr1 Unit 5a

Catalogued items:

Red-figure: **8.66, 8.116, 8.147, 8.149, 8.189**.
Black-glaze: **9.7, 9.21, 9.23, 9.49, 9.84, 9.93, 9.125, 9.135, 9.141, 9.142**.
Stamped black-glaze: **10.41, 10.61, 10.68, 10.109**.
Domestic pottery: **12.1, 12.15, 12.48, 12.56**.
Amphorae: **13.6, 13.25, 13.26, 13.27, 13.30.**
Greek lamp: **15.24**.
Figurines: **16.25, 16.26, 16.29, 16.34**.
Metal objects: **18.26, 18.54**.
Coin: **20.55** (uncertain).

TR2 tr1 Contamination. A small quantity of intrusive later material, primarily Late Roman, but also at least one fragment of Hellenistic pottery (**11.13**) was encountered in the interface between the "Amphora Deposit" and the overlying Phase II. Most of it was noted in that part of the "Amphora Deposit" that was first exposed in 1976 and continued in 1978. The items listed below derive from a number of individual units listed above.

Catalogued items:

Hellenistic pottery:	**11.13**.
Roman pottery:	**14.94**.
Roman lamp:	**15.92**.
Objects of glass and bone:	**17.15, 17.32, 17.36, 17.40**.

ISTHMUS PHASE V

This is only a tentative phase, distinguished from the others by one poorly preserved wall - Wall 8 - uncovered in the SW sector of TR1 tr3 (Fig. 35; Pls. 31 f, 32 b). Oriented SE-NW, on a similar but nevertheless slightly different alignment from that of the nearby Wall 7, Wall 8 was traced for a length of 2.10 m. and has an average width of 0.35-0.40 m. The preserved top of the wall was met at a level considerably lower than that of Wall 7 of Phase III and by the conclusion of the 1978 campaign its base had not been reached. The preserved top of the wall was first encountered at 3.33 m. above sea level, whereas the preserved top of Wall 7 was at 4.01 m., and the level of the protruding bedrock nearby (see below) was at 3.45 m. above sea level.

Towards the NW Wall 8 had been destroyed in such a way as to suggest that it had been cut by the foundation trench for Wall 10 of Phase IV. This could not be established, however, with certainty since the baulk separating TR1 tr1 and TR1 tr3 was not excavated. Towards the SE Wall 8 extends to the SE baulk of TR1 tr3, but at this point, too, it appears to have been destroyed and cut into. As preserved, the wall was predominantly built of thin slabs of schist, with only a smaller admixture of other stone. Individual stones were either unworked or only very roughly hewn, and were bonded with mud. The schist slabs were laid in such a way as to define three rough preserved courses. The masonry style of Wall 8, especially in the use of schist, differed from that of all other walls uncovered in the Isthmus area. It closely resembled the poorly preserved Wall 4 in the Lower City Trench 3,[266] assigned to the Archaic period, as well as a number of much better preserved wall foundations uncovered on Promontory 1 in 1988, dating to the Archaic period and to the second half of the fifth century B.C.[267]

Deposits clearly associated with Wall 8, such as foundation trenches and floor levels, were not encountered; consequently the wall cannot be precisely dated. Its

[266] See Figs. 43 a-b, d; Pl. 43 b-c.

[267] A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 3 (1990) 97 fig. 4; 101 fig. 6; 102 fig. 8; pls. 30:1-6; Cambitoglou and Papadopoulos, *MeditArch* 4 (1991) 150 fig. 3; pls. 21:3-4.

relationship, however, to Wall 7 of Phase III and Wall 10 of Phase IV is clear, and the building represented by Wall 8 certainly predates both these phases. The preserved top of Wall 8 first appeared with the removal of TR1 tr3 Unit 3 which was associated with Wall 7. This association, the relative levels of Walls 7 and 8 and the fact that the two walls are on slightly different alignments, argue that Wall 8 predates Phase III. It is worth adding that Unit 3 which was associated with Wall 7 (see above TR1 tr3 Unit 3) yielded a comparatively large quantity of Archaic residual material, including the terracotta antefix **16.43** and a few fragments of Corinthian and Attic black-figure pottery (**6.16, 7.18**), and at least one fragment of a Subgeometric or Archaic vessel (**5.32**). Although the latest identifiable material found in the deposit could be dated into the second half of the fourth century B.C., the relatively high quantity of earlier sherds was a curiosity, and may possibly represent pottery deriving from disturbed and destroyed deposits associated with the earlier Wall 8.

The precise relationship of Wall 8 to Wall 10 is partially obscured by the intervening baulk between TR1 tr3 and TR1 tr1. It has already been mentioned that the NW end of Wall 8 was destroyed in a way suggesting that it had been cut by the foundation trench for Wall 10. Although this could not be established with certainty, Wall 8 appeared at a much lower level than Wall 10 and on an orientation different from that of Phase IV.

The only other deposit met in TR1 tr3 was revealed to the SW of Wall 8, after the overlying Unit 3 had been cleared. Designated *Unit 4*, this deposit was characterised by a dark-brown, less compact soil, which was clearly different from the yellow-brown earth of Unit 3. The deposit either represents material which had accumulated over the building to which Wall 8 belonged once it had gone out of use or, more likely, a localised, lower level of fill laid prior to the construction of Wall 7. The deposit yielded only a small quantity of fragmentary pottery and other small finds, the latest of which could be dated to the 4th century B.C. The material from this deposit is presented here, but should be seen as part of Phase III.

On the basis of the indications outlined above, and a comparison of domestic masonry styles in other parts of the site, the building represented by Wall 8 should be dated to either the fifth century B.C. or conceivably to the later sixth century.

DEPOSIT SUMMARY

TR1 tr3 Unit 4

Catalogued items:

Red-figure:	**8.7, 8.112**.
Black-glaze:	**9.63, 9.65, 9.148**.

Stamped black-glaze: **10.35.**
Greek lamp: **15.23.**

STRUCTURES OF UNCERTAIN PHASE

Wall 1 (TR1 tr1)

Very little can be said about Wall 1, uncovered in the west corner of TR1 tr1 (Fig. 35; Pl. 31 d). Only a 1.90 m. stretch of it was exposed and its width could not be defined. Oriented SW-NE, but on a different alignment to walls of Phases III and IV, it was constructed in a variety of stone, mostly small to medium sized, and either unworked or only roughly hewn. No bonding agent was apparent other than mud and the wall survived to a height of two rough courses.

Wall 1 appeared to have been founded directly on the "Amphora Deposit" (TR1 tr1 Unit 4), while its preserved top was first noted during the excavation of TR1 tr1 Unit 3 of Phase II. Its base was at a level higher than that of Walls 9 and 10;[268] no trace of a foundation trench or associated surface was noted.

Chronologically, the only thing that can be stated about Wall 1 is that it clearly predates the Post-Byzantine Structure A of Phase I, that it was overlain by the hill wash levels of Phase II of Late Roman date, and was clearly later than the "Amphora Deposit" levelling fill, which was laid over the architectural remains of Phase IV by the builders of Phase III. The building represented by Wall 1 may conceivably belong to Phase III, although this seems unlikely on account of its orientation which is slightly different to that of Phase III buildings. Another possibility is that Wall 1 was built during the Roman period, sometime prior to the accumulation of the Phase II wash levels, but there is no evidence either to support or to negate such an assertion.

The Well (TR2 tr2)

The well-shaft in TR2 tr2 first appeared with the clearance of TR2 tr2 Unit 3 of Phase II, and necessitated a small extension of the trench so that the immediate area could be defined more clearly (Fig. 35; Pls. 31 b-c, 33 b-d). The well was located very close and partly below the base of the wall of the Post-Byzantine Structure E

[268] On Pl. 31 d the base of Wall 1 appears to be at a level similar, or even lower, to that of Wall 9, but this is a photographic illusion due to lens distortion.

(Pl. 33 b-c). Well constructed, the circular shaft of the well has an internal diameter of 0.85 m. Its interior was neatly faced with worked slabs of schist, limestone and granodiorite, which continued to the depth reached by the conclusion of the 1978 campaign. A neatly laid paving was built around the well-shaft and clearly continued for a distance to the west and south. Stones encountered in its upper fill (Pl. 31 b), along with at least one larger stone found *in situ* above the level of the paving on the south side (Pl. 33 b-c) may suggest that it originally had a low coping around it. The flagstones of the paving may have originally continued on the east side, where evidence of minor disturbance was met (Pl. 33 b).

Above the flagstones of the paving surrounding the well-shaft, and continuing for a short distance to the SE, a thin deposit of red soil appeared and was cleared as *Unit 4*. A large quantity of roof-tile fragments, predominantly large fragments of pantiles, was found in the immediate vicinity of the well suggesting the possibility that the shaft may have been covered by a tiled roof of sorts. Apart from the tile fragments, Unit 4 - which represents the lowest level reached in the trench proper at the end of the excavations - yielded very little pottery. The only items catalogued were the fragments of the upper body and neck of the Classical transport amphora **13.37**. Of other fragments of pottery encountered in Unit 4 only a small quantity was recorded in context, all of them being of Classical date.[269]

The fill of the well-shaft itself was excavated as *Unit 5*. Its uppermost 0.80 m. was full of stones, as noted above (Pl. 31 b), and a brown clayey soil. This upper level of the well-fill also yielded joining fragments from the lower body of the amphora **13.37**, and a very small quantity of Classical fine- and coarse-ware pottery, which could not be more precisely dated.[270] Below this, the fill assumed a greyish-brown colour, and a dense, but not very compact, texture, which was virtually sterile of small finds. At a depth of 2.60 m. below the top of the shaft, saline water began seeping in and excavation was terminated at this point.

Although clearly of Classical date, both on account of the fragmentary pottery recovered from the well-shaft and its immediate vicinity, and its stratigraphic location below the deposits associated with Phases I and II, the well could not be more precisely dated. The red soil of Unit 4 was confined to this trench only and in the immediate vicin-

[269] The following fragments were noted in context: 3 body frr. black-glaze; 1 fr. of a banded cup; 2 frr. of local painted domestic pottery, and 7 frr. of coarse-ware vessels, predominantly amphorae. Although not precisely datable, there was nothing in the deposit that was post-Classical.

[270] The uppermost 0.80 m. of the well-fill yielded the following fragments, now stored in context lots: 22 black-glaze frr., including 3 base frr., 2 handle frr., and 4 rim frr.; 1 red-figure fr.; 21 frr. of Classical coarse-ware pottery (mainly amphorae); 33 cooking-ware frr. and 18 frr. of Classical or pre-Classical painted wares, mostly small and very worn.

ity of the well, and was not encountered in any of the neighbouring trenches. Moreover, the deposits associated with Phases III and IV in TR2 tr1 and in TR3 tr2 did not continue into TR2 tr2; therefore it is impossible to associate the well with either Phase III or IV. The relationship of the well to either Phase III or IV might only be determined with the excavation of the underlying deposits in the SE sector of the trench.[271]

5. HILL 2 (1978)

Grid reference: 12H

Hill 2 is one of the three hills within the fortified Early Hellenistic defensive system and one of several hills in the immediate vicinity of the ancient city of Torone (Fig. 1; Pls. 2 a, 4 a, 37 a). The summit is at a height of 89.52 m. above sea level. After Hill 1, Hill 2 is the most prominent geographical feature of the land on which the ancient city was built, especially with regard to its proximity to the harbour and to the promontories on the western side of the site. As early as 1923 Meritt equated the summit of Hill 2 (Figs. 1- 2; Pls. 1 a, 37 a) with Thucydides' ἀνωτάτω φυλακτήριον[272] and established it - on the basis of the evidence of Thucydides' account - as the highest fortified part of the Archaic and Classical city of Torone.[273] The hill is today known locally as *O Anemomylos* (the windmill).[274]

The foundations of a large round, or semi-circular bastion were clearly visible above surface prior to excavation, built in a masonry style similar to that of the Early Hellenistic fortification system. The remains of this structure were best preserved on the north side of the hill (Pl. 37 b, d). Moreover, the surface cleaning operations tracing the line of the ancient fortification system conducted during the 1975 season showed that three city walls converged at Hill 2. Of these, the earlier Walls A and B terminate at the summit of the hill, thereby closing the "triangle" of the fortified Archaic and Classical city, while the Early Hellenistic Wall H continues towards the SSE (Fig. 1).

[271] Should the "Amphora Deposit" encountered in TR2 tr1 extend into TR2 tr2 below unit 4, then it would be possible to assign the well to Phase III.

[272] Thucydides IV.110.2.

[273] B.D. Meritt, *AJA* 27 (1923) 456; see further A. Cambitoglou, *PAE* 1975, 110; *id., PAE* 1978, 80-84; A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180ff.

[274] Hill 2 perhaps derives its modern name from the remains of the round tower on the summit which was thought to have been a windmill. There are, however, conflicting local accounts about this story.

In 1978 four trenches were excavated, two of which were located on the summit within the perimeter of the tower (Trenches 1 and 2), and two on the west side (Trenches 3 and 4, Fig. 37).[275] The primary aim of these trenches was to determine the exact relationship of the various elements of the fortification to one another, and to determine their date. A further aim was to test for any earlier remains which may have occupied the site. Although important results were obtained, both in terms of architecture and small finds, the excavations of 1978 showed that the greater part of the summit of the hill had been systematically dug up, the fortifications dismantled, and the limestone melted down in the large lime kiln located only a short distance to the south sometime during the course of the late 19th century.[276]

Prominent among the small finds from the trenches excavated on the hill were a number of metal weapons which could equally represent part of the arsenal of the defenders of the city, or the weaponry of the besiegers. Mostly dating to the 4th century B.C., during which time Torone was besieged on several occasions,[277] the weapons include lead sling-bullets, some of which are inscribed, and bronze and iron arrow- and spear-ends Although all these finds derive from the summit of the hill, none was actually encountered *in situ* due to the 19th century stone robbing activity associated with the lime kiln. Throughout most of the Hill 2 trenches, particularly Trenches 1 and 2, a number of heavy, sea-worn and well-rounded pebbles were found which may well have been used as sling-bullets.

The most prominent architectural feature on the hill prior to excavation was the preserved semi-circular arc of the large round, semi-circular, or perhaps even apsidal bastion (Fig. 37). The wall of the structure could be traced for a preserved length, along its circumference, of approximately 23.30-23.80 m. If the line of the curve was continued towards the south on both the east and west sides, then the building would have a diameter in the vicinity of 16-17 m. The outer face, as preserved, is built of large rectangular blocks of limestone locally quarried on Hill 1. The faces are pick-

[275] A. Cambitoglou, *PAE* 1978, 80-84.

[276] The lime kiln is indicated on the plans Figs. 2 and 4, as are several of the other contemporary lime kilns.

[277] Following the events of the winter of 424/3 B.C., at which time Brasidas took Torone from the Athenians (Thucydides IV.110-116), and its recapture by Kleon in the summer of 422 B.C. (Thucydides V.2-3), Torone was taken at least three times in the course of the first half of the 4th century B.C. In 380 B.C. when the Spartans were campaigning against Olynthos, Agesipolis ravaged the territory of the Olynthian allies and took Torone by storm (Xenophon, *Hell.* V.3.18). In 364 B.C. Timotheos took Torone, evidently with the aid of mechanical devices (Diod. XV.81.6; Isokrates, *Antidosis* 108; *cf.* Polyainos, *Strat.* III.10.15). In 348 B.C. Torone, according to Diodorus Siculus XVI.53.2, fell to Philip II "by means of treasonable surrender."

worked flat or cushioned. As exposed in Trench 1 (see below), but also visible at various points along its circumference, the rubble fill between the inner and outer faces consists of small limestone pieces (Pl. 37 d). The masonry style of the building is similar to that of the Early Hellenistic defence system as exposed at the Gate Area and as is also visible elsewhere on the site (Pls. 9-19 e, 21 f). Immediately beyond the north face of the wall, remains of a second screen, or lower course, of large dressed limestone blocks were noted at various points, *in situ* and parallel to the wall. These formed part of a more substantial foundation, especially on the north side where the downhill thrust was greatest, which no doubt served to stabilise and strengthen the building.

Although there are a few other blocks, which appear to belong to the structure, scattered about the summit of Hill 2, the stone robbing activity of the 19th century makes it improbable that further excavation would reveal the complete plan. It remains, therefore, unclear whether the curved wall continued all round to form a circular, or a semi-circular building. The exact width of the wall could not be accurately measured, as it was hoped, even in Trench 1 because the inner face had been largely robbed. In the few places above surface where the outer face was visible, but inner face was not very clear, the width of the wall varies from *ca.* 1.10-1.50 m. If this is an accurate width, the wall could easily have supported a tower or bastion, although the thickness does not concur with Philo's recommendation.[278]

Of the four trenches excavated, Trenches 1 and 2 did little to clarify the internal nature of the building since, in both soundings, a confusing picture of stone robbing and back filling was revealed (Pls. 37 c-f, 38 a-f, 39 a-b). More significant were the results in Trench 3 where the junction of City Walls A and H was exposed to some depth (Figs. 37, 40b; Pl. 39 c-g). Since the junction was located on the downhill, west side of the summit, any attempt by the stone robbers to clear the lower parts of Walls A and H as preserved would have resulted in major collapse. The junction, which is described more fully below, was important, not only on account of the fact that it provides the best preserved stretch of both walls, but also because it showed that the earlier Wall A was partly rebuilt at this point by the Early Hellenistic builders in a style following the original. Wall A contrasts markedly to the later wall H (Fig. 40 b; Pl. 39 f-g), while the junction is further enhanced by a guidance groove at the beginning of Wall H.

[278] If one heeds Philo's recommendation (81.8-9), the walls of towers should be ten cubits wide (approximately 4.5 m.); F.E. Winter, *Greek Fortification* (1971) 178 n.75 (following Diels and Schramm) suggests that such a figure (if indeed it has not been incorrectly transmitted in MSS tradition) reasonably refers to the foundations.

TRENCH 1 (Figs. 37, 38 a; Pls. 37 c-f, 38 a-b).

Trench 1 was laid out as a 5 x 2.90 m. test,[279] oriented north-south, following the curve of the semi-circular wall. The primary aim of the excavation of the trench was to investigate the interior face of the semi-circular wall and to test the nature of the deposits inside the building. A further aim was to expose more fully the external face of the wall, particularly with the view of investigating the NE of the structure at a point near its presumed junction with City Wall B (Figs. 1-2, 4; Pl. 37 c). Because of the risk of collapse of the preserved stretch of the semi-circular structure, however, excavation was limited to the interior of the building and the wall top so that the second aim was not achieved.

Three distinct deposits were encountered in the trench.[280] A thin layer of topsoil was cleared as Unit 1. It yielded a small quantity of fragmentary and very worn pottery, mostly fragments of Classical fine and coarse-wares, but also at least two fragments of Post-Byzantine pottery (none inventoried). A total of seven detonators were also found in topsoil.[281] Clearance of topsoil brought to light a substantial layer of

[279] The west scarp measured 5.0 m., the east only 3.50 m. since it followed the curve of the wall.

[280] The surface, prior to excavation, was highest at the south scarp where it had a height of 89.40 m. above sea level. The ground sloped slightly down towards the north. A depth of 1.50 m. was reached at the south scarp and of over 2 m. near the face of the semi-circular wall.

[281] The detonators, initially thought to have been spark-plugs on account of their metal and ceramic components, were identified as such by Professor Richard Temple. The lettering on one of them reads:

24/31 R.Y.G.
WZ. 1918
W02 - P 3-38

The figure 1918 in the second line may refer to the year of manufacture but this is far from certain. If the figure does refer to the year of manufacture, then the detonators may date to the closing years of the First World War and bear witness to the presence of Allied troops in Macedonia at that time. The detonators may conceivably be linked with the German occupation of the area during the Second World War at which time a German naval base and gunning installation was located below Hill 1 on the SSW side, near the entrance to Porto Koupho. Local tradition has it that the Germans used explosive devices to quarry stone required for their naval base. Alternatively, the detonators may have been used - or were intended to be used - for a similar purpose by the local inhabitants. The possibility that the detonators were associated with the stone-robbing activity and lime kilns is highly unlikely on account of our knowledge of the date of the dismantling of the fortification systems and the testimony of the early travellers to Torone. Of the early travellers who walked over the site, both Kinch and Demitsas imply that the city walls were not well preserved; see K. F. Kinch, "De hellenske Kolonier paa den makedoniske Halvø," in: *Festskrift Thomsen* (1894) 147; M. G. Demitsas, *Ἡ Μακεδονία ἐν λίθοις φθεγγομένοις καὶ μνημείοις* (1896; reprint Thessalonike 1988) 616. By the time of Meritt's visit in the early 1920s, as his published photographs well testify, the systematic dismantling of the fortification systems was not only complete, but enough time had lapsed for some of the walls to have been covered with topsoil and undergrowth, Meritt, *op.cit.* (*supra* n. 273).

backfill, up to 1.15 m. thick (Fig. 38 a). Designated Unit 2,[282] the deposit was characterised by several localised dumps of stone (Figs. 37, 38a; Pls. 37 e-f, 38 a-b), above which a red, coarse-grained soil was dumped in the southern part of the trench and a yellow-brown soil towards the north (Fig. 38 a). Smaller localised dumps of fire-affected chips of limestone were noticed at various points throughout the deposit and it is clear that at least part of the backfill comprised discarded debris from the nearby lime kiln. Some fragmentary pottery and other small finds were recovered from Unit 2, including two fragments of Attic black-figure pottery (**7.14**, **7.24**) and three inscribed lead sling-bullets (**18.1, 18.2, 18.4**). Several sea-worn pebbles perhaps also used as sling-bullets in Antiquity were recovered, in addition to small fragments of Classical pottery. The latest identifiable material comprised three sherds which are perhaps from Late Roman amphorae. No later pottery was noticed, although small quantities of Post-Byzantine fragments were found in the underlying Unit 3.

Clearance of Unit 2 brought to light a dense, yellow clayey soil which was designated Unit 3. This was first encountered just below the level of the few blocks which may represent the inner face of the semi-circular wall. Although yielding pottery almost exclusively of the 5th and 4th centuries B.C., the few Post-Byzantine fragments encountered in the deposit indicate the disturbance caused by stone robbing. Excavated to a depth of 0.35-0.40 m., Unit 3 was not exhausted by the conclusion of the 1978 campaign, and represents the lowest level reached in the trench. Among the small finds other than pottery recovered from the deposit, a sling-bullet is worth mentioning (**18.5**) and several more sea-worn pebbles which may have served as sling-bullets. It should also be noted that fragments of roof-tiles were found throughout Units 2 and 3.

Two courses of masonry were preserved along the exterior face of the semi-circular structure. As noted above, the upper course was stepped in from the lower one (Pl. 37 b, d). Much less well-preserved was the interior face of the wall. The exposed line of stones indicated on Fig. 37 (see also Pl. 37 d-f), averaging 1.30 m. from the external face, was composed of small limestone pieces representing left-over debris from the activity of the stone robbers. Below this line of stones a number of larger limestone blocks, with pick-worked faces, were encountered which may be part of the internal face of the wall, or alternatively, part of the foundation course of the building. At least two of these blocks were in line defining a width for the wall of 1.15 m. The fill between the external and the presumed internal face was composed

[282] Unit 2 appears as deposits 1a and 2 on Fig. 38 a.

of small pieces of limestone (Pl. 37 d); it is unclear how much of this fill was *in situ* and how much represents discarded material from stone robbing.

DEPOSIT SUMMARY

TR1 Unit 1 (Topsoil). Small, worn pottery fragments only. Various fragments of Classical fine and coarse-wares and at least two fragments of Post-Byzantine pottery. Also seven detonators discussed above (note 281).

No catalogued finds.

TR1 Unit 2. Backfill from stone robbing and lime kiln activity. Pottery and other small finds recovered almost exclusively of Classical date, with some Archaic material. The latest identifiable pottery is perhaps Late Roman.

Catalogued items:

Attic black-figure:	**7.14, 7.24.**
Metal objects:	**18.1, 18.2, 18.4.**

TR1 Unit 3. Pottery largely of Archaic and Classical date, but with small quantities of Late Roman and Post-Byzantine sherds.

Catalogued items:

Red-figure:	**8.159, 8.188.**
Black-glaze:	**9.75.**
Stamped black-glaze:	**10.123.**
Metal object:	**18.5.**

Inventoried Post-Byzantine pottery:

78.1610.

TRENCH 2 (Figs. 37, 38 b, 39 a-b; Pls. 38 c-f, 39 a-b).

Trench 2, oriented north-south, was originally laid out as a 5 x 2 m. trench on the summit of the hill with the purpose of examining the interior of the semi-circular structure.[283] The discovery of Wall 1 (Fig. 37; Pls. 38 d-f, 39 a-b) in the SE corner necessitated an extension of 1.80 m. to the south, resulting in an overall length of the trench, north-south, of 6.80 m.[284]

[283] A. Cambitoglou, *PAE* 1978, 82-83.

[284] The modern ground surface in the trench was at 89.20 m. above sea level; the trench was dug to a maximum depth of 1.80 m.

The only architectural features to have been uncovered were Walls 1 and 2 (Fig. 37; Pls. 38 c-f, 39 a-b). Wall 1 was exposed for a short distance of about 1 m. near the SE corner of the trench. Oriented SE-NW, the width of the wall could not be measured as it extended into the east scarp; as exposed, Wall 1 has a width of at least 0.45 m. It was constructed largely of small to medium-sized pieces of limestone, but with the occasional piece of granodiorite noted along its SW face. Abutting Wall 1, and at roughly right angles to it, was Wall 2. Oriented SW-NE, but with a noticeably curved line, Wall 2 was exposed across the width of the trench for a length of 2.0 m. and has a width of 0.90-1.00 m. The wall survives to a height of 1.75 m. and is built largely of small to medium-sized pieces of limestone, with a much smaller admixture of granodiorite, as was the case with Wall 1 (Fig. 39 b). The stones were unworked or only very roughly hewn and the masonry style can only be described as crude dry rubble (Fig. 39 b; Pls. 38 f, 39 b). Traces of lime, as distinct from lime mortar, were noted at various points near the junction of Walls 1 and 2. By the conclusion of the 1978 campaign, with the stratigraphy of the trench having been clarified, it had become clear that Walls 1 and 2 were retaining walls designed to support backfill associated with the stone-robbing and lime kiln activity. Indeed, both walls, and the juncture between them, are similar to the modern retaining walls built by the excavation workmen in 1986 and enlarged in 1988-1990, designed to retain the excavation dump soil.

The stratigraphy of the trench was straightforward. Clearance of topsoil, designated Unit 1,[285] revealed a massive pit in the central part of the trench (Fig. 38 b). In the area south of the pit and north of Wall 2, a thick deposit of red soil, up to 1.20 m. thick was revealed, very similar to the backfill encountered in Trench 1 where it was excavated as Unit 2. This deposit of red soil, dug in two arbitrary vertical passes, was designated Trench 2 Extension Units 1 and 2. The deposit yielded quite a number of fragments of 5th and 4th century B.C. pottery, but nothing definitely later. Below Units 1 and 2 a layer of limestone pieces, identical to those used in the construction of Walls 1 and 2, was found laid flat and covered with a yellow-brown earth, designated Trench 2 Extension Unit 3 (Fig. 38 b; Pl. 39 a-b). A somewhat greater quantity of Classical sherds was encountered in this deposit than in the overlying Trench 2 Extension Units 1 and 2, in addition to smaller quantities of Archaic fragments, but nothing noticeably post-Classical. Small finds other than pottery recovered from Unit 3 include a lead sling-bullet (**18.7**), two bronze arrowheads (**18.15, 18.18**), and a bronze rivet (**18.88**).

[285] This was only a very thin layer which yielded no small finds.

In the area to the north of the large central pit a red soil, up to 1.45 m. thick, was encountered, identical in every respect to that noted south of the pit and designated TR2 Extension Units 1 and 2. The area to the north of the pit was designated in the field as Area (3) and the deposit of red soil here was also excavated in two arbitrary vertical passes labelled Trench 2 Area (3) Units 1 and 2. Small finds recovered from this deposit were similar to those south of the pit and included a good quantity of Classical sherds, smaller quantities of fragmentary Archaic pottery and at least one fragment of Hellenistic West Slope Ware (**11.1**). The latest identifiable material comprised a few fragments of Post-Byzantine pottery. The deposit also yielded four lead sling-bullets (**18.6, 18.8, 18.9, 18.11**) and two bronze arrowheads (**18.16**, **18.17**).

Trench 2 Extension Units 1 and 2 and Trench 2 Area (3) Units 1 and 2 were, therefore, part of the same deposit of backfill associated with stone-robbing and the lime kiln activity, into which the large pit exposed in the centre of the trench was dug. Small pieces of fire-affected limestone appeared throughout Trench 2 Extension and Trench 2 Area (3) Units 1 and 2, as were traces of lime.

The pit itself had a maximum preserved length, when first exposed within the trench, of 4 m. but tapered considerably towards its bottom. It was, however, clearly much larger and extended well beyond the confines of the trench as indicated on the west scarp section (Fig. 38 b). The pit fill comprised four distinct layers or localised dumps. The lowest of these, exposed but not cleared, was a dump of mostly small to medium-sized pieces of limestone, with the occasional piece of dressed limestone and granodiorite also noted (Pl. 39 a). This dump was more concentrated in the central part of the trench and towards the east scarp, where it continued beyond the line of Wall 1; towards the west scarp it tended to peter out (Fig. 38 b). Above this, and constituting the greater part of the pit fill, was a coarse, light brown soil, relatively free of stone and of small finds, designated Unit 3. It yielded only two catalogued fragments of Classical black-glaze pottery. Above this, and largely confined to the central and western parts of the trench, was a localised dump of finer brown clayey earth, designated Unit 2. The upper part of the pit fill, Unit 1, was characterised by a mid to dark brown soil similar to the thin covering of topsoil. Units 1 and 2 yielded very little in the way of pottery and other small finds, though a small quantity of Classical fine- and coarse-ware sherds was noted in both. At least one rim fragment of a Post-Byzantine vessel was also recorded, but not inventoried.

Excavation of Trench 2 was terminated in 1978 at the lowest level of the pit fill (Pl. 39 a). In the area to the south Trench 2 Extension Unit 3 was not exhausted, while to the north Trench 2 Area 3 Unit 2 continued to greater depth.

The course of events in the trench can now be reconstructed, on the basis of the evidence obtained, as follows: Walls 1 and 2 were built first, but probably only their

lower portions, since retaining walls can be built up gradually as the quantity of dumped material they have to keep in place increases.[286] Wall 1 must have been built first since Wall 2 abuts onto it. It is uncertain how far deeper the two walls continue. The stones constituting part of Trench 2 Extension Unit 3 were laid in the immediate vicinity of the two walls shortly after (Pl. 39 b). This was followed by the dumping of the red soil of Trench 2 Extension and Trench 2 Area 3 Units 1 and 2, either at one time or gradually over a short period. The large pit located in the central area of the trench was then dug into the dump of red soil. There are two possibilities as regards the sequence of all these events. The first possibility is that Walls 1 and 2 were built to their preserved height and the area was filled in with the red soil of Units 1 and 2 at a single time. Later on the red soil was shovelled out and dumped elsewhere and the pit was created to receive its fill. The second, and more likely, possibility is that, in the first instance, only the lower parts of Walls 1 and 2 were built to retain the red soil. The digging of the pit into the red soil followed and the displaced red soil was dumped on either side to the north and south necessitating the increase of the height of the two retaining walls. The pit was then filled up with the localised dumps described above. Both the fill of the pit and the red soil are the result of the stone-robbing and the activity in the lime kiln located only at a very short distance to the SSE. We have, therefore, to conclude that all the small objects recovered from the trench, which range chronologically from the Archaic to the Hellenistic period, were found out of their original context.

DEPOSIT SUMMARY

TR2 Unit 1 (Pit fill). Very small quantity of pottery, primarily non-diagnostic coarse-ware fragments.

No catalogued small finds.

TR2 Unit 2 (Pit fill) Very small quantity of pottery, primarily small fragments of Classical fine and coarse-wares. At least one rim fragment of a Post-Byzantine vessel.

No catalogued small finds.

TR2 Unit 3 (Pit fill). Very small quantity of small finds, mostly non-diagnostic.

Catalogued items:

Black-glaze: **9.3, 9.27**.

[286] It is very likely that Wall 2 was built up in two sections as is suggested by its NNW face (Fig. 39 b). Approximately half-way down the wall face, as preserved, there is a slight gap of earth fill, up to 0.25 m. thick.

TR2 Ext. Unit 1 (south of pit). Pottery mostly Classical; nothing clearly post-Classical. Part of the same deposit as TR2 Ext. Unit 2.

Catalogued items:

Black-glaze:	**9.19**.
Domestic pottery:	**12.31**.

TR2 Ext. Unit 2 (south of pit). Pottery mostly Classical; nothing clearly post-Classical. Part of the same deposit as TR2 Ext. Unit 1.

Catalogued items:

Red-figure:	**8.19**.
Black-glaze:	**9.206**.
Stamped black-glaze:	**10.10**.
Domestic pottery:	**12.39**.

TR2 Ext. Unit 3 (south of pit). Pottery mostly Classical, with some Archaic material. Nothing clearly post-Classical. Noticeable increase in quantity of pottery from that of preceding Units.

Catalogued items:

Attic black-figure:	**7.28, 7.29**.
Red-figure:	**8.20, 8.125**.
Black-glaze:	**9.9, 9.73, 9.107**.
Stamped black-glaze:	**10.29, 10.118**.
Greek lamps:	**15.11, 15.78.**
Metal objects:	**18.7, 18.15, 18.18, 18.88**.

TR2 Area 3 Unit 1 (north of pit). Deposit largely Classical, with some Archaic material. Latest identified pottery Post-Byzantine. Part of the same deposit as TR2 Area 3 Unit 2 and TR2 Ext. Units 1 and 2.

Catalogued items:

Attic black-figure:	**7.5**.
Red-figure:	**8.163**.
Black-glaze:	**9.17, 9.103, 9.185**.
Stamped black-glaze:	**10.15, 10.120, 10.126**.
Domestic pottery:	**12.28**.
Metal objects:	**18.6, 18.8, 18.9, 18.11, 18.16, 18.17**.

Inventoried Post-Byzantine pottery:

78.763.

TR2 Area 3 Unit 2 (north of pit). As previous.

Catalogued items:

Attic black-figure:	**7.16.**

Hellenistic pottery: **11.1.**
Domestic pottery: **12.35.**

TRENCH 3 (Figs. 37, 40 a-b; Pl. 39 c-g).

Trench 3 was originally laid out as a 3.50 x 2.50 m. test on the west side of Hill 2 wih the purpose of investigating the junction of City Walls A and H (Figs. 1, 37), which was partly visible above surface prior to excavation.[287] The trench was oriented SE-NW following more or less the line of City Wall A.[288]

The stratigraphy encountered essentially comprised four distinct deposits, all of which had accumulated after the walls were built (Fig. 40 a). By the conclusion of the season the footings of City Walls A and H had not been reached.[289]

Topsoil, Unit 1, was characterised by a coarse, brown soil, which contained a good deal of stone tumble fallen from the walls. Unit 1, as was the case with the succeeding Units 2 and 3 (but not 4), followed the downhill slope of the land from NE to SW; towards the NE, at the face of City Wall H, it was dug to a depth of 0.40 m., while towards the SW it was 0.97 m. thick (Fig. 40 a). Only a small quantity of fragmentary pottery was recovered from the topsoil, mostly of Classical date, along with the occasional Archaic sherd, but nothing clearly later than Classical or Early Hellenistic. The clearance of the topsoil brought to light a reddish brown soil containing some smaller pieces of limestone but not the tumble noticed in the overlying Unit 1. Designated Unit 2, this reddish brown soil dipped down from NE to SW and was dug to a maximum depth of 1 m. The pottery recovered from it was similar to that of Unit 1, being mostly of Classical date, with a sprinkling of Archaic material, but nothing clearly later than Classical/Early Hellenistic. Unit 2 also yielded a lead sling-bullet inscribed on one side with the letters ΚΛΕΟ and on the other with the letters ΒΟΥΛΟ;[290] the name *Kleoboulos* has been interpreted by Robinson as that of an officer of Philip II.[291]

The underlying Unit 3 was characterised by a yellowish-grey soil which contained some smaller pieces of limestone. The deposit was substantially thicker

[287] The location of the junction was established by the surface clearance operations conducted during the 1975 season. For a preliminary account of the excavation of Trench 3 see A. Cambitoglou, *PAE* 1978, 83-84, pl. 71β.

[288] This accounts for the shorter scarp on the SE side which measures 1.50 m. and terminates at the face of City Wall H.

[289] The modern ground surface at the SE scarp was at 83.40 m. above sea level; excavations were terminated at 80.40 m. above sea level, resulting in a 3 m. depth of excavated deposits.

[290] *Cf. Olynthus* X, 427 pl. CXXXI no. 2202.

[291] *Ibid.* 428-429; see further Chapter 18.

towards the NE, at the face of Wall H, where it was dug to a depth of 1.16 m., dipping down towards the SW where it was cleared to a depth of 0.33-0.50 m. (Fig. 40 a). In comparison to Units 1 and 2, Unit 3 contained a noticeably greater quantity of fragmentary pottery, which was chronologically similar to that of the other two units, being mostly of Classical date, with small quantities of Archaic, but containing no piece clearly later than Classical/Early Hellenistic. Small finds other than pottery include a small bronze handle (**18.79**), a bronze clamp (**18.93**), a lead ring (**18.95**) and a coin of Philip II (**20.14**; 359-336 B.C.). At least one sea-worn pebble, similar to those encountered in Trenches 1 and 2, was found, which may have originally served as a sling-bullet (not catalogued). Small fragments of roof-tiles were also noted in the deposit, as in most Hill 2 deposits.

Clearance of Unit 3 brought to light a deposit of clayey soil, of various colours, which was excavated in the field as "Deposits 4-7" (Fig. 40 a). The first of these, encountered over the entire area of the trench, was "Deposit 5," which was characterised by a mustard-yellow clayey soil. Towards the SW, especially near the SE scarp, a lens of clayey grey-black soil, designated "Deposit 4," overlay "Deposit 5." Underlying "Deposit 5" was a clayey soil variously coloured light grey and brown ("Deposit 6") and under this, a dark brown, approaching black clayey soil ("Deposit 7"), which was confined to the SW of the area under excavation (Fig. 40 a). Collectively, "Deposits 4-7" did not dip down from NE to SW, as was the case with the overlying Units 1 to 3, while joins noted between fragments of pottery recovered from all four suggested that they were part of the same stratum. The pottery and other small finds recovered from "Deposits 4-7" was accordingly amalgamated and designated Unit 4. The pottery was mostly Classical; noticeably absent were the small fragments of Archaic pottery noted in small quantities in the overlying Units 1-3. At least one fragment of Hellenistic West Slope Ware was encountered (**11.15**), while the latest identifiable material consisted of a solitary sherd of Çandarli Ware, probably of the early series, dating to *ca.* 100-150 A.C. (**14.15**).[292] Small finds other than pottery include: a large inscribed lead sling-bullet (**18.10**), an iron spear-end (**18.13**), an iron pin (**18.37**), three non-joining fragments of plate bronze (78.1352), and a possible coin (**20.68**).

By the conclusion of the season Unit 4 had not been exhausted, nor had the base of Wall A and Wall H been reached. Consequently, deposits associated with the construction of the fortification walls, such as foundation trenches, had not been revealed. Units 1-4, therefore, represent deposits post-dating the construction of the walls.

[292] For the early Çandarli series see Chapter 14.

Although evidence for a construction date for City Walls A and H at this point was not obtained, the junction of the two walls proved to be one of the best preserved stretches of the fortification systems uncovered on the site up till now (Fig. 40 b; Pl. 39 c-g). Wall A was traced for a length of about 2 m. within the trench and survives to a maximum exposed height of 2.75 m. Wall H was traced for a length of 1.80-2.0 m. within the trench and survives to an average exposed height of 2.96 m., and up to 3.40 m. if the single preserved block of the uppermost course is *in situ* (Fig. 40 b). In plan the SW face of Wall H assumes a slight curve, which would be in keeping with the round or semi-circular structure on the hill summit. A number of limestone blocks visible on the surface in the area NE of the trench appear to represent the inner face of both walls, though further excavation is required to verify this with certainty. Should these blocks prove to be the inner, NE, faces of Walls A and H, then both walls have a width at this point of 2.35 m. Such a width for Wall H in particular would mean that its inner face would continue exactly the line of the semi-circular structure if this were extended southwards towards the junction of Walls A and H.

The masonry style of Wall H is similar to that of the Early Hellenistic defence system as uncovered in the Gate Area and as observed elsewhere on the site, particularly on Hill 1, and the area between Hills 1 and 3. Constructed exclusively of limestone, the masonry style may be described as pseudo-isodomic or irregular isodomic, consisting of blocks of various sizes. The chisel-picked surfaces of the larger blocks presented in the wall face could be either flat or cushioned. A number of the larger blocks served as "key" stones, their jointed edges cut at various angles in order to strengthen the wall as a whole. Smaller, dressed pieces of limestone were used to fill interstices and at various points these were set to form a ladder-pattern (Fig. 40 b), which was less regular than those of City Wall C at the Isthmus (Fig. 5 a) and those encountered along Wall 2 of Structure 2 in the Isthmus trenches (Fig. 35; Pls. 35 g, 36 a-d), where schist was exclusively used for the purpose. The most prominent feature of Wall H is the guidance groove, 0.08-0.12 m. wide, running vertically down the wall near the juncture with Wall A. Such guidance grooves, common in late Classical and Hellenistic military architecture, were cut into blocks before these were set into position and enabled builders to align subsequent courses of masonry accurately.[293] Furthermore, the groove provides something of a distinct dividing line between the two walls and their differing masonry styles. Preserved to a height of 2.78 m., the guidance groove terminates 0.18 m. above the lowest level of the wall face as revealed, suggesting that the base of the wall was near at hand. It should be

[293] A.W. Lawrence, *Greek Aims in Fortifications* (1979) 242-243.

noted, however, that not all guidance grooves begin at ground level,[294] and a useful example is provided by the round tower at Smovolon on Tenos where the four guidance grooves only begin at the sixth course above ground level.[295]

The juncture of City Walls A and H is not marked by a regular straight line of masonry, but rather by a series of integrated blocks, some of which continue the line of Wall H, others that of Wall A (Pl. 39 f-g). Towards the base of the walls as exposed, the junction is less well integrated and some of the blocks of Wall A are set slightly in from the face of the wall. Wall A is constructed of roughly hewn blocks of various shapes and sizes, neatly jointed but not in regular courses. The outer faces of the stones have been chiselled to present a flat surface. The masonry style can only be described as an irregular dry-rubble which forms a marked contrast with the pseudo- or irregular isodomic ashlar masonry of Wall H. Perhaps the most significant aspect of Wall A to have emerged with the excavations of 1978 is that the wall, as exposed in Trench 3 and in the nearby Trench 4 (see below), was built almost exclusively of limestone blocks,[296] whereas the remainder of the wall, as traced along the NW slope of Hill 2 was built of an admixture of stone, including granodiorite, in a masonry style approaching true polygonal. This would indicate that the Early Hellenistic builders of Wall H intentionally rebuilt the southeastern-most part of Wall A, as close as possible to its original masonry style but using their preferred limestone, in order to be able to integrate the juncture of the two walls accurately. The masonry style of Wall A as exposed in Trenches 3 and 4 is, therefore, not that of the original wall.

DEPOSIT SUMMARY

TR3 Unit 1 (Topsoil). Small quantity of fragmentary pottery, mostly Classical, but with the occasional fragment of Archaic date. Nothing clearly later than Classical/Early Hellenistic.

Catalogued item:

Coin: **20.60** (uncertain).

TR3 Unit 2. Small quantity of fragmentary pottery, mostly Classical, with a little Archaic. Nothing clearly later than Classical/Early Hellenistic.

[294] *Ibid.*

[295] Demoulin, *BCH* 27 (1903) 258.

[296] Only a few blocks of granodiorite were noted in Wall A.

Catalogued items:

Greek lamp:	**15.41**.
Metal object:	**18.3**.

TR3 Unit 3. Noticeable increase in the quantity of pottery. Mostly Classical, some Archaic. Nothing clearly later than Classical/Early Hellenistic.

Catalogued items:

Attic black-figure:	**7.17**.
Stamped black-glaze:	**10.132**.
Domestic pottery:	**12.13, 12.49.**
Figurine:	**16.35**.
Metal objects:	**18.79, 18.93, 18.95**.
Coin:	**20.14** (Philip II, 359-336 B.C.).

TR3 Unit 4. Pottery mostly Classical; no noticeable Archaic material. At least one fragment of Hellenistic pottery (**11.15**). Latest identifiable material comprises one sherd of Çandarli Ware (**14.15**).

Catalogued items:

Red-figure:	**8.100**.
Black-glaze:	**9.140, 9.150, 9.191**.
Stamped black-glaze:	**10.48, 10.60**.
Hellenistic pottery:	**11.15**.
Amphora:	**13.43**.
Roman pottery:	**14.15**.
Metal objects:	**18.10, 18.13, 18.37.**
Coin:	**20.68** (uncertain).

Inventoried item:

Bronze sheet frr.:	78.1352

TRENCH 4 (Fig. 37; Pl. 40 a-c)

Trench 4 was laid out late in the 1978 campaign as a 3.75 x 3.00 m. test[297] in order to investigate further the external SW face of Wall A, primarily with the view of establishing whether the masonry style was here similar to that of the part of the wall as exposed in Trench 3, rebuilt by the Early Hellenistic fortification builders, or was closer to that of the original part to the NW.

[297] Trench 4 was not a rectangle but a trapezoid, with its long axes measuring 3.75 and 3.10 m. respectively. The trench was laid out on an orientation similar to that of Trench 3 and was separated from it by a 2.50 m. baulk.

The SW face of Wall A was cleared to a depth of 1.87 m. and was shown to have been built in a masonry style similar to that exposed in Trench 3 (Pl. 40 a-c).[298] The rubble fill behind the wall face comprised fairly loosely packed smaller pieces of limestone. The internal, NE face of the wall was not exposed within the trench; therefore, the width of the wall could not be measured at this point, although it is at least 1.40 m.

The stratigraphy differed from that of Trench 3. The clearance of a thin layer of topsoil, Unit 1, revealed a light grey brown soil, containing quite a bit of stone tumble fallen from the wall (Pl. 40 a-b), designated Unit 2. By the conclusion of the 1978 campaign the deposit had not been exhausted. Unit 1 yielded no small finds, while only a minimal amount of fragmentary pottery was recovered from Unit 2.

DEPOSIT SUMMARY

TR4 Unit 1. Very thin covering of topsoil, no small finds whatsoever.

TR4 Unit 2. Very small quantity of fragmentary pottery. Context lots comprise only 9 fragments of Classical black-glaze pottery, 1 small painted body fragment (Archaic or Classical), and 14 fragments of Classical coarse-ware pottery. No catalogued small finds.

6. THE LOWER CITY (1978)

Grid reference: 4H-4J, 5H-5J, 6H-6J

Three trial trenches were laid out in 1978 in the so-called "Lower City" area which incorporates the flat ground near the harbour of ancient Torone and the adjoining lower terraces in the NE sector of the fortified Classical city, not far from the presumed junction of City Walls B and C (Figs. 2, 41-43; Pls. 40 d- 43 e).[299] The proximity of this area to the harbour of the ancient city and to the fortification wall facing the sea, coupled with the evidence of Thucydides' account of the storming of Torone in 424/423 B.C. by the Spartan force led by Brasidas,[300] suggested that the *agora* of the Classical city may have been located in the general vicinity.[301]

[298] The modern ground surface prior to the excavation of the trench was at 81.60 m. above sea level; the greatest depth reached by the conclusion of the 1978 season was at 79.67 m. above sea level.

[299] A. Cambitoglou, *PAE* 1978, 84-86.

[300] Thucydides IV.110-116.

[301] A. Cambitoglou, *PAE* 1975, 109; *id., PAE* 1978, 84.

The three trenches were sited at some distance from one another in a diagonal line from NE to SW, covering a small portion of the flat ground and of the first two terraces (Fig. 41).[302] In addition to testing for the nature of occupation and its chronological range, one of the initial aims of the excavation in this area was to test for the presumed continuation of City Wall C, a small part of which was subsequently uncovered in the south corner of Trench 1 (Fig. 42 a-b; Pl. 40 f, h). Excavations in the Lower City were extended considerably in 1981 and 1982.[303] The results of these later campaigns will be presented elsewhere. On account of the distance between the three trenches opened in 1978, the results obtained in each of them tended to complement rather than being similar to one another. The results of the 1978 campaign in the Lower City are presented below according to trench, beginning with Trench 1.

TRENCH 1 (Figs. 42 a-d; Pls. 40 d-h, 41 a-f).

The northeasternmost of the three Lower City trenches opened in 1978, Trench 1, was originally sited as a 10.0 x 2.50 m. trial trench, oriented SW-NE. The discovery of the large oval tomb located in the centre of the trench early in the season necessitated two extensions aiming at defining better its plan. One of these, measuring 6.55 x 1.0 m., was excavated on the SE side of the original trench and a second was opened on the NW side measuring 4.0 x 1.50 m., resulting in the final trench plan as shown on Fig. 42 a-b. The surface of the ground sloped downward from west to east, and from south to north. The modern ground surface at the point immediately above the west wall of the oval tomb was at 3.67 m. above sea level; at the east corner of the trench it was at 2.30 m. above sea level. The limit of excavation within the tomb at the conclusion of the 1978 campaign was at 1.24 m. above sea level.

Clearance of topsoil, Unit 1, in the downhill NE sector of the trench quickly revealed the NE wall of the large oval tomb. In the NW, central and southern portions of the trench a deposit of fine-textured, dark brown (approaching black) soil was encountered below topsoil and overlying the tomb, which was designated Unit 2. This contained a considerable quantity of rubble, predominantly limestone and schist, which was particularly concentrated in the central portion of the trench direct-

[302] Trenches 1 and 2, both oriented NE-SW lay at a distance of 21 m. from one another, while Trench 3, oriented almost true N-S, was at a distance of about 13 m. to the SW of Trench 2.

[303] A. Cambitoglou, *PAE* 1981, 33-36, figs. 3-4; *id.*, *PAE* 1982, 69.

ly overlying the tomb. This rubble was originally thought to represent stone fallen from the upper walls and roof of the structure.[304]

Unit 1 yielded a quantity of fragmentary Roman pottery as well as a coin dating to the reign of Aurelian (**20.24**). Smaller quantities of earlier material were also recovered, including two architectural terracottas (**16.45, 16.46**) of Late Archaic or Early Classical date. The latest identifiable material recovered from Unit 1 included fragments of Late Byzantine or Post-Byzantine wares. Recovered from Unit 2 were copious quantities of Late Roman pottery, but only minor quantities of Byzantine or Post-Byzantine material, including a fragment of a Turkish tobacco pipe (78.2055) unlikely to be intrusive (see below).

Clearance of Unit 2 and the subsequent excavation of the two extensions defined the plan of the oval tomb and consequently determined the further investigation of the trench in two main areas: that inside the tomb, and that beyond, to the south and SW. The two extensions, along with the small area to the NE of the tomb, were not excavated below the level of Units 1 and 2.

Below Unit 2, within the oval tomb, a reddish earth containing much rubble was encountered, designated Unit 3 N. As with the overlying Unit 2, the rubble encountered in this deposit was originally thought to represent tumble from the roof and upper walls of the structure. Also during the excavation of Unit 3 N, the tops of a series of stones, primarily limestone, began to appear which defined a circular structure within the oval tomb (Fig. 42 a-b). The earth below the level of the preserved top of the stones of this inner circle was excavated as Unit 4 N. The soil of Unit 4 N was essentially the same reddish colour as that of Unit 3 N but lacked the rubble. The excavator also observed signs of burning within the inner circle; black discolouration and traces of powdery white burnt limestone were noted throughout the deposit. By the conclusion of the 1978 campaign, the original floors of the tomb and of the smaller circle of stones within it were not reached. The latest identifiable material recovered from both Trench 1 Unit 3 N and Unit 4 N was Late Roman, including a coin dating to the reign of Theodosius I (**20.29**). Unit 3 N also contained a small quantity of Archaic and Classical pottery.

In the area south and SW of the tomb, two distinct deposits were met below Unit 2. The first, designated Unit 3 S, was characterised by a yellowish-brown compact

[304] During the excavation of Unit 2 an ill defined single line of stones, including a large well-dressed granodiorite block in secondary use, was noted by the excavator and tentatively designated "Wall 1" These stones, which did not lie evenly, proved to be part of the rubble encountered in Unit 2 and are visible on Pl. 40 d-e.

soil which yielded pottery not later than the Late Roman period, but at the same time small quantities of earlier, Classical, material. It was during the excavation of Unit 3 S that the preserved top of City Wall C first appeared. Unit 3 S represents the soil into which the cutting for the oval tomb was dug and, as such, provides an important *terminus ante quem* for the tomb, indicating that it was constructed in the Late Roman period or later. Unit 3 S was preceded by a somewhat darker and less compact soil designated Unit 4 S.[305] The latter contained a certain amount of rubble, predominantly schist, and represents the lowest level reached in this part of the trench by the end of the 1978 campaign. The latest identifiable material recovered from Unit 4 S was of the Classical period, including pottery which could be assigned to the fourth century B.C., such as the almost complete small bowl **10.66**, dated to the period *ca.* 350-325 B.C. (Pl. 40 g). The interface between Unit 3 S and Unit 4 S was at about 7 cm. below the preserved top of City Wall C.

City Wall C

First encountered at a depth of 2.33 m. below surface, only a small stretch of the north face of the wall was uncovered in the south corner of the trench (Fig. 42 a-b; Pl. 40 f, h). Oriented ESE-WNW, the wall is on an approximately similar alignment with that of the better preserved stretch on the NE side of the Isthmus. The great distance between the two exposed stretches of the wall, however, makes it virtually impossible to determine whether it continued originally from the Isthmus SE in a straight line towards the Lower City, or whether there was a slight change of direction.[306]

A length of only 1.80 m. of Wall C was exposed in Trench 1; its width could not be measured. The masonry style as exposed along its north, exterior, face matched exactly that of the elevation of Wall C as exposed at the Isthmus.[307] The wall was constructed of dressed granodiorite blocks of various sizes, interspersed at irregular intervals with stacks of thin pieces of schist laid to form a ladder-work pattern. Behind the neatly constructed face an internal packing of small unworked stones set in mud was revealed (Pl. 40 f). This construction technique of two well laid faces filled with a stone packing is basically the same as that of the Early Hellenistic forti-

[305] The interface between Unit 3 S and Unit 4 S was not always clear during the course of excavation and the uppermost pass of Unit 4 S contained minor Late Roman contamination which is presented separately below.
[306] Wall C has an indented trace at one point near the Isthmus, which could be determined by its line as visible above ground level (Fig. 4). This jog towards the south is located near the lime kiln at the Isthmus.
[307] Compare Fig. 5 a with Pl. 40 h.

fication as exposed at the Gate Area.[308] Only two courses of Wall C were uncovered in Trench 1 and it is impossible to determine to what depth the wall survives. A floor or other surface which might clearly be associated with Wall C was not revealed at the conclusion of the excavation. The Classical deposit to the north of the wall, Unit 4 S, probably represents fill, or else hill wash, which was laid or was formed after the wall was built and, as such, provides no evidence for the date of its construction.

The Oval Tomb

The structure (Fig. 42 a-d; Pl. 41 a-f) is oriented east-west with an entrance (found blocked) in the centre of the east side (Fig. 42 a-b; Pl. 41 e-f). The interior defines almost a rectangle, but with rounded corners. Its internal dimensions are 4.30 x 3.0 m.; the external dimensions vary according to the wall thickness, but are in the realm of 6.10 x 4.0 m. The walls vary in thickness from just under 0.40 m. up to a maximum width of about 1.0 m. The structure was built largely of unworked or only roughly hewn stones, mostly small in size, with a preponderance of schist, so far as could be determined from those parts of the walls that were not plastered over. The occasional dressed block of granodiorite or limestone was incorporated into the walls, clearly in secondary use. Tiles, fragments of tiles, and pot sherds were also built into the walls of the tomb. The bonding agent was a coarse-grained lime mortar, not unlike that used in a number of Late Byzantine structures on Promontory 1 excavated in 1986-1990,[309] and that used for the Post-Byzantine Structure F at the Isthmus.[310] The interior surface of the tomb was carefully rendered with a coarse lime plaster similar to the mortar. The walls, especially those of the long sides, curved inwards as they rose, indicating a vault or partial vault.[311] The walls of the tomb have no exterior faces and were left extremely rough (Pl. 41 a, c-d). This would indicate that the tomb was built by digging a large trench, roughly the size of the tomb, and constructing the walls flush against the cutting. The walls of the tomb

[308] See, for example, Pl. 19 a-d.

[309] Such as the large semi-circular defensive tower at the SE end of the promontory, as well as the large double cistern excavated by the Byzantine Ephoreia of Chalkidike in the early 1970s. For the semi-circular tower see A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 191-195, ills. 8-10, 13-14; *MeditArch* 3 (1990) 97-109, figs. 4, 9-10; pls. 30:1-4, 7; 31:1-5, 7. The double cistern is illustrated in plan in *MeditArch* 1 (1988) 182 ill. 7; *MeditArch* 3 (1990) 96 fig. 3; *MeditArch* 4 (1991) 149 fig. 2.

[310] See Fig. 33.

[311] This is best seen on Pl. 41 a, c-d and on Fig. 42 d. As can be measured along both the north and south walls, the preserved tops of the walls curve in some 25 cm.

were, therefore, designed to be underground when constructed. The highest preserved point of the tomb was at 2.65 m. above sea level; the lowest level reached by the end of the season was at 1.24 m. above sea level.

Three niches, labelled Niches I-III, were built into the walls of the tomb. Niche I, located in the west wall and slightly north of centre, has an internal height of 0.70 m., a width of 0.50 m., and a depth of 0.47 m. (Fig. 42 b-d; Pl. 41 b). To the north, near the NW corner of the tomb, the smaller Niche II, measuring 0.52 x 0.40 x 0.45 m. (height x width x depth) was set at a level slightly higher than Niche I (Fig. 42 b, d; Pl. 41 b). Both niches are rectangular, framed with dressed stone, and left free of plaster. Both were sunk into the wall and through its width. A third niche, Niche III, was located at the SE corner of the tomb, 0.70 m. to the south of the tomb entrance (Fig. 42 a-b; Pl. 41 e). Only partially preserved, the original height of Niche III could not be measured; width and depth measure 0.40 x 0.55 m. respectively and the niche is framed with stones like Niches I and II. The first niche contained several bone fragments, mostly of animal bone, but including a small fragment perhaps of a human skull.[312] No bone fragments were recorded for Niche II, while fragments of a tortoise shell and some scraps of animal bone were recorded from Niche III, which are best seen as intrusive.

The tomb entrance was located at the centre of the east wall (Figs. 42 a-b; Pl. 41 e-f). The entrance is 0.50-0.55 m. wide and runs the width of the wall. It was found blocked by a number of dressed blocks at the interior face, carefully chosen to seal the width of the entrance. Above and behind these a variety of smaller stones were used for the same purpose.

The inner circle of stones already noted occupied approximately the western two-thirds of the internal area of the tomb. As can be seen on Fig. 42 a-b and Pl. 41 a and f, the feature has a clearly defined internal face but a less regular external one. Moreover, the uppermost preserved stones of the structure do not define a complete circle, lacking a continuation to the south and SW, where the wall of the tomb itself served to complete the circle. The internal diameter of the feature is about 2.40 m., while its less regular external diameter is just over 3.0 m. Towards the west the circle survives to a height of three courses, elsewhere only to one. It appears to have been constructed of an admixture of stone, predominantly limestone, including several large blocks of dressed granodiorite, perhaps robbed from the the nearby City Wall C, as well as some smaller pieces of schist. Towards the east and roughly, though not exactly, in line with the blocked tomb entrance, a gap in the circle, about 0.40 m. wide, was noted (Fig. 42 a-b; Pl. 41 a).

[312] As these bone fragments have not as yet been studied definitively, their identification is uncertain.

That this inner circular architectural feature was later than the oval tomb was clear both on account of the fact that the stones of the north and west segments of the circle abutted the wall of the tomb, but also because the pre-existing tomb wall served to complete the circle to the south and SW. Precise evidence to help us establish the construction date of the feature was not obtained, since the excavation was terminated at an arbitrary level, both within the inner circle and within the oval building, and floor levels or surfaces associated with either were not reached.

Determining the function of the inner circle with certainty might only be possible through further excavation, but the combined evidence of its plan, shape and size, coupled with the existence of an entrance of sorts to the east and, more significantly, clear traces of burning associated with Unit 4 N (including black colouration and remains of white powdery burnt limestone), would indicate that it is the upper preserved part of a lime kiln. If this identification is correct, the entrance to the east would have served as a stoke hole or *praefurnium,* while the rubble encountered in Unit 2 and Unit 3 N may have derived from the collapsed upper walls of the kiln (and/or tomb). Alternatively, it may represent the remains of a stone dump, gathered for the purpose of reducing the stones to lime. The diameter of the circle is approximately the same as those of the better preserved lime kilns at the Isthmus, on Hill 2 and elsewhere on the site, and the circle may well be of a similar late 19th century date.[313] Such a date may well be verified by the discovery of the tobacco pipe fragment in Unit 2 already noted. The occurrence, especially in topsoil, of a relatively large quantity of earlier material, including the architectural terracottas **16.45** and **16.46**, may have been caused by the disturbance of earlier levels by the digging for the firing chamber of the kiln.

Since no surfaces were encountered within the area of the tomb, the deposits overlying the tomb and those within it are all in the nature of fill, wash levels, fallen or accumulated debris, and topsoil. The only informative deposits with regard to the date of the tomb were Unit 3 S and Unit 4 S. The material recovered from the later Unit 3 S established that the tomb must have been built at a time later than the latest material in the deposit. The latest identifiable pottery from the deposit is Late Roman; therefore, the tomb must have been constructed either late in that period or, as is more likely, during the Byzantine era, but evidence pertaining to its exact date, such as a floor level or *kterismata*, was not obtained.

Certain features of the tomb, such as its construction technique, and its east-west orientation with an entrance to the east, are matched by two smaller rectangular

[313] For the date of the systematic dismantling of the fortifications of Torone see A. Cambitoglou, *PAE* 1975, 106 n. 6.

tombs excavated on Promontory 1 in 1986 and 1988, both assigned to the Late Roman or Byzantine periods.[314] The latter are, however, considerably smaller and lack the niches of the Lower City tomb. In general appearance this seems to be a mortar and rubble descendent of the earlier Roman subterranean barrel-vaulted masonry tombs such as those of the second century A.C. at Knossos, one of which, Tomb 33, was also equipped with three niches.[315] The purpose of the niches in the Lower City tomb is unknown. They may have been used for grave goods, offerings or, conceivably, for individual secondary burials. The possibility that the tomb served to accommodate secondary burials rather than primary interments should not be overlooked. That it was an *osteotheke* is plausibly suggested by its size as well as its proximity to the Late Roman/Byzantine Basilica of Aghios Athanasios located a short distance to the NE.[316] It is uncertain, however, whether the tomb was ever associated with that Basilica. Interesting in this repect is its east-west orientation which may suggest that its occupants were of the Christian faith.[317] If the latter is correct, the intention of the niches as settings for the ashes of the dead contained in urns or chests, as in the earlier Roman *Columbaria*,[318] seems unlikely. It is worth adding that the tomb is considerably larger and of different construction to those of the 3rd and 4th centuries A.C. excavated on Terrace IV in the years between 1981 and 1984.[319]

DEPOSIT SUMMARY[320]

In addition to the material listed below, the majority of deposits in Trench 1 yielded a large quantity of animal bone and some sea-shell.[321]

Unit 1 (topsoil). Latest identifiable material Post-Byzantine, but with a large quantity of earlier material.

[314] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 191a ill. 12, 198 ill. 18; *MeditArch* 3 (1990) 130 f., figs. 28, 30-31, pl. 34:3-5.

[315] H. W. Catling, "Knossos, 1978," *AR* 25, 1978-1979, 44 fig. 2, 56-57 and 54 fig. 43.

[316] For the basilica of Aghios Athanasios see the references given in A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 181 n. 11; for the difficulty of determining between primary and secondary burials see, for example, H.W. Catling and D. Smyth, *BSA* 71 (1976) 25-47.

[317] For discussion on Christian elements in the Late Roman cemetery on Terrace IV see J. K. Papadopoulos, *AE* 1989, 78 n. 21; for the cemetery see also A. Cambitoglou, *PAE* 1981, 39; *PAE* 1982, 69-73.

[318] See J.M.C. Toynbee, *Death and Burial in the Roman World* (1971) 113-116.

[319] *Supra* note. 317.

[320] As was the case in the Isthmus area, the Byzantine and Post-Byzantine pottery recovered from the various Lower City deposits will be presented by inventory number.

[321] This material will be presented elsewhere.

Catalogued items:

Roman pottery:	**14.5, 14.9, 14.22, 14.93, 14.120, 14.134, 14.173, 14.183, 14.204, 14.205, 14.226, 14.232, 14.255, 14.303, 14.323, 14.329, 14.375, 14.376, 14.504.**
Greek lamps:	**15.4, 15.59.**
Architectural terracottas:	**16.45, 16.46.**
Object of glass:	**17.41.**
Coin:	**20.24** (Aurelian, A.D. 274-275).

Inventoried Byzantine/Post-Byzantine pottery:

78.523, 78.1729, 78.1738, 78.1743, 78.2865, 78.3048, 78.3050.

Unit 2.[322] Latest identifiable material Post-Byzantine, including a fragment of a Turkish tobacco pipe. Large quantity of various Late Roman wares but only minor quantities of earlier material.

Catalogued items:

Red-figure:	**8.132.**
Black-glaze:	**9.147.**
Roman pottery:	**14.1, 14.2, 14.4, 14.13, 14.21, 14.29, 14.30, 14.33, 14.34, 14.53, 14.58, 14.61, 14.67, 14.68, 14.76, 14.78, 14.79, 14.85, 14.91, 14.96, 14.99, 14.103, 14.113, 14.122, 14.148, 14.172, 14.181, 14.184, 14.194, 14.201, 14.208, 14.222, 14.224, 14.231, 14.234, 14.241, 14.245, 14.260, 14.261, 14.268, 14.277, 14.282, 14.283, 14.284, 14.298, 14.300, 14.305, 14.310, 14.326, 14.330, 14.335, 14.337, 14.340, 14.342, 14.346, 14.350, 14.354, 14.360, 14.387, 14.390, 14.398, 14.401, 14.411, 14.417, 14.452, 14.459, 14.473, 14.478, 14.487, 14.503.**
Object of glass:	**17.24.**

Inventoried item:

Tobacco pipe fr.:	78.2055.

Unit 3 N.[323] Latest identifiable material Late Roman; only small quantities of earlier material.

Catalogued items:

Geometric and Archaic pottery:	**5.13.**
Corinthian pottery:	**6.9, 6.12.**

[322] Also includes Trench 1 N west extension, N east extension, and Trench 1 N (2).

[323] Includes Trench 1 NW extension (3).

Red-figure:	**8.87**.
Roman pottery:	**14.26, 14.35, 14.66, 14.163, 14.229, 14.276, 14.308, 14.444.**
Object of glass:	**17.39**.
Coin:	**20.29** (Theodosius I, A.D. 378-388).

Unit 4 N. Latest identifiable material Late Roman.

No catalogued small finds.

Inventoried items not in catalogue:

Roman pottery:	78.3122, 78.3123, 78.3125.
Figurine:	78.3124.

Unit 3 S.[324] Latest identifiable pottery Late Roman. Many more fragments of Late Roman pottery were entered on the inventory or stored in context lots but not catalogued.

Catalogued items:

Geometric and Archaic pottery:	**5.15**.
Black-glaze:	**9.25**, **9.80.**
Stamped black-glaze:	**10.31, 10.36.**
Roman pottery:	**14.4, 14.6, 14.7, 14.16, 14.17, 14.24, 14.25, 14.31, 14.32, 14.37, 14.40, 14.46, 14.47, 14.49, 14.59, 14.80, 14.98, 14.100, 14.101, 14.102, 14.185, 14.186, 14.223, 14.252, 14.254, 14.262, 14.273, 14.288, 14.297, 14.309, 14.318, 14.328, 14.336, 14.338, 14.356, 14.362, 14.366, 14.367, 14.370, 14.392, 14.394, 14.443, 14.451, 14.475, 14.477, 14.480, 14.482, 14.501.**
Greek lamp:	**15.8.**
Roman lamp:	**15.84.**
Object of glass:	**17.71.**
Metal objects:	**18.22, 18.67, 18.72,18.73**.

Unit 4 S. Latest identifiable material Classical, including at least one piece (**10.66**) dating to the second half of the fourth century B.C.

Catalogued items:

Red-figure:	**8.9, 8.10, 8.109**.
Stamped black-glaze:	**10.30, 10.66**.
Metal object:	**18.114**.

[324] Includes Trench 1 Baulk (3).

TRENCH 2 (Fig. 42 e; Pls. 41 g-h, 42 a-b)

Although originally Trench 2 was laid out as a 10.0 x 2.50 m. test on a SW-NE orientation similar to that of Trench 1, only its southern half was excavated resulting in dimensions of 5.0 x 2.50 m. (Figs. 41, 42 e). The modern ground level, prior to excavation, was at 4.25-4.35 m. above sea level. Towards the SW bedrock was quickly reached at a depth of only 4.10 m. above sea level, but dipped down considerably towards the NE where it was encountered at a depth of 3.31 m. above sea level. Only one deposit was encountered, designated Unit 1, being a consistent, yellow-coloured, compact soil.[325]

The only feature to be encountered was located in the NE part of the trench (Fig. 42 e; Pls. 41 g-h, 42 a-b). It consisted of a number of limestone and schist pieces, along with several tiles or bricks, resting on or close to bedrock. Originally thought to have been an intentionally constructed feature, the stones and tiles/bricks were shown to have been little more than debris which had fallen or had accumulated in such a way as to form two rough lines defining something of an obtuse angle. Anticipating the possibility of a constructed feature, the excavator separated the material from the NW part of the area as a matter of course even though no soil change was noted. The material recovered from the NW corner, within the area of the angle formed by the two rough lines of stone and tiles or bricks, was designated *Trench NW* and is presented separately below. It should be seen as part of the same deposit as Unit 1.

The pottery and other small finds recovered from the trench include small quantities of Classical material and a few sherds of Late Byzantine or Post-Byzantine date. The largest component of the fragmentary pottery was of the Late Roman period, including a good variety of fine and cooking-wares, amphorae and other material.

DEPOSIT SUMMARY

Unit 1

Catalogued items:

Red-figure:	**8.8, 8.106.**
Black-glaze:	**9.165, 9.208.**
Roman pottery:	**14.8, 14.14, 14.19, 14.20, 14.23, 14.27, 14.36, 14.39, 14.43, 14.71, 14.72, 14.108, 14.127, 14.182, 14.189, 14.227,**

[325] The uppermost 14 cm. of the deposit were of a slightly darker colour due to root action.

	14.233, 14.235, 14.239, 14.258, 14.263, 14.279, 14.294, 14.317, 14.320, 14.321, 14.347, 14.348, 14.349, 14.371, 14.389, 14.404, 14.407, 14.433, 14.437, 14.440, 14.441, 14.448, 14.456, 14.457, 14.464, 14.466, 14.476, 14.488, 14.496.
Roman lamps:	**15.86, 15.95.**
Objects of glass and bone:	**17.7, 17.8, 17.19, 17.42, 17.44, 17.47, 17.67, 17.72.**
Metal objects:	**18.47, 18.49, 18.50.**

Unit 2 NW Corner

Catalogued items:

Black-glaze:	**9.131.**
Object of glass:	**17.20.**
Coin:	**20.23** (uncertain Imperial, A.D. 50-250).

TRENCH 3 (Fig. 43 a-d; Pls. 42 c-g, 43 a-e)

The southernmost of the three Lower City trenches, Trench 3 was laid out as a 10.0 x 2.50 m. test oriented north-south, straddling the first and second terraces of the lower part of the ancient city (Fig. 41). The location of the trench was in part dictated by a wall visible above surface prior to excavation, designated Wall 1 and oriented east-west across the centre of the trench (Fig. 43 a; Pl. 42 c). Wall 1 divided the trench into two sectors, designated the north (N) and south (S) sectors, which were excavated separately from the beginning. The ground level in the north sector of the trench, along with the underlying deposits, dipped sharply down from south to north. In the south sector clearance of the topsoil, Trench 3 Unit 1 S, quickly brought to light Wall 2 (not numbered in the plan Fig. 43 a) which formed a right angle with Wall 1 and ran longitudinally down the centre of the trench. Since the building represented by Walls 1 and 2 was not removed, excavation was greatly limited in the south sector, and the deposits on either side of Wall 2 were subsequently designated the SE and SW sectors.

Walls 1 and 2 define the NE corner of a building which extends to the south and west. The walls were roughly constructed of an admixture of stone of all sizes. Several large well-dressed blocks of granodiorite, in secondary use, were built into Wall 1 at its corner with Wall 2. This junction was more strongly built in neatly laid courses, surviving to a height of four courses, in order to support better the downhill thrust. Judging from the exterior (Fig. 43 d; Pls. 42 c, 43 d-e) and the interior face of Wall 1, it would appear that it was built first since some of the rough courses of Wall 2 appear to abut it. The two walls are, however, homogeneous and some of their

upper courses are bonded to one another. For most of its exposed length Wall 2 was built of small to medium sized stones, either unworked or only roughly hewn, bonded with mud. No real coursing was apparent, even though the exterior (east) face of the wall was slightly more carefully built than the interior (west) face as a comparison of Figs. 43 b and 43 c might suggest. The lowest course of Wall 2 was at a level slightly higher than that of Wall 1 (Fig. 43 b). Wall 1 was exposed for a length of 1.85 m. and averages a width of 0.65 m. Wall 2 was exposed for a length of almost 4.50 m. and has an average width of 0.55 m.

A clearly recognisable floor surface associated with the interior of the building represented by Walls 1 and 2 was not encountered.[326] Be that as it may, the evidence of the stratigraphy revealed in all three sectors, N, SW and SE, suggests that the building was constructed sometime in the Late Roman period.

In the north sector of the trench, in the area downhill and north of Wall 1, the stratigraphy was straightforward (Fig. 43 b-c).[327] The topsoil, Unit 1 N, yielded small quantities of Classical material, a few fragments of Late Byzantine and Post-Byzantine pottery, and somewhat larger quantities of Late Roman pottery and other small finds. The underlying Unit 2 N, which yielded material almost exclusively of Late Roman date, probably represents debris from the building itself after its abandonment, including some tumble (Pl. 42 c). Unit 2 N was characterised by a dark brown, rather loose-textured, soil. Below this, level with the lowest course of Wall 1 and underlying it, there was a yellow-brown soil, designated Unit 3 N upper. This deposit appears to represent the ground level during the period of primary use of the building. The deposit yielded material not later than the Late Roman period. The deposit below this in turn was only partially exposed. Designated Unit 3 N lower,[328] it yielded only a small quantity of fragmentary pottery; all identifiable sherds in it could be accommodated either in the Archaic period or else the Late Geometric/ Subgeometric period, with nothing clearly later than the late 6th century B.C. This deposit is associated with Wall 4 (see below).

[326] It should be noted that the area of the interior of the building actually under excavation was very limited indeed. Coupled with this was the proximity of the building to the modern surface and, therefore, its exposure to ploughing and other agents of destruction.

[327] This area is external to the building.

[328] During the course of excavation there was no distinct change of colour in the soil between Unit 3 N upper and Unit 3 N lower, but the excavator noted a change in the texture of the earth and kept the material from the two separate.

The topsoil in the south sector of the trench was identical to that in the north with the latest identifiable material being of the Late Byzantine or Post-Byzantine era. As noted above, the clearance of topsoil in the south sector revealed Wall 2 which subdivided the trench into two sectors: the SE and SW. In the SE sector, a deposit analogous to Unit 2 N was encountered and designated Trench 3 SE; it represents a direct continuation, in the external area of the building, of Unit 2 N and was of a similar dark colour and loose texture. The latest identifiable material from Trench 3 SE was again of the Late Roman period but with small quantities of earlier material also noted in it. Stone tumble and roof-tiles thought to have fallen from the building represented by Walls 1 and 2 were observed throughout the deposit (Pl. 42 d). In the southern half of the SE sector bedrock was exposed with the removal of deposit Trench 3 SE at an average depth of about 1.30 m. below surface, but rising to a higher level towards the south (Fig. 43 b). In the northern half of the SE sector the preserved top of Wall 4 was brought to light below deposit Trench 3 SE, and with it its foundation trench. The latter was cut into bedrock and extended 0.50-0.70 m. to the south of Wall 4 (Fig. 43 a-b). The pottery recovered from the foundation trench south of Wall 4 was very small in quantity, as well as being worn and fragmentary. Although nothing from the deposit is catalogued in the present volume, the few small sherds recovered appeared to be of Archaic date.

In the SW sector, within the interior of the building represented by Walls 1 and 2, a deposit similar to Unit 2 N and deposit Trench 3 SE was not encountered. Instead a uniform yellow-brown to mid-brown soil was noted overlying bedrock. Designated Unit 3 SW, the deposit yielded only a small quantity of fragmentary pottery, mostly of the Archaic period, but including also at least one fragment of a lamp dating to the 4th century B.C. (**15.73**). The cutting into bedrock which formed the foundation trench for Wall 4 continued into the SW sector (Fig. 43 a, c), but no distinct change of soil was noted. In the northern part of the SW sector, within the area of the cutting for Wall 4, a line of three small schist stones was exposed, designated "Wall 3" (Fig. 43 a; Pls. 42 f, 43 a). Clearly not a wall, these stones may represent tumble from Wall 4.

Final cleaning in the southern half of both the SE and SW sectors, immediately on bedrock, brought to light only a handful of sherds which were designated Unit 3 S. The only fragment catalogued from this unit was a piece of black-glaze pottery dating to the years 525-450 B.C. (**9.78**).

The earliest wall encountered in the trench and in the Lower City area was Wall 4. The wall was exposed only for a length of 0.90 m. (Fig. 43 a; Pl. 43 b-d) and has

an average width of 0.45 m. Oriented ESE-WNW, the wall was built largely of small to medium sized slabs of schist laid flat and bonded with mud. The wall, as preserved, survives to a height of four courses of neatly jointed, though not very regular, masonry (Fig. 43 d; Pl. 43 c); it stands to a maximum height of 0.75 m. Individual stones, as seen in the NNE face of the wall, average 0.20-0.25 m. in height and 0.30-0.35 m. in length; smaller pieces and slivers of schist were used to fill interstices and to level up larger stones. A curious feature, worth drawing attention to, is that although Wall 4 is oriented ESE-WNW, its foundation trench, cut into bedrock to a depth of about 0.80 m., runs east-west and has a slight inclination from ENE-WSW. This may in part be due to the natural configuration of the bedrock at the junction between two terraces, and the cutting, better cut towards the east, may have followed the natural line of the rock.

The deposits directly associated with Wall 4, namely the fill of the foundation trench to the south and Unit 3 N lower to the north, suggest that it was constructed in the Archaic period. It should be stressed, however, that because of the limited area in which excavation was conducted, the fact that very little material was recovered from the fill of the foundation trench, and the fact that Unit 3 N lower was not exhausted, such a date is only tentatively suggested.[329]

DEPOSIT SUMMARY

Topsoil

Owing to the fact that Wall 1 was partly visible above surface prior to excavation, topsoil to the north and south of the wall was excavated separately. Throughout, the latest identifiable material is of Late Byzantine or Post-Byzantine date, including fragments of a Post-Byzantine cooking vessel reconstructed almost whole (inv. 78.782 from Trench 3 S[1]). The largest component of the fragmentary pottery recovered is of the Late Roman period, though little of the Roman pottery from topsoil is here catalogued.

Trench 3 Surface

Catalogued item:

Red-figure: **8.187**.

[329] In terms of construction, Wall 4 is similar to the Late Archaic/Early Classical Wall 8 in the Isthmus area, and to a series of buildings of Archaic and Classical date exposed on Promontory 1 in later seasons, A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 3 (1990) 97 ff., figs. 4, 6, 8; pls. 30:1-6; *MeditArch* 4 (1991) 150 fig. 3, 152 fig. 5; pl. 21:3.

Unit 1 N

Catalogued items:

Red-figure:	**8.12.**
Black-glaze:	**9.32, 9.66, 9.184.**
Domestic pottery:	**12.37.**
Roman pottery:	**14.105, 14.118, 14.132, 14.144, 14.149, 14.162, 14.166, 14.187, 14.206, 14.212, 14.217, 14.414, 14.445, 14.474, 14.484, 14.508.**
Objects of glass:	**17.14, 17.16.**
Metal object:	**18.30.**

Unit 1 S

Catalogued items:

Red-figure:	**8.11.**
Black-glaze:	**9.8, 9.10.**
Stamped black-glaze:	**10.91.**
Figurine:	**16.11.**

Inventoried Byzantine/Post-Byzantine pottery:

78.782, 78.1717.

Deposits associated with the Late Roman building represented by walls 1 and 2

Two types of deposit were associated with this building. The first, encountered only in the north and SE sectors outside the building, comprises Unit 2 N and Trench 3 SE; these represent debris, including tumble from the walls of the building, which had accumulated after the building had been abandoned. The latest identifiable material from this deposit was of the Late Roman period. Below this, but only in the north sector, was Unit 3 N upper which appears to represent the external ground level during the period of primary use. The pottery recovered from this deposit was again of the Late Roman period.

DEPOSIT SUMMARY

Unit 2 N. Deposit exclusively Late Roman, but only four pieces catalogued.

Catalogued items:

Roman Pottery:	**14.117, 14.177, 14.396, 14.432.**

Trench 3 SE [330]

Catalogued items:

Geometric and Archaic pottery:	**5.6, 5.17, 5.18.**
Corinthian pottery:	**6.5.**
Black-glaze:	**9.81.**
Roman pottery:	**14.271, 14.306, 14.409.**
Greek lamp:	**15.44.**
Object of glass:	**17.50.**
Metal object:	**18.119.**

Unit 3 N upper [331]

Catalogued items:

Attic black-figure:	**7.13.**
Roman pottery:	**14.106, 14.119, 14.124, 14.174, 14.236, 14.238, 14.359, 14.415, 14.419, 14.429, 14.430, 14.431, 14.434, 14.500.**
Object of glass:	**17.45.**
Metal object:	**18.101.**

Deposits associated with wall 4

Two deposits may be directly associated with the building represented by Wall 4. The first comprises the fill of the foundation trench to the south of the wall. Only a very small quantity of fragmentary pottery was recovered from this deposit, none of which is here catalogued. The fill yielded, however, material that was certainly not later than Archaic. The second deposit, Unit 3 N lower, extending to the north of the wall, also yielded pottery that was clearly not later than Archaic.

DEPOSIT SUMMARY

Fill of foundation trench (south of schist wall)

No catalogued objects.

Unit 3 N lower

Catalogued items:

Geometric and Archaic pottery:	**5.24, 5.35.**
Attic black-figure:	**7.20.**

[330] Also includes Trench 3 Baulk Unit (2) and Trench 3 Unit (2) SE.

[331] *Supra* note 328.

Other deposits

Unit 3 SW. Encountered within the building represented by Walls 1 and 2 but below its foundations. Some Archaic and Early Iron Age fragments; latest identifiable fragment **15.73**, dating to the 4th century B.C.

Catalogued items:

Early Iron Age pottery:	**4.4.**
Geometric and Archaic pottery:	**5.14.**
Corinthian pottery:	**6.13.**
Attic black-figure:	**7.23.**
Greek lamp:	**15.73.**

Unit 3 S. Represents final cleaning immediately above bedrock in the south sector. Only one catalogued fragment, dated to 525-450 B.C.

Black-glaze:	**9.78.**

7. PROMONTORY 1 - THE LEKYTHOS (1978)

Grid reference: 1C-1D, 2C-2E, 3D-3E

Promontory 1, known from Thucydides as *The Lekythos*,[332] is the northernmost of four promontories on the western side of the hilly cape on which ancient Torone was built (Figs. 1, 44; Pls. 43 f-g, 44 a). Thucydides describes it as being the extremity of the city, jutting out into the sea and connected with the mainland by a narrow isthmus.[333] Promontory 1 has an overall length of about 140 m., and at its widest point measures 61 m. across.[334] Almost flat at the top, with its cliff falling abruptly to the sea, it was one of the largest single areas of level ground within the Classical city and one of the most easily defendable. This defensive aspect is stressed by Thucydides who describes the promontory as a φρούριον.[335] It was here that, in the winter of 424/3 B.C., the Athenian garrison in Torone, along with its allies among the

[332] IV. 113.
[333] *Ibid.*
[334] These are overall dimensions which are not unlike those of some inland Macedonian mounds. The *toumba* at Assiros, for example, measures 100 x 70 m., K. A. Wardle, *BSA* 75 (1980) 231, 262; *BSA* 82 (1987) 313-329; *BSA* 83 (1988) 375-387; *BSA* 84 (1989) 447-463.
[335] IV. 113.

local citizens, took refuge after the capture of the city by the Spartan force led by Brasidas,[336] and it was here, too, that a temple dedicated to Athena stood.[337]

At its highest point the promontory is at 15.21 m. above sea level, while its average height is at about 12 m. Even on the SE side, where the promontory is connected to the main part of the site, there is a near vertical drop of almost 8 m. within a stretch of about 10 m. It was at this point that the builders of the late fortifications, which partly survive and probably date from the early Post-Byzantine era, constructed a suitably massive wall, over 3 m. wide, largely built of reused ancient blocks. These late fortifications which encircle the promontory (Figs. 1-2, 44) provide the modern visitor with the most conspicuous evidence of past occupation.

Although B.D. Meritt in 1923, using Thucydides' account, established many topographical details of the Archaic and Classical city,[338] it was not until 1939 that the existence of a Prehistoric settlement on Promontory 1 was reported by N. Kotzias.[339] In 1965 D.H. French visited the site with G. Bakalakis. As part of a larger project French collected, exclusively from Promontory 1, and catalogued 61 surface sherds, which are discussed more fully in Chapter 3.[340]

The two test trenches opened on Promontory 1 in 1978 were only partially excavated,[341] and in both cases only the upper, Post-Byzantine, levels were investigated. The results of these two test trenches are best understood in the light of the excavations conducted on the promontory in 1986-1990.[342] The latter have shown the promontory to have been a complex, multi-phase site. Promontory 1 appears to have been more or less continuously occupied from the Early Bronze Age to the Post-

[336] *Ibid.*

[337] IV. 116; see further B. D. Meritt, *AJA* 27 (1923) 447-460; E. Oberhummer, *RE* 6A.2 (1937) 1795-1798; A. Cambitoglou, *PAE* 1975, 106. Fragments of the temple, in poros limestone, were found for the first time in 1988 and include several *gutta* fragments, see A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 3 (1990) 124, 126 fig. 23; more *guttae* were found in 1989 and 1990, see *MeditArch* 4 (1991) 159, pl. 23:5, which established that the temple was Doric. More substantial parts, including a triglyph, a geison block, and fragments of columns were found in 1990, see *MeditArch* 7 (1994) 161-163, figs. 37-42, and show the temple to have been built in the Archaic period.

[338] Meritt, *op. cit.* (*supra* n. 337) 455 fig. 7; 456 fig. 8; 458 fig. 10. See further M. Zahrnt, *Olynth und die Chalkidier* (1971) 247-251.

[339] Ch. Makaronas, *Makedonika* 1 (1940) 493; O. Walter, *AA* 1940, 279; T. J. Dunbabin, *JHS* 64 (1944) 93.

[340] D. H. French, *Index of Prehistoric Sites in Central Macedonia and Catalogue of Sherd Material in the University of Thessaloniki* (privately issued 1967) 35, 66; see also *id., BalkSt* 7, 1966, 103-110.

[341] A. Cambitoglou, *PAE* 1978, 91-93, pl. 76.

[342] A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217; *MeditArch* 3 (1990) 93-142; *MeditArch* 4 (1991) 147-171; *MeditArch* 7 (1994) 141-163.

Byzantine era with a break in occupation perhaps only during Late Republican and early Imperial Roman times.[343] Several major structural changes, primarily during the Classical and Hellenistic periods and again during Late Byzantine and Post-Byzantine times were a natural result of this continuous occupation. The frequent excavation by the inhabitants of the promontory for foundation trenches and rubbish pits, coupled with stone-robbing or general clearance of earlier structures, involved considerable displacement of material.[344] Many small finds were therefore found out of their original context and, indeed, excavation revealed a textbook case where the later the layer, the more likely it was to contain earlier material.[345] This accounts for the quantity of Bronze Age, Early Iron Age, Archaic, Classical, Hellenistic and Roman material encountered in Post-Byzantine deposits, especially in Trench 2.[346]

Among the many small finds found out of their original context, special mention must be made of the Bronze Age pottery (catalogued in Chapter 3), all of which derives from the promontory. Early, Middle and Late Bronze Age sherds were encountered, including two fragments of LH I Vapheio type cups which represent the earliest Mycenaean pottery found in Macedonia.[347] The earliest identifiable material revealed during the first three digging campaigns in other areas of Torone, outside the promontory, amounted to little more than nine scraps of Early Iron Age pottery (Protogeometric and Sub-Protogeometric), and a few contemporary objects thought to be spindlewhorls, beads or buttons found in later deposits at the Gate Area, at Structure 1, and in the Lower City Area.[348] Also worthy of mention among the small finds recovered from later contexts is the relatively large quantity of Hellenistic pottery from the Lekythos. Of the seventeen fragments of West Slope Ware presented in Chapter 11, nine derive from Promontory 1. The significance of this evidence is considered below.

In addition to the late fortification wall which encircles the promontory, many wall lines were visible above surface prior to excavation over the entire area. The more notable of these include the large double cistern (Fig. 44) partly excavated by

[343] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 214.

[344] *Ibid.* 188-190.

[345] See G. Webster, *Practical Archaeology. An Introduction to Archaeological Field-Work and Excavation* (2nd ed., 1974) 55-56.

[346] Trench 2 was subsequently dug in 1986-1990 as Trench 69, where important Early Bronze Age deposits were revealed, see A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 205ff.

[347] This is more fully discussed in A. Cambitoglou and J. K. Papadopoulos in C. Zerner *et al.* (eds.), *Wace and Blegen 1939-1989. Pottery as Evidence for Trade in the Aegean Bronze Age. Proceedings of the Conference Held at the American School of Classical Studies at Athens, 2-3 December 1989* (1993) 289-302, pls. 39-40.

[348] See Chapter 4.

the Byzantine Ephoreia of Chalkidike before the commencement of the current excavations.[349] Visible remains of walls abutting the cistern, and a poorly preserved apse built of stone and mortar which partly overlies it on the SE side, suggest that a chapel was built over the cistern. Equally prominent were the remains of a large semi-circular structure at the SE end of the promontory, only a short distance from the late fortification wall. The excavations conducted on the promontory between 1986 and 1990 have shown it to be a large defensive tower, probably built in the first half of the 13th century A.C., and representing a defensive line predating that of the now-standing nearby fortification.[350] Elsewhere on the promontory a palimpsest of less distinguished wall lines was noted. The excavations of 1986-1990 showed that most of these represent various phases of construction of domestic buildings in the Post-Byzantine era.[351]

TRENCH 1 (Figs. 44, 45 a-c; Pls. 44 b-h, 45 a-b)

With the curved wall of the semi-circular structure, designated Wall 1, clearly visible above surface prior to excavation, a trial trench was sited along the exterior face of the wall on the NE side, designated Trench 1. The trench measures 5.50 m. SE-NW x 4.50 m. SW-NE. The primary aims of the trial were to test the surviving depth of the semi-circular Wall 1, as well as to test for the nature of deposits at a point along the exterior of the building. The preserved top of Wall 1 was at 13.47 m. above sea level, the lowest level reached by the end of the 1978 campaign was at 11.00 m. above sea level.

Clearance of the topsoil, Unit 1, quickly brought to light the preserved top of Wall 2 in the NW sector of the trench, as well as the preserved top of Wall 3 to the SE (Fig. 45 a). Unit 1 was characterised by a loose black soil with a good deal of rubble and tiles throughout. The preserved top of Wall 2 was first encountered towards the NE where it survives to one or two courses higher than it does to the SW at the junction with Wall 1 (Pl. 45 a). Similarly, Wall 3 was preserved to a greater height towards the SW (Pls. 44 b, e, h, 45 a-b). Clearance of the topsoil revealed a deposit of stone rubble and tiles similar to Unit 1, but with brown instead of black soil; this was designated Unit 2. The latter terminated approximately half-way down the pre-

[349] For preliminary notices of the work of the Byzantine Ephoreia at Torone see above note 206.

[350] See especially A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 3 (1990) 97-109 figs. 4-5, 9-10, pls. 32:7, 33:1-7.

[351] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 180-217; *MeditArch* 3 (1990) 93-142.

served height of Wall 3, along its SW face, about 0.50 m. from the preserved top of the wall at the SE scarp.[352] At this point traces of a possible floor surface were noted, especially near the SW face of Wall 3. This surface comprised little more than a trampled upper crust of the succeeding Units 3 and 4, although at certain points towards the SW, near the external face of Wall 1, a more carefully prepared surface of lime mortar/plaster was met. A large well-dressed threshold block of Classical date was found among the rubble of Unit 2 near the SW face of Wall 3 and the SE scarp of the trench. The block was lifted and placed on top of Wall 3 until the end of the season (Pls. 44 c-d, 45 a-b).

Clearance of Unit 2 in the central area of the trench defined by Walls 1, 2, 3 and the SE scarp brought to light two deposits horizontally distinct from one another. Over most of the area under excavation a substantial fill was encountered, largely composed of sand, but with a great number of small, fist-sized stones throughout. Designated Unit 3, it yielded a good deal of fairly well preserved Post-Byzantine table, cooking and coarse-wares, as well as a notable amount of animal bones, suggesting a fill of domestic refuse mixed with sand. The latter was probably brought in from the beach nearby and is similar to a substantial part of the fill of the interior of the semi-circular tower cleared in 1986 and 1988.[353] Unit 3 was cleared to a maximum depth of 0.90 m. to a level slightly above the *euthynteria* of Wall 1 (see below).

Towards the SW face of Wall 3, especially in the area near the SE scarp of the trench, a somewhat more dense and brown earth was met underlying Unit 2. Designated Unit 4, it proved to be the fill of the foundation trench for Wall 3, which had been dug into the pre-existing fill of Unit 3. The foundation trench cutting itself extended for up to 1.40 m. from the SW face of Wall 3, but narrowed considerably with the depth; it also narrowed towards the NW, petering out as Wall 2 was approached. During the course of its excavation, at the level of the base of Wall 3, a substantial spread of stone and mortar was uncovered, confined to the area of the foundation cutting and extending below Wall 3. At first considered by the excavator to have been a possible wall underlying Wall 3, the feature was designated Wall 4 (Fig. 45 a). It was quickly shown, however, that the mortar and stone comprised the foundation of Wall 3, which was laid probably on account of the loose, sandy, texture of the fill into which the foundation trench was dug. The stone and mortar feature

[352] On account of the location of Walls 2 and 3, the small area to the NW of Wall 2 and that to the NE of Wall 3 could not be excavated further.

[353] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 192-195; *MeditArch* 3 (1990) 99 fig. 5 (Phase 6), pp. 105-106.

designated Wall 4, therefore, probably had the dual function of providing a more solid setting for the construction of Wall 3 and of retaining the loose fill of Unit 3. The overall preserved height of Wall 3 and its setting below (Wall 4) was 1.50 m. (Fig. 45 c), while it was clear that Wall 2 continued to greater depth (Fig. 45 b-c).

Clearance of Units 3 and 4 revealed Unit 5 which was characterised by a dense, brown to yellow-brown soil with few if any stones. The deposit was dug to a maximum depth of 0.30 m., and during its excavation the *euthynteria* of Wall 1 was exposed (Fig. 45 a; Pls. 44 f, 45 a-b). By the conclusion of the 1978 campaign Unit 5 had not been exhausted. Traces of burning in the form of charcoal and ash were noted throughout the deposit, particularly near the face of Wall 1, as were small localised patches of plaster or mortar. Unlike Units 1-4, all of which produced relatively large quantities of Post-Byzantine pottery and other small finds, with small quantities of earlier residual material, Unit 5, yielded only a very small quantity of fragmentary pottery. Some 25 sherds only were recovered from it, mostly small unidentifiable scraps, none of which was catalogued. The latest identifiable sherds appear to be of a Late Roman amphora, but this evidence by itself does not date the deposit. Unit 5 almost certainly represents soil which had accumulated outside the semi-circular tower after the period of its construction. Deposits associated with the construction of Wall 1 were not revealed in the course of the 1978 campaign.

The stratigraphic sequence outlined above, coupled with the evidence of the relationship of the various walls uncovered to one another, allows the following chronological reconstruction.

The earliest building uncovered is the semi-circular tower represented by Wall 1.[354] As exposed in Trench 1, the wall survives to a maximum height of 2.60 m. towards the SE, but only to about 1.10 m. towards the NW at its junction with Wall 2, where it appears to have been damaged by stone robbing.[355] The wall proper has an average width of 1.15 m., while its *euthynteria*, which represents the lowest course reached by the conclusion of the 1978 campaign, extends for a distance of 0.10-0.30 m. from the external face of the wall.[356] The stones of the exterior face of Wall 1 are in some parts roughly coursed and in others uncoursed (Fig. 45 b; Pls. 44 e-f, 45 a-b). An admixture of limestone, granodiorite, and schist was used. The limestone blocks

[354] This has been renamed Wall A in later reports, A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 191 ill. 8; *MeditArch* 3 (1990) 97 fig. 4.

[355] This was clarified with the excavations of 1988, see A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 3 (1990) 102 ff., pl. 31:2.

[356] A *euthynteria* course was not encountered along the interior of the building, see *ibid.*

tended to be small to medium in size and only roughly dressed on the side visible in the face. Much of the granodiorite was in medium to large size slabs cut and reused from larger blocks of the Classical period, while schist was mainly used in smaller pieces filling interstices. A smaller quantity of tiles and sherds was used for the same purpose as the schist. A thick mortar of lime and large-grained sand was used as bonding. Judging by the lower courses, where it is better preserved, a somewhat finer, though still quite coarse, lime plaster containing fine-grained sand was used as a facing between the stones,[357] but this had mostly worn away on account of exposure to the elements. At one point, towards the upper part of the wall as preserved, and approximately in the centre, a number of stones are completely faced with a coarse lime plaster unlike that used as bonding agent or that used as facing between stones (Fig. 45 b; Pl. 44 f). This would suggest that this part of the building had suffered damage and was rebuilt.

Associated with the same structure as Wall 1 is Wall 2, which appears to abut Wall 1, though at its juncture to Wall 1, Wall 2 survives to a height of only two courses (Fig. 45 c; Pls. 44 c-d, 45 a-b). The angle formed between the two walls is not quite a right angle; it is slightly acute. Wall 2 represents the external continuation of Wall B of the semi-circular tower as exposed in later seasons.[358] Wall 2 is built of a similar admixture of stone as Wall 1, including two large granodiorite blocks in secondary use at the juncture with Wall 1 and its stones are bonded with a similar lime mortar of which little survives due to weathering. The wall was exposed for a length of 3.70 m. and clearly continues towards the NE, where it also survives to a greater height of 1.40 m.[359] Wall 2 has a width of 0.75-0.85 m. and is clearly a defensive wall associated with the semi-circular tower, though it may have been built slightly later than it. As noted above, deposits dating the tower (Walls 1 and 2) were not exposed in 1978 and the lowest unit reached by the end of the season - Unit 5 - post-dates the construction of the building. A construction date for the tower in the first half of the 13th century A.C, based on the evidence of the 1986-1990 excavations, has already been noted.[360]

Sometime during the course of the Post-Byzantine period, conceivably at the time when the later fortifications at a short distance to the SE were built, the entire interior and exterior area of the tower was filled in in order to raise the ground level to the required height for subsequent building. The fill encountered in the external

[357] Similar to that of the interior of the building, *ibid.* 103-104 figs. 9-10, pls. 31:4-5.

[358] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 191 ill. 8; *MeditArch* 3 (1990) 97 fig. 4, although it is clear that at the internal juncture of Walls A and B (=Walls 1 and 2) the two walls are bonded to one another.

[359] As distinct from the height of 0.80 m. at its juncture with Wall 1.

[360] *Supra* n. 350.

area of the building in 1978, designated Unit 3, yielded a large quantity of Post-Byzantine pottery. It was into this fill that the foundation trench for Wall 3 was dug; the fill of the foundation trench was designated Unit 4.

Wall 3 was exposed for a length of 4.35 m., though for its northwesternmost 1.10 m., where it abuts Wall 2, it survives to only one or two very rough courses of small stones (Pl. 44 h). At this point the uppermost course of the NE stretch of Wall 2 defines a slightly greater width than that part of Wall 2 further to the SW and lacks the lime mortar (Fig. 45 a; Pl. 45 a). This, and the floor surface of the building represented by Wall 3, which is level with the top of Unit 3, may indicate that those parts of Walls 1 and 2 above the level of the floor may well have been incorporated into a later building which includes Wall 3. If this is the case, then the northwesternmost 1.10 m. of Wall 3 may have served as an entrance or doorway.[361] It is worth adding that during the excavation of Unit 2 in the small area to the NE of Wall 3 (Fig. 45 a), the excavator came across the remains of two charred timbers which may have served as roof beams or, possibly, as door jambs. Their exact use, however, remains uncertain and unless a much larger area is excavated the function of the building represented by Wall 3, which is clearly dated to the Post-Byzantine period, cannot be established. The wall has an average width of 0.60 m., which is significantly less than that of both Walls 1 and 2, and although lime was used in the lower level of the fill of its foundation trench (Unit 4, see above), the wall itself was built in dry rubble technique with no mortar bonding. Although constructed with an admixture of stone, Wall 3 was largely built of smaller pieces, either undressed or only very roughly hewn, with few reused Classical blocks like those noted in Walls 1 and 2.

Following the period of use of the building represented by Wall 3, the entire area of Trench 1 was covered with a deposit of stone rubble and tiles (Unit 2) mostly deriving from the Wall 3 phase, but also from Walls 1 and 2. Over this deposit topsoil had formed (Unit 1).

DEPOSIT SUMMARY[362]

LEKYTHOS SURFACE

Catalogued items:

Archaic Pottery: **5.9, 5.20.**

[361] The large Classical threshold block encountered in Unit 2 (Pl. 44 d) has a length of 1.70 m. and is, therefore, too large to have been reused as a threshold block for this presumed entrance.

[362] In the following summary only the Late Byzantine/Post-Byzantine pottery that is inventoried is listed.

Stamped black-glaze: **10.80.**
Coin: **20.27** (Valentian I, A.D. 364-367).

TRENCH 1

TR1 Unit 1 (Topsoil)

Catalogued items:

Transport amphora: **13.15**.
Roman pottery: **14.18, 14.70, 14.146, 14.478, 14.483**.

Inventoried Late Byzantine/Post-Byzantine pottery:

78.984, 78.1631, 78.1633, 78.1635.

TR1 Unit 2. Latest identifiable pottery Post-Byzantine.

Catalogued items:

Black-glaze: **9.55.**
Object of glass: **17.21**.

Inventoried Late Byzantine/Post-Byzantine pottery:

78.981, 78.1647, 78.1648, 78.1650, 78.1651, 78.1652, 78.1665.

TR1 Unit 3. Large quantities of Post-Byzantine pottery, a little of which may possibly be of Late Byzantine date. Smaller quantities of earlier material.

Catalogued items:

Red-figure: **8.101.**
Roman pottery: **14.315**.

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1466, 78.1580, 78.1583, 78.1584, 78.1585, 78.1586, 78.1587, 78.1588, 78.1590, 78.1591, 78.1593, 78.1594, 78.1596, 78.2653, 78.2654, 78.2656, 78.2657, 78.2658, 78.2659, 78.2660, 78.2662, 78.2663, 78.2664, 78.2665, 78.2666, 78.2667, 78.2668, 78.2669, 78.2670, 78.2671, 78.2672, 78.2673, 78.2674, 78.2675, 78.2676, 78.2677.

Of these fragments the following are identified as Post-Byzantine by Pamela Armstrong: 78.1466, 78.1590, 78.2657 and perhaps also 78.2671, 78.2672 and 78.2676; the remainder are identified as Byzantine and dated to the first quarter of the 13th century A.C.

TR1 Unit 4. Latest identifiable material Post-Byzantine with smaller quantities of earlier material.

Catalogued item:

Corinthian pottery: **6.8.**

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1462, 78.1463, 78.2707, 78.2708, 78.2709, 78.2710.

Of these, only 78.2707 is Post-Byzantine; the remainder appear to be Byzantine.

TR1 Unit 5. Only 25 sherds were recovered, mostly small non-diagnostic scraps. Latest clearly identifiable material (1 sherd) is Late Roman. There are no catalogued objects.

TRENCH 2 (Figs. 44, 45 d-e; Pls. 45 c-g, 46 a-g)

Trench 2 was sited some 17 m. to the west of Trench 1 and was located against part of the late fortification wall (Fig. 44).[363] Its dimensions were 7 m. SW-NE x 6 m. SE-NW. Three walls, designated Walls 1-3, were partly visible above surface prior to excavation, and by the conclusion of the 1978 campaign eleven distinct walls were exposed (Fig. 45 d). Excavation of the trench was continued in the years between 1986 and 1990, at which time it was renamed TR69.[364]

Of the three walls visible above surface prior to excavation, Wall 1, located in the south corner of the trench, is part of the late fortification wall encircling the promontory. That part of the wall located within the trench is not the fortification wall proper, but rather a substantial foundation for it; the wall itself is located beyond the trench to the southwest. This foundation forms a corner; it is preserved for a length of 2.65 m. SE-NW and 1.20 m. SW-NE. It survives to a height of approximately 1.50 m. It is mostly built of large well-dressed granodiorite blocks, in secondary use, along with an admixture of small stones, including limestone and schist. The stones are laid in roughly horizontal courses, especially the larger ones, and are bonded with a coarse-grained mortar of lime and sand (Pl. 45 c, e). The function of the corner is to follow the line of the fortification wall itself which, at this point, turns 90° from a SE-NW orientation to a NE-SW one to follow the configuration of the promontory.

Wall 2, oriented SW-NE, was exposed for a length of 4.90 m. and has a width varying between 0.30 and 0.48 m. The wall survives to a height of 0.85 m. at the SW end, where it abuts Wall 1, but only to 0.20 m. towards the NE, where it abuts Wall 5

[363] A. Cambitoglou, *PAE* 1978, 91-93, pl. 76.

[364] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 205-212.

(Fig. 45 d). Its NE end is built directly onto the underlying Wall 4, whereas at the SW end up to 0.15 m. of mud separate the base of Wall 2 from Wall 4 (Pl. 46 a-b). Wall 2 is built exclusively of small unworked stones, in dry rubble technique. As it both overlies Wall 4 and abuts Wall 5, which together form the east corner of a building dated quite late in the Post-Byzantine period on account of several Turkish tobacco pipes found on its floor (see below), Wall 2 is the latest of all the walls uncovered in the trench. It may well represent a field wall constructed quite recently, after the abandonment of the promontory in the 19th century,[365] or else a very late phase of Post-Byzantine occupation.[366]

Of Wall 3 only the two large well-dressed granodiorite blocks serving as door jambs were visible above surface prior to excavation (Fig. 45 e; Pls. 45 c, f, 46 e-f). Both blocks are clearly in secondary use; that to the NE is a Classical threshold block, that to the SW possibly a lintel block. The wall itself with which they are associated was encountered at greater depth and is described below.

The topsoil was cleared as *Unit 1* and was characterised by a loose, dark brown soil with decayed vegetable matter (humus) and a good deal of stone and tile. Its clearance brought to light *Unit 2,* which was a harder, more compact mid-brown to yellow brown soil extending over the entire area of the trench. It was into Unit 2 that a small pit had been dug in order to receive the body of an infant (Pl. 45 d). The skeleton was found along the NW baulk, about 2.25 m. SW of the north corner of the trench. The body was oriented NW-SE with the head towards the NW. It had been laid on its back in a fully extended supine position, arms slightly bent and head tilted slightly towards the left shoulder; the feet and lower leg bones were missing. Two plastic white buttons, each with four holes, were found on the rib cage and indicate that the infant was dressed at the time of burial; no other trace of clothing was found. The buttons also date the tomb to the 20th century and probably quite recently. *Kterismata* associated with the tomb were not found. As the body of the infant was re-interred with a Christian Orthodox priest present, it was not possible to study it

[365] The chronology of the abandonment of the promontory is uncertain. A date in the second half of the 19th century seems most likely on the evidence of Turkish tobacco pipes and coins found in the occupation deposits on the promontory. The Lekythos was clearly deserted at the time of Meritt's visit in the early 1920s, *supra* n. 337, with the *kalyvia* of Torone spread out along the beach north of the ancient site.

[366] The preserved top of Wall 2 lies at 13.92 m. above sea level at its SW end and slopes down considerably towards the NE where its preserved top is at 12.56 m. above sea level. There is therefore a difference of 1.36 m. in the maximum and minimum heights of its preserved top.

with a view of determining age, sex and the cause of death.[367] Notes taken by the excavator in the field, however, might indicate that the infant was aged between 8-18 months at the time of death, though this remains speculative.[368]

The preserved top of Wall 4, which partly underlies Wall 2, was first encountered after the removal of the topsoil, Unit 1. Clearance of Unit 2 revealed the flagstones of the paving set in the immediate area of the door jambs of Wall 3 along with an associated beaten earth floor, and the small preserved stretch of Wall 3 itself. It was also during the excavation of Unit 2 that the preserved top of Wall 5, which was shown to form a corner with Wall 4, first appeared and a hearth in the corner between Walls 4 and 5 (Pl. 45 g).

Only the NW face of Wall 4 was exposed; the remainder underlies Wall 2. Wall 4 has a length of 4.90 m. Its NE half is mainly built of an admixture of small stones in dry rubble technique, the stones having been set in rough courses (Pls. 45 g, 46 a, c). The width of the wall at this point cannot be measured accurately on account of the overlying Wall 2. The NE half of Wall 4 is oriented NE-SW. Its SW half, which abuts Wall 1 (Fig. 45 d) is built of a similar admixture of small stones, but also incorporates a number of large well-dressed granodiorite blocks, in secondary use, including a block which must have originally served as the setting for a Doric column (Fig. 46 b; Pls. 45 e, 46 b).[369] The top of the latter represents the uppermost preserved point of Wall 4, which is at 12.68 m. above sea level. The SW half of the wall is considerably thicker than the NE half, and on a different alignment, ENE-WSW. At the point where it abuts Wall 1, Wall 4 has a width of at least 0.86 m. It is clear, however, from the narrowing of its NW face that the two halves are contemporary (Pl. 46 a-c). The thickening of the SW half of the wall and the use of larger blocks was probably an attempt not to undermine the foundations of the fortification wall, Wall 1, which it abuts.

Bonded to Wall 4, and at right angles to it, is Wall 5. Oriented SE-NW, the wall was exposed for a length of 2.70 m. from the NW face of Wall 4; no part of it is pre-

[367] The infant may not have been christened at the time of death and according to local Orthodox custom, unchristened children cannot be buried in cemeteries. Another alternative is that the burial may have been that of one of the children of transhumance shepherds - locally referred to as "Vlachs" - who, in living memory used to bring sheep and goats to winter in the milder climate of Sithonia. These shepherds, along with Gypsies, have no real rights in the local cemeteries. For death among the nomads of Greece see, most recently, G.V. Kavvadias, *Σαρακατσάνοι. Μία Ελληνική πομενική κοινωνία* (Greek trans. 1991) 331-343.

[368] The excavator noted a number of teeth and the non-closure of the sutures of the skull.

[369] The block is described more fully below.

served beyond that point to the NW.[370] It is built in a similar dry rubble technique as Wall 4 and mostly of small stones, either unworked or only roughly hewn (Pl. 46 c). Its SE part, where it is bonded to Wall 4, is better preserved than the rest to the NW. Towards the SE it survives to two courses up to a height of 0.40 m.;[371] it has a width of 0.45-0.48 m. The northwesternmost preserved part of Wall 5 directly overlies the earlier Wall 10 (Pl. 46 g).

In the corner formed by Walls 4 and 5 a semi-circular hearth or fireplace was uncovered (Pls. 45 g, 46 c). It comprised a single line of small stones, some laid flat, others set on edge (Pl. 45 g), which define a semi-circle. The hearth has a maximum preserved length of about 1.0 m. Its central part was composed of clay fired hard, variously coloured yellow and red.

The hard packed earth floor associated with the hearth and with Walls 4 and 5 extended over the entire central area of the trench, right up to the paving associated with the entrance and door jambs of Wall 3. Only in the west quarter of the trench, to the SW of the line of stones designated Wall 6, and in the north corner of the trench, in the area where Walls 3 and 5 were not preserved, was the floor not encountered. The compact upper crust of this floor was designated and cleared as *Unit 3*, while the material directly overlying the floor was excavated as the lowest pass of Unit 2. Although their continuations were not preserved, it is clear that Walls 3 and 5 were part, with Wall 4, of a rectangular building, with a carefully paved entrance near the west corner of the NW wall (Wall 3) and a hearth at the east corner. Five Turkish tobacco pipes and a large quantity of well preserved Post-Byzantine pottery encountered in the lowest pass of Unit 2, directly overlying the floor, among which a number of spouted jugs were conspicuous, may possibly suggest that the building, though modest, had a public rather than a domestic function. The activities of smoking and drinking, suggested by the finds recovered from immediately above the floor may indicate a gathering place for men, not unlike a *Kapheneion*. If the lines of Walls 3, 5 and 6 are reconstructed to their original state then the building would have internal dimensions of approximately 5 m. SW-NE x slightly less than 4 m. SE-NW.

A separate, constructed wall serving as the SW wall of this building was never built. At the south corner Wall 4 abuts the foundation of the fortification wall, Wall 1, and it is clear that the latter was incorporated into the building. Further NW, beyond the point where the foundations of Wall 1 form a corner which continues to the SW,

[370] The large block at its SE end shown on Fig. 45 d, which appears to continue the line of the wall, is in fact not part of Wall 5.

[371] This is clearly seen on Pl. 46 g.

only earth was met for a distance of 1.80 m., as far as the small stretch of Wall 6, which continues directly the line of the NE face of the foundations for Wall 1. Wall 6 is a retaining wall, oriented SE-NW and parallel to Wall 5. It was constructed of small unworked stones and has a face only on the NE side. Exposed for a length of 1.57 m., Wall 6 survives to a height of several rough courses; its base is at the level of the threshold of the entrance along Wall 3.[372] It is clear that Wall 6 is a retaining wall which originally extended towards the SE where it met the foundations for Wall 1. It retained a substantial fill largely of stone and served as the SW wall of the building (Pl. 46 d).

Of the walls of the building, that to the NW, Wall 3, was the most poorly preserved. Like Walls 4 and 5, it was largely built of an admixture of small stones in dry rubble technique. It was traced for a length of about 3.0 m., but only 0.80 m. of the face NE of the doorway were clear. Towards the NE end several larger, well-dressed granodiorite blocks were noted in a SSW-NNE orientation, whereas the SW part of the wall was aligned SW-NE and was parallel to Wall 4. Excavation in 1986 showed that these larger granodiorite blocks were in fact part of a large constructed tomb of Late Roman or Early Byzantine date, predating Wall 3.[373] Towards the SW, near the entrance, Wall 3 had a width of about 0.60 m.

The entrance of the building was defined by two large granodiorite blocks, in secondary use, set upright as door jambs. That on the NE side preserved cuttings which showed that it was originally a threshold block of Classical date. In its reused state it was found half fallen and propped up by the upright block to the SW (Figs. 45 e, 46 a; Pls. 45 f, 46 e-f). The width of the doorway was slightly greater than 1.0 m. A carefully laid schist pavement was found in the immediate vicinity of the entrance, at the same level as the earth floor which extended over most of the central portion of the trench, towards Walls 4 and 5. The paving extended into the small area NW of Wall 3, outside the building, where it was laid at a level about 0.10 m. higher than that inside, with three smaller blocks in the doorway retaining it. This difference of levels resulted in a slight step down into the building. Towards the SE the flagstones of the pavement extended to a distance of 0.45 m. into the building.

Approximately 0.80 m. NE of the entrance a further wall line was exposed, designated Wall 11 (Fig. 45 d). Only a few blocks of the wall were revealed, defining a

[372] The preserved top of Wall 6 was first encountered at 12.27 m. above sea level.

[373] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 208-209. The preserved top of Wall 3 proper was first encountered at 12.01 m. above sea level, whereas the preserved tops of the granodiorite blocks further to the NE were met at 11.60 m. above sea level, that is some 0.40 m. deeper.

clear north face and a somewhat less clear south face. Oriented east-west, Wall 11 was exposed for a length of *ca.* 0.40 m.; it survived to a height of 0.33 m. as revealed along its north face (Pl. 46 e) and had a width of *ca.* 0.55 m. Traces of mortar bonding were encountered in the wall. Wall 11 appeared to underlie Wall 3, though the preserved state of the latter was such that this could not be determined with certainty in the course of the 1978 season. In 1986 it was shown that Wall 11 was, in fact, the SW wall of the same Late Roman or Early Byzantine tomb noted above.[374]

The location of the floor associated with the building defined by Walls 3, 4, 5 and Walls 1 and 6 subsequently divided the trench into two main sectors which were excavated separately. The first sector comprised the floor surface itself which extended over the greater part of the trench from Walls 1 and 6 to the SW, up to Wall 5 to the NE. In addition to the Post-Byzantine pottery and Turkish tobacco pipes encountered in the lowest pass of Unit 2, immediately above the floor mentioned above, roof-tiles were found smashed on the surface at various points. The compact upper crust of the floor, only a few centimetres thick, was cleared as Unit 3. Although a greater quantity of Prehistoric pottery was noted in its makeup than what was recovered in the overlying deposits, the latest identifiable material was of Post-Byzantine date. Clearance of Unit 3 also brought to light the preserved tops of Walls 7, 8, 9 and 10.[375]

Below Unit 3 a similar medium to light brown clayey deposit was met, but lacking the hardened texture of Unit 3. Designated *Unit 5* the deposit was only dug to a depth of a few centimetres below the preserved tops of Walls 7, 8, 9 and 10. This deposit is best seen as a sub-floor packing. It yielded a quantity of Prehistoric pottery (including fifteen of the catalogued fragments), as well as some Hellenistic pottery (six catalogued fragments), in addition to small quantities of Early Iron Age and Classical material. The latest identifiable pottery was again of Post-Byzantine date.

Of the earlier walls encountered in this sector with the clearance of Units 3 and 5, Walls 7 and 8 defined the north corner of a small constructed feature. Wall 7 was exposed for a length of 1.35 m., but clearly continued below Wall 4 (Fig. 45 d). It consisted basically of two large stones which defined a clear SW face but no real NE face.[376] Oriented SE-NW, Wall 7 had a maximum width of just under 0.30 m. and

[374] *Ibid.*

[375] Wall 10 was better defined with the excavation of the deposits encountered in the north quarter of the trench.

[376] A smaller stone continued the line of the SW face at the corner with Wall 8.

was first encountered at 11.92 m. above sea level. Oriented SW-NE and at right angles to Wall 7, Wall 8 was exposed to a length of 1.44 m. As was the case with Wall 7, only the interior SE face of Wall 8 was clearly defined, and it, too, comprised two large stones set in line. Wall 8 had a maximum width of 0.41 m.,[377] and was first encountered at 11.84 m. above sea level. Time did not permit the excavation of the feature defined by Walls 7 and 8 in 1978, but excavations in 1986 showed it to be another Late Roman or Early Byzantine tomb.[378]

Walls 9 and 10 belonged to a more substantial structure which continued beyond the confines of the trench. Oriented east-west and with a width of 0.65-0.69 m., Wall 9 was traced for a length of at least 4 m.[379] Only a small stretch of the return wall, Wall 10, was exposed. Bonded to Wall 9 and at right angles to it, this wall was traced for a length of 1.70 m. from the north face of Wall 9. Its exact width could not be measured on account of the overlying Wall 5, but the wall was at least 0.50 m. wide.[380] Both walls were constructed of an admixture of stone, predominantly limestone, with mud used as a bonding agent. Though the building represented by Walls 9 and 10 could not be more fully investigated in 1978, excavation in 1986 and again in 1989 showed it to be a substantial domestic dwelling of the Late Classical/Early Hellenistic period.[381]

The second sector was considerably smaller and was largely located in the north quarter of the trench, NW of Wall 5, and in the area between it and Walls 3, 11 and the NW scarp of the trench. Here, the floor surface described above was not encountered, nor the presumed continuation of Walls 3 and 5. Clearance of Unit 2 brought to light a loose-textured yellow-brown soil, containing some organic debris and mixed pottery, the latest of which was of Post-Byzantine date. Dug into this was a grey ashy pit, located along the NW scarp of the trench immediately to the NE of Wall 11. Only partially exposed and continuing towards the NW beyond the trench, the pit had a maximum preserved length of 0.70 m. and was dug to a maximum depth of 0.30 m. In addition to ash and charcoal, it yielded a good deal of animal bone and sea-shell, as well as fragmentary pottery of mixed date, the latest of which was Post-Byzantine. The contents of the fill of the pit were cleared as *Unit 6*. The relationship of the pit to Walls 3 and 11

[377] Which represents the width of the larger block to the NE.

[378] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 209 (Tomb 2).

[379] It was first encountered at 11.91 m. above sea level.

[380] It was first encountered at 11.81 m. above sea level.

[381] A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 207-208, 206 ill. 28; *MeditArch* 4 (1991) 164-168.

would suggest that it post-dates both and is therefore quite recent. It should be noted that the infant burial described above was partly located above the pit in Unit 2.

Below Unit 4 the excavator distinguished a further soil unit, similar in colour to it, but of slightly harder texture. Designated *Unit 7,* it was dug to a depth of a few centimetres only and is best seen as a continuation of Unit 4.

The fact that the NE continuation of Wall 3 and the NW continuation of Wall 5 were not found was a problem that could not easily be explained. Excavation in 1986 revealed a massive Post-Byzantine refuse pit in the north corner of the trench, just where the continuation of both walls would have been met had they survived.[382] Although yielding a number of late finds such as fragments of tobacco pipes,[383] the pit appears to predate Walls 3 and 5. Therefore, the damage caused to both walls was probably due to subsidence, caused by the loose texture of its fill. Similar damage to other Post-Byzantine walls built directly over large refuse pits was noted elsewhere on the promontory during the excavations of 1986-1990.[384]

Among the architectural members of earlier buildings reused in later walls, two of the most interesting are illustrated on Fig. 46; both are rather worn. The first is one of the well-dressed blocks reused as door jambs in the Post-Byzantine structure defined by Walls 3, 4, 5 and 6-1. It was found half fallen and propped up by the second jamb to the SW which was still upright (see above).[385] The block measures 3.60 x 1.08 x 0.47 m. The cuttings on its upper face show it to be a threshold block of Classical date.[386] There are three small cuttings on the uppermost face, the two on the one side rectangular and rather thin, the third on the other side almost square. A larger cutting on the step down would have originally taken the socket for the upright of the door itself.

The second block was found built into the late Wall 2; it measures 1.73 x 1.72 x 0.76 m. On its square upper face there is a slightly raised, central disk measuring 0.86 m. in diameter, which suggests that the block may have originally served as a

[382] *MeditArch* 1 (1988) 206-207.

[383] The pit yielded fragments of two tobacco pipes (inv. 86.03 and 86.19) and a large two-pronged socketed ploughshare (inv. M86.48), identical to some still in use today in the nearby village of Sykia.

[384] See, for example, A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 3 (1990) 109-116 and especially pls. 32:1-5.

[385] See further A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 205-206, ill. 26; A. Cambitoglou, *PAE* 1978, pl. 76β.

[386] For other published threshold blocks at Torone in primary use and *in situ* see: A. Cambitoglou, *PAE* 1977, 110, 105 fig. 16, 113 fig. 17, pls. 64-65; 116, pl. 67β; *id., PAE* 1982, 69 pl. 53α.

setting for a column. Consequently, the block may have derived from the Temple of Athena on Lekythos mentioned by Thucydides, though this is uncertain.[387]

DEPOSIT SUMMARY

TR2 Unit 1 (Topsoil)

Catalogued items:

Bronze Age pottery:	**3.10**.
Red-figure:	**8.88**.
Stamped black-glaze:	**10.110**.
Hellenistic pottery:	**11.10**.
Transport amphora:	**13.1**.
Roman pottery:	**14.240, 14.250**.

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1672, 78.1675, 78.1678, 78.1680, 78.1681, 78.1687, 78.1688, 78.1689, 78.1690.

Turkish tobacco pipe: 78.2928.

TR2 Unit 2. Large quantity of pottery, mostly Post-Byzantine, including material recovered immediately above the floor (Unit 3). Only small quantities of earlier material noted.

Catalogued items:

Bronze Age pottery:	**3.5, 3.6, 3.9.**
Black-glaze:	**9.210.**
Hellenistic pottery:	**11.3, 11.11**.
Roman pottery:	**14.344.**
Objects of glass and bone:	**17.51, 17.82, 17.96**.

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1545, 78.1546, 78.1547, 78.1556, 78.1557, 78.1559, 78.1560, 78.1561, 78.1562A & B, 78.1563, 78.1564, 78.1565, 78.1571, 78.1572, 78.1574, 78.1575, 78.1578, 78.1579, 78.2372, 78.2373, 78.2374, 78.2375, 78.2376, 78.2377, 78.2378, 78.2379, 78.2380, 78.2381, 78.2382, 78.2383, 78.2384, 78.2613, 78.2616, 78.2617, 78.2618, 78.2619, 78.2620, 78.2621, 78.2622, 78.2623, 78.2624, 78.2625, 78.2626, 78.2627, 78.2792

[387] Thucydides IV. 116; see also A. Cambitoglou and J. K. Papadopoulos, *MeditArch* 1 (1988) 214; A Cambitoglou, *PAE* 1978, pl. 76β (to the left).

Turkish tobacco pipes: 78.1549, 78.1551, 78.1553, 78.1554, 78.1682.

TR2 Unit 3. Latest identifiable material Post-Byzantine, but with quantities of earlier material present. The four metal objects listed below were encountered in the uppermost part of the deposit and may therefore represent material directly overlying the floor.

Catalogued items:

Bronze Age pottery: **3.4, 3.11, 3.14, 3.15, 3.16, 3.21, 3.28, 3.31.**
Corinthian pottery: **6.14.**
Black-glaze: **9.172.**
Metal objects: **18.19, 18.39, 18.71, 18.105.**

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1666, 78.1692.

TR2 Unit 4. Only a small quantity of material recovered, the latest clearly Post-Byzantine, though no fragments of Late Byzantine/Post-Byzantine pottery were inventoried.

Catalogued items:

Bronze Age pottery: **3.3, 3.24, 3.29.**
Corinthian pottery: **6.2.**
Louterion: **16.51.**
Objects of glass and bone: **17.83, 17.101.**

TR2 Unit 5. Notable increase of early material including Bronze Age, Early Iron Age, Classical and Hellenistic. Latest identifiable material Post-Byzantine.

Catalogued items:

Bronze Age pottery: **3.1, 3.2, 3.7, 3.8, 3.12, 3.13, 3.17, 3.18, 3.19, 3.20, 3.22, 3.23, 3.25, 3.26, 3.30.**
Early Iron Age pottery: **4.5.**
Geometric and Archaic pottery: **5.4.**
Hellenistic pottery: **11.6, 11.7, 11.8, 11.9, 11.12, 11.14.**
Transport amphorae: **13.4, 13.20.**
Greek lamp: **15.69.**
Objects of glass and bone: **17.84, 17.95.**

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1278, 78.1603.

TR2 Unit 6. Contents of pit; latest identifiable material Post-Byzantine.

Catalogued items:

Black-glaze: **9.217**

Objects of glass and bone: **17.85, 17.86.**
Metal object: **18.69.**

Inventoried Late Byzantine/Post-Byzantine pottery:

78.1313, 78.1396.

TR2 Unit 7. Only a small quantity of material recovered, the latest of which is Post-Byzantine (not inventoried). Only one catalogued fragment.

Catalogued item:

Stamped black-glaze: **10.45**.

The Early Mycenaean body fragment **3.27** was found on the surface of the promontory in 1975.

3. THE BRONZE AGE POTTERY*

John K. Papadopoulos

As early as 1923 the late B.D. Meritt, using Thucydides' account, and the published writings of early travellers to Torone (see Chapter 1), established many topographical details of the Archaic and Classical city and published the first photographs of the site.[1] It was not until 1939, however, that the existence of a Prehistoric settlement on Promontory 1 was reported by N. Kotzias.[2] Some twenty-five years later, in 1965, D.H. French visited the site with G. Bakalakis. As part of a larger project French collected, exclusively from Promontory 1, and catalogued 61 surface sherds now in the Collection of the University of Thessalonike.[3] A number of these sherds were assigned by French to the Early, Middle and Late phases of the Bronze Age, others to the Geometric through Hellenistic periods, and the group as a whole also included "Medieval" glazed and plain wares.[4] Among the other sites in central Macedonia visited by French few yielded such a varied and chronologically continuous collection of surface pottery.

Although providing potentially tantalizing evidence, Torone, like coastal Chalkidike in general, failed to stir the interest of Aegean prehistorians. This neglect of coastal Chalkidike, particularly of the large peninsulae of Pallene, Sithonia and Akte, has been a feature of the archaeology of Macedonia.[5] In the half century since

* For discussion on various aspects connected with this chapter I am grateful to Sarah Morris, Jeremy Rutter, and Maria Schroder. A good deal of preliminary sorting of the Bronze Age pottery from Torone, particularly that from the later seasons, was carried out by Geoffrey Holden, to whom I am most grateful. This chapter was originally to be co-authored with Geoffrey Holden, but prior commitments prevented him from contributing. I am also grateful to Denise MacKenzie, Beatrice McLoughlin and Joanna Savage for facilitating my work at the excavation base and the Archaeological Museum at Polygyros.

[1] Including photographs of Promontory 1; B.D. Meritt, *AJA* 27 (1923) 447-460, especially 455 fig. 7, 456 fig. 8, 458 fig. 10.

[2] See Ch. Makaronas, *Makedonika* 1 (1940) 493; O. Walter, *AA* (1940) 279; T.J. Dunbabin, *JHS* 64 (1944) 93.

[3] French, *Index,* 35, 66; see also *id., BalkSt* 7 (1966) 103-110. I am grateful to Prof. Michalis Tiverios for allowing me to inspect the surface pottery picked up by French.

[4] French, *Index*, 35, 66.

[5] Heurtley's map of prehistoric sites in central and western Macedonia and Chalkidike (Heurtley, *PM*, xxii) locates numerous settlements in the coastal plain of the Chalkidike east of the Thermaic Gulf, but the three large peninsulae are totally neglected. Not one site is recorded for Pallene, while the greater part of Sithonia and all of Akte do not even appear on the map. Similarly, the various maps that illustrate N.G.L. Hammond, *A History of Macedonia* (1972) *passim* do not include the greater part of Pallene, Sithonia and Akte.

the publication of Walter Heurtley's *Prehistoric Macedonia*, excavations in north Greece at sites such as Kastanas, Assiros, Vergina, those on the lower slopes of Mt. Olympos, Nea Nikomedeia, Sitagroi and Dikili Tash, to mention only some, have brought the prehistory of Macedonia into much clearer focus. But most of these sites are inland mound settlements or else cemeteries. Of the settlements, most are situated with regard to available arable land and inland communications rather than with an interest in the sea.[6] The same is true of many of the mounds in mainland Chalkidike investigated by Heurtley,[7] and even earlier by Wace,[8] although some of these are sited near the coast, especially those not far from the eastern shore of the Thermaic Gulf or those at the head of the Toronean Gulf, in the vicinity of Olynthos. Prehistorians have concentrated on the rich agricultural plains of Macedonia, well-watered by rivers such as the Axios, Strymon, Gallikos, Haliakmon and Nestos. These rivers, particularly the Axios and the Strymon, which provide both irrigation and a natural means of communication, have been seen as the bridge between the Aegean and southern Greece on the one hand and the Balkans and the Danube valley on the other.[9]

Promontory 1 at Torone has an overall length of about 140 m. and at its widest point measures approximately 61 m. across. These are dimensions which are not unlike those of many inland Macedonian mounds.[10] Almost flat at the top, with its cliffs falling abruptly to the sea, the promontory provides one of the largest single areas of level ground within the fortified Classical city and one of the most easily defended.[11] But unlike the ubiquitous Macedonian toumba, the location and the physical appearance of the site more closely resemble such promontory settlements as those at Kolonna on Aigina, Ayia Irini on Keos, Pefkakia Magoula in Thessaly and Beşik Tepe in western Anatolia.

[6] For the colonisation of the Macedonian and Thracian coasts during the historic period see J. Boardman, *The Greeks Overseas. Their Early Colonies and Trade* (1980 ed.) 229ff.; and, most recently, J. K. Papadopoulos, "Euboians in Macedonia? A Closer Look," *OJA* 15 (1996) 151-181; *id.* "Phantom Euboians," *JMA* 10 (1997) 191-219.

[7] Heurtley, *PM*, xxii-xxiii, sites C1-C9.

[8] A.J.B. Wace, *BSA* 20 (1913-1914) 123-132; A.J.B. Wace and M.S. Thompson, *AnnLiv* 2 (1909) 159-164.

[9] K.A. Wardle in M.B. Sakellariou (ed.), *Macedonia. 4000 Years of Greek History and Civilization* (1988) 30.

[10] The toumba at Assiros, for example, measures approximately 100 x 70 m., see K.A. Wardle, *BSA* 75 (1980) 229-267; *id.*, BSA 82 (1987) 313-329; *id., BSA* 83 (1988) 375-387; *id., BSA* 84 (1989) 447-463.

[11] At its highest point the promomtory is 15.21 m. above sea level, while the average height is about 12m.

Full scale excavations on Promontory 1 conducted in the years between 1986 and 1990 have brought to light a thriving prehistoric settlement with well stratified deposits of the Early, Middle and Late Bronze Ages.[12] The finds, which are in the process of being studied, will be presented in a future volume. The small quantity of prehistoric pottery encountered during the first three seasons provides only a cursory glimpse of the range of material found in later seasons. The 31 sherds presented in the catalogue in this chapter were all found in later deposits, out of original context, and, with the exception of one (**3.27**), only in Trench 2.[13] The two test trenches opened on the promontory in 1978 were not excavated to sufficient depth to reach the Bronze Age levels. Nevertheless, the material they yielded covers the full span of the Bronze Age and includes representative sherds of types now known from the stratified deposits of later seasons. There were no traces of any earlier, Neolithic, material found during the first three seasons.[14]

The pottery listed below represents the majority of feature sherds found in 1978 which may be assigned to the Bronze Age. The material has been divided into the three categories of Early, Middle and Late Bronze Age, along with a small miscellaneous category at the end.

THE EARLY BRONZE AGE

The fragments listed under this heading are of two basic hand-made vessel forms: bowls or bowl-jars with incurved rims (**3.1-3.8**) and larger jars - Töpfe or Vorratsgefässe - (**3.9-3.15**).[15] Of the former category **3.1-3.3** are classic examples of the standard bowl with incurved rim, ubiquitous in Early Bronze Age contexts throughout the Aegean. They may be compared with types 6 and 7 in Hood's classification.[16] On account of the fragmentary state of the pieces, distinguishing between Hood's types 6 and 7 is difficult especially since bowls of type 7 shade into bowls of

[12] For published preliminary reports see A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217; *MeditArch* 3 (1990) 93-142; *MeditArch* 4 (1991) 147-171; *MeditArch* 7 (1994) 141-163; see also *AEMTh* 3 (1989) 439-449. Preliminary notices have also appeared in the pages of *Ergon, AR* and *BCH.*

[13] See Concordance 1.

[14] The later excavations on Promontory 1 have brought to light material at least as early as the Final Neolithic.

[15] Throughout this section on the Early Bronze Age pottery continual reference is made to the typological nomenclature, in German, published by Aslanis in *Kastanas PAS* 4.

[16] *Chios* I, 173 fig. 93, types 6 and 7.

type 6 and jars with rims of his class A.I.[17] **3.1** preserves part of a ledge-lug, but its condition is such that its overall length and exact type cannot be determined, nor is it possible to establish whether it was ever perforated. **3.2**, also poorly preserved, is best described as a tubular "string-hole" lug with grooved or ridged outer face; it resembles some of Hood's so-called "trumpet lugs."[18] The rim of **3.3** is noticeably incurved but lacks the internal differentiation and usual thickening of Hood's type 11.[19] Nevertheless, the degree of incurving does facilitate the "anti-splashing" characteristic of Hood's type 11 and the line between his types 6, 7 and 11 is only a fine one. The size of **3.6** and **3.8** would indicate that these fragments accord with bowl-jars of Hood's type 30 and allied types, with rims of class A.I.[20] With regard to **3.4-3.5** and **3.7** it is virtually impossible to tell whether they are bowls (Hood's types 6-7) or bowl-jars (Hood's type 30, *cf.* types 31 and 32). **3.6** preserves a handle scar, though the type of handle remains undetermined; **3.7** and **3.8** preserve mastos-like projections.[21] Although only a small fragment, **3.4** preserves a single perforation immediately below the rim which was drilled *after* the vessel was fired. Hence, although closely resembling a baking dish or pan (Pfanne) as preserved, the fragment cannot be from such a vessel.[22] Bowls or bowl-jars of a form similar to **3.4** with holes drilled after firing are not uncommon in Early Bronze Age contexts as the *comparanda* from Macedonia, Chios and Samos listed in the catalogue testify. A similar piece from Kum Tepe is described as having been repaired in antiquity.[23]

In the second category, **3.9-3.15**, are typical examples of jars/storage jars (Töpfe or Vorratsgefässe), though in cases like that of **3.9** there is little consistency in the literature as regards shape nomenclature.[24] Aslanis distinguishes four types of Töpfe

[17] *Chios* I, 175.

[18] *Chios* I, 414 fig. 191, especially 1b, 3b-c.

[19] *Chios* I, 179-181 (*cf.* **3.5**).

[20] *Chios* I, 192.

[21] At Kastanas such projections (Knubben) are more commonly found on jars (Töpfe) rather than bowls (Schalen), see *Kastanas PAS* 4, pl. 98 no. 6; pl. 111 nos. 5-6; pl. 123 no. 7.

[22] For baking dishes or pans see especially: *Chios* I, 173 fig. 98 type 3, fully discussed on pp. 172-174; *Kastanas PAS* 4, 83; A. Furness, *PPS* 22 (1956) 173-212, especially 182 (7) from Tigani on Samos; also *Argissa-Magula* III, pl. IX, 3a-b for a well preserved example.

[23] *Kum Tepe,* 235 no. 229, illustrated on p. 321 fig. 11 and pl. 73. For an earlier vase of similar shape with hole from Dikili Tash see J. Deshayes, *BCH* 97 (1973) 467 fig. 7.

[24] For individual vessels similar to **3.9** some scholars, like Sperling, *Kum Tepe*, 321 fig. 11 nos. 127-130 (discussed on p. 322) prefer the term "bowl;" Bernabò-Brea, *Poliochni* I, pls. XXX-XXXI (various examples), pl. XXXIVf; pl. XXXVd and g, uses the term "coppe tronco-coniche." A more idiosyncratic, but related, shape is

and Vorratsgefässe from Kastanas as follows: 1. "mit einbiegendem Oberteil;" 2. "zylinderförmig;" 3. "eimerförmig" and 4. "mit S-Profil."[25] **3.9** is a good example of Aslanis' type 3, whereas **3.11** is of type 4. **3.10** is more problematic: the fragment is probably the rim of a jar of Aslanis' type 4, as its rim diameter would exclude a closed amphoroid vessel;[26] an alternative would be a collar-necked bowl such as a well preserved example from Thermi.[27] The two fragments **3.12** and **3.13** preserve the standard type of vertical handle found on jars and larger storage vessels, sometimes on bowls and bowl-jars. The parallels cited in the catalogue serve to illustrate how common this type of handle is in the Early Bronze Age Aegean. The fragment **3.14** is almost certainly from a Topf or Vorratsgefäss of Aslanis' type 4;[28] the distinctive application is variously referred to in the literature as "lunate lug,"[29] "curving rib,"[30] "horseshoe in relief,"[31] "arcades forming lugs,"[32] "τοξοειδῆ ἄτρητα ὠτία,"[33] and "Ohrengriff" ("ear-grip").[34] **3.15** is probably also a fragment of a Topf or Vorratsgefäss but may conceivably be from an amphora.[35] It is of interest because of the striations (Besenstriche) set vertically and diagonally on the lower face of the handle and on the body below. Striated ware, sometimes referred to as "scored ware,"[36] occurs commonly, but rarely in great quantities, at a number of Early

referred to by H.S. Georgiou, *Keos* IV. *Ayia Irini: Specialized and Industrial Pottery* (1986) 30-35, pls. 7-9 as "spreading bowl." See further *Sitagroi* I, 461 fig. 13.15 no. 1 (and 385 fig. 11.16 no. 2 for a Neolithic version of a similar shape); *Argissa-Magula* III, pl. 43 no. 8; *Orchomenos* III, 58 figs. 17, 19; *Troy* I, ill. 412 nos. 11, 13-14; ill. 413 no. 25.

[25] *Kastanas PAS* 4, 78-82.

[26] *Cf. Kastanas PAS* 4, pl. 1 no. 8 (also no. 6 which is smaller).

[27] *Thermi,* pls. XIII and XXXVI no. 286. The basic form of **3.10** resembles Hood's type 8 bowls (that is bowls with carinated shoulders and tall rims), *Chios* I, 175-176, 173 fig. 98 type 8 (top), which have a rim diameter of 10-40 cm., but mostly between 15-30 cm. Few of the latter, however, have the pronounced concavity in profile of **3.10**. There is also a similarity to some of Hood's jars, particularly *Chios* I, 193 fig. 101 type 32 and *cf.* p. 335 fig. 156 no. 710 (which is smaller); also p. 399 fig. 180c and *cf.* some of the bowls like *Samos* I, pl. 45 nos. 7, 10-14, 18.

[28] *See Kastanas PAS* 4, 81 fig. 42 (type 4).

[29] *Thermi,* pl. XXXVII no. 519 and *cf.* the "spurred lunate lug" on pl. XXXIV no. 9; *cf.* also pl. XLVI nos. 1 and 6, which are later.

[30] *Chios* I, pl. 8d nos. 305-306.

[31] *Chios* II, pl. 81 no. 1807.

[32] S. Benton, *BSA* 39 (1938-1939) 2-3 pl. 1 nos. 5 (right), 6 and 15.

[33] *DS,* 262 fig. 169; *cf.* also figs. 166 and 172; 373 fig. 302.

[34] *Kastanas PAS* 4, pl. 74 no. 10.

[35] *Cf. Kastanas PAS* 4, pl. 37 no. 7.

[36] *Troy* I, 53-54 where it is fully discussed.

Bronze Age sites in Macedonia,[37] Thessaly,[38] north-west Anatolia,[39] and elsewhere.[40]

Although very fragmentary, and deriving from uninformative contexts, the Early Bronze Age sherds from the first three seasons found on Promontory 1 are of some interest. They do not only display a strong local Macedonian character, which becomes very clear through a comparison with material from sites such as Kastanas, Axiochori (Vardaroftsa), Kritsana, Perivolaki (Saratse), Aghios Mamas and, perhaps to a lesser degree, Sitagroi, but they also show a close link with corresponding material from north Aegean island sites, and from sites in north-west Anatolia. Among the latter there are notable similarities with the pottery from Kum Tepe and Troy, as there are similarities with the pottery from a number of Thessalian sites. Close parallels for many of the Early Bronze Age sherds from Torone are to be found at Chios, particularly Emporio, Samos, Thermi on Lesbos, Poliochni on Lemnos, as well as Mikro Vouni on Samothrake, judging from material presented from that island in preliminary reports.[41]

THE MIDDLE BRONZE AGE

Perhaps the most poorly understood of all periods in Macedonian prehistory is the Middle Bronze Age,[42] so much so that it has led some scholars to conclude that an easily distinguished Middle Bronze Age phase does not really exist in Macedonia.[43] Only the small settlement near the modern hamlet of Molyvopyrgo at

[37] Examples from Kastanas, Axiochori (Vardaroftsa), Kritsana and Aghios Mamas are illustrated in *Kastanas PAS* 4, pl. 2 no. 8; pl. 3 no. 6; pl. 4 no. 9; pl. 6 no. 12; pl. 7 no. 3; pl. 16 no. 5; pl. 17 no. 4; pl. 20 no. 15; pl. 23 no. 5; pl. 24 nos. 7-8; pl. 25 no. 11; pl. 26 no. 2; pl. 31 nos. 4-5; pl. 35 no. 5; pl. 36 no. 2; pl. 44 no. 9; pl. 45 no. 7; pl. 48 no. 3; pl. 50 no. 11; pl. 61 no. 12; pl. 93 nos. 3, 8-9; pl. 97 no. 12; pl. 110 no. 2; also cf. pl. 37 no. 7 (amphora); and pl. 38 nos. 4, 6; pl. 39 no. 7; pl. 92 no. 2; pl. 113 no. 3. W.A. Heurtley and R.W. Hutchinson, *BSA* 27 (1925-1926) pl. VI.

[38] Thessalian examples, including pieces from Argissa, Rhodia, Trikki, Iolkos and Pefkakia are conveniently assembled and illustrated in *Argissa-Magula* III, various examples discussed under "Gattung BIII," p. 57 "Gebrauchskeramik mit besenstrichaufgerauhter Oberfläche" and *cf.*, among others, pl. 18 nos. 13-17; pl. 25 no. 16; pl. 27 no. 6; pl. 30 nos. 2-6; pl. 38 no. 6; pl. 39 nos. 22-27; pl. 50 no. 18; pl. 54A no. 17; pl. 56 nos. 2-3, 5; pl. 62 nos. 3, 9; pl. 64A nos. 5, 12; pl. 64B nos. 8, 10-11; pl. 65 nos. 1-2, 4; pl. 65A no. 11; pl. 65D no. 8.

[39] *Troy* I, ill. 251 nos. 1-3, 5-7, 12-13 and various examples on ills. 252, 409-410; *Troy* II, ill. 250 (various examples). An example from Beşik-Tepe is illustrated in *Argissa-Magula* III, pl. 54A no. 1.

[40] See, among others, *Eutresis,* 90 fig. 112 no. 1; *Orchomenos* III, pl. XXVIII 1c, 1e, 2a; *Samos* I, pl. 39 nos. 42-43.

[41] D. Matsas, *Anthropologika* 6 (1984) 73-94.

[42] See further J.K. Papadopoulos, "Macedonia in the Second Millennium B.C.," *AJA* 96 (1992) 362.

[43] K.A. Wardle, *BSA* 75 (1980) 262.

the head of the gulf of Torone, and several nearby sites, have produced, by way of Minyan pottery, indisputable evidence for the existence in Macedonia of a Middle Bronze Age phase.[44] There has been among scholars something of a tendency to push the evidence from Molyvopyrgo to one side and to regard the evidence from more recently excavated inland Macedonian sites as more typical.[45] The stratified Middle Bronze Age deposits excavated on Promontory 1 between 1986 and 1990,[46] which have yielded large quantities of local and imported varieties of Minyan pottery, now call for a re-evaluation of the Middle Bronze Age material from Molyvopyrgo and other nearby sites and suggest that at least part of Chalkidike had a full-fledged Middle Bronze Age phase.[47]

The transition, as far as it can be traced through pottery alone, from the Early to the Middle Bronze Age at Torone heralds a radical change so far as Macedonia is concerned. Not only are Toronean Middle Bronze Age pieces totally different to those of the Early Bronze Age tradition in terms of shape, fabric and decoration, they witness two important technical innovations: the introduction of the potters' wheel, although much of the local Minyan is hand-made, and controlled reduction firing. These innovations, characteristic for many sites in contemporary central and southern Greece, first occur in mainland northern Greece in coastal Chalkidike and appear to be confined to this region. As Heurtley remarked many years ago: "In this period, of which we know least, Central Macedonia and Chalkidike must be treated separately, as there is a divergence in their ceramic history."[48] Moreover, Heurtley preferred to regard Aghios Mamas as the type site for Middle Bronze Age Chalkidike, since the transition from the Early Bronze Age there saw little in the way of major change, stating that the course of events at Molyvopyrgo, where the pottery was almost exclusively Minyan, was abnormal.[49] It is now clear from the recent excavations at Torone that the situation at Molyvopyrgo is far from unique.

[44] *Ibid;* for the excavations at Molyvopyrgo see W.A. Heurtley and C.A.R. Radford, *BSA* 29 (1927-1928) 156-175; Heurtley, *PM,* 10-17. Note also the evidence for a Middle Bronze Age phase at Aghios Mamas, Heurtley, *PM,* 1-8. See further K. Kilian in H. Müller-Karpe (ed.), *Jahresbericht des Instituts für Vorgeschichte der Universität Frankfurt a.M.* (1976) 117 fig. 5.

[45] Wardle, *ibid.* For Minyan pottery at Argissa see *Argissa-Magula* IV, 109-112.

[46] *Supra* note 12.

[47] See further A. Cambitoglou and J.K. Papadopoulos in C. Zerner *et al.* (ed.), *Wace and Blegen: Pottery as Evidence for Trade in the Aegean Bronze Age. Proceedings of the Conference held at the American School of Classical Studies at Athens, December 2-3, 1989* (1993) 289-302; also *MeditArch* 4 (1991) 161-162.

[48] Heurtley, *PM,* 89.

[49] Heurtley, *PM,* 91.

The few Middle Bronze Age fragments recovered in 1978 are but a modest anticipation of the material excavated in 1986-1990. With the possible exception of **3.17**, the pieces catalogued below are all of stemmed goblets or of shapes closely related. The majority are probably of local manufacture, although **3.23** and **3.25** could perhaps be imports. Apart from the latter, the fabric is that which may be considered as standard for the local "northern Minyan" now well known from the more recent excavations at Torone. Two versions are represented among the finds catalogued here: "grey Minyan," which is the more common, and what may be described as a "red" or "brown Minyan." **3.19** and **3.22** belong to the latter category. The surface of **3.18**, which is a greyish red or brown colour close to weak red 2.5YR 5/2 on the Munsell scale, falls somewhere in between. At Molyvopyrgo, as Heurtley states, "the pottery is almost exclusively Minyan, mostly grey or black ....., but there is a fair quantity of red and rather less yellow."[50] All the fragments presented below are handmade except for **3.23** and **3.25**.

Other wares, characteristic of the Middle Bronze Age elsewhere, such as matt-painted pottery, were not encountered in the first three seasons.

The order of the Middle Bronze Age sherds presented below is arbitrary, although the fragments have been grouped according to whether they derive from the rims, the handles, the bases and stems or the bodies of pots. *Comparanda* and discussion are given in the catalogue.

THE LATE BRONZE AGE

Only four fragments, all of Mycenaean decorated vessels, are presented under this heading. Other identifiable Late Bronze Age fabrics were not encountered in the first three seasons. The four fragments come from three different vessels. **3.26** and **3.27** are typical examples of Late Helladic I Vapheio cups (Furumark Shape 224) decorated with ripple pattern (Furumark Motif 78).[51] Though similar to one another in details of shape and decoration, they belong almost certainly to two different vessels. The shape of Vapheio cups has been divided into three types on the basis of the stratigraphy at Kythera.[52] The flaring rim of **3.26** would suggest that it belongs to

[50] Heurtley, *PM,* 91; see also Heurtley and Radford, *BSA* 29 (1927-1928) 138. For red and grey wares of the transitional class at Thermi see *Thermi,* 137 (i).

[51] For the general characteristics of Late Helladic I Vapheio cups see further O.T.P.K. Dickinson, *BSA* 69 (1974) 115.

[52] J.N. Coldstream in *Thera and the Aegean World* I: *Papers presented at the Second International Scientific Congress, Santorini, Greece, August 1978* (1978) 393, 395 fig. 6; *MDP,* 15.

type III, whereas the rim of **3.27**, which is clearly less flaring, may be of type II rather than III. Similar cups decorated with ripple pattern continue into Late Helladic II.[53] Details, however, of **3.26** and **3.27**, notably the early ripple, particularly on **3.26**, and the fact that the interiors of both fragments are unslipped with wheel-marks clearly visible, are features characteristic for Late Helladic I. The source for both cups must surely be the Peloponnese.

Fragments of two more Vapheio cups were found on the promontory during the more recent excavations; these along with a dozen fragments assigned to Late Helladic II, have been published and their significance more fully discussed elsewhere.[54] It would suffice to state here that these fragments represent the earliest known Mycenaean imports to Macedonia and that such imports occur as early as Late Helladic I,[55] and do not begin in Late Helladic III A2/B1 as was previously thought.[56]

3.28 and **3.29** must derive from the same vase which is a medium to large closed vessel. Vertical chevrons enclosed by parallel wavy lines (Furumark Motif 58) above a horizontal band stand to the left of an unidentified motif on **3.29**. Identical vertical chevrons are found on **3.28** to the right of what looks like a flower (Furumark Motif 18) or octopus (Furumark Motif 21 "cuttlefish"). The fact that the flower or octopus is located so close to the chevrons would exclude the larger octopodes which normally cover the greater surface of a vase.[57] The decoration of **3.28** as preserved, especially when looked at in the light of **3.29**, would suggest a more isolated motif perhaps best described as a hybrid flower/octopus (Furumark Motif 18B).[58] **3.28** and **3.29** cannot be dated any more precisely than Late Helladic III; the hybrid flower/octopus on **3.28**, if that is what it is, is most commonly found in Late Helladic III A2/B1.[59]

[53] Dickinson, *op.cit.* (*supra* note 51), for example, considers the Vapheio cup from Pazhok in Albania as Late Helladic IIA; for Pazhok see N.G.L. Hammond, *BSA* 62 (1967) pl. 20 no. 1.

[54] Cambitoglou and Papadopoulos in Zerner *et al.* (ed.), *op. cit.* (*supra* note 47); the fragments are also illustrated in *MeditArch* 4 (1991) 165-166 figs. 22-23.

[55] A solitary surface sherd classified as Late Helladic I/II from Kalamaria Toumba is noted by French, *Index*, 59; the fragment is also noted in R. Hope Simpson, *Mycenaean Greece* (1981) 180 and in *Aust. Cat.*, 76.

[56] Heurtley, *PM,* 96; Wardle, *op. cit.* (*supra* note 9) 40. For the recently excavated Mycenaean pottery from Spathes near Dion (LH III B-C) see *Μυκόσμος,* 139 nos. 80-82.

[57] Such as E. Vermeule and V. Karageorghis, *Mycenaean Pictorial Vase Painting* (1982) XIII.8 or *Troy* III, ill. 315 no. 34.713.

[58] *Cf. MDP,* 111 fig. 135 nos. 2 and 4 (also p. 94 fig. 114).

[59] *MPAnalysis,* 291 fig. 44; *MDP,* 68, 94.

MISCELLANEOUS

The two fragments presented under this heading cannot be confidently assigned to any of the previous categories. Horizontal handles of a form similar to **3.30** are commonly found at a number of Early Bronze Age sites in Macedonia, but are mostly associated with open vessels.[60] Similar open vessels (bowls) with horizontal handles are also common at Argissa.[61] A number of closed vessels with similar horizontal handles from various Aegean sites are listed in the catalogue for comparison, most of them dating to the Early Bronze Age but some dating to the Middle Bronze Age. The closest parallels are those from Middle Bronze Age Argissa.[62] The latter, coupled with the fact that the fabric and burnishing of **3.30** resemble those of some fragments of the Middle Bronze Age presented above, particularly **3.18-3.20**, may suggest that the piece is best accommodated in the Middle, rather than Early, Bronze Age.

The fragment **3.31** preserves a low ring base. Although ring bases are rare in Macedonian hand-made wares of the Bronze and Early Iron Age, they are occasionally found.[63] A close parallel in terms of shape, fabric and burnishing comes from Early Bronze Age Kastanas;[64] to suggest, however, that **3.31** should be given an Early Bronze Age date would be sheer guesswork.

CATALOGUE

THE EARLY BRONZE AGE

a) Hand-made bowls and bowl-jars with incurved rims

3.1 (78.1318) Fig. 47; Pl. 47
Lekythos TR2 (5).
Rim and Lug fr.
P.H. 0.040; P.W. 0.038; D. (rim) N/R.
Clay coarse with many small to medium and some larger inclusions, but only a dusting of fine silvery mica.
Fired evenly dark grey, close to grey and dark grey 5YR 5/1-4/1. Interior and exterior surfaces

[60] *Kastanas PAS* 4, pl. 4 no. 8; pl. 64 nos. 3, 5; pl. 74 no. 1; pl. 104 nos. 1-2, 6 (Kritsana); pl. 107 no. 1; pl. 111 no. 3; pl. 112 no. 3; pl. 119 no. 2 (Aghios Mamas); pl. 121 no. 2; pl. 123 no. 8; pl. 125 nos. 4, 6; pl. 126 no. 1 (Perivolaki); pl. 127 nos. 7-8.

[61] *Argissa-Magula* IV, *passim*.

[62] See catalogue.

[63] See, for instance, Heurtley, *PM*, 178 no. 218 (Early Bronze Age); 224 no. 452 (Late Bronze Age); 235 no. 482 (Early Iron Age).

[64] *Kastanas PAS* 4, pl. 66 no. 2. For discussion of ring bases (both high ring feet and low) from Neolithic and Early Bronze Age Chios see *Chios* I, 220 classes 3-4, 218 fig. 109, 3-4; also W.A. Heurtley, *BSA* 35 (1934-1935) 21 fig. 17 (from Ithaka).

highly burnished producing a good lustrous surface, evenly fired black.
Incurving rim with rounded, almost chamfered, lip. Portion preserved of ledge-lug attached directly below lip.
Similar: French, *Index,* no. 12.
Cf. Heurtley, *PM,* 167 no. 164, fig. 38b (Kritsana); 190 no. 307 (Servia); *Kastanas PAS* 4, pl. 25 no. 15, pl. 29 no. 3; from Kritsana: pl. 96 no. 2, pl. 103 no. 5; from Aghios Mamas: pl. 112 no. 6, pl. 115 no. 3; *Argissa-Magula* III, pl. 15 nos. 1-4, 6-9, 11, 13-14, pl. 22 nos. 4, 12-15, pl. 32 nos. 1-4, 9, pl. 56 no. 7 (Koutsocheiro, Stratum 5), pl. 57 nos. 1, 15 (Koutsocheiro, Stratum 4), pl. 58 nos. 15-16 (Tsani, Stratum V), pl. 61 no. 17 (Iolkos, Stratum H), pl. 65B no. 12 (Pefkakia), pl. 69 no. 1 (Lianokladhi, Stratum II); *Kum Tepe,* 334 pl. 75 nos. 510 and 531; *Thermi,* 77 fig. 27, especially no. 2 (*cf.* 137 fig. 39 no. 7 which is later); *Poliochni* I, pl. XXIVd, pl. CXXXVIIIb; *Orchomenos* III, 65 fig. 27a (*cf.* 64 fig. 26)

3.2 (78.1319) Fig. 47; Pl. 47
Lekythos TR2 (5).
Rim and Lug fr.
P.H. 0.019; P.W. 0.030; D. (rim) N/R.
Clay and burnished surfaces as **3.1** but fired closer to dark brown 7.5YR 4/2 on exterior.
Rim slightly incurved; lip rounded. Tubular stringhole lug with grooved or ridged outer face, attached directly to rim.
For the basic type of lug see *Chios* I, 414 fig. 191, 1b, 3b-c, 210 fig. 106 no. 14 (*cf.* nos. 21a-b), 353 fig. 161 no. 834.
Cf. Heurtley, *PM,* 166 no. 163 (Kritsana, also illustrated in *Argissa-Magula* III, pl. 70 no. 15); *Kastanas PAS* 4, pl. 95 no. 9, pl.109 no. 5; *Poliochni* I, pl. XXVa; *Thermi*, pl. XXXI nos. 1-2 (*cf.* no. 5); *Troy* I, ill. 243 no. 31, ill. 244 no. 7, ill. 246 nos. 21-22, ill. 260 no. 16, ill. 261 no. 10. *Cf.* also the following lugs which lack the central ridge: *Kum Tepe,* pl. 74 nos. 408, 410, 402, pl. 75 nos. 513, 619, 620 and others; *Sitagroi* I, 455 fig. 13.9 nos. 3-4, 472 fig. 13.26 nos. 13-20.

3.3 (78.3765) Fig. 47; Pl. 47
Lekythos TR2 (4)
Rim fr.
P.H. 0.0435; P.W. 0.033; D. (rim) est. 0.180-0.190.
Coarse clay with many small to medium white and light-coloured inclusions and much golden mica, including large flakes.
Clay core evenly fired grey, close to grey 5YR 6/1-5/1. Interior and exterior surfaces burnished smooth, fired close to reddish brown and yellowish red 5YR 4/4-4/6, black on lower part of exterior.
Incurving rim with rounded lip.
Similar: French, *Index,* nos. 20-21. *Cf. Chios* I, 173 fig. 93 types 6 and 7 (*cf.* type 11A), 254 fig. 122 (type 6, especially no. 123), 313 fig. 144 (type 6, especially nos. 482, 495-498), 367 fig. 166 (types 6 and 7, especially nos. 571, 583, 572, 591); *Chios* II, 473 fig. 211 no. 1839 (type 7), 549 fig. 242 (types 6 and 7, especially nos. 2461-2462, 2468, 2470-2473, 2467); Heurtley, *PM,* 166 fig. 36 a-c (Kritsana), 171 nos.178-180 (Aghios Mamas), 176 no. 209 (Molyvopyrgo), 178 no. 216 (Axiochori/Vardaroftsa), 182 no. 249 (Saratse), 190 no. 307 (Servia); *Kastanas PAS* 4, pl. 4 no. 15, pl. 5 nos. 1-3, 5-11, pl. 14 no. 4; *Sitagroi* I, 451 fig. 13.5 no. 1 (Phase IV), 472 fig. 13.26 nos. 1-2 (Phase Vb); *Argissa-Magula* III, pls. 5-6 (various examples), pl. 14 nos. 23, 26, pl. 49 no. 8, pl. 55 no. 12 (Ayia Sofia-Magula), pl. 63A no. 9 (Sesklo), pl. 64 no. 11 (Pefkakia), pl. 68 no. 3 (Zerelia); *Troy* I, shape A16, ill. 263 (various examples), ill. 264 nos. 4-5, 14; *Kum Tepe,* 319 fig. 9 nos. 211-212; *Thermi,* 80 fig. 28 Class B no. 2, 81 fig. 29 class C nos. 1-2 (*cf.* no. 4), pl. XI no. 492-494, 354; *Samos* I, pl. 35 no. 49 (*cf.* nos. 12, 44), pl. 37 no. 25, pl. 38 no. 40, pl. 39 no. 27, pl. 42 no. 13, pl. 43 nos. 30-31, pl. 45 nos. 3-6, pl. 46 no. 11; *Poliochni* I, pl. XXVIj, m, n, pl. XXVIIi (and the profile of pl. XXIXc); *Eutresis,* 102 fig. 133 nos. 3, 7, 17.

3.4 (78.1671) Fig. 47; Pl. 47
Lekythos TR2 (3).
Rim fr.
P.H. 0.055; P.W .0.030; D. (rim) N/R.

Clay coarse with many small and large inclusions and predominantly golden mica.
Core fired close to dark grey 5YR 4/1.
Interior and exterior surfaces burnished smooth, partially blackened; fired close to greyish brown 10YR 5/2 where not blackened.
Rim slightly incurved, rounded lip. Single perforation preserved below lip, drilled after firing (the perforation is unlike that normally found on baking dishes [Pfannen]).
Cf. Kastanas PAS 4, pl. 14 no. 9, pl. 28 no. 10, pl. 107 no. 3 (Aghios Mamas); *Samos* I, pl. 39 no. 27; *Chios* I, pl. 6 no. 38, 269 fig. 128 no. 205 (two preserved holes made after firing), 353 fig. 161 no. 824; *Kum Tepe,* 321 fig. 11 pl. 73 no. 229.

3.5 (78.1576) Fig. 47; Pl. 47
Lekythos TR2 (2).
Rim fr.
P.H. 0.068; P.W. 0.048; D. (rim) N/R.
Clay coarse with many small to medium and some larger inclusions; silver and golden mica, predominantly the former.
Interior and exterior surfaces roughly burnished producing a dull finish.
Clay and surfaces evenly fired close to light brownish grey and greyish brown 10YR 6/2-5/2; slightly blackened on exterior surface.
Large deep bowl with slightly incurved rim and rounded lip. Slight thickening at break to one side suggests beginning of possible handle attachment. Tooling marks visible at thickening on exterior.
Cf. **3.4**; *Chios* I, 173 fig. 98 (type 11A), 319 fig. 148 (various examples, especially nos. 572, 582-584); *Kastanas PAS* 4, pl. 91 no. 2 (Axiochori); *Kum Tepe,* 321 fig. 11 no. 227.

3.6 (78.1573) Fig. 47; Pl. 47
Lekythos TR2 (2).
Rim fr, preserving handle scar.
P.H. 0.042; P.W .0.068; D. (rim) N/R.
Clay dense with noticeably fewer impurities than other pieces. Some inclusions and a dusting of fine silvery mica; occasional pin-prick blow-outs.
Core and interior surface evenly fired close to dark grey 5YR 4/1.
Interior and exterior surfaces burnished smooth; interior less well finished.
Exterior surface fired close to light brown and brown 7.5YR 6/4-5/4, preserving a slight sheen.
Incurved rim with chamfered lip; comparatively thick-walled. Handle scar indicates that handle was attached immediately below lip; handle type undetermined. The fr. is broken in such a way as to suggest the possibility of a spout.
Similar: French, *Index,* no. 23.
Cf. Chios I, 254 fig. 122 no. 110 but larger; *Kastanas PAS* 4, pl. 55 no. 8, pl. 69 no. 7, pl. 116 no. 1 (Aghios Mamas); *Poliochni* I, pl. XXVIIf.

3.7 (78.1608) Fig. 47; Pl. 47
Lekythos TR2 (5).
Rim fr.
P.H. 0.028; P.W. 0.045; D. (rim) est. 0.210-0.250 (?).
Clay as **3.1** but with burnished surfaces less lustrous.
Interior and exterior fired close to reddish brown 5YR 5/3-4/3.
Vertical to slightly incurved rim, rounded lip. Two mastos-like projections attached below lip. Rim slightly thickened on interior.
Similar: Torone inv. no. 90.865.
Cf. Kastanas PAS 4, pl. 98 no. 6 for the mastos-like projections (Knubben), pl. 111 nos. 5-6, pl. 123 no. 7; *Poliochni* I, pl. CXIVc, e, j-k (also on the open vessel with flaring rim pl. XXXVIk); not unlike: *Argissa-Magula* III, pl.1 no. 5; pl. 8 no. 14.

3.8 (78.1317) Fig. 47; Pl. 47
Lekythos TR2 (5).
Rim fr.
P.H. 0.044; P.W. 0.099; D. (rim) est. 0.350.
Clay containing many small to medium inclusions and quite some mica.
Interior and exterior surfaces burnished, perhaps with straw, producing a dull matt finish; burnishing marks resembling brush marks clearly visible especially on exterior.
Body clay and interior surface evenly fired close to reddish brown 5YR 5/3-5/4; exterior surface slightly darker and in parts blackened.

Sharply incurved rim with rounded lip. Two fairly large mastos-like projections attached to rim below lip.
Not unlike: French, *Index,* no. 15.
For large bowls with sharply incurved rims see, for example, *Kastanas PAS* 4, pl. 97 no. 13 (from Kritsana) but classified as a Topf, also pl. 97 no. 16 which is smaller, pl. 99 no. 7, pl. 106 no. 3, pl. 110 no. 5 (Aghios Mamas); *PM,* 169 fig. 40 h, k-l, 182 no. 250. Very close in shape is *Orchomenos* III, 70 fig. 30b. *Cf.* also *Argissa-Magula* III, pl. 49 no. 10, pl. 64 no. 18 (Pefkakia); *Keos,* pl. 78 no. B72 (also 367 fig. 4 nos. B48, B50); *Chios* I, 397 fig. 179 pl. 70 no. 1192 (with less sharply incurved rim).

b) Hand-made jars and storage jars (Töpfe and Vorratsgefässe)

3.9 (78.1577) Fig. 47; Pl. 47
Lekythos TR2 (2).
Rim fr.
P.H. 0.052; P.W. 0.063.
Clay containing many small to medium and occasional larger inclusions and much silver and golden mica, including some large flakes.
Interior and exterior only roughly burnished producing a poor dull surface.
Clay and surfaces evenly fired close to dark brown 7.5YR 4/2 and dark grey 10YR 4/1.
Thick flaring wall tapering slightly to plain rim with rounded lip.
Similar: French, *Index,* no.11. *Cf. Kastanas PAS* 4, pl. 92 no. 9, pl. 93 no.1 (=*PM,* 180 no. 240) from Axiochori/Vardaroftsa. See also supra note 24.

3.10 (78.1683) Fig. 47; Pl. 47
Lekythos TR2 (1).
Rim fr.
P.H. 0.049; P.W. 0.048; D. (rim) est. 0.290-0.350.
Clay containing many small to medium and occasional larger inclusions and much golden mica.
Interior and exterior surfaces highly burnished producing a good lustrous surface.
Firing even, close to light reddish brown 5YR 6/3; interior and exterior surfaces closer to reddish brown 2.5YR 4/4 and 5YR 5/4-4/4.
Upper wall vertical; rim slightly flaring, tapering to rounded lip.
Cf. Kastanas PAS 4, pl. 1 no. 8 (also pl. 1 no. 6 which is smaller); *Thermi,* pls. XIII and XXXVI no. 286.

3.11 (78.1459) Fig. 47; Pl. 47
Lekythos TR2 (3).
Rim fr.
P.H. 0.083; P.W. 0.082.
Clay containing small to medium inclusions but only a dusting of mica.
Most of core fired close to grey 5YR 5/1. Interior and upper part of exterior fired close to reddish brown and red 2.5YR 5/4-5/6, lower part of exterior fired grey/black.
Interior and exterior surfaces burnished producing a mostly dull surface, with a very slight sheen only on the upper part of the interior.
Upper body of vessel defines an S-profile; lip flat on top.
Three lightly incised diagonal lines preserved on exterior.
For shape *cf.* Heurtley, *PM,* 175 no. 205 (=*Kastanas PAS* 4, pl. 114 no. 9 from Aghios Mamas). A number of vessels of this form are decorated on the exterior with a "series of stabs", see *PM,* 185 fig. 58 especially i. For decoration which is not unlike see *Kastanas PAS* 4, pl. 74 no. 4. For the shape *cf. Kastanas PAS* 4, pl. 3 no. 4, pl. 87 no. 3, pl. 98 no. 1 and the "pithos" pl. 105 no. 10; also *Argissa-Magula* IV, pl. 30 nos. 14-18, 20 (but without the "pie-crust" rim), pl. 60 no. 1, pl. 61 no. 13; *Kum Tepe,* 321 fig. 11 no. 231, 336 fig. 17 no. 420; *Chios* I, 272 fig. 129 no. 241; *Chios* II, 561 fig. 250 no. 2558.

3.12 (78.1697) Fig. 47; Pl. 47
Lekythos TR2 (5).
Handle fr.
P.H. 0.101; W. (handle) 0.038.
Clay coarse with small to large inclusions and predominantly golden mica.
Interior and exterior surfaces burnished producing a dull surface.

Core fired close to reddish brown 2.5YR 5/4 and 5YR 5/4. Interior surface and much of exterior fired black.
Thick vertical handle, oval in section. Preserved wall vertical, curving slightly in towards lower break.
Similar: French, *Index,* no. 14.
Handle of large storage vessel such as Heurtley, *PM,* 174 no. 203, 175 nos. 204-205, 195 no. 354, 196 nos. 355-358; *Kastanas PAS* 4, pl. 17 no. 6, pl. 32 no. 4, pl. 38 nos. 5, 8, pl. 46 no. 7, pl. 48 nos. 10-11, 14, 17, pl. 53 no. 13, pl. 59 no. 4, pl. 72 nos. 8, 11-13, pl. 73 nos. 1, 8, pl. 78 no.6; the following from Axiochori/Vardaroftsa: pl. 84 no. 10, pl. 93 no. 4; the following from Kritsana: pl. 97 no. 5, pl. 98 no. 4, pl. 101 nos. 7, 9-10; the following from Aghios Mamas: pl. 108 no. 15, pl. 109 nos. 1, 11, pl. 111 no. 9, pl. 113 nos. 2, 11, pl. 114 nos. 4, 9, pl. 115 no. 9; the following from Perivolaki: pl. 120 no. 1, pl. 125 no 7 (but without the impressed decoration), pl. 126 no. 11; also similar handles on bowls such as *Kastanas PAS* 4, pl. 41 nos. 3, 12, pl. 67 no. 7, pl. 68 no. 10, pl. 94 no. 3; *Sitagroi* I, 454 nos. 1-2, 462 no. 3, 464 no. 2, 465 no. 2, 468 nos. 2-4, 469 no. 3, 470 nos. 5-10; *Kum Tepe,* 336 fig. 18 nos. 528-529; *Troy* I, shapes C10-C11, C16-C19, C21-22 and various examples on ills. 391-396, 399-400, ill. 414 nos. 30-32, 36; *Troy* II, ills. 74-77, 163-167 (various examples); *Samos* I, pl. 35 nos. 1, 29, pl. 36 nos. 16, 21, pl. 37 nos. 69, 80, 84-85, pl. 38 no. 18, pl. 39 no. 26, pl. 41 no. 29, pl. 42 nos. 12, 18-19, pl. 43 nos. 11, 32, 47, pl. 44 no. 12; *Chios* I, 394 fig. 178 pl. 72 nos. 1184, 1187-1188, 397 fig. 179 nos. 1189, 1194, 400 fig. 181 nos. 1199-1201, 1209-1211, 403 fig. 182, pl. 73 no. 1235; *Chios* II, 559 fig. 249 pl. 110 nos. 2547-2548, 2554-2555; *Poliochni* I, pl. IIg-h, pl. LIXd, g, pl. CLXe, pl. CLXIIb, pl. CLXIIId, pl. CLXIVa (found on vessels of various shapes); *Poliochni* II, pl. CXCIVa-d, pl.CXCVa-b, d-e, pl. CXCVIIa-d, pl. CXCVIIIh, pl. CCXIIIa-g, pl. CCXIVb, d, pl. CCXVa, c, pl. CCXVIa, pl. CCXIXa-f, pl. CCXXIIIj-m, pl. CCXXIVc; *Thermi,* pl. IX nos. 210, 440 (tripod cauldrons), pl. XIII no. 286 (collar-necked bowl), pl. XXXVI no. 311, pl. XXXVII nos. 442-443, 519, 582 (jars); *Argissa-Magula* III, pl. 10 nos. 8-10, 12, pl. 13 no. 10, pl. 21 (various examples), pl. 40 especially no. 25, pl. 46 no. 4, pl. 60 no. 16 (Iolkos); *Argissa-Magula* IV, pl. 23 no. 2, pl. 49 nos. 15-16; *DS,* 277 fig. 207; *Eutresis,* 113 fig. 150 no. 2; also the following from Ithaka: W.A. Heurtley, *BSA* 35 (1934-1935) 25 fig. 20 nos. 82-84, 28 fig. 23 no. 92; S. Benton, *BSA* 39 (1938-1939) pl. 2 nos. 6,8. For handles of similar type from Neolithic Dikili Tash see J. Deshayes, *BCH* 94 (1970,) 805 fig. 11.

3.13 (78.1696) Fig. 47; Pl. 47
Lekythos TR2 (5).
Handle fr.
P.H. 0.072; W. (handle) 0.041.
Clay coarse with many medium to large inclusions and much mica, predominantly golden.
Interior and exterior surfaces roughly burnished.
Core fired dark grey 5YR 4/1. Interior surface blackened; exterior surface of wall fired close to reddish brown 5YR 5/4; surface of handle fired closer to very pale brown and pale brown 10YR 7/3-6/3.
Handle and wall as **3.12** but smaller.
Cf. comparanda cited for **3.12** and especially *Kastanas PAS* 4, pl. 38 nos. 3 and 5.

3.14 (78.3769) Fig. 48; Pl. 47
Lekythos TR2 (3).
Body fr. with "lunate lug".
P.H. 0.054; P.W. 0.060.
Clay coarse with many small to large inclusions and predominantly golden mica.
Interior and exterior surfaces roughly burnished producing a dull finish.
Core fired light grey at points; elsewhere clay and surfaces evenly fired close to light brown 7.5YR 6/4.
Lower part of body as preserved sloping in, upper part tending vertical; profile defines something of an "S". Applied "lunate lug" (Ohrengriff) on exterior.
Cf. *Kastanas PAS* 4, 81 abb. 42 (Topf of Type 4); for applied decoration see pl. 74 no. 10. *Cf.* also

Chios I, pl. 8d nos. 305-306; *Chios* II, pl. 81 no. 1807; *Samos* I, pl. 40 no. 31; *Thermi,* pl. XXXVII no. 519 (also pl. XXXIV no. 9, pl. XLVI nos. 1, 6 which are later); *Troy* I, shape C20, ill. 248 no. 12; *Troy* II, ill. 170 no. 16, ill. 243 no. 36.867; *Argissa-Magula* III, pl. 10 no. 7; *DS,* 262 fig. 169 (also figs. 166, 172; p. 373 fig. 302); *Orchomenos* III, 85 fig. 41; S. Benton, *BSA* 39 (1938-1939) 2-3 pl. 1 nos. 5 (right), 6, 15 (Ithaka); *Alt-Ithaka* II, Beil. 68a no. 1 (which is larger and deeper). For an earlier form of lug which is related see J.E. Coleman, *Kephala. A Late Neolithic Settlement and Cemetery* (1977) pl. 39 D-E.

3.15 (78.3770) Fig. 48; Pl. 47
Lekythos TR2 (3).
Body and handle fr.; striated.
P.H. 0.079; P.W. 0.082.
Clay containing small to large inclusions and much mica, both silver and golden, the former predominating.
Clay fired close to pinkish grey and reddish grey 5YR 6/2-5/2.
Interior surface only roughly finished, colour as clay. Exterior surface more carefully burnished, producing a dull finish, fired closer to light reddish brown 5YR 6/4.
Body sloping in; vertical handle as **3.12** and **3.13**.
Striations (Besenstriche) set vertically and diagonally on lower face of handle and body below.
For striated ware see supra notes 36-40; *cf.* especially *Kastanas PAS* 4, pl. 4 no. 9; *Eutresis,* 90 fig. 112 no. 1.

THE MIDDLE BRONZE AGE

a) Rim fragments

3.16 (78.1653) Fig. 48; Pl. 48
Lekythos TR2 (3).
Rim fr.; hand-made.
P.H. 0.042; D. (rim) est. 0.160.
Clay containing many small to medium and occasional larger inclusions and a dusting of fine mica.
Core fired grey at points; elsewhere closer to light reddish brown and reddish brown 2.5YR 6/4-5/4. Surfaces fired very dark grey to black.
Interior and exterior surfaces highly burnished producing a good lustrous surface. Interior surface somewhat worn.
Preserved upper body vertical; sharply everted rim with chamfered lip which is slightly concave on top. Portion of handle scar preserved at junction of body and rim.
For the basic shape *cf.* Heurtley, *PM,* 210-1 nos. 398-9; for similar rims *cf.* p. 212 fig. 80 top row, first on the left, fifth and seventh from the left and especially top row far right and fourth from right. Also *PT,* 187 fig. 135, 156 fig. 103c; *DS,* 139 fig. 40; *Troy* III, ill. 292a A64 (for the general shape). Very similar in shape and size, but of different fabric, is *Keos,* 393 pl. 93 G74 (considered Cycladic). *Cf.* also the following: *Asine* I, 270 fig. 188 no. 1, 287 fig. 198 no. 8; *Asine MHV,* fig. 46 no. 7, fig. 47 nos. 1-2, fig. 49 especially no. 3, fig. 51 nos. 1-2; *Eutresis,* 127 fig. 170 nos. 8, 11, also 180 fig. 251 no. 3.

3.17 (78.1700) Fig. 48; Pl. 48
Lekythos TR2 (5).
Rim fr.; hand-made.
P.H. 0.047; P.W. 0.072; D. (rim) N/R.
Clay and surfaces as **3.16** with clay core fired grey; surfaces highly burnished.
Flaring rim terminating in chamfered lip as **3.16**.
Handle scar preserved showing that a handle was attached directly to rim, rising above the level of the lip.
The handle form is similar to that of two-handled cups or kantharoi from Molyvopyrgo and Aghios Mamas (*cf. PM,* 208-210 nos. 383-384, 389-393, 396-397) though rim form precludes such a shape. Although the fr. may be from a handled version of a shape similar to **3.9**, the possibility of a sharply everted rim of a vessel similar to **3.16** cannot be dismissed. The fr. may possibly be related to a form like *Chios* II, 572 pl. 113 no. 2648; *cf.* also *Troy* III, ill. 292a shapes A47-A50 (which are without handles), and especially ill. 435 no. 34.317, 34.369.

b) Handle fragments

3.18 (78.1702) Fig. 48; Pl. 48
Lekythos TR2 (5).
Handle fr.; hand-made.
P.H. 0.069; P.W. 0.080.
Clay as **3.16-3.17**, with core fired grey and edges of biscuit fired close to red 2.5YR 5/6. Surfaces similar to **3.16-3.17** but slightly less lustrous, fired close to weak red 2.5YR 5/2.
Preserved lower wall almost vertical; upper wall sloping in, with thickening of wall towards top suggesting proximity to juncture with rim. Lower attachment preserved of vertical strap handle. Portions preserved of two parallel horizontal grooves on either side of handle attachment. Grooves executed after handle was attached.
Handle as Heurtley, *PM*, 210-211 nos. 398-399; W.A. Heurtley and C.A.R. Radford, *BSA* 29 (1927-1928) 163 fig. 38 nos. 1-3, 167 fig. 44 (especially second from right). **3.18-3.19** are from large goblets, the upper walls of which are inward sloping as, for example, *Troy* III, ill. 354 no. 14 (also the form of ill. 434 pot F 8-9.65); *cf. TKB*, pl. 214 nos. B-10, Γ-51, pl. 215 nos. I-100, Λ-128, pl. 216 (various examples), pl. 217 no. Y-232; *cf. Asine MHV,* 171 fig. 49 no. 3 (also *Asine* I, 261 fig. 183 no. 4 which is of different form).

3.19 (78.1701) Fig. 48; Pl. 48
Lekythos TR2 (5).
Handle fr.; hand-made.
P.H. 0.059; P.W. 0.070.
Clay and surfaces as **3.18**, but with surfaces fired close to light reddish brown 5YR 6/4; interior roughly finished.
Preserved wall inward sloping. Handle as **3.18**, but with broad shallow groove on outer face. Terminations preserved of three diagonal grooves to left of lower handle attachment.
Cf. **3.18** and **3.20**.

3.20 (78.1699) Fig. 48; Pl. 48
Lekythos TR2 (5).
Handle fr.; hand-made.
P.H. 0.053; P.W. 0.065.
Clay as **3.18-3.19** but with clay at handle break and outer half of wall and surfaces fired grey 5YR 5/1, inner portion of wall fired close to light red and red 2.5YR 6/6-5/6.
Surfaces as **3.19** with exterior burnished and interior only roughly finished.
Body and handle as **3.19**, but handle thicker.
Cf. **3.18-3.19** (the possibility, however, of a closed vessel form cannot, in the case of this fr., be categorically dismissed).

c) Base or stem fragments

3.21 (78.1670) Fig. 48; Pl. 48
Lekythos TR2 (3).
Base fr.; hand-made.
P.H. 0.038; P.W. 0.056; D. (base) est. 0.080 at inner edge (D. at outer edge approx. 0.150 at least).
Clay containing small to medium inclusions and only a dusting of very fine mica.
Interior surface well finished but not highly burnished; exterior surface burnished producing a good surface with a slight sheen.
Clay fired close to grey 2.5YR N6, interior surface close to pinkish grey 5YR 6/2, exterior surface close to grey 5YR 5/1.
Vertical stem splaying out to broad resting surface, obliquely cut on underside; edge of foot not preserved; juncture of stem and resting surface marked by angle formed on interior. Five preserved roughly horizontal grooves on exterior face of stem and foot.
For shape *cf.* generally Heurtley, *PM,* 211 fig. 79 and p. 92 for discussion on grooves. In appearance the fr. is not unlike that from the neck of a jug from Aghios Mamas, Heurtley, *PM,* 208 fig. 74b (*cf.* 74a), though size alone would preclude such a shape. The form is a fairly standard one and can be found on various Middle Helladic goblets elsewhere in the Aegean. *Cf.*, among others, *TKB,* pl. 215 no. Λ-125, pl. 216 no. Ξ-174, pl. 217 no. Y-234; *ATMA* 204 fig. 62 (left); *Asine MHV,* 169 fig. 43 no. 10, 170 fig. 47 no. 2; *Eutresis,* 136 figs. 183-184 (various examples); *Keos,* pl. 82 D95-D100; *PT,* 156 fig. 103a-b, e (Zerelia); *Troy* III, ill. 292a shape A64, ill. 424 no. 3 (as restored).

3.22 (78.3771) Fig. 48; Pl. 48
Lekythos TR2 (5).
Base fr.; hand-made.
P.H. 0.023; D. (base) est. 0.084.
Clay and surfaces as **3.19**, but with surfaces partially fired dark grey/black at points.
Exterior and underside burnished producing a good surface with a slight sheen.
Short vertical stem with splaying foot; outer edge obliquely cut. Break at stem shows that method of attaching stem and cup is that of Heurtley's Type 3, Heurtley, *PM,* 211 fig. 78 no. 3 (with discussion on p. 91 and in *BSA* 29 (1927-1928)167 note 1, p. 169 fig. 47).
For shape of foot *cf. PM,* 211 fig. 79 no. 2; *TKB,* pl. 214 nos. B-10, Γ-51, pl. 215 nos. I-100, Λ-132, pl. 216 no. O-213, pl. 217 no. O-217 (*cf.* also the bases of some of the one-handled cups: pl. 231 nos. Γ-60, Λ-120, Γ-24); *ATMA,* 169 AD-11 (also 168 fig. 51 AD-8, AD-9); *Asine MHV,* 172 fig. 51 nos. 2-3; *Prosymna* II, 8 fig. 45 nos. 9-10, 9 fig. 59 no. 55; *Zygouries,* 127 fig. 119; *Eutresis,* 138 fig. 186 no. 2; *Thermi,* pl. XIX no. 649.

3.23 (78.1320) Fig. 49; Pl. 48
Lekythos TR2 (5).
Fr. of base stem; wheel-made.
P.H. 0.048; P.W .0.061.
Finer clay containing noticeably fewer impurities, but still with the occasional small inclusion and a dusting of fine silvery mica.
Interior surface (on underside) well finished but not burnished. Exterior surface highly burnished producing a good surface with a sheen.
Clay fired close to grey 2.5YR N5/, interior surface and outer skin towards exterior fired closer to light grey/ grey 10YR 6/1; burnished exterior surface fired grey 10YR 5/1.
Preserved upper portion of stem slightly curved in section, thickening towards top, decorated with four grooves defining four prominent ribs. Fifth possible groove towards lower break unclear due to chipping.
Vessel well thrown, thinner and finer than **3.21-3.22**; conceivably an import.
Cf. PM, 211 fig. 79 various examples (the majority of the Molyvopyrgo stems are ribbed or grooved at the juncture of base and body; few are ribbed on the stem itself as **3.23**. See also W.A. Heurtley and C.A.R. Radford, *BSA* 29 (1927-1928) 165 fig. 40 no. 1). *Cf.* especially the following: *Eutresis,* 136 figs. 83-84 (various examples); *Asine MHV,* 170 fig. 47 no. 2 (though thinner), 175 fig. 56 no. 1; *TKB,* especially pl. 235 no. 551 (also pl. 214 no. Δ-69, pl. 217 no. Y-233); *Keos,* pl. 82 nos. D-95-D100; *PT,* 187 fig. 135 (Lianokladhi), also 156 fig. 103a-b, e; *Troy* III, ill. 423 nos. 3-4; W.A. Heurtley, *BSA* 35 (1934-1935) 30 fig. 26 no. 101 (Ithaka).

d) Body fragments

3.24 (78.1667) Fig. 49; Pl. 48
Lekythos TR2 (4).
Body fr.; hand-made.
P.H. 0,074; P.W. 0.054.
Clay with some small to medium inclusions and only a dusting of very fine silvery mica.
Interior and exterior surfaces burnished producing a good surface with a sheen.
Fabric similar to **3.16** and **3.17**. Clay fired close to reddish brown 2.5YR 5/4-4/4; surfaces close to dark grey 5YR 4/1.
Fr. preserves portion of upper body of vessel, defining something of an "S" curve. Four widely spaced grooves on exterior.
Similar: French, *Index,* nos. 4-5.
Cf., among others, Heurtley, *PM,* 208 fig. 74c, 210 fig. 76b, h-i; *Troy* III, ill. 354 no. 11, ill. 362 no. 14, ill. 375 nos. 10-12, 17.

3.25 (78.3768) Fig. 49; Pl. 48
Lekythos TR2 (5).
Body fr.; wheel-made.
P.H. 0.047; P.W. 0.035.
Clay finer than normal, containing the occasional white inclusion and some fine silvery mica.
Interior and exterior surfaces burnished producing a good surface with a slight sheen.
Clay and surfaces evenly and consistently fired throughout close to light grey 10YR 6/1.

Body carinated; flaring rim, only the lowest part of which is preserved. Chip at lower left may indicate handle scar.
Vessel conceivably an import.
The carinated profile corresponds to that of a number of vessel forms of Middle Helladic date. *Cf.*, among others: *PT,* 183 fig. 130b; Heurtley, *PM,* 209 nos. 389, 393 (though **3.25** is deeper than the latter; *cf. DS,* 140 fig. 42 which is also shallow); *Eutresis,* 139 fig. 187 no. 4; *Asine* I, 268 fig. 185 nos. 1, 3; *ATMA,* 63 fig. 15 no. 84, 77 fig. 21 (various examples nos. 169-175), 78 fig. 22 no. 201; *Korakou*, 15 figs. 18-19; *Prosymna* II, 6 fig. 34 nos. 3, 5; 8 fig. 45 no. 9; *Keos,* pl. 82 D94, D106-D107, pl. 84 D126-D127; W.A. Heurtley, *BSA* 35 (1934-1935) 30 fig. 26 nos. 105, 110 (Ithaka); Alt-Ithaka II, Beil. 72 no. 3, Beil. 73 nos. 7, 10; also *Argissa-Magula* III, pl. 11 no. 13 (Early Bronze Age). The shape is paralleled by several vessel forms of Middle and Late Bronze Age date at Troy, see *Troy* III, ills. 292a-294 shapes A57, C72-C75, C77, C82, also ill. 387 no. 5, ill. 425 no. 16, ill. 426 no. 13, ill. 433 F8-9.70.

THE LATE BRONZE AGE

Mycenaean only (wheel-made)

3.26 (78.1315) Fig. 49; Pl. 49
Lekythos TR2 (5).
Rim fr.
Furumark Shape 224 (Vapheio Cup).
P.H. 0.040; D. (rim) est. 0.125.
Clay fine with few, if any, visible impurities
Fired close to light reddish brown and light red 2.5YR 6/4-6/6.
Paint mostly black, brown where more dilute and red towards lower right of fr. on exterior. Slip on exterior fired close to pink 7.5YR 7/4.
Exterior: ripple (Furumark Motif 78) below band at rim. At lower left, portion of diagonal stroke preserved of decoration associated with handle.
Interior: band at rim; remainder of preserved interior reserved and unslipped. Wheel-marks prominent.
Cf. GBA, pl. XVIIIB (=*Ergon* 1961, 168 fig. 168); *TKB*, pl. 52γ; *MDP,* 15 fig. 8 no. 8; *Phylakopi*, 198 and 200 fig. 5.25 no. 403; C.L. Zachos, *BSA* 79 (1984) 329 and pl. 36 nos. 2, 18, 20; *B.M. Cat.* I, 1, 131 fig. 174 no. A756; *Korakou,* 39 fig. 53 no. 3, pl. IV no. 6; *Palace of Nestor* III, fig. 249 nos. 19, 21; *Eleusis* III, pl. 415 no. Hp3-495; *Asine* II, 131 fig. 126 no. 317; *Alt-Ägina* IV, 1, pl. 3 nos. 30-34; *Keos* III, pl. 59a; W.D. Taylour, *BSA* 67 (1972) pl. 50(f). For the Minoan version of the shape, normally lacking the band at rim, see M. Popham, *BSA* 72 (1977) fig. 1B, pl. 29b, d, e, f. LH I. The fr. is published and discussed in A. Cambitoglou - J.K. Papadopoulos, "The Earliest Mycenaeans in Macedonia," in C. Zerner (ed.), *Wace and Blegen 1939-1989: Pottery as Evidence for Trade in the Aegean Bronze Age* (1993), no. 1.

3.27 (75.746) Fig. 49; Pl. 49
Lekythos Surface.
Body fr. (near rim).
Furumark Shape 224 (Vapheio Cup).
P.H. 0.022.
Clay as **3.26** but fired closer to pink 5YR 7/3.
Decoration and *comparanda* as **3.26**. Thickness of fr. and angle of the flaring wall would suggest that the fr. is from a vessel other than **3.26**.
Cambitoglou - Papadopoulos, *ibid*, no. 4.

3.28 (78.1461) Fig. 49; pl. 49
Lekythos TR2 (3).
Body fr.
Medium-sized to large closed vessel.
P.H. 0.026; P.W. 0.035.
Clay containing few visible impurities, but quite some silvery mica.
Clay and unslipped interior surface fired close to light reddish brown 5YR 6/4. Exterior slipped and painted; slip fired close to pink 5YR 7/3-7/4. Dull paint, with a slight tendency to flake, fired dark brown. Band of vertical chevrons enclosed by parallel lines, only the left preserved (Furumark Motif 58), to the right of flower (Furumark Motif 18) or octopus (Furumark Motif 21 "cuttlefish"), only partially preserved. The motif is

most probably a hybrid flower/octopus (Furumark Motif 18B).
Provenance undetermined.
Almost certainly from the same vessel as **3.29**.
LH III Pictorial.
Cf. MPAnalysis, 291 fig. 44; *MDP,* 111 fig. 135 nos. 2, 4 (p. 94 fig. 114 no. 4) for Furumark Motif 18B.

3.29 (78.1668) Fig. 49; Pl. 49
Lekythos TR2 (4).
Body fr.
Medium-sized to large closed vessel.
Clay, slip, and paint as **3.28**.
Vertical chevrons enclosed by parallel wavy lines (Furumark Motif 58) above horizontal band; to the right unidentified motif as shown.
Provenance undetermined.
Almost certainly from the same vessel as **3.28**.
LH III Pictorial.

Miscellaneous

3.30 (78.1698) Fig. 49; pl. 49
Lekythos TR2 (5).
Handle fr.; hand-made.
P.H. 0.046; P.W. 0.087.
Clay containing many small to medium and some larger inclusions, but only a dusting of fine silvery mica. Interior surface only roughly finished; exterior surface burnished producing a slight sheen.
Clay evenly fired close to grey 5YR 5/1; interior surface fired close to pinkish grey 5YR 6/2; exterior surface fired closer to reddish grey 5YR 5/2.
Curved body from large closed vessel. Thick horizontal handle, oval in section. Surface of lower handle and point of attachment to body split at many points.
The fabric and burnishing of **3.30** resembles some frr. of the Middle Bronze Age presented above, particularly **3.18-3.20** and is perhaps of Middle, rather than Early, Bronze Age date (see *supra* notes 48-50). The closest parallels come from Middle Bronze Age Argissa see *Argissa-Magula* IV, pl. 86 no. 2, pl. 88 no. 5, pl. 90 no. 4, also the following: pl. VII no. 1, pl. 22 no. 2, pl. 55 no. 2, pl. 58 no. 2, pl. 76 nos. 1-2, pl. 77 nos. 2, 4, pl. 81 no. 1, pl. 87 no. 9, pl. 88 nos. 1, 5, pl. 99 nos. 14, 16, pl. 101 no. 1, pl. 114 no. 15; and *Argissa-Magula* III, pl. IV no. 1, pl. V no. 5, pl. 1 no. 7 (all three with projections flanking the handle which is not evident on **3.30**). *Cf. Samos* I, pl. 40 no. 3, pl. 41 no. 23; *Chios* I, 404 fig. 183 especially no. 1243 (the type is rare on closed vessels at Chios); *Kum Tepe,* especially pl. 80 no. 920 (Period II which falls almost entirely within the time span of Troy Settlement V); *Troy* II, ill. 45a shapes C13-C14, ill. 164 nos. 37.888, 33.115 (also *Troy* IV, ill. 216 shapes C43-C45, C64-C68, C70, ill. 232 nos. 37.907, 35.1206, 35.637, 33.221, ill. 234 nos. 35.461, 37.1184, ill. 249 no. 35.461, ill. 264 nos. 32.14, 32.86); *Poliochni* I, pl. LIXe-f, pl. CXXIVd-e, pl. CLXIVb; *Poliochni* II, pl. CCXIa-c, e, pl. CCXIIa; *Keos,* pl. 79 no. B41b.

3.31 (78.1654) Fig. 49; Pl. 49
Lekythos TR2 (3).
Base fr.; hand-made.
P.H. 0.028; D. (base) est 0.045.
Clay not unlike **3.8** but with fewer impurities and ony the odd speck of fine mica.
Interior and exterior surfaces burnished producing a very slight sheen.
Clay fired close to reddish brown 2.5YR 5/4, 5YR 5/3-5/4; surfaces closer to reddish grey and dark reddish grey 5YR 5/2-4/2.
Low ring base; curved lower wall rising fairly steeply.
The closest parallel in terms of shape, fabric and burnishing is *Kastanas PAS* 4, pl. 66 no. 2 which is Early Bronze Age.

4. THE EARLY IRON AGE POTTERY AND OTHER SMALL FINDS

(Protogeometric and Sub-Protogeometric)

John K. Papadopoulos

INTRODUCTION[1]

A trial trench laid out on Terrace V on the lower north slopes of Hill 2 in the earlier part of the 1981 season brought to light evidence of an Early Iron Age cemetery.[2] Continued excavations during the course of that season and in 1982 and 1984[3] yielded a total of 134 tombs of which 118 were cremations, much in the Athenian manner,[4] as well as 16 inhumations.[5] A total of over 500 pots, complete and fragmentary,

[1] I am grateful to the following for discussion on various aspects of Early Iron Age Torone, and for their advice and criticism: Richard Catling, Robin Hägg, Irini Lemos, Martin Robertson, and the late Ioulia Vokotopoulou. Especial thanks are due to Richard Jones and Ian Whitbread for their chemical and petrographic work on the Torone Early Iron Age pottery which is to be published elsewhere. The notes presented below on the chemical characteristics of the imported pottery are based on the preliminary observations of Richard Jones. I owe an enormous debt to Evelyn Smithson for memorable and stimulating discussion; her untimely death has left a lacuna that can never be filled.

[2] A. Cambitoglou, *PAE* 1981, 38-9.

[3] A. Cambitoglou, *PAE* 1982, 73-77; *id., PAE* 1984, 44-50. See also *Ergon* 1984, 26-8; *AR* 1985-86, 59-61.

[4] A typical cremation tomb is illustrated in *PAE* 1981, pl. 52γ. The similarities between the Torone cremation tombs and those of Athens are marked and perhaps the only departures from the strictly Attic system are that the Toroneans could use a variety of pot shapes as ash-urns, whereas the Athenians normally preferred amphorae, and that the Athenian "trench-and-hole," a development during the course of the Protogeometric period replacing the earlier Submycenaean circular pit, was never adopted at Torone. For Athenian Early Iron Age cremations see especially D.C. Kurtz - J. Boardman, *Greek Burial Customs* (1971) 33, 37; *GDA,* 137-8; *MX, passim*; C.-G. Styrenius, *Submycenaean Studies: Examination of Finds from Mainland Greece with a Chapter on Attic Protogeometric Graves* (1967) 33, 91; G. Krause, *Untersuchungen zu den ältesten Nekropolen am Eridanos in Athen* (1975) *passim*; and, generally, R. Garland, *The Greek Way of Death* (1985) 34, 36, 42, 47, 78-9, 82, 144, 161. See also I. Morris, *Burial and Ancient Society: The Rise of the Greek City-State* (1987); J. Whitley, *Style and Society in Dark Age Greece: The Changing Face of a Pre-Literate Society 1100-700 B.C.* (1991). The unusual "cist cremation" illustrated in A. Cambitoglou, *PAE* 1982, pl. 55β is a rare variant and one of only two examples in the Terrace V cemetery. This type of cremation tomb appears to be more common at the Early Iron Age cemetery at nearby Koukos near Sykia, see J. Carington Smith and I. Vokotopoulou, *AEMTh* 3 (1989) 425-438, especially 436 pl. 4 (of the 78 tombs excavated up to 1989, 41 are inurned cremations in cists).

[5] The 16 inhumation tombs contained the remains of 21 individuals. Of the 16, 13 were simple pit graves (*cf. PAE* 1981, pl. 52), one a cist tomb, in addition to two "pithos" graves. The latter were not, however, pithos graves in the normal sense, like those of Vergina for instance (*cf. Vergina* I, 164; Ph. Petsas, *AD* 17A (1961/62) *Mel.*, 218-88; Radt, *PBF,* XX,1, 101), but rather variations of the pit grave where a large body fragment of a pithos (not a

and other small finds were recovered from tombs and associated deposits on the terrace, the former serving either as ash-urns, kterismata, or used in other aspects of funerary ritual. The Early Iron Age cemetery on Terrace V constitutes a significant body of new material important both for the internal evidence it provides about Torone during this period and also for the information it has to offer for the broader cultural scene. The material from this cemetery, including a typology of the local wheel-made and hand-made wares and an account of the imported vessels, will be published separately in a forthcoming monograph.[6] The nine sherds and two terracotta spindlewhorls, beads or buttons presented here represent all the pieces which may be assigned as contemporary with the tomb material with any degree of certainty from the excavations conducted during the first three seasons; their identification as such is based on the study of the tomb finds. All eleven pieces were encountered in mixed or later deposits and represent residual material. Five sherds (**4.1, 4.2, 4.3, 4.6, 4.9**) were found in the Classical/Early Hellenistic levels at the Gate Area; two sherds (**4.7, 4.8**), as well as the two terracottas (**4.10, 4.11**), were recovered from deposits associated with the Classical Structure 1, while a third sherd was found in one of the two trenches opened on Promontory 1 (**4.5**) and a fourth came from the Lower City Area (**4.4**). These pieces, although their quantity is meagre and their contexts far from happy, are of some interest since they are distributed over a fairly large area of the site.[7]

The chronological span, in relative terms, of the Terrace V cemetery may be defined as follows: its upper limit can be fixed approximately as contemporary with the later stages of Attic Submycenaean, although a few tombs are slightly earlier, while its lower limit appears to be roughly contemporary with the end of Attic Early Geometric, if not slightly later, corresponding with Sub-Protogeometric from Lefkandi.[8] Chronologically, the eleven pieces from the first three seasons are best

complete vessel) would be laid flat as a tomb lining on which the deceased was placed. For pithos burials elsewhere in the Greek World see *GDA,* 268-77, especially 272; *LMTS,* 39ff; *DAG,* 183; I. Pini, *Beiträge zur minoischen Gräberkunde* (1968) 11-3; H. van Effenterre, *Nécropoles du Mirabello* (1948) *passim*; *MX, passim*; also O.T.P.K. Dickinson, *BSA* 78 (1983) 58.

[6] This was submitted as my doctoral dissertation at the University of Sydney in 1987. Reference is here made to catalogue numbers in that text. For a published selection of pottery from the Early Iron Age cemetery see J.K. Papadopoulos in: *Η Μακεδονία από τά Μυκηναϊκά χρόνια ως τον Μέγα Αλέξανδρο* (1988) 82-6; *id.* in *Aust.Cat.* 83, 182-6; see also *id.* in J.-P. Descoeudres (ed.), *EYMOYΣIA. Ceramic and Iconographic Studies in Honour of Alexander Cambitoglou* (1990) 13-24.

[7] Contrast the distribution of the Bronze Age material, confined exclusively to Promontory 1, and even that of the Hellenistic and Late Roman pottery which, although encountered in much greater quantity, was confined to a more limited area of the site. See further A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217.

[8] Relative and absolute chronology are more fully addressed in the forthcoming monograph. Worth noting here is Mountjoy's lowering of the absolute date for Submycenaean, *MDP*, 8 and the evidence she notes of

accommodated within the stylistic divisions of Protogeometric and Sub-Protogeometric; there was nothing clearly Submycenaean from the 1975, 1976 and 1978 campaigns.

The character of this material and of the site during the Early Iron Age will be discussed fully in the forthcoming volume on the cemetery; so too the external links Torone enjoyed during this period.

I. THE POTTERY

The nine sherds presented here represent both local and imported vessels, with the former category including examples of wheel-made and hand-made wares. The designation of individual pieces as imports was originally based on visual criteria, but was subsequently verified by the joint chemical and petrographic analysis of a sample of Early Iron Age vessels from Torone, initiated in 1989 with Fitch Laboratory at the British School at Athens under the supervision of Dr. R.E. Jones and Dr. I.K. Whitbread. The results of this work will be presented in detail elsewhere, although the findings of the chemical analysis pertaining to the few suspected imports found in the first three seasons at Torone are referred to in the text below. It should be noted that the discovery, in 1982, of a potter's kiln dating to the second half of the 8th century B.C. provided valuable assistance in determining the visual attributes of the local wares and their variations and formed the basis for the joint chemical and petrographic analysis.[9] The kiln was located just over one metre from the main cemetery area and yielded fragments of fourteen vessels (both wheel-made and hand-made), the majority of which had collapsed into the firing chamber during the process of firing.

Submycenaean stratified above the latest LH III C, *MDP*, 194 n. 12; also her belief that the earliest tombs in the Athenian Kerameikos north of the Eridanos contain pottery stylistically LH III C Late, P.A. Mountjoy - V. Hankey, *JdI* 103 (1988) 1-37. Contrast, however, J. Rutter in P.P. Betancourt (ed.), *Temple University Aegean Symposium* III (1978) 58-65 and *cf.* E.L. Smithson in: *Studies in Athenian Architecture, Sculpture, and Topography presented to Homer A. Thompson, Hesperia Suppl.* 20 (1982) 141 n. 5. See also Papadopoulos in Descoeudres (ed.), *op. cit.* (*supra* note 6) 14 n. 4. For the most recent account of the chronology at Lefkandi see *Lefkandi* II:1, 94-95.

[9] J.K. Papadopoulos, *MeditArch* 2 (1989) 9-44. See further *id., Hesperia* 61 (1992) 203-221; see, most recently, I. K. Whitbread, R. E. Jones and J. K. Papadopoulos, "The Early Iron Age Kiln at Torone: Geological Diversity and the Definition of Control Groups," in A. Sinclair, E. Slater and J. Gowlett (eds.), *Archaeological Sciences* 1995 (1997) 88-91.

A. Imported Pottery

The fragments **4.1** and **4.2** are considered as imports, although the size alone of both fragments as preserved is such as to render tenuous any certain statement about provenience on the basis of visual criteria.

The small shoulder fragment **4.1** preserves part of one set of compass-drawn concentric circles above a band or area painted solid; it finds numerous parallels in Attic, Euboian and other Protogeometric styles.[10] Judging by wall thickness, the fragment is probably from an amphora, although the possibility of a closed vessel form other than amphora should not be altogether ruled out.[11] According to Dr. R.E. Jones the chemical composition of the fragment matches the majority of the "Euboian" imports found at Knossos, as well as matching the other Lelantine plain reference material. Although chemically several other sources, such as coastal Thessaly, cannot be dismissed, the piece is most likely to be Euboian.

The body fragment **4.2** is probably from a krater rather than a large skyphos or bowl; details of fabric, shape and decoration - the latter comprising two thin bands above a third band or area painted solid, above which, in turn, is one partially preserved set of compass-drawn concentric circles - are most consistent with Thessalian Protogeometric kraters, especially those from Marmariani.[12] Chemically the fragment does not match satisfactorily with most of the main reference groups, including those established among the local Toronean wares. According to Dr. R.E. Jones, it is neither coastal Thessalian nor Attic; it does not match with the Lelantine Plain reference material, nor is it likely to be Argive. An exact source for the piece cannot at present be stated with certainty.

B. Local Wheel-Made Pottery

The normal clay used for vessels formed on the wheel is perhaps best described as semi-fine, not thoroughly levigated, and micaceous. The local fabric is characterised by many white and light-coloured inclusions and a small or large quantity of

[10] See catalogue for *comparanda*.

[11] The only permissible alternatives would be a hydria or jug. The latter is unlikely on account of size, while the hydria is not a very popular shape as tomb furniture in Attic Protogeometric, see *PGP* 43-5, although it is found more frequently in non-funerary contexts, see Smithson, *op. cit.* (*supra* note 8) 141-54. For the Euboian version of the hydria see, most recently, *Lefkandi* II:1, 40-2.

[12] W.A. Heurtley and T.C. Skeat, *BSA* 31 (1930-1931) 30-3, pls. IX-XI; *PGP,* 142-5, pl. 23. Circles without alternating vertical motifs are more common at Kapakli, *PGRT*, 22-6, especially pl. 7 no. 44, pl. 8 no. 47 and *cf.* no. 45 (the latter with pendent semi-circles); see also *Goulandris Coll.*, 193 no. 44 (Skyros); D.R. Theocharis, *Archaeology* 11 (1958) 18; *PGIT*, pl. 12 no. 8.

golden or silver mica. The colour of the clay may vary considerably according to the conditions of firing and can range from a very pale light-coloured fabric,[13] through to a good red colour[14] (often on the same vase); a colour close to reddish yellow 5YR 6/6 - 7.5YR 6/6 is most common. The texture of the fabric is normally rather soft and is easily incised with a fingernail;[15] this soft texture of the clay is usually accompanied by a surface which has a powdery or "chalky" feel. The local wheel-made pottery is slipped and painted prior to firing. By "slip" I refer to a thin layer of fine clay applied to the surface of a pot; in most cases this is little more than a clay wash or slurry which helps seal the surface of a vase and is normally a shade lighter in colour to the body clay.[16] The paint is almost always dull or matt and never quite achieves the sheen, gloss, or lustre of the paint used in some other contemporary pottery producing centres, although occasionally a slight sheen may be observed.[17] The paint may be applied thickly, where there is often a tendency to flake, or it can be applied more dilutedly. As with the clay, the colour of the paint is prone to great variation according to the conditions of firing, often to be seen on the one pot, and any colour from true black, through various shades of brown, to a bright red or orange red may be found.

The five fragments presented under this heading are little more than scraps of pottery; they represent three shapes: **4.3**, **4.4** and **4.5** are from amphorae; **4.6** is from an open vessel, either a skyphos or a krater, while **4.7** preserves part of the rim of a distinctly local shape here referred to as lekanis.[18]

The small fragment **4.3** preserves part of one set of compass-drawn concentric circles with dot at centre; though too little is preserved to commend it, it is probably Protogeometric rather than Sub-Protogeometric, whereas both **4.4** and **4.5** preserve features that are best assigned to Sub-Protogeometric. The decoration of the former is described in the catalogue below; the two or three very thin bands at junction of

[13] Usually something like light brown 7.5YR 6/4 or light yellowish brown 10YR 6/4, occasionally even lighter.

[14] Within the range of light red 2.5YR 6/6 to reddish yellow 5YR 6/6.

[15] In this respect it more closely resembles the characteristic clay of Corinth, *cf.* G.R. Edwards, *Corinth* VII, Part iii. *Corinthian Hellenistic Pottery* (1975) 9-10, and never quite reaches the firmness of say Attic black-figure or later wares. For a general "softening," however, of Attic pottery in the Late Geometric period through the mid 7th century B.C. see *Agora* VIII, 29.

[16] For various ways in which such a slip can originate during manufacture rather than being consciously applied see J. K. Papadopoulos, *AE* 1989, 85 n. 61.

[17] The term "paint" is here preferred to "glaze" or "gloss" in order to distinguish it from both the later clay glaze as that used, for example, in Classical black-glaze ware, see *GCP*, 798-805, and from the modern use of the term "glaze," *GCP*, 760-1.

[18] The lekanides from the Terrace V cemetery may be divided into two types (1 and 2); **4.7** is an example of the earlier Type 1.

shoulder and neck, coupled with the size of the preserved set of compass-drawn circles or upright semi-circles, are features consistent with the latest tomb material. The pendent semi-circles on **4.5** are perhaps more informative; although pendent semi-circles do occasionally occur on tomb amphorae, they are not common and their arrangement is somewhat different. The decoration and feel of **4.5** is closer to an amphora shoulder fragment from the Terrace V kiln (8th century B.C.),[19] than it is to the greater part of the tomb material.

The fragment **4.6** is problematic; the preserved portion of a cross-hatched vertical panel is a feature commonly found on Attic Protogeometric skyphoi, [20] and may also be found on contemporary Attic and Thessalian kraters.[21] The motif, however, remains unattested among the numerous local skyphoi and kraters from the cemetery.[22]

The rim fragment **4.7** is a typical example of the local lekanis (Type 1); the shape, essentially a shallow bowl, is characterised by a tall conical or flaring foot. The lower wall is shallow and rises, almost vertically, to a rim which can be sharply everted, sometimes horizontal, or outward thickened; the rim top is invariably flat or obliquely cut. Two horizontal ribbon handles are normally attached to the upper wall immediately below the rim and a few examples of the shape are equipped with a bridged spout. The shape probably derives from the Mycenaean shallow bowl (Furumark Shape 295),[23] with possible local Mycenaean antecedents at Kastanas[24] and Assiros Toumba,[25] although the form is rare in Early Iron Age Macedonia outside Torone.[26] A related shape, not identical to the Toronean, appears to be confined to the Thessalo-Euboian sphere,[27] although a comparable, tall-footed, variety is known on Cyprus, [28] and at least

[19] *Cf.* Papadopoulos, *op. cit.* (*supra* note 9) 33, 41 ills. 32-3 (KP-10).

[20] *PGP,* 80 (Desborough's Attic Type IIa skyphoi).

[21] See catalogue for *comparanda*; cross-hatched panels, of a different form and on various shapes, are common in the Protogeometric pottery from Iolkos, see *PGIT*, pl. 2 no. 11; pl. 3 nos. 7-8; pl. 8 no. 7; pl. 16 no. 4; pl. 33 nos. 3-4; pl. 36 no. 11; pl. 42 no. 5; pl. 43 no. 11; pl. 44 no. 1.

[22] The slight gap between the panel and the vertical line seems to be more consistent with the decoration on kraters. The fragment, although probably local, may prove to be an import; it has not been chemically or petrographically analyzed.

[23] *Cf. MDP,* 153 fig. 197 Type A; an example of the shape is represented in the Granary Class, A.J.B. Wace, *BSA* 25 (1921-1923) 33 fig. 9c, and also at Bronze Age Lefkandi, M.R. Popham and E. Milburn, *BSA* 66 (1971) 347 fig. 8 no. 1.

[24] C. Podzuweit, *JRGZMainz* 26, 1979, 213 fig. 21 no. 9.

[25] K.A. Wardle, *BSA* 75 (1980) 250-2 fig. 14 no. 31.

[26] Vergina has yielded at least one example, *Vergina* I, 181-2 fig. 32 and pl. 75 no. AΘ 1.

[27] *Lefkandi* I, 303 and footnotes 152-4; related examples from Thessaly are illustrated in *PGRT*, 37-8 and pl. 12 nos. 139-41.

[28] *PGRK*, pl. 3 nos. 1-4; *cf.* J.L. Benson, *The Nekropolis of Kaloriziki* (1973) pl. 42 no. K38 and *cf.* pl. 16 nos. K34 and K36.

one similar example may be cited from Athens, dating to the period of transition from Submycenaean to Protogeometric.[29] The closest parallel to the Toronean shape at Lefkandi is an import - perhaps even Toronean - assigned to Sub-Protogeometric II.[30] According to the evidence of the Terrace V cemetery, the chronological range of the Type 1 lekanis appears to be fairly well defined. It first appears in Early Protogeometric (unattested in any tomb yielding Submycenaean) but is replaced during the later stages of the period of the use of the cemetery by the low-footed variety, Type 2.

C. Local Hand-Made Pottery

The hand-made pottery of Early Iron Age Torone is perhaps the most distinctive aspect of the local potters' craft and it is steeped in a strong Macedonian tradition. But however firmly fixed the local hand-made ware of Torone is in such a tradition, there are certain differences between it and the wares of other Macedonian sites that are noteworthy. This aspect is not peculiar to Torone, for as the excavator of Assiros has noted, few of the vases from that site find exact parallels in both shape and decoration to those from sites further north or east.[31] Indeed, comparisons of material from Assiros in the Langadas Basin and Kastanas on the Axios have yielded some inportant differences.[32] A more detailed survey of trends, developments, connexions and influences in the various parts of Macedonia is presented by Hochstetter in a study of the hand-made pottery of Kastanas.[33]

The differences between local wheel-made and local hand-made fabric are, visually, rather marked; the differences being analogous, though not identical, to "fine" and "cooking" wares of later periods.[34] Moreover, two "varieties" of clay may be distinguished for the local hand-made vessels; the two are essentially the same, differing primarily in the quantity of visible inclusions and resulting in a very coarse fabric

[29] M. Brouskari, *BSA* 75 (1980) 25-8 and pl. 5(a) no. 26 (EPK 555). *Cf.* a closely related coarseware version of the shape from Asarlik, *B.M.Cat.* I,1, 212 and pl. XVI no. A1104.

[30] *Lefkandi* I, 353 and pl. 181 T24,1, described as a pedestalled bowl; although assigned to the Sub-Protogeometric II period, the dating evidence is not clear and the piece is conceivably earlier. R.E. Jones, *GCP*, 628-31 verifies T24,1 as an import to Lefkandi.

[31] K.A. Wardle, *BSA* 75 (1980) 263.

[32] *Ibid* 261-5; B. Hänsel, *JRGZMainz* 26 (1979) 167-207; *Kastanas PAS* 3, 290-3.

[33] *Kastanas PAS* 3, 277-325 (reviewed by M. Jacob-Felsch, *Göttingische Gelehrte Anzeiger* 237 [1985] 35-48).

[34] *Cf. Agora* VIII, 29. Note, however, that the range of visible inclusions is similar for the local hand-made and wheel-made fabrics.

used only for three shapes - the pithos, pitharion and tripod cauldron - and a somewhat less coarse or semi-coarse variety used for all other vessel forms.[35] The special qualities of the latter are its lightness, a reduced porosity, and a good resistance to heat.[36] In both cases inclusions are many, usually small to medium in size and mainly white and light-coloured; both varieties are highly micaceous. These two varieties of clay are used exclusively for vessels which are shaped by hand without the use of a continually revolving wheel, although a simple turntable or disk may have been partly used in shaping most vessels, especially the larger jars and pithoi.[37] Handmade vessels are burnished but unslipped.

The two pieces presented here include a fragmentary jug with cut-away neck, **4.8**, of the semi-coarse variety of clay, and a small fragment of a tripod cauldron, **4.9**, of the coarser variety. The former is a typical example of the shape which was the most common of all hand-made vessels deposited in the tombs of the Terrace V cemetery. The jug with cut-away neck is as well attested in the earliest tombs (Submycenaean), as it is in the very latest. The shape itself is one of the characteristic hallmarks of Late Bronze and Early Iron Age Macedonia and its ancestry may be traced back into the Early Bronze Age.[38] Typologies of the shape have been presented from settlement material at Kastanas[39] and from cemetery material at Vergina,[40] as well as from cemetery material at Vitsa Zagoriou in Epeiros,[41] and, more recently, from Thasos.[42] Its penetration into Thessaly has been well recorded.[43] It has been

[35] The difference between the two, in this case, being analogous, though not identical, to the difference between "Attic cooking ware" and "Attic pithos fabric" as defined by Brann for fabrics of the Late Geometric and Protoattic periods in Athens, *Agora* VIII, 29, and p. 30 for Corinthian "fine" and "coarse" wares.

[36] *Cf. Agora* VIII, 29.

[37] *Cf. GCP,* 866 fig. 12.8.

[38] Early Bronze Age ancestors include *PM*, 176 no. 211 (= W.A. Heurtley and C.A.R. Radford, *BSA* 29 [1927-1928] fig. 36 no. 6) from Molyvopyrgo in Chalkidike; the same site also yielded Middle Bronze Age counterparts such as *PM,* 210 nos. 394-5, 212 nos. 400-1. At Kastanas the jug with cut-away neck is attested at least as early as Level 16 (K Period IV, 1400-1190 B.C.) and is especially common in the Early Iron Age levels, *Kastanas PAS* 3, 48-58, especially 53 fig. 12; for earlier examples see, for instance, *Kastanas PAS* 4, pl. 70 no. 1. In Macedonia the form of the jug is also found in small bronze miniatures, often serving as pendents, see J. Bouzek, *Graeco-Macedonian Bronzes* (1974) 38-49; *id., AE* 127 (1988) 47-60; I. Kilian-Dirlmeier, *Anhänger in Griechenland von der mykenischen bis zur spätgeometrischen Zeit* (1979) pls. 78-81, and pl. 103B for their distribution.

[39] *Kastanas PAS* 3, 48-58.

[40] *Vergina* I, 194-201.

[41] I. Vokotopoulou, *Βίτσα. Τα νεκροταφεία μιας Μολοσσικής κώμης* I (1986) 236-241.

[42] Ch. Koukouli-Chrysanthaki, *Πρωτοϊστορική Θάσος. Τα νεκροταφεία του οικισμού Καστρί* B (1992) 397-399, σχήμα VII, especially VII Γ.

[43] W.A. Heurtley and T.C. Skeat, *BSA* 31 (1930-1931) 13 (Group I, Class 1), 14 fig. 4; *PGP*, 136, 166; *GDA*, 206-16; *DAG*, 61-3; *Lefkandi* I, 324-5.

suggested that the few hand-made examples of the shape found at Lefkandi probably owe their origin to central northern Thessaly, although some of the more recently published hand-made pieces from Lefkandi display strong Macedonian characteristics.[44]

The body and leg fragment of the tripod cauldron **4.9** is perhaps more interesting. At least twenty-six examples of the shape were found in tombs and the various deposits on Terrace V,[45] but unlike the ubiquitous jug, the tripod cauldron is conspicuously absent in the local Macedonian repertoire. In 1939 there were almost none known to Heurtley,[46] and since that time the excavations at Kastanas, Assiros and Vergina have yielded few, if any, certain examples,[47] while the fragments of tripod legs at Thasos appear to post-date those of Torone.[48] The tripod cauldron, however, both as a coarseware cooking vessel and as a finer wheel-made and painted version, is well known in Minoan[49] and Mycenaean[50] ceramic history, and especially close to

[44] M.R. Popham *et al., BSA* 77 (1982) 235 and 234 fig. 7, nos. T41,12 (pl. 22) and T39,18 (pl. 18). Also *Lefkandi* I, 325 where it is noted that the type is not found south of Lefkandi; *Lefkandi* II:1, 65, 131 no. 806 (illustrated on pls. 40 and 74).

[45] It is significant that all tripods encountered in tombs were recovered in a fragmentary state, never complete, and in positions neither consistent with normal pot offerings nor with ceramic lids/covers. These circumstances would indicate some connexion with funerary ritual, perhaps in the preparation of food or the burning of incense.

[46] The only legged vessels mentioned by Heurtley are Neolithic, *PM*, 150 no. 91 (4-legged vase from Servia), 161 no. 148 (3-legged "table" = *Olynthus* I, fig. 62b, fig. 63, pl. II; *cf.* figs. 60-1), 162 no. 161 (cooking pot = *Olynthus* I, fig. 22, 1-2). Comparative tripods, plastic vessels and stands, primarily Neolithic, are discussed by E.S. Elster in: C. Renfrew *et al.* (eds.), *Excavations at Sitagroi: A Prehistoric Village in Northeast Greece* 1 (1986) 303-44.

[47] Hochstetter discusses a number of legged vessels preserved only in fragments, *Kastanas PAS* 3, 179-80; some are from vessels which are of anthropomorphic or zoomorphic form, while others, like pl. 280 no. 3, are from vessels which bear no resemblance to the Torone tripods; the only fragment which may be from a similar vessel is pl. 93 no. 1. Worth noting is that a common type of cooking vessel in Late Bronze and Early Iron Age Macedonia is the stand or "pyraunos," see *Kastanas PAS* 3, 155-64; K.A. Wardle, *BSA* 75 (1980) 249 fig. 13; for Lefkandian pyraunoi see *Lefkandi* II:1, 60-61 pls. 40 and 78 nos. 847-848. There is also a curious variety of cauldron/stand with two broad legs from Vergina which is somewhat later, Ph. Petsas, *AD* 17A (1961/62) *Mel.*, pl. 146γ, pl. 147β.

[48] P. Bernard, *BCH* 88 (1964) 134-6 figs. 46-8. There do not appear to be any tripod cauldrons among the finds from the recently published cemeteries associated with the settlement of Kastri on Thasos, although reference is made to a possible incised leg from a four-footed vessel, see Koukouli-Chrysanthaki *op. cit.* (*supra* note 42) Vol. A, 149 no. 8(B2), Vol. Γ, pl. 76 8(B2).

[49] The tripod enjoys a long history in Crete from Early Minoan through Subminoan, see P.P. Betancourt, *The History of Minoan Pottery* (1985) figs. 29E, 31, 68, 86, 116; M.R. Popham *et al., The Minoan Unexplored Mansion at Knossos* (1984) pl. 86f, g, h, pl. 162 nos. 9-11 and p. 174 n. 125 for further references; more recently N. Metaxa Prokopiou in D. Musti *et al.* (eds.), *La transizione dal miceneo all'alto archaismo. Dal palazzo alla città; Atti del Convegno Internazionale, Roma, 14-19 marzo 1988* (1991) 373-401, especially 379-381 fig. 5, 396 fig. 17.

[50] *MPAnalysis*, Shape 320; A.D. Lacy, *Greek Pottery in the Bronze Age* (1967) 185 Shape 7, 184 fig. 72b.

the Toronean tripods are many coarseware Mycenaean examples from Athens.[51] The shape, both in fine and coarseware varieties, continues to be found at a number of sites during the Protogeometric and Geometric periods.[52] It would seem reasonable, then, to conclude that the existence of the form at Torone was probably the result of influence from the south, although such an influence may have occurred as early as the Middle Bronze Age at Torone on the evidence of tripod legs found in Middle Helladic deposits in the recently excavated trenches on Promontory 1.[53]

II. SMALL FINDS OTHER THAN POTTERY

4.10 and **4.11** were found in the debris of the Classical Structure 1.[54] Such small pierced terracottas are usually classified as spindlewhorls, beads or buttons,[55] designations which cover the range of likely possibilities. The basic form of both is bicon-

[51] For tripods of Mycenaean date in Athens and Attika see O. Broneer, *Hesperia* 2 (1933) 371-2 and fig. 45; *id., Hesperia* 8 (1939) 398-400 Shape 27, fig. 81a-b; H.D. Hansen, *Hesperia* 6 (1937) 562-4 fig. 17f-k; F.H. Stubbings, *BSA* 42 (1947) 54 fig. 23B; *Agora* XIII, 140, pl. 61 no. 441; M. Benzi, *Ceramica micenea in Attica* (1975) 225, pl. VII no. 174; P.A. Mountjoy, *Four Early Mycenaean Wells from the South Slope of the Acropolis at Athens* (1981) 22 fig. 6, pl. 5b no. 25.

[52] For example: S. Benton, *BSA* 35 (1934-1935) 101-2; *Kerameikos* I, pl. 63 inv. 554, pl. 64 inv. 555; *Kerameikos* V,1, pl. 156 inv. 782; *CVA Athens* 1, pl. 6 (III H d) nos. 13-14; I. Vokotopoulou, *AD* 24A (1969) *Mel.*, 84-5 no. 36, pl. 30α-β; I. and R. Hägg, *Excavations in the Barbouna Area at Asine,* Fasc. 2 (1978) 86-7 figs. 75, 77 nos. 146-51 and *cf.* related shapes in B. Wells, *Asine* II, Fasc. 4, Part 2, 77, 88, 100, 115; W.A. McDonald *et al.* (eds.), *Excavations at Nichoria in Southwest Greece*. III. *Dark Age and Byzantine Occupation* (1983) 95, 137 fig. 3-21 nos. P408, P860, P833; p. 178 fig. 3-62 no. P1313; *Lefkandi* I, pl. 284 no. 9; M.R. Popham *et al.*, *BSA* 77 (1982) pl. 15 no. 13; *Lefkandi* II:1, 57-58, nos. 812-823; *Fortetsa*, Tomb X pp. 49, 51, 167 nos. 483 and 515 (not illustrated); L. Rocchetti, *ASAtene* 45-6 (N.S. 29-30), 1967-1968, 206 fig. 48; *PGP*, pl. 30c (Kos); *PGRK,* 107 Shape 23, pl. 7 nos. 10-12.

[53] For these excavations see A. Cambitoglou and J.K. Papadopoulos, *MeditArch* 1 (1988) 180-217; *MeditArch* 3 (1990) 93-142; *MeditArch* 4 (1991) 147-171; *MeditArch* 7 (1994) 141-163. The Middle Bronze Age tripods at Torone seem to be similar, though not identical, to those of Aigina (C. Zerner and J. Rutter personal communication).

[54] I am grateful to Dr. Jill Carington Smith for bringing these to my attention; their identification as Early Iron Age is hers and the general subject is well treated in her unpublished PhD Dissertation *Spinning, Weaving and Textile Manufacture in Prehistoric Greece* (University of Tasmania 1975). An earlier, Bronze Age, date for both terracottas cannot be dismissed, but the dearth of Bronze Age finds beyond Promontory 1, coupled with the fact that the same deposit yielded fragments of two Early Iron Age pots (**4.7** and **4.8**), would argue more for an Early Iron Age date.

[55] *Lefkandi* I, 83; *PM*, 165 fig. 35p, 203 fig. 67 l-ee, 213 fig. 83 l-o, 231 fig. 104 a-l, 240 fig. 112h; McDonald *et al., op. cit.* (*supra* n. 52) 287; *Asine* II, Fasc. 4, Part 2, 80.

ical, comprising two more or less equal symmetrical parts; the sides of **4.11** are straight in section, those of **4.10** more rounded. **4.11** with its plain burnished surface is typical of the standard biconical spindlewhorl, bead or button in Macedonia of the Bronze and Early Iron Ages,[56] and is common elsewhere in Greece in Bronze Age and much later contexts.[57]

More interesting is the incised decoration on **4.10**, which consists of the entire surface of the terracotta being decorated with many, variously arranged, incised motifs, including small dots, vertical, horizontal and diagonal lines, as well as crosses, chevrons, triangles and zig-zag patterns. Beads or spindlewhorls of this form with incised decoration are discussed at some length by Smithson,[58] Boardman[59] and Sourvinou-Inwood.[60] At Athens they are closely related to the hand-made pyxis,[61] but unlike the pyxides (and the associated incised "dolls"), they are distributed over a much wider area and chronological range. In Athens related examples first appear in later Protogeometric contexts and drop out of fashion towards the end of Early Geometric.[62] Contemporary, or near-contemporary, examples may be cited from Lefkandi,[63] Asine,[64] Lindos,[65] and Delos,[66] and the type is particularly common in Crete where some examples are dated as early as Subminoan to Early Protogeometric.[67] In discussing the Cretan material, Boardman points to Anatolia as the likely place of origin, where incised terracotta beads or spindlewhorls, of various shapes,

[56] S. Casson, *BSA* 26 (1923-1925) 21 fig. 10; *PM*, 101 and 108, and especially 213 fig. 83m, 231 fig. 104c, f, i; K.A. Wardle, *BSA* 75 (1980) pl. 22(e) bottom right; *Kastanas PAS* 6, pl. 18 nos. 12-26 and *cf. Vergina* I, 260 and pl. 116ζ (four terracotta examples).

[57] A fuller discussion will appear in J. K. Papadopoulos, *The Early Iron Age Cemetery at Torone* (forthcoming).

[58] E.L. Smithson, *Hesperia* 30 (1961) 170-3, pl. 30 no. 55; *cf. ead., Hesperia* 37 (1968) pl. 30 nos. 60-3 and also the incised clay balls (nos. 56-9).

[59] J. Boardman, *BSA* 55 (1960) 146-8.

[60] C. Sourvinou-Inwood, *OpAth* 11 (1975) 169-71.

[61] See note 58 and see further E.L. Smithson, *Hesperia* 43 (1974) pl. 73b-c; *Kerameikos* I, pl. 74 inv. 764; *Kerameikos* IV, 15, 19, 25; *Kerameikos* V,1, 38 n. 85, 139 n. 106; J. Bouzek, *The Attic Dark Age Incised Ware* (Sbornik. Acta Musei Nationalis Pragae. Series A - Historia: Vol. 28 [1974] no. 1) 4-6, 10-11, 21-3, 39-40, 44; *id., The Aegean, Anatolia and Europe: Cultural Interrelations in the Second Millennium B.C.* (1985) 198-9; the most recent and comprehensive study is K. Reber, *Untersuchungen zur handgemachten Keramik Griechenlands in der submykenischen, protogeometrischen und der geometrischen Zeit* (1991).

[62] Smithson, *Hesperia* 30 (1961) 171.

[63] *Lefkandi* I, 83, pls. 125, 154, 214.

[64] *Asine* II, Fasc. 4, Part 3, 255 fig. 193 no. 744 and *cf.* no. 743.

[65] C. Blinkenberg, *Lindos. Fouilles de l'Acropolis 1902-1904.* I. *Les petits objets* (1931) pl. 10 nos. 152-3.

[66] *Délos* XVIII, pl. 83 no. 704,3.

[67] J. Boardman, *BSA* 55 (1960) 146-8 (with references); *id., The Cretan Collection in Oxford. The Dictaean Cave and Iron Age Crete* (1961) 127-8, fig. 47 no. 552; *Fortetsa*, 207.

abound throughout the course of the Bronze Age.[68] Worth drawing attention to are similar examples from Cyprus,[69] and quite a number from Early Bronze Age Samos,[70] Chios,[71] Lesbos,[72] and Lemnos.[73] Other scholars prefer a northern origin: Bouzek sees a Middle Balkan source as likely,[74] while Sourvinou-Inwood (following a Boardman alternative) reconstructs a northern route from the Troad, through the intermediary of her "Macedonian loose koine," down into Attika, Crete, and other Southern centres.[75] Bouzek's argument may be summarily dismissed for the same reasons as a northern (Central Balkan) origin for the pyxides - most of the examples he cites are later, and often stylistically different, to those of the Aegean. Concerning Sourvinou-Inwood's proposed route, it should be noted that this type of incised terra-cotta is already established in Macedonia during the course of the Late Bronze Age,[76]

[68] J. Boardman, *BSA* 55 (1960) 146-8 cites examples in C.W. Blegen *et al.*, *Troy* III. *The Sixth Settlement* (1953) 32-3 and H. Goldman, *Excavations at Gözlü Kule. Tarsus* II (1956) 328-44. It is worth elaborating that at Troy the type is common from Settlement I through VIIb, see further C.W. Blegen *et al.*, *Troy* I. *General Introduction. The First and Second Settlements* (1950) fig. 222 and figs. 366-8; *Troy* II. *The Third, Fourth, and Fifth Settlements* (1951) figs. 151-3 and 236-7; *Troy* IV. *Settlements VIIa, VIIb and VIII* (1958) figs. 221-2 and 257; while at Tarsus they range in date from Early Bronze Age I through Late Bronze Age II. See also H.H. von der Osten, *The Alishar Hüyük. Seasons of 1930-32.* Part 1 (1937) 198-204, figs. 199-203 (Chalcolithic); also J. Boehlau - K. Schefold, *Larisa am Hermos. Die Ergebnisse der Ausgrabungen 1902-1934.* Bd. III: *Die Kleinfunde* (1942) pl. 1 nos. 16-18, 10-11 and 25 (which are later).

[69] V. Karageorghis, *Nouveaux documents pour l'étude du Bronze Récent à Chypre* (1965) 49 fig. 16, 58 fig. 17; *id.*, *Alaas. A Protogeometric Necropolis in Cyprus* (1975) pl. LXXXI no. Q4; J.L. Benson, *Bamboula at Kourion. The Necropolis and Finds excavated by J.F. Daniel* (1972) pl. 37; M.-J. Chavane, *Salamine de Chypre* VI. *Les petit objets* (1975) pls. 27 and 64 no. 269.

[70] V. Milojcic, *Samos* I. *Die prähistorische Siedlung unter dem Heraion. Grabung 1953 und 1955* (1961) pl. 23 nos. 5-8, pl. 32 no. 16 (12 examples), pl. 41 nos. 28 and 33, pl. 43 nos. 4-8, pl. 49 nos. 3-6.

[71] S. Hood, *Excavations in Chios 1938-1955. Prehistoric Emporio and Ayio Gala* II (1982) 639 fig. 288 pl. 133 nos. 23-47.

[72] W. Lamb, *Excavations at Thermi in Lesbos* (1936) 163 fig. 47 nos. 1-25.

[73] L. Bernabò-Brea, *Poliochni* II. *Città preistorica nell'isola di Lemnos* (1976) pls. CCXXVII-CCXXXIII; *cf.* also those from Dikili Tash, G. Daux, *BCH* 86 (1962) 919 fig. 10.

[74] J. Bouzek, *The Attic Dark Age Incised Ware* (1974) especially 14-17, 28-30, 41-2, 45, 48-50; *id.*, *The Aegean, Anatolia and Europe* (1985) 200-1.

[75] *Op. cit.* (*supra* note 60) 170; *cf.* Boardman, *op. cit.* (*supra* note 67) (1961) 132.

[76] To the list of Macedonian examples cited in *OpAth* 11 (1975) 170 notes 54-7 and p. 171, add the following Late Bronze Age examples: K.A. Wardle, *BSA* 75 (1980) pl. 22(e); *cf. id.*, *BSA* 82 (1987) 320 fig. 3, pl. 51(c) (Early Iron Age); *Kastanas PAS* 6, pl. 18 nos. 1-11, pl. 36 nos. 1-8, Hochstetter notes (p. 85): "Die verzierten Wirtel verteilen sich auf die Schichten 15 bis 4, also den Zeitraum, in dem Wirtel allgemein am häufigsten vorkommen (Abb. 14), doch ist eine gewisse Konzentration auf die spätbronze- bis beginnend eisenzeitlichen Schichten 15 bis 11 festzustellen." The examples published by L. Rey (described as "pre-Mycenaean"), *BCH* 41-43 (1917-1919) pl. 21 nos. 1-5 come from Perivolaki (Saratse), Sedes and Gona.

and that the type may possibly be traced back to Late Neolithic at Olynthos.[77] This in itself does not preclude a link between Macedonia and Northwest Anatolia during the course of the Bronze Age,[78] nor between Macedonia and Attika during the Early Iron Age, but the evidence at hand does not neatly point to a common origin for the distribution of the type in the Aegean and there remains the uncomfortable chronological factor of the Cretan examples being earlier than the Attic, which would seem to argue against the route from the Troad through Macedonia. In any case, it is worth remembering that the idea of applying incised decoration to a simple clay spindle-whorl, bead or button may well have evolved independently in different regions at different times, or that it may have been inspired by some other medium (incised decoration on local pottery for instance), and does not necessarily require direct contact with similar objects from other regions.

CATALOGUE*

1. THE POTTERY

a. Imported Pottery

4.1 (75.248) Fig. 50; Pl. 50
Gate Area TR1 tr2 (2).
Shoulder fr.; wheel-made closed vessel, probably amphora.
P.H 0.035; P.W. 0.048.
Clay evenly fired close to reddish yellow 5YR 6/6; slip slightly lighter.
Single fr, broken on all sides, preserving small portion of shoulder; chipped and worn. Imported fabric, finer than local, with only the odd impurity and the occasional speck of mica.
Sloping shoulder, only very slightly curved.
Slipped and painted: good lustrous paint, fired black where thickest, red on circles where more dilute.
Horizontal band or area painted solid on lower preserved fr. at break; portion of one set of compass-drawn concentric circles on shoulder above (set comprising four circles).
Imported, probably Euboian (?).
Cf. Lefkandi I, 332-339, and especially pl. 281c, pl. 282c; *Lefkandi* II:1, 34-42 and various examples on pls. 6-7, 61-66; for Attic counterparts *cf. PGP*, various examples pls. 2-5; *Kerameikos* I, pl. 41 inv. 591, pl. 56 inv. 556, pl. 58 inv. 563; *Kerameikos* IV, pl. 5 inv. 915; M. Brouskari, *BSA* 75 (1980) 20 no. 5, pl. 3c (EPK 537).
Protogeometric.

4.2 (76.764) Fig. 50; Pl. 50
Gate Area TR6 tr3 (4).
Body fr.; wheel-made krater.
P.H. 0.058; P.W. 0.053.
Clay fired close to light reddish brown 5YR 6/4; slip slightly lighter.
Fabric imported, finer than local with only the

* *The Early Iron Age Cemetery at Torone* = Papadopoulos, J.K., *The Early Iron Age Cemetery on Terrace V at Torone* (Unpublished PhD Thesis, The University of Sydney, 1987).

[77] *PM,* 165 fig. 35p (= *Olynthus* I, fig. 91a, also 91b; note further the incised decoration on the clay "sling bullet," p. 81 fig. 92).

[78] On this aspect see *Kastanas PAS* 3, 373-5 (with references).

odd impurity and occasional speck of mica.
Single fr., broken on all sides, preserving small portion of body.
Thick-walled, slightly curved sherd.
Slipped and painted: good, slightly lustrous, paint, fired black where thickest on exterior, brown where more dilute; red on interior. Fr. at lower break painted, above which are two thin horizontal lines in dilute paint. Above, one partially preserved set of compass-drawn concentric circles, with only the outer six circles actually preserved. Interior painted.
Imported.
Cf. W.A. Heurtley and T.C. Skeat, *BSA* 31 (1930-1931) 30-3, pls. IX-XI; *PGP*, 142-5, pl. 23 (Marmariani); circles without alternating vertical motifs are more common at Kapakli, *PGRT*, 22-6, especially pl. 7 no. 44, pl. 8 no. 47; *cf.* also *PGIT*, pl. 12 no. 8. For the recently published kraters from Lefkandi see *Lefkandi* II:1, 23-31.
Protogeometric.

b. Local Wheel-Made Pottery

4.3 (75.385) Fig. 50; Pl. 50
Gate Area TR3 E (3).
Shoulder fr.; wheel-made amphora.
P.H. 0.045; P.W. 0.043.
Single fr., broken on all sides, preserving small portion of shoulder; much worn.
Clay local with many small to medium white and light-coloured inclusions and much mica, predominantly golden.
Fired evenly close to reddish yellow 5YR 6/6; slip slightly lighter.
Sloping shoulder.
Slipped and painted: dull paint, thickly applied with a tendency to flake; fired black.
Part of one set of compass-drawn concentric circles on shoulder; set, as preserved, comprises at least three circles with dot at centre.
Cf. The Early Iron Age Cemetery at Torone, T51-1, T67-1, T104-1,T124-1.

4.4 (78.2427) Fig. 50; Pl. 50
Lower City TR3 (3) SW.
Shoulder fr.; wheel-made amphora.
P.H. 0.030; P.W. 0.024.
Single fr., broken on all sides, preserving small portion of shoulder.
Clay local with fewer small white and light-coloured inclusions than normal but much silver and golden mica.
Fired close to light brown 7.5YR 6/4 towards exterior, light grey/brown towards interior.
Sloping shoulder.
Slipped and painted: paint evenly applied, fired red. Small portion of one set of compass-drawn concentric circles or upright semi-circles preserved; set comprises at least three circles/arcs, above which are two preserved thin horizontal lines, with a possible third at upper break.
Cf. The Early Iron Age Cemetery at Torone, T41-1, T77-1, T124-1; the horizontal lines are more consistent with the decoration of neck-handled amphorae. *Cf.* also *PM,* 236 no. 485.

4.5 (78.1600) Fig. 50; Pl. 50
Lekythos TR2 (5).
Shoulder fr.; wheel-made amphora.
P.H. 0.050; P.W. 0.040.
Single fr., broken on all sides, preserving small portion of shoulder; much worn.
Clay local, rather hard-fired, with some small to medium white and light-coloured inclusions and much mica, mainly fine, silver tending to predominate; occasional blow-outs.
Clay and interior surface fired close to light reddish brown 5YR 6/3; closer to brown 7.5YR 5/2 towards exterior.
Slip, where preserved, lighter.
Shoulder slightly curved; neck becoming vertical, but only lowest part preserved.
Slipped and painted: dull paint, evenly and rather thickly applied with a tendency to flake, fired black. Horizontal band on lower fr. near break; horizontal band at junction of shoulder and neck from which hang pendent two partially preserved sets of compass-drawn semi-circles; one set comprising at least five arcs. Lower preserved neck reserved.
Cf. The Early Iron Age Cemetery at Torone, no.

67; also the decoration on the shoulders of T88-1 and T114-1.

4.6 (75.381) Fig. 50; Pl. 50
Gate Area TR3 E (3).
Body fr.; large wheel-made open vessel (skyphos or krater).
P.H. 0.037; P.W. 0.035.
Single fr., broken on all sides, preserving small portion of body; worn.
Clay local (?) with fewer visible inclusions than normal, but quite some mica, predominantly silver.
Clay evenly fired close to reddish yellow 5YR 6/6; slip lighter.
Preserved fr. almost vertical.
Slipped and painted: dull paint with a tendency to flake, mostly fired black. Portion of cross-hatched vertical panel; two widely spaced vertical lines to left; part of one vertical line to right. Interior painted.
Shape and decoration consistent with Desborough's Attic Type IIa skyphoi (circles flanking a central cross-hatched rectangle enclosed by vertical lines), *PGP*, 80 pl. 10 no. 607 (T24), no. 1091 (38), *cf.* pl. 33 no. VI,20 and XI,16a (Attic skyphoi found at Knossos), also pl. 11 no. 567 (D). Similar decorative elements may also be found on Attic and Thessalian kraters, *cf. PGP*, pl. 12, Munich 6157 (Attic), pl. 23 no. 137 (Marmariani); W.A. Heurtley and T.C. Skeat, *BSA* 31 (1930-1931) pl. IX nos. 134, 137, 139.

4.7 (75.794) Fig. 50; Pl. 50
Structure 1 TR1 tr1 (6).
Rim fr.; wheel-made lekanis.
P.H. 0.031; approx. D. (rim) est. 0.250.
Single fr. preserving small portion of rim and handle scar; very worn.
Clay local with fewer small white and light-coloured inclusions and some silver and golden mica, tending fine; occasional blow-outs.
Fired close to very pale brown 10YR 8/4.
Lower preserved wall curved, upper wall vertical; thickened rim, flat to obliquely cut on top, with rounded outside edge. Handle scar of horizontal ribbon handle preserved on upper wall directly below rim.
Slipped and painted, but with decoration almost completely worn. Traces of paint on interior; rim top evidently barred, but too worn to reconstruct on drawing.
Cf. The Early Iron Age Cemetery at Torone, nos. 37, 68, and for general shape, T41-2, T47-3, T51-3, T124-3. Also *Vergina* I, 181 fig. 32 pl. 75 no. AΘ 1; *Lefkandi* I, pl. 181 (Toumba T24,1).

c. Local Hand-made Pottery

4.8 (75.790) Fig. 50; Pl. 50
Structure 1 TR1 tr1 (6), (7), (8).
Body, neck and rim frr.; hand-made jug with cut-away neck.
Dimensions of illustrated frr: P.H. 0.056; D. (rim) est. 0.050-0.060.
Fifteen frr., mostly non-joining, of which only one is illustrated, preserving small part of body, neck and rim; all frr. much worn.
Clay local with many small to medium white and light-coloured inclusions and much mica, golden tending to predominate.
Core mostly fired light grey, close to light brownish grey 10YR 6/2; surfaces on interior and exterior mottled two-tone, grey/orangey red.
Body rounded, though exact proportions difficult to reconstruct; vertical neck, cut-away and offset from body by groove on exterior corresponding to slight angle formed on interior; rim chamfered.
Exterior burnished, though much worn, with preserved tooling marks tending horizontal on upper body, vertical on neck.
Cf. The Early Iron Age Cemetery at Torone, T6-1, T10-2, T13-2, T52-2, T58-2, T67-3, T70-2, T124-2 (among others); also *Vergina* I, 194-201; *Kastanas PAS* 3, 48-58; *Lefkandi* II:1, pls. 40 and 74 no. 806.

4.9 (75.789) Fig. 50; Pl. 50.
Gate Area TR3 S (2).
Body and leg fr.; hand-made tripod cauldron.
P.H. 0.055; P.W. 0.049.

Single fr., broken on all sides and cracked, preserving small portion of body and upper attachment of one leg; chipped and worn.
Coarse local clay with a great many small to large white and light-coloured inclusions and much silver and golden mica, the latter tending to predominate.
Clay and surfaces mostly fired close to reddish brown 2.5YR 5/4 and 5YR 5/4; in parts blackened, especially at core.
Body curved; thick leg, oval in section at attachment.
Exterior and interior surfaces evidently burnished smooth, but much worn.
Cf. The Early Iron Age Cemetery at Torone, T47-4, T70-3, T99-3, T115-12, T118-11, T123-2 (among others); and generally *MPAnalysis,* Shape 320.

II. SMALL FINDS OTHER THAN POTTERY

4.10 (75.356) Fig. 50; Pl. 50
Structure 1 TR1 tr3 (6).
Terracotta spindlewhorl, bead or button. Incised decoration.
H. 0.030; D. (max) 0.031.
Intact; very slightly chipped.
Clay probably local with some small light-coloured inclusions and predominantly golden mica; fired close to brown 7.5YR 5/4-4/4.
Roughly biconical in shape, but tending somewhat more spheroid than **4.11**.
Surface dull, decorated with incised motifs as shown. Motifs variously arranged and include small dots; vertical, horizontal and diagonal lines; as well as cross, chevron, triangle and zig-zag patterns.
For discussion of Early Iron Age incised spindlewhorls, beads or buttons see especially E.L. Smithson, *Hesperia* 31 (1961) 170-3 pl. 30 no. 55; J. Boardman, *BSA* 55 (1960) 146-8; C. Sourvinou-Inwood, *OpAth* 11 (1975) 169-171.

4.11 (75.324) Fig. 50; Pl. 50
Structure 1 TR1 tr3 (6).
Terracotta spindlewhorl, bead or button.
H. 0.028; D. (max) 0.033.
Intact; much worn.
Clay local with small white and light-coloured inclusions and much mica, predominantly golden.
Surface mostly blackened, but in parts fired close to reddish brown 5YR 5/3.
Biconical shape, consisting of two more or less equal, symmetrical, parts, with straight sides.
Surface smoothed, but worn.
Cf. The Early Iron Age Cemetery at Torone, 55, T46-3, T51-5; *PM,* 213 fig. 83m, 231 fig. 104c, f, i; K.A. Wardle, *BSA* 75 (1980) pl. 22 fig. (e) bottom right; S. Casson, *BSA* 26 (1923-1925) 21 fig. 10; also *Vergina* I, 260 and pl. 116ζ (4 terracotta examples); *Kastanas PAS* 6, pl. 18 nos. 12-26, especially 12, 18, 23.

5. THE LATE GEOMETRIC AND ARCHAIC POTTERY

Stavros A. Paspalas

DISCUSSION

The material presented in this chapter dates from the late eighth century through to the sixth century B.C., and includes local as well as imported pieces. The Late Geometric and Archaic Corinthian pottery is dealt with in Chapter 6, and the Archaic Attic material in Chapter 7. Although all the pieces in this chapter are small fragments and no vessel is substantially preserved, when considered collectively they advance our knowledge of Torone and the Chalkidike during these periods.

Finds of the Geometric period in the Chalkidike are not as yet numerous, and published finds are even fewer. While it has been reported that Geometric pottery has been found at Nea Kallikrateia on Pallene, nothing has as yet been published.[1] A small number of eighth century B.C. finds from Aphytis and Sane, both on Pallene, have appeared in print, and some have been identified as Euboian.[2] In addition, an eighth century B.C. kiln at Torone has been published, along with its preserved contents.[3]

The fragment **5.1** is possibly the earliest piece in the catalogue. Although it preserves only a very small portion of the original vase it can be identified as part of a drinking vessel, probably a kotyle. Its decorative scheme is similar to that found in the handle-zones of Aetos 666 type kotylai.[4] These kotylai are hemispherical in

[1] For reports of Geometric pottery from Nea Kallikrateia see A. Rhomiopoulou, "Αρχαιότητες καὶ Μνημεία Κεντρικής Μακεδονίας. Νομός Χαλκιδικής," *AD* 32, *Chron.* Β'2 1977 (1984) 202 and *id.*, "Αρχαιότητες καὶ Μνημεία Κεντρικής Μακεδονίας. Νομός Χαλκιδικής. Νέα Καλλικράτεια," *AD* 31, *Chron.* Β'2 1976 (1984) 247. For a report on pottery dating from the twelfth century through to the seventh century B.C. at Mende on Pallene see I. Vokotopoulou, "Ανασκαφικές έρευνες στη Χαλκιδική," *AEMTh* 1, 1987 (1988) 281.

[2] For Geometric finds from Aphytis see E. Yioure, "Τὸ ἱερὸν τοῦ Ἄμμωνος Διὸς παρὰ τὴν Ἄφυτιν," *AAA* 4 (1971) 361, figs. 12-14 and E. Juri, "Τὸ ἐν Ἀφύτει ἱερὸν τοῦ Διονύσου καὶ τὸ ἱερὸν τοῦ Ἄμμωνος Διός," in U. Jantzen (ed.) *Neue Forschungen in Griechischen Heiligtümern* (Tübingen 1976) 135-136. For eighth century Euboian and other Geometric and Subgeometric wares at Sane see Juri, *ibid.* 136, fig. 4; K. Rhomiopoulou, "Pottery Evidence from the Northern Aegean (8th - 6th cent. B.C.)," in *Les céramiques de la Grèce de l'Est et leurs diffusion en occident (Centre Jean Bérard, Institut Français de Naples, 6-9 Juillet 1976* [Paris/Naples 1978]) figs. 3-6; and J. Vokotopoulou, "La Macédoine de la protohistoire à l'époque archaïque," in *Magna Grecia, Epiro e Macedonia, Atti del ventiquattresimo Convegno di Studi sulla Magna Grecia, Taranto 5-10 Ottobre 1984* (Taranto 1985) 150, pl. 9,4.

[3] See J. K. Papadopoulos, "An Early Iron-Age Potter's Kiln at Torone," *MeditArch* 2 (1989) 9-44. The discovery of locally made pottery of the Geometric period at Mende is reported in I. Vokotopoulou , "Ανασκαφή Μένδης 1989," *AEMTh* 3, 1989 (1992) 413.

[4] S. Benton, "Further Excavations at Aetos," *BSA* 48 (1953) 281, no. 666, pl. 42. The type equates with Neeft's

shape; their handle-zone bears a central panel of chevrons above a group of horizontal lines flanked by vertical lines. Above this composition a series of horizontal lines runs along the rim of the vessel.[5] Preserved on **5.1** is part of the row of chevrons with three vertical lines to the right, and two horizontal lines below. The Aetos 666 type kotyle is a hallmark of the Corinthian Late Geometric style, and it first appears at the transition from Middle Geometric to Late Geometric, *ca.* 750 B.C. Soon after its appearance at Corinth this type was imitated by Euboian potters, and their contemporaries at Pithekoussai. While the preserved decorative scheme of **5.1** is similar to that of Corinthian Aetos 666 type kotylai, its fabric does not appear to be Corinthian. For the moment it cannot be ascribed to a particular school.[6]

5.2 is the rim sherd of a Euboian skyphos with a high vertical lip. The decorative scheme that it bears, a lozenge net under two horizontal lines, places it firmly in the latter part of Euboian Late Geometric. Three closely related schemes occur on the lips of Euboian skyphoi in this period. The first is a close cross-hatching which results in a lozenge net pattern whose execution appears rather rushed.[7] A second

Chevron Kotyle Type 1. C. W. Neeft, "Corinthian Fragments from Argos at Utrecht and the Corinthian Late Geometric Kotyle," *BABesch* 50 (1975) 109, fig. III,1.

[5] For the development of the type see *GGP* 101 and 105, pl. 19j; J. N. Coldstream, "Some Problems of the Eighth-Century Pottery in the West, Seen from the Greek Angle," in *La céramique grècque au VIIIe siècle en Italie Centrale et Méridionale (Cahiers du Centre Jean Bérard* 3) (Naples 1982) 31 and 33, table on pl. 3; and Neeft *op. cit.* (*supra* n. 4) 105-109.

[6] The most detailed study of the distribution of Aetos 666 kotylai deals with examples of this type in Italy, see C. Dehl, *Die Korinthische Keramik des 8. und frühen 7. Jhs. v.Chron. in Italien. Untersuchungen zu ihrer Chronologie und Ausbreitung. AM* 11 *Beiheft* (Berlin 1984) 28-33, where a comprehensive list of findspots is given.

For a Euboian example found on Euboia see *Eretria* V, 46, pl. 1, Eretria Museum Inv. 2. For a Euboian imitation found at Zagora, Andros, see A. Cambitoglou *et al., Zagora* 1. *Excavation Season 1967; Study Season 1968-9* (Sydney 1971) 59 (inv. 154), 67, fig. 54,where it is identified as "Corinthianizing Cycladic kotyle", and A. Cambitoglou, *Archaeological Museum of Andros. Guide to the Finds from the Excavations of the Geometric Town at Zagora* (Athens 1981) 54 no. 105 ("Euboean ware"). Reference is made to an unpublished example found at Old Smyrna in *Eretria* V, 146 n. 176. For Euboian imitations found at Amathos, Cyprus, see J. N. Coldstream, "The Greek Geometric and Archaic Imports," in *La nécropole d'Amathonte, Tombes 113-167.* II. *Céramiques non Chypriotes* (*Études Chypriotes* VIII) (Nicosia 1987) 25, pl. 9, no. 12 and pl. 13. no. 6; and E. Gjerstad *et al.*, *SwCyprusExp* II. *Finds and Results of the Excavations in Cyprus 1927-1931* (Stockholm 1935) 57-58 no. 19, pl. 139, no. 10. In the west more imitations have been found; see A. Deriu *et al.,* "Provenance and Firing Techniques of Geometric Pottery from Pithekoussai. A Mössbauer Investigation," *AION Archeologia e Storia Antica* 8 (1986) 99-116, especially fig. 32, 1 for Euboian and locally made examples at Pithekoussai. The origins of a kotyle found at Villasmundo, Sicily, are not clear, see G. Voza, "L'attività della Soprintendenza alle Antichità della Sicilia Orientale. Parte II," *Kokalos* 22-23 (1976-77) 570, pl. 108, no. 3. It has been suggested that it too may be of Euboian manufacture, see Dehl *op. cit.* 278.

[7] A. Andreiomenou , "Γεωμετρικὴ καὶ Ὑπογεωμετρικὴ κεραμεικὴ ἐξ Ἐρετρίας III (σκύφοι)," *AE* 1981 (1983), 101-102, pl. 31, nos. 211-215, 218-222, no. 225, pl. 32, no. 254 and pl. 33, no. 265; *Lefkandi* I, 64 Group V nos. 155-156, pl. 48. See also *GGP* 193, pl. 41b. The number of rows in the net varies.

scheme consists of a more carefully and precisely drawn lozenge net which is dotted, set between a number of horizontal lines.[8] The third scheme, of which the decoration of **5.2** is an example, is the same as the second though it lacks the dotting.[9]

5.3 is the body fragment of a drinking vessel, either a skyphos or a kotyle. It is uncertain where it was made, but on decorative grounds it finds close parallels among Late Geometric Euboian skyphoi with zones of fluent lines.[10] However, this motif was by no means restricted to the pottery workshops of Euboia.[11] Fluent lines flanked by vertical lines are also known on Corinthian Late Geometric skyphoi. It is apparent, furthermore, that this decorative scheme was widespread in the second half of the eighth century B.C. and into the seventh. Fragments of locally made skyphoi bearing these motifs have been identified among the finds of the Old Smyrna excavations. These pieces date from the end of the eighth century and into the first quarter of the seventh century B.C.[12] Elsewhere in the eastern Aegean, locally made skyphoi bearing fluent lines in their handle zones have been excavated at the Samian Heraion.[13] Skyphoi with groups of fluent and vertical lines in their handle zones that have been identified as Cycladic are also known.[14]

[8] Andreiomenou *op. cit.* (*supra* n. 7) 102-103, pl. 32, nos. 232-247, 250-253, pl. 33, nos. 255-264; *Lefkandi* I, 64-65 Group VI nos. 160-163; *Eretria* V, pl. 1, Vouni 1, and the "Kelchskyphoi" pl. 1 (FK 1329). 1, pl. 2, (FK 1329). 2, Eretria Mus. Inv. 4 and Tsaroumi 1. The prototypes of the dotted lozenge net are Corinthian, see *GGP* 193. Due to the number of her Group VI skyphoi found at Eretria, A. Andreiomenou, "Γεωμετρικὴ καὶ Ὑπογεωμετρικὴ κεραμεικὴ ἐξ Ἐρετρίας," *AE* 1975 (1976), 212-213 suggests that a local workshop produced this type, though the decorative scheme was more widely spread on Euboia. It will be noted that the number of rows in the net varies and that the lozenge nets on some skyphoi touch the horizontal lines above and below them while on other skyphoi they do not.

[9] *Lefkandi* I, 64 Group V nos. 157-159, pl. 48. Descoeudres (*Eretria* V, 44) points out that the rim profiles of skyphoi with high lips, like **5.2**, are difficult to distinguish from those of kantharoi; also see *Lefkandi* I, 66.

[10] *Ibid.* 67, pl. 52, no. 229 "Skyphos-krater"; Andreiomenou *op. cit.* (*supra* n. 7) pl. 15, no. 3 and pl. 19, no. 46.

[11] J. N. Coldstream, "Knossos 1951-61: Protogeometric and Geometric Pottery from the Town," *BSA* 67 (1972) 87 no. 23, fig. 7, pl. 23 and Benton *op. cit.* (*supra* n. 4) 276 no. 628, pl. 41.

[12] Özgünel, 24-25, figs. 31-34. For a Chian kotyle with groups of fluent lines in its handle zone from a context dating to *ca.* 660-630 B.C. see *Emporio*, 118 no. 159, pl. 30.

[13] R. Eilmann, "Frühe griechische Keramik im Samischen Heraion," *AM* 58 (1933) 66 *Beilage* 21, nos. 19 and 21, on the latter they flank a bird. At a number of sites on Rhodes kotylai have been found that are painted solid except for a panel in the handle zone which is decorated with a group of fluent lines flanked on either side by a group of vertical lines. However, the fluent lines on these kotylai are looser than those on **5.3.** For examples of these Rhodian kotylai see K. Friis Johansen, *Exochi. Ein Frührhodisches Gräberfeld* (Copenhagen 1958) figs. 41, 50, 72 and 101; C. Blinkenberg, *Lindos. Fouilles de l'acropole 1902-1914,* I. *Les petits objets* (Berlin 1931) pl. 38, 889.

[14] For an example found on Siphnos see J. K. Brock and G. Mackworth Young, "Excavations in Siphnos," *BSA* 44 (1949) 43 no. 15, pl. 14, 24.

The profiles of **5.4** and **5.5**, both skyphos fragments, are nearly identical, with gradually outcurving rims and widening bodies. Their preserved decorative schemes are also very similar. Skyphoi with horizontal lines on their rims and groups of vertical lines in their handle zones are not uncommon in the Greek world in the Late Geometric period and slightly later. It is more than likely that the vertical lines on these fragments formed "triglyphs" that flanked metopes. If so, it is impossible to say what decorative schemes appeared in the metopes since they no longer survive. The major difference between these two pieces is that the surface of **5.4** is covered by a thick slip whereas that of **5.5** bears a very thin one. Both contain copious amounts of mica and their fabrics fall within the range of that of the local pottery. **5.4** and **5.5** may possibly have been made at Torone or elsewhere in the Chalkidike. The closest parallels for these admittedly small pieces are to be found among the products of Cycladic and Euboian workshops, where skyphoi with a metopal decorative scheme are common in the Late Geometric and immediately succeeding period.[15] The groups of vertical lines on both **5.4** and **5.5** may have included more than those that are preserved: a noted characteristic of Late Geometric Euboian and Cycladic metopal skyphoi are their multiple line "triglyphs".[16] Such skyphoi, however, were not manufactured only in those two regions; skyphoi sharing very similar characteristics were also produced in East Greek centres, particularly on Samos.[17]

[15] For example: *Delion* 89-90, Gruppe a, pl. 14, 11-12, with dotted and chevron patterns (equated with *Délos* XV Group Ae); V. Lambrinoudakis, "Les ateliers orientalisants de Naxos: perspectives pour l'analyse archéométrique de la céramique," in *Les Cyclades. Matériaux pour une étude de géographie historique* (Paris 1983) 167, fig. 20, with birds (equated with *Délos* XV Group Bb, identified as Naxian); *Zagora* 2, 194 n. 3, inv. 1313, pl. 250 a-b, with chevrons between two rows of vertical short strokes (Late Geometric II Parian or local) and inv. 1325, pl. 251 a-b, with elongated blobs and stacks of Ms (identified as local, Late Geometric II); *Délos* XV, pl. 30, nos. 69-70 with birds, pl. 31, 61 with dot pattern, pl. 31, nos. 71-73 (Group Ae) with birds, pl. 39, 38-42 with birds and hourglass, pl. 40, nos. 43-46, 50 (Group Bb) with birds, hourglass and dotted net; *Lefkandi* I, 62-63, Skyphoi Group I nos. 103-117, pl. 46 decorated with birds, dotted snakes or multiple brush patterns.
Most of the above examples have at least one reserved line on the interior of their rims unlike **5.4** and **5.5**; for some exceptions see *Délos* XV, 62 no. 69, pl. 30, 80 no. 41, pl. 39 and no. 43, pl. 40. For comments on the difficulty of distinguishing between such skyphoi of Euboian and Naxian manufacture see E. Walter-Karydi, "Geometrische Keramik aus Naxos," *AA* 1972, 410.
Continuous groups of multiple vertical lines also appear on Late Geometric panel skyphoi from the Cyclades, in effect the handle zone consists of one series of vertical lines. For examples see *GGP*, 185, pl. 39f and 180, pl. 38a. For the profile of the two skyphoi fragments found at Torone, especially for that of **5.5**, see *Eretria* V, *Beilage* 7 (FK.420/422).2.

[16] *Lefkandi* I, 62.

[17] For Samian skyphoi see W. Technau, "Griechische Keramik im Samischen Heraion," *AM* 54 (1929) *Beilage* 5, nos. 4 (horizontal zig-zags), 5, 7-11 (chevrons and lozenge chain); *GGP*, 290 and 292, pl. 64a (with St. Andrew's cross) and pl. 64c (with horizontal zig-zags). For examples identified as products of a Milesian workshop see V.

5.6 has the same decorative features as **5.4** and **5.5**; it differs, however, from them in shape. Whereas **5.4** and **5.5** have gradually outcurving rims, the rim of **5.6** is far sharper and taller.[18]

5.7 is a bird-kotyle fragment that dates to the end of the eighth or to the beginning of the seventh century B.C. The body of the bird is not outlined, a feature that indicates that it is to be placed towards the end of the bird-kotyle sequence.[19] **5.8** is also a fragment of a late bird-kotyle. It bears a narrow band of zig-zags upon which the metopes and "triglyphs" are based. The zig-zag band is a feature of the bird-kotylai attributed by Coldstream to the second phase of his Rhodian Bird-kotyle Workshop.[20] However, bird-kotylai (and the later bird-bowls) were not only manufactured on Rhodes. Fragments attributed to other workshops in East Greece and beyond are well documented. Nonetheless, the fabric of the fragments presented here compares well with the description of Coldstream's "Rhodian" examples.[21]

The following four pieces are bird-bowl fragments, a drinking vessel type that developed from the bird-kotyle. The development of the bird-bowl from a form with

von Graeve, "Milet. Bericht über die Arbeiten im Südschnitten an der hellenistischen Stadtmauer, 1963," *IstMitt* 23-24 (1973-1974) 92-93, pl. 20, nos. 26-27, 29-30. For a similar Subgeometric Milesian example dated to the first half of the seventh century B.C. see V. von Graeve, "Milet. Vorlaüfiger Bericht über die Grabung im Südschnitt an der hellenistischen Stadtmauer, 1966," *IstMitt* 25 (1975) 50, no. 42, pl. 9. For skyphoi with groups of multiple vertical bars alternating with either groups of fluent lines or a single fluent line in their handle zones and horizontal lines on their rims from Old Smyrna, that have been identified as local, see Özgünel, 24-25, figs. 31-36; these have been dated to the first quarter of the seventh century B.C.

For Chian skyphoi with horizontal lines on their rims and groups of multiple vertical lines and metopes filled with various motifs see *Emporio*, 117-118 nos. 160-173. These Chian pieces were found in contexts that date from the end of the eighth century to *ca.* 660 B.C.

[18] It has been noted that the rims of Late Geometric skyphoi become taller and more vertical as the Late Geometric development progresses, see Andreiomenou *op. cit.* (*supra* n. 7) 87-88; *Lefkandi* I, 62; *Zagora* 2, 189. If this is so, **5.6** should belong to a very late stage in this development.

[19] For birds of similar date without outlined bodies see *Délos* XV, 98-99 nos. 6-9, pl. 46. For the position of pieces in the sequence of bird-kotylai whose birds do not have outlined bodies see *GGP*, 279.

[20] *Ibid.* 277 nos. 17-21. The zig-zag band is found on Chian bird-bowls from Period II levels (*ca.* 690-660 B.C.) at Emporio, see *Emporio*, 133-134 nos. 443-444, pl. 42. However, the profile of **5.8** suggests that it comes from a bird-kotyle, not a shallower bird-bowl.

[21] See *GGP*, 279 and *Eretria* VI, 9 no. 13 for descriptions of the fabric of Rhodian bird-bowls. Bird-bowls were not only produced on Rhodes; other suggested workshops include: Chios (*Emporio*, 132-134), Samos (*Samos* V, 40-41, 58), Miletos (von Graeve, *IstMitt* 23-24 [1973-1974] 86), and Euboia (*Eretria* V, 22-23 no. FK 367/582.1 *Beilage* 10 and 34 no. FK 1085.1, pl. 3, 49).

For bird-kotylai fragments found on Paros and Naxos which have been identified as Cycladic imitations of Rhodian prototypes see M. H. Bikakis, *Archaic and Classical Imported Pottery in the Museums of Paros and Naxos,* Ph.D. Thesis, University of Cincinnati, 1985 (University Microfilms International, Ann Arbor, Michigan 1989) 38-41 nos. 18-21, pl. 1, and Walter-Karydi *op. cit.* (*supra* n. 15) 411, 419 nos. 63-66, fig. 39, 63-66.

a deep profile to one with a shallower profile has been well documented. Its decorative scheme also changed through time.[22] Bird-bowls are a hallmark of the seventh century B.C. East Greek *koine*. As so little is preserved of these fragments they can only be placed in broad periods of the bird-bowl's development. On **5.9** the zig-zags of the bird-kotyle **5.8** have been replaced by simple diagonal strokes. This is a feature found on bird-bowls that date around the middle of the seventh century B.C.[23] **5.11** is later in date than **5.9** as it bears a solidly painted area beneath the metope frieze and not a band of strokes or dots.[24] **5.10** preserves a "triglyph" and in the metope to the left a small part of a bird, and in the one to the right part of an outlined cross-hatched lozenge. As these features are found on bird-bowls of different periods, it is not possible to date **5.10** solely on its decoration. The curve of its profile, however, is not dissimilar to that of the Chian bird-bowls found in Period IV (*ca.* 630-600 B.C.) levels at Emporio.[25] The base **5.12,** encircled with void rays, finds parallels among the bird-bowls dated to the last third of the seventh century B.C.[26] Elsewhere in the Chalkidike late bird-bowls have been found at Olynthos, Sane and Mende.[27]

The single largest group presented here is that of the "Ionian" cup fragments, **5.13** - **5.19**. The rim and upper body fragments, **5.13** and **5.14**, as well as the conical foot fragments, **5.18** and **5.19**, have a very good metallic-like glaze. The other rim fragments have a thinner paint that ranges from black to brown. **5.15** has a slightly

[22] For this development see M. Robertson, "The Excavations at Al Mina, Suedia IV. The Early Greek Vases," *JHS* 60 (1940) 14; GGP, 298-301; *Emporio*, 132-134; and *Eretria* VI, 12 n. 14. For the division of the types into "vogelschalen" and "vogelskyphoi" see F. Brommer, "Ein ostgriechischer Skyphos," in A. Cambitoglou (ed.), *Studies in Honour of Arthur Dale Trendall* (Sydney 1979) 39-45; for a recent list of findspots see *Alt-Ägina* II.1, 10.

[23] Coldstream, *GGP*, 239, places bird-bowls with a band of diagonal strokes below the metope frieze in his Group I (*ca.* 690-675 B.C.). However, suggestions have been made that lower Coldstream's dating of these bowls, see *Emporio*, 132-134, *Eretria* VI, 12, and C. W. Neeft, *Protocorinthian Subgeometric Aryballoi* (Amsterdam 1987) 313 n. 1129.

[24] **5.11** compares well with the description of some Chian bird-bowls found in Period IV levels (*ca.* 630-600 B.C.) at Emporio, see *Emporio*, 133. Boardman dates the introduction of bird-bowls that are solidly painted below the metope frieze zone to *ca.* 650 B.C., see *ibid.*, 133 n. 9. Coldstream, *GGP*, 299-300, places bowls with this feature in his Group II (nos. 7-16) which he dates *ca.* 675-640 B.C.

[25] *Emporio*, 134 no. 499, fig. 83, and especially no. 452, fig. 83, pl. 43.

[26] **5.12** finds a close parallel in *Délos* XV, 102 no. 30, pl. 48. While this bird-bowl is equipped with a different type of foot it is similar to **5.12** in that its floor also has a reserved circle at its centre. The undersurface of its foot bears one painted circle, while that of **5.12** has two circles and a central dot. Coldstream, *GGP*, 300, places bird-bowls with void rays late in his Group III, *ca.* 650-615 B.C.

[27] Olynthos: *Olynthus* XIII, 53 nos. 1 and 1A, pl. 12 and pl. 131, 7. Sane: Rhomiopoulou *op. cit.* (*supra* n. 2) fig. 6. Mende: K. Sismanides, "ΙΣΤ΄ Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων. Νομός Χαλκιδικής. Μένδη," *AD* 41 *Chron.* 1986 (1990) 149.

different profile from that of the others: a more angular shoulder and a more outturned rim. Despite these minor differences these fragments are best paralleled, in terms of both shape and decoration, by Hayes' Type IX "Rhodian" cups found at Tocra.[28]

Both **5.20** and **5.21** are fragments from the handle-zones of thin-walled Chian chalices. They compare well with chalices attributed to Hayes' Type III at Tocra and Boardman's Type E at Emporio, the handle-zones of which are directly above a low bowl below which is the high foot.[29] Parallels for these two fragments date from the first quarter of the sixth century to *ca.* 550-540 B.C.[30]

The skyphos fragments **5.22** and **5.23** bear concentric circles within metopes, a decorative scheme that is particularly well known on Subgeometric skyphoi from the Cyclades and the northern Aegean.[31] The Cycladic skyphoi differ amongst them-

[28] *Tocra* I, 113-114. These cups come from contexts which range in date from *ca.* 600 to 520/10 B.C., see *ibid.*, 113, 124 and *Tocra* II, 3. In Villard and Vallet's classification of "coupes ioniennes" Hayes' Type IX Rhodian cups mostly equate with Type B2; however, some find their best parallels; in terms of shape, with A2 cups, see F. Vallet and G. Villard, "Megara Hyblaea V: Lampes du VIIe siècle et chronologie des coupes ioniennes," *MEFRA* 67 (1955) 18-19, fig. 3 a-b (for A2 cups) and 21-22, fig. 5 (for B2 cups). On A2 and B2 cups see further E. Pierro, *Materiali del Museo Archeologico Nazionale di Tarquinia* VI. *Ceramica "ionica" non figurata e coppe attiche a figure nere* (Rome 1984) 30-57.

[29] For the development of the Chian chalice see J. M. Cook, "Old Smyrna: Ionic Black Figure and Other Sixth-Century Figured Wares," *BSA* 60 (1965) 138-141; *Tocra* I, 57-63; and *Emporio*, 102-103 and 156-161.

[30] D. Williams, "Aegina, Aphaia-Tempel V. The Pottery from Chios," *AA* 1983, 183, dates fragments whose bowls join the tall walls of the rim without a contour (as on **5.20** and **5.21**) more closely. He places them slightly later than the first quarter of the sixth century B.C. and "down perhaps to the middle of the second quarter of the sixth century."

[31] For Cycladic examples, often called "Parian" though possibly made in various centres, see *Delion*, 90-91, Gruppe b skyphoi; *Délos* X 193-194 nos. 665-668; *Délos* XV, 60-61 nos. 57 and 64, pls. 29 and 30; *Délos* XVII, pl. 68 Lin. 20; Lambrinoudakis *op. cit.* (*supra* n. 15) 166, figs. 14-15; V. K. Lambrinoudakis, "Νέα στοιχεῖα γιά τή γνώση τῆς Ναξιακῆς γεωμετρικῆς καὶ πρώϊμης ἀρχαϊκῆς κεραμεικῆς," *ASAtene* 61 (N.S. 45) (1983) 113, figs 10-11; Bikakis *op. cit.* (*supra* n. 21) 288-294 nos. 461-488, fig. 6, pl. 59. Coldstream, *GGP* 179, dates the skyphoi published in the Delos volumes as "post-geometric". The skyphos fragments illustrated in Lambrinoudakis *ASAtene* 61 (N.S. 45) (1983) 111 fig. 4 and *op.cit.* (*supra* n. 15) 166, fig. 10 are dated as Late Geometric. It is suggested that a skyphos fragment found at Zagora, Andros, which bears part of a set of concentric circles and a "triglyph" dates to the Late Geometric period, see *Zagora* 2, 193 (inv. 1224+1482), pl. 246a. For introductory studies on these skyphoi and their dating, see Bikakis, *op. cit.* (*supra* n. 21) 283-287, and M. Tiverios, "Από τη νησιώτικη κεραμεική παραγωγή των αρχαϊκών χρόνων στο βόρειοελλαδικό χώρο," *AEMTh* 3, 1989 (1992) 615-616. Bikakis, *op. cit.* (*supra* n. 21) 285, believes that these Cycladic skyphoi were produced "sometime between the last quarter of the seventh and the third quarter of the sixth century B.C." For a selection of kraters with the same decorative scheme see *Zagora* 2, 208 (inv. 429, "Parian", dated as Late Geometric II), pl.233a-b, and *Tarsus* III, 311 no. 1537, figs. 106 and 146 (unattributed, seventh century B.C.), 313 nos. 1545-1548, figs. 104 and 147 ("Cycladic"; for seventh century date see J. Boardman, "Tarsus, Al Mina and Greek Chronology," *JHS* 85 [1965] 9).

selves: some have concentric circles with a thick outer ring enclosing thinner ones within dense "triglyphs" formed by numerous vertical lines,[32] while the concentric circles of others are encircled with dots.[33] Neither of these schemes appears on the two fragments from Torone.[34]

In the northern Aegean, versions of these skyphoi were produced locally. The Parian colony of Thasos produced skyphoi with concentric circles with or without encircling dots.[35] Excavations at sites on the Thasian Peraia have also recovered fragments of such skyphoi from Kalamitsa (ancient Antisara ?),[36] Akontisma,[37] the Herakleitses cave,[38] and Kavala (ancient Neapolis).[39] Further to the west, at the site of Ennea Odoi, sherds of similar skyphoi have been found.[40] All these finds have been identified as Thasian or as the products of workshops of the Thasian Peraia.[41]

[32] Examples of such skyphoi have been attributed to Naxos: Lambrinoudakis *ASAtene* 61 (N.S. 45) (1983) 113, figs. 10-11; Lambrinoudakis *op. cit.* (*supra* n. 15) 166, figs. 14-15.

[33] For examples of skyphoi bearing this feature see: *Delion* pl. 15; *Tocra* I, pl. 54, nos. 918-919; Bikakis, *op. cit.* (*supra* n. 21) 288 nos. 461-463, pl. 59.

[34] Examples of these Cycladic Subgeometric skyphoi are distributed widely, including Tocra (see *supra* n. 33), Delos (*Délos* X, pl. 55, nos. 665-668; *Délos* XVII, pl. 37, nos. 16-18), Paros (*Delion* pl. 15; E. Buschor, "Kykladisches," *AM* 54 [1929] *Beilage* 51), Siphnos (Brock and Mackworth Young *op. cit.* [*supra* n. 14] pl. 15, no. 3). A skyphos with this decorative scheme has been found at Mersin (R.D. Barnett, "Explorations in Cilicia. The Neilson Expedition: Fifth Interim Report. Parts III and IV. Explorations at Mersin 1938-1939. The Greek Pottery," *AnnLiv* 26 (1939-1940) 104, no. 4, pl.79, 7).

[35] With dots: *Ét. Thas.* VII, pl. 20, nos. 9-21, pl. 21, nos. 21bis-29.Without dots: J. Maffre, "Travaux de l'École Française en 1972. Thasos III Sondage Yannopoulos," *BCH* 97 (1973) 573, fig. 64; *AR* 1985-1986, 81, fig. 120.

[36] G. Bakalakes, "Ἀνασκαφὴ ἐν Καλαμίτσᾳ Καβάλας," *PAE* 1935, 34-35, fig. 8, 1; G. Bakalakes, "Ἀνασκαφὴ ἐν Καλαμίτσᾳ Καβάλας," *PAE* 1936-1937, 75, fig. 3 (two top sherds); C. Koukoule-Chrysanthake, "Αρχαιότητες και Μνημεία Ανατολικής Μακεδονίας," *AD* 32 *Chr.* Β'2 1977 (1984) 251, pl. 149α; C. Koukoule-Chrysanthake, "Οἱ ἀποικίες τῆς Θάσου στὸ βόρειο Αἰγαῖο. Νεώτερα εὑρήματα," in *Ἡ Καβάλα καὶ ἡ περιοχή της, Α΄ Τοπικό Συμπόσιο. Πρακτικά* (Thessalonike 1980) 316, fig. 13.

[37] C. Koukoule, "Ἀρχαιότητες καὶ Μνημεῖα Ἀνατολικῆς Μακεδονίας," *AD* 22, *Chron.* Β΄ 2, 1967 (1969) 420, pl. 312α, nos. 1-3.

[38] G. Bakalakes, "Ἀνασκαφὴ ἐν Καβάλᾳ καὶ τοῖς πέριξ," *PAE* (1938) 88-89, fig. 9 (top and middle row); Koukoule *op. cit.* (*supra* n. 37) 422, pl. 312γ.

[39] D. I. Lazarides, "Ἀρχαιότητες καὶ Μνημεῖα Ἀνατολικῆς Μακεδονίας-Θράκης," *AD* 19 *Chron.* Β'3, 1964 (1966) 371.

[40] D. I. Lazarides, "Ἀρχαιότητες καὶ Μνημεῖα Ἀνατολικῆς Μακεδονίας," *AD* 20 *Chron.* Β'3, 1965 (1968) 444, pl. 513α. Fragments of skyphoi with this Subgeometric decoration have been found at Orphani, Kavala, see D. Grammenos, "Εφορεία Προϊστορικών καί Κλασικών Αρχαιοτήτων Καβάλας," *AD* 34 *Chr.*Β'2, 1979 (1987) 332-333, pl. 145β, and dated to the sixth century B.C. A skyphos decorated with concentric circles and "triglyphs" has also been found at Toumba, Thessalonike, see E. Andreou *et al.*, "Ανασκαφή στην Τούμπα της Θεσσαλονίκης 1989," *Egnatia* 2 (1990) 386, and fig. 5. It has been dated to the sixth century B.C. but has been attributed to a Parian, not a northern, workshop.

[41] A similar skyphos, but without concentric circles, has been found in a grave at Mikro Doukato, Thrace, and has

On Thasos and at sites on the northern coast of the Aegean the decorative scheme of concentric circles within metopes survived on skyphoi well into the sixth century B.C. The excavators of the kiln and pottery workshop at Phari on Thasos have recovered skyphoi decorated in this manner which they have dated to the *floruit* of the workshop in the fourth quarter of the sixth century B.C.[42]

In the Chalkidike, skyphoi decorated in the same manner as **5.22** and **5.23** have been found at Olynthos, and in contexts of the third quarter of the sixth century B.C. at the cemetery of Akanthos.[43] As the parallels for **5.22** and **5.23** in the northern Aegean mostly date to the sixth century B.C., it is likely that these two skyphos fragments fall into the same period.[44]

been compared with the Thasian skyphoi, see D. Triantaphyllos, "Αρχαιότητες καὶ Μνημεία Θράκης," *AD* 29 *Chron.* Β' 3, 1973-1974 (1980) 803 no. 6, pl.591γ; D. Triantaphyllos, "Αρχαϊκό νεκροταφεῖο στὴ Δυτική Θράκη," *ASAtene* 61 (N.S. 45) 1983, 188 and 200, Grave VI, figs. 25-26. Another skyphos with "triglyphs" and empty metopes has been found at Aul Uljap (Kurgan 15, Grave 5) in the North Caucasus, see A. M. Leskow *et al.*, *Gold und Kunsthandwerk von antiken Kuban. Neue archäologische Entdeckungen aus der Sowjetunion (Städtisches Reiß-Museum Mannheim, Archäologische Sammlungen, Sonderausstellung von 22 Januar bis 27 März 1989)* (Stuttgart 1989) 20, 123 no. 108, and A. Leskov, *Grabschätze der Adygeen. Neue Entdeckungen im Nordkaukasus* (Munich 1990) 38, 184 no. 140, fig. 41. It has been identified as "Rhodo-Ionian" and dated from the early to the middle sixth century B.C.

[42] For the dating of the Phari workshop and its pottery types see K. Peristere *et al.*, "Θάσος 1985. Πρώτη ανασκαφική έρευνα σ' ένα εργαστήρι αγγειοπλαστικής στη θέση 'Φάρι' Σκάλας Μαριών," *AAA* 18 (1985) 34-38, figs. 8 and 10 (where skyphoi bearing concentric circles in metopes are identified on the basis of shape either as imitations of Types B1 and B2 "Ionian" cups [see Vallet and Villard *op. cit.* {*supra* n. 28} 21-27, figs. 4-5] or as belonging to a Subgeometric type); K. Peristere *et al.*, "ΙΗ' Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων. Νομός Καβάλας. Φάρι Σκάλας," *AD* 40 *Chron.* 1985 (1990) 261; and *AR* 1985-1986, 49. K. Peristere *et al.*, "Θάσος 1986-1987. Δεύτερη και τρίτη ανασκαφική έρευνα του αρχαϊκού αγγειοπλαστείου στη θέση Σκάλας Μαριών," *AAA* 19 (1986) 78-80, date the main period of use of the workshop to the fourth quarter of the sixth century B.C. and into the first quarter of the fifth. The main period of activity of the workshop is dated around the fourth quarter of the sixth century B.C. in C. Koukoule-Chrysanthake, "ΙΗ' Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων. Νομός Καβάλας," *AD* 41 *Chron.* 1986 (1990) 173.

A similarly decorated skyphos has been found in a grave at Ialysos, Rhodes, which dates to the third quarter of the sixth century B.C., see L. Laurenzi, "Necropoli Ialisie (Scavi dell'anno 1934)," *ClRh* VIII (1936) 152, fig. 138 (second row, second from right).

[43] Olynthos: *Olynthus* V, 44, pl. 40, P79-P80. Akanthos: E. Yioure, "Αρχαιότητες καὶ Μνημεῖα Κεντρικῆς Μακεδονίας. Νεκροταφεῖον Ἱερισσοῦ (Ἀρχαίας Ἀκάνθου)," *AD* 26 *Chron.* Β' 2, 1971 (1975) 394, pl. 392β; A. Rhomiopoulou, "Αρχαιότητες καὶ Μνημεῖα Κεντρικῆς Μακεδονίας," *AD* 30 *Chron.* Β'2, 1975 (1980) 250, pl. 168β.

[44] A number of differences are to be noted between the Torone fragments. The concentric circles on **5.23** are very close to the rim of the skyphos, while those preserved on **5.22** are just above the solidly painted zone of the lower body. Furthermore, the concentric circles are very close to the "triglyph". These features distance **5.22** from most of the skyphoi found elsewhere, whose concentric circles are placed higher in their metopes. One of the skyphoi found at Olynthos (*Olynthus* V, 44, P80, pl. 40) also differs from most other examples in that it has a low ring foot.

5.24, a fragment of a deep cup, shares the concentric circle motif with the two preceding pieces; however its similarities do not extend further. Unlike the examples just discussed, **5.24** has horizontal handles under which a concentric circle is placed. These features distinguish it from **5.22**, **5.23** and their parallels.

Little can be said of **5.25**, a local krater fragment. Its most conspicuous feature is its chequer-board, a decorative motif very common in the Geometric repertoire. A fragment of a local large open vessel found on the surface of the Lekythos and believed to date to the Late Geometric period, provides another example of the motif in the region.[45] Elsewhere in the north a very late eighth or seventh century B.C. krater, believed to be of local coastal Macedonian manufacture, from Karabournaki, just west of the Chalkidike, also bears a chequer-board.[46] On Thasos the chequer-board seems to have continued well into the seventh century B.C. if not later.[47] The chequer-board motif above and alongside double-axes is seen on the fragment **5.31,** which is possibly part of the neck and shoulder of a large open vessel.[48]

The krater rim **5.26** may be placed together, on decorative grounds, with the two closed vessel fragments, **5.32** and **5.33**, as they all bear a series of concentric squares. Concentric squares are very rare in the repertoire of Geometric vase-painters. They are met in the Argive school in Late Geometric, but as filling ornaments and not in careful bands as on the pieces here discussed.[49] A Late Geometric terracotta horse from Skyros is decorated on either flank by two sets of concentric squares, each with a central horizontal hourglass.[50] This assemblage is more complicated than the con-

[45] A. Cambitoglou and J. K. Papadopoulos, "Excavations at Torone, 1989," *MeditArch* 4 (1992) 155, fig. 9.

[46] Vokotopoulou *op. cit.* (*supra* n. 2) pl. 9, 6.

[47] See *Ét. Thas.* VII, 44 no. 15, pl. 15. For seventh century chequer-board patterns see *Emporio*, 110 nos. 23-25, pl. 20. The chequer-board was also used in seventh century B.C. Boiotia: for an amphora with a chequer-board on its body dated to the first half of the seventh century B.C., see A. Andreiomenou, "Ἀνασκαφές στή Βοιωτία," *ASAtene* 59 (N.S. 43) 1981, 251, fig. 1.

[48] For examples of seventh century B.C. kraters with double-axes see *Emporio*, 112-113 no. 45, pl. 22, no. 60 pl. 23, no.98 pl. 27, no. 99 pl. 27; for oinochoai with double-axes: *Emporio* 142 nos. 547-548, no. 551 pl. 49, nos. 554-555 pl. 49, 144 no. 579 pl. 50. It must be noted, however, that on these oinochoai the double-axes are not on and just below the neck as on **5.31**, but on the widest part of the vase.

[49] P. Courbin, *La céramique géométrique de l'Argolide* (Paris 1966) pl. 7, C.928/B, Group GR2c, pl. 43, C.201/A, Group GR2c.

[50] A. Kalogeropoulou, "Δείγματα ἀγνώστου κεραμεικοῦ ἐργαστηρίου στη Σκύρο τοῦ 7ου π.Χ. αἰ.," *ASAtene* 61 (N.S. 45) 1983, 150-151, fig. 12. A number of sherds classified as LPG-SPG III have been found at Lefkandi which bear diminishing rectangles with various motifs at their centres, see V. R. d'A. Desborough and O. T. P. K. Dickinson, "The Protogeometric and Sub-Protogeometric Pottery," in *Lefkandi I*, 53, 374 n. 77, pl. 27, nos. 704, 708-709. It is not possible to associate these much earlier rectangles with the concentric squares discussed here.

centric squares found on **5.26**, **5.32** and **5.33**, or on vases of the Argive school. Closer parallels for the Torone pieces date to the seventh century B.C. and are Subgeometric or later in style. The skirt of a fragmentary terracotta statuette found on Siphnos is decorated down the centre of its front with two columns of concentric squares, on either side of which are animal figures. Brock dated this statuette to the beginning of the second quarter of the seventh century B.C. and believed it to be of Naxian manufacture.[51] The series of squares on it are similar to those on **5.33** (and probably **5.32**) in that a vertical column is divided into square compartments by horizontal bars; within these compartments are placed squares with a solid central square. However, the borders of the vertical column of **5.33** are composed of more vertical lines, and there are more concentric squares within the compartments than there are on the statuette from Siphnos.[52]

It is apparent that parallels for the concentric squares on **5.26**, **5.32** and **5.33** are not readily found, despite the similar decorative schemes of the vessels mentioned here. The motif of the concentric squares, while more common in the seventh century B.C. than in the Geometric period, is still rare. The fact that sherds from three different vessels bearing this motif have been found at Torone may indicate that concentric squares were favoured in a local Subgeometric school. This suggestion is supported by the observation that the fabric of these three pieces falls within the known range of the local ceramics; they may well have been made locally.[53]

The major feature of the preserved decoration of **5.27** is the filling ornament of a debased cruciform rosette, a motif that is common in seventh century B.C. Cycladic wares such as Melian,[54] and the Wild Goat style vessels of the late seventh and sixth centuries B.C.[55] Little can be said of this piece; its fabric suggests that it may be local.

[51]Brock and Mackworth Young *op. cit.* (*supra* n. 14) 19-20, pl. 7b and pl. 8, nos. 4-5.

[52] Other figured vessels also bear series of concentric squares. Two Aiolian Wild Goat style krater fragments from Burunçuk ("Larisa-on-the-Hermos") bear a band of concentric squares below their rims and above their figured zones (J. Boehlau and K. Schefold, *Larisa am Hermos III. Die Kleinfunde* [Berlin 1942] pl. 26, nos. 1 and 3), while a Melian amphora bears a similar band on its neck, although on it each concentric square has a solid centre (Ph. Zapheiropoulou, *Προβλήματα τῆς Μηλιακῆς Ἀγγειογραφίας* [Athens 1985] 21-22 no. 3 [39], fig. 25).

[53] The excavation of the eighth century B.C. kiln on Terrace V, however, did not provide any material that would point to a tradition from which Subgeometric squares could have developed. Nonetheless, the fabric of **5.26**, **5.32** and **5.33** falls within the range of the local ceramics. For a description of the fabric of the fragments found in the Geometric kiln see Papadopoulos *op. cit.* (*supra* n. 3).

[54] Zapheiropoulou *op.cit.* (*supra* n. 52) fig. 32 no. 38, fig. 50 no. 55, fig. 62 no 65, fig. 74 no. 77, fig. 88 no. 91, figs. 95-96 no. 97; *Tocra* I, 78 no. 906, pl. 53.

[55] For a few examples see *Delion*, 16, fig. 7k; P. Alexandrescu, *Histria* IV. *La céramique d'époque archaïque et classique VIIe—VIe s.* (Bucharest 1978) 37 no. 2, pl. 1; G. Ploug, *Sukas* II. *The Aegean. Corinthian and Eastern Greek Pottery and Terracottas* (Copenhagen 1973) 52-53 no. 344, 62 no. 219, pl. 12; *Tocra* I, 46 no 580, 41, pl. 28.

5.28 initially brings to mind the rosette bowls of East Greek manufacture of the very late seventh century B.C. and into the sixth. However the wall of this fragment is thicker than that of those bowls and, in all probability, it comes from a krater.

The fragment **5.29** preserves part of the grip and strap of a krater's stirrup handle. Kraters equipped with an early form of stirrup handle were manufactured in various Greek centres from the Late Geometric period onwards.[56] **5.29**, however, is probably Archaic in date. A seventh or early sixth century B.C. date has been suggested for a close parallel found on Thasos identified as a local product.[57] Both **5.29** and the Thasian handle fragment can be compared to the stirrup-handles of Laconian type kraters. This type of krater appeared ca. 650 B.C.[58] As so little is preserved of **5.29** it is difficult to ascribe it to a period. However, its grip and strap are joined at a slightly outward projecting angle, a feature found on all-black Lakonian stirrup kraters placed by Stibbe in the first quarter of the sixth century B.C.[59]

The closed vessel neck fragment **5.30** belongs to an SOS amphora, and is possibly Euboian. Some of its characteristics have been noted on SOS amphorae from Chalkis.[60] It bears a white slip on its exterior surface and its decorative scheme, which consists of a wheel within a circle, all flanked by a rope pattern, is more complex than the schemes normally met on the Attic SOS amphorae, but is well paralleled on Euboian examples. **5.30** does differ, however, from most of the amphorae

[56] Kraters with double-stirrup handles first appear in Attic Middle Geometric, see *GGP*, 17-19, 23, pl. 5f. Kraters with single stirrup-handles are common in the late eighth and seventh ceuturies B.C., for example: *Samos* V, pl. 62 no. 363, pl. 66 no. 377, pl. 70 nos. 382-384; Technau *op. cit.* (*supra* n. 17) 33, fig. 24, 2; K. Vierneisel and H. Walter, "Die Funde der Kampagnen 1958-59 im Heraion von Samos," *AM* 74 (1959) pl. 99, no. 1; G. Kopcke, "Heraion von Samos: Die Kampagnen 1961-1965 im Südtemenos (8.- 6. Jahrhundert)," *AM* 83 (1968) pl. 93, no. 3 and pl. 102, nos. 1-2; A. E. Furtwängler, "Heraion von Samos: Grabungen in Südtemenos 1977, I. Schicht und Baubefund, Keramik," *AM* 95 (1980) pl. 45, no. 2; A. Maiuri, "Jalisos e l'agro Jalisio," *ClRh* I (1928) 76, fig. 58 (bottom row left); *Emporio*, 105-115, especially 122 no. 49, pl. 23, 155 no. 35, fig. 66, 113 nos. 106-107, pl. 27.

[57] *Ét. Thas.* VII, 60 no. 48, pl. 23.

[58] C. M. Stibbe, *Laconian Mixing Bowls. A History of the Krater Lakonikos from the Seventh to the Fifth Century B.C. Laconian Black-Glazed Pottery,* Part 1 (Amsterdam 1989) 14. For the possible relationship between the Laconian stirrup krater and kraters with stirrup-handles of the Geometric period see *ibid.* 22-23.

[59] *Ibid.* 38.

[60] A. W. Johnston and R. E. Jones, "The SOS Amphora," *BSA* 73 (1978) 111-112; A. Johnston, "Il Dibattito," in *Gli Eubei in Occidente. Atti del diciottesimo Convegno di Studi sulla Magna Grecia, Taranto, 8-12 Ottobre 1978* (Taranto 1979) 147. For an unidentified fragment with concentric circles with four "spokes" and horizontal wavy lines on either side, found at Chalkis, see A. K. Choremis, " Ἀρχαιότητες καὶ Μνημεῖα Εὔβοιας," *AD* 26 *Chron.* B'1, 1971 (1974) 252, pl. 227α (middle, top row). For an SOS amphora fragment found at Pithekoussai and identified as Chalkidian see N. di Sandro, *Le anfore arcaiche dallo Scarico Gosetti, Pithecusa. Cahiers des amphores archaïques et classiques,* 2 (Naples 1988) 18, SG7, pl. 1 (=Johnston and Jones *op. cit.* 166 no. 10). For a fragment from the same site tentatively identified as Euboian see di Sandro *op. cit.* 18-19, SG8, pl. 1.

found at Chalkis in that its neck is not slipped on the interior.[61] Despite this observation, the decorative scheme of **5.30** is far closer to that of the SOS amphorae from Chalkis than those attributed to Attic workshops, and none of the white and red inclusions present in the clay of the Attic amphorae were noted in this piece.[62]

The bird on **5.34** is of interest; its boldly outlined body is not simply hatched but is decorated with a series of closely spaced loops. The general stance of the bird, with its head reverted, is not uncommon in the Archaic period. The fabric of this piece suggests that it may be of local manufacture.

5.35 is the shoulder fragment of a closed vessel. Its closest parallel is a Chian hydria found at the cemetery of Rizari, Chios, which is dated to the period covering the late seventh century B.C. and the early sixth.[63] The shoulder of this Chian vessel also bears concentric circles in metopes separated by "triglyphs".[64]

Both the fragments **5.36** and **5.37** are decorated in a black-figure technique. The former comes from an open vessel, the latter from a closed vessel. **5.36** bears some similarities to Corinthian figured vases, though its fabric (which is not unlike that of the local pottery) is not Corinthian.[65]

Two holes have been opened in **5.37** either to repair the broken vessel or to facilitate a use to which the fragment was put after the vessel was broken. In the centre of the fragment the lower parts of a figure wearing a long garment are preserved; the object to the left may be a folding stool; that to the right is unidentifiable. The origin of this piece is uncertain.[66]

Although the fragments examined in this chapter are not many, they provide us

[61] Johnston and Jones, *op. cit.* (*supra* n. 60) 112; R. E. Jones, *Greek and Cypriot Pottery. A Review of Scientific Studies* (1986) 707.

[62] *Ibid.* 708. On a number of SOS amphorae found at Pithekoussai that have some Chalkidian features, but not all, see Johnston and Jones, *op. cit.* (*supra* n. 60) 128 and Jones *op. cit.* (*supra* n. 61) 711. For a listing of other SOS amphora fragments found at sites in the northern Aegean, see Johnston and Jones, *op. cit.* (*supra* n. 60) 112-113.

[63] A. A. Lemos, "Archaic Chian Pottery on Chios," in J. Boardman and C. E. Vaphopoulou-Richardson (eds.), *Chios. A Conference at the Homereion in Chios, 1984* (Oxford 1986) 237, fig. 8; *Emporio*, 137, pl. 44 Y.
For a Cycladic Group C hydria with concentric circles between "triglyphs" on its lower body see *Délos* XVII, 27 no. 8, pl. 18.

[64]There are, however, differences between the decoration on **5.35** and that on the Chian hydria. Firstly, the set of concentric circles on **5.35** has a central dot (on the compass point) and comprises three circles; on the Chian hydria there are four circles to each set of concentric circles and no central dot. Furthermore, the "triglyph" on **5.35** consists of three vertical lines; the "triglyphs" on the Chian hydria have four lines.

[65] For a similar circular cruciform incised rosette see, Payne, *Necrocorinthia* 157.

[66] For the lower part of a figure dressed in a long garment like that worn by the figure on **5.37**, see *Ét. Thas.* VII, 60 no. 47, pl. 23. The incision on the Thasian piece is far more precise.

with an impression of Torone's contacts in the late eighth, seventh and sixth centuries B.C. The fragment **5.1** probably dates to the earliest period, as does the Euboian sherd **5.2**. These two pieces are followed chronologically by **5.30** which probably also comes from Euboia. East Greek imports are relatively numerous in the seventh century B.C., and include the bird-kotylai and bird-bowls **5.7** - **5.12**. Torone's East Greek connections continued in the sixth century as is evidenced by the "Ionian" cups, **5.13** - **5.19**; and the Chian chalice fragments **5.20** and **5.21**. **5.22** and **5.23** show that skyphoi of a type common on Thasos and its Peraia, and ultimately derived from the Cyclades, reached Torone as they did other Chalkidic sites. The fragments **5.4** - **5.6**, **5.25** and **5.34,** which are possibly local, indicate that the pottery of the Chalkidike shared some common features with that of other parts of the Greek world, especially Euboia, the Cyclades and East Greece. **5.26, 5.32** and **5.33**, however, suggest that it may be possible in the future to recognise certain characteristics as indicative of local pottery workshops of the early Archaic period.

POSTSCRIPT

Since the submission of the above text a number of preliminary reports of excavations in the Chalkidike (and elsewhere in the northern Aegean) have appeared which have increased present knowledge of the pottery types current in the region in the Late Geometric and Archaic periods. These reports may be found in the recent volumes of *AD, Egnatia* and *AEMTh*, and for Torone in *MeditArch*. Owing to the strictures of space I concentrate here on the relevant finds from the Chalkidike.

For brief accounts of Subgeometric pottery with painted decoration broadly comparable to that of **5.2-5.6** see: *Αρχαία Μακεδονία από τους Μυκηναϊκούς χρόνους ως τον Μέγα Αλέξανδρο. Μουσείο Κυκλαδικής Τέχνης. 8 Ιανουαρίου-30 Απριλίου 1992, no.* 237 (Mende); Vokotopoulou, I., "Αρχαϊκό ιερό στη Σάνη Χαλκιδικής" in *Αρχαία Μακεδονία* V,1. *Ανακοινώσεις κατά το πέμπτο διεθνές συμπόσιο, Θεσσαλονίκη, 10-15 Οκτωβρίου 1989* (Thessalonike 1993) 193-195; *id.*, "Μένδη-Ποσείδι 1990," *AEMTh* 4 1990 (1993) 399; *id.*, "Ποσείδι 1993" *AEMTh* 7 1993 (1997) 401. Note that pottery decorated in different styles that may be contemporary with the earliest pieces listed here have now been found at Poseidi (Vokotopoulou, I., "Ποσείδι 1992" *AEMTh* 6 1992 [1995], 445; *id.*, "Μένδη-Ποσείδι 1990" *AEMTh* 4 1990 [1993], 400). Although much remains to be studied, such finds may indicate the existence of a range of different styles current in the Chalkidike towards the end of the conventional Late Geometric period if the fragments with close southern Aegean links that are cautiously suggested here to be of local manufacture are in fact so (on local production see further: Cambitoglou, A. and Papadopoulos, J.K., "Excavations at Torone, 1990" *Meditarch* 4 [1994] 142).

It has now been reported that bird bowls have been excavated at: Sane on Pallene (Vokotopoulou, I., *Αρχαία Μακεδονία* V,1, 195); Potidaia (Kousoulakou, N., "Ανασκαφή Ποτίδαιας 1993," *AEMTh* 7 1993 [1997] 458); Mt. Itamos, Sithonia (Vokotopoulou, I. *et al.*, "Παρθενώνας Χαλκιδικής: ιερό σε κορυφή του Ιτάμου," *AEMTh* 4 1990 [1993] 428 fig.14); and Akanthos (Trakosopoulou-Salakidou, E., "Αρχαία Άκανθος 1986-1996" *AEMTh* 10 A 1996 [1997] 305).

Chian chalice fragments, some possibly of northern Aegean manufacture (see further Lemos, A.A., *Archaic Pottery of Chios. The Decorated Styles* [Oxford 1991] 208-221; Coulié, A., "Το Θασιακό εργαστήριο μελανόμορφων αγγείων· γιατί θασιακό;" *AEMTh* 10B 1996 [1997] 825-834), have been reported from Akanthos (Trakosopoulou-Salakidou, E., "Αρχαία Άκανθος 1986-1996,"

AEMTh 10A 1996 [1997] 305), and from a sanctuary on Mt. Itamos on Sithonia (Vokotopoulou, I. *et al.*, "Παρθενώνας Χαλκιδικής, ιερό σε κορυφή του Ιτάμου," *AEMTh* 4 1990 [1993] 428 fig.17).

Ionian cups have been excavated at a number of Chalkidic sites, including: Mt. Itamos (*ibid.*, fig.18); Poseidi (Vokotopoulou, I., "Μένδη-Ποσείδι 1990," *AEMTh* 4 1990 [1993] 403 fig.16); and ancient Stageira (Sismanides, K., "Αρχαία Στάγειρα 1990-1996" *AEMTh* 10A 1996 [1997] fig.14).

Numerous discoveries of skyphoi and "skyphoi kraters" with concentric circles in metopes (**5.22** and **5.23**) have been reported in the Chalkidike and the wider northern Aegean region. These discoveries largely reinforce their previously known distribution pattern, though ancient Stageira may be added as a newly reported find-spot in the Chalkidike (Sismanides, S.K., "Αρχαία Στάγειρα 1990-1996," *AEMTh* 10A 1996 (1997) fig.14 [left sherd]). To the east of the Chalkidike examples have been excavated at Phagres (Nikolaïdou-Patera, M., "Ανασκαφικά δεδομένα από τις αρχαίες πόλεις Τράγιλο και Φάγρητα," *AEMTh* 4 1990 [1993] 518-519 fig.17) and Oisyme (Koukoule-Chrysanthake, Ch. and Papanikolaou, A., "Ανασκαφή στην αρχαία Οισύμη, 1988-1990" *ibid.* 492 fig.20). For finds with this type of decoration from the Black Sea site of Kerkinitis: Kutaisov, V.Y., *Antichiyi Gorod Kerkinitida VI-II vv.do n.e.* (Kiev 1990) 36-39 figs.10 and 11,2-3.

For the discussion on, and photographs of, an SOS amphora from Mende, and the report of the excavation of two others, see Vokotopoulou, I. and Christides, A.-P., "A Cypriot Graffito on an SOS Amphora from Mende, Chalcidice" *Kadmos* 34 (1995) 5-12. Elsewhere in the northern Aegean an SOS amphora has been illustrated from Samothrace: Karadema, Ch. and Koutroumanes, M., "Αρχαιολογικές εργασίες Σαμοθράκης 1992" *AEMTh* 6 1992 [1995] 679 fig.10 (with a reference to an SOS amphora from Abdera). For the SOS amphorae excavated at Pithekoussai see now Buchner, G. and Ridgway, D., *Pithekoussai I. La necropoli: Tombe 1-723 scavate del 1952 al 1961* (Rome 1993).

Generally on the question of Late Geometric drinking vessels with decorative patterns which are similar to the little preserved on **5.2-5.6** see Kearsley, R.A., "The Greek Geometric Wares from Al Mina Levels 10-8 and Associated Pottery" *MeditArch* 8 (1995) 7-81. For the decorative scheme of the chevron zone on **5.1** see: *id.*, "A Pendent Semicircle Skyphos of the Geometric Period" in Cambitoglou, A. and Robinson, E.G.D. (eds.), *Classical Art in the Nicholson Museum, Sydney* (Mainz 1995) 17-28; and the examples of locally-made kotylai with Aetos 666 type decoration from Pithekoussai (Buchner and Ridgway, *op.cit.*, 204 no.161,3, pl.63, 470 no.469,2, pl.138, 702-703 no.Sp 4/4 pls.245,4 and CCIX). Note that on the last vessel, a locally-made skyphos, the chevrons face the same direction as they do on **5.1** (as it is positioned here); on most chevron skyphoi and Aetos 666 kotylai they face the opposite direction (those on *ibid.* 490,2, pls.145 and CLXVII are rather ambivalent).

For **5.10** and **5.11** see the parallels of the second half of the seventh century from Ephesos: Kerschner, M., "Ein stratifizierter Opferkomplex des 7. Jh.s v.Chr. aus dem Artemision von Ephesos" *ÖJh* 66 *Beiblatt* (1997) 84-226.

For **5.13-5.19** see now Utili, F., "Früh- und hocharchaische bemalte Schalen" in Serdaroglu, Ü. and Stupperich, R. (eds.), *Ausgrabungen in Assos 1990* (*Asia Minor Studien* 5), (Bonn 1992) 38-40, 52-54 nos.29-32 (Assos Group b, beginning of the sixth century) and *cf.* Iren, K., "Archaische ostgriechische Keramik 1991" in Serdaroglu, Ü. and Stupperich, R. (eds.), *Ausgrabungen in Assos 1991* (*Asia Minor Studien* 10) (Bonn 1993) 48 no.8, pl.146 fig.2 (p.43 first half of the sixth century). Generally for a preliminary study on the fabrics on bird bowls found at Miletos: Kerschner, M. *et al.*, "Neutron Activation Analysis of Bird Bowls and Related Archaic Ceramics from Miletos" *Archaeometry* 35 (1993) 197-210. **5.7-5.12** compare well to Kerschner's "Standard fabric", *ibid.* 199-201.

5.29 finds a good parallel in a stirrup-handled krater excavated at Stageira and which, its excavator suggests, may be of local manufacture: Sismanides, K., "Αρχαία Στάγειρα 1993" *AEMTh* 7 1993 (1997) 429 fig.2.

CATALOGUE

5.1 (76.296) Fig. 51; Pl. 51
Isthmus TR2 tr1 (1).
Wall fragment.
P.H. 0.016; P.W. 0.027; Th. (max.) 0.004.
Clay light red 10 R 6/8 with grey core; gold and silver mica.
Exterior: on a reddish yellow slip 5 YR 7/6, three vertical lines to right; to left, portion of chevron pattern above two horizontal lines.
Interior: painted.
For similar decoration in the handle zone of a Corinthian kotyle *cf. BSA* 48 (1953) 281 no.666, pl.42; for similar decoration on a Euboian kotyle *cf. Eretria* V, pl.1, Eretria Mus. Inv. 2.
Kotyle (?).
Second half of the eighth century B.C. (?)

5.2 (78.157) Fig. 51; Pl. 51
Isthmus TR1 tr1 (4a).
Rim fragment.
P.H. 0.021; P.W. 0.039; Th. 0.005.
Clay pink 5 YR 7/4.
Exterior: slipped white 2.5 YR 8/2; two horizontal bands above, lozenge net, in reddish brown paint 5 YR 4/4.
Interior: painted black including edge of lip, top of rim white-slipped with central painted horizontal line in red.
Cf. Lefkandi I pl.48, 157-159.
Skyphos with vertical lip.
Late eighth century B.C.
Euboian.

5.3 (76.583) Fig. 51; Pl. 51
Isthmus TR1 tr2 (3).
Wall fragment, convex.
P.H. 0.022; P.W. 0.025; Th. 0.004.
Clay reddish yellow 5 YR 7/6, grey core; gold mica.
Exterior: slipped reddish yellow; fluent vertical zig-zags above a horizontal line.
Interior: painted black.
Cf. Lefkandi I, pl. 52, 229; *AE* 1981, pl.15, 3 and pl.19, 46.
Skyphos or kotyle.
Late eighth-early seventh century B.C.

5.4 (78.1316) Fig. 51; Pl. 51
Lekythos TR2 (5)
Rim fragment, outturned; wall slightly convex.
P.H. 0.035; P.W. 0.038; Th. (max.) 0.005; Rim D. (est.) 0.17.
Clay light red 2.5 YR 6/8 on exterior; grey on interior; gold mica.
Exterior: off-white slip; four horizontal lines in brown paint at rim; below, three vertical lines.
Interior: painted brown.
Cf. Délos XV, pl.39, 38; *Samos* V, pl.40, 223; *Lefkandi* I, pl.46, 117.
Skyphos.
Late eighth (?) - early seventh century B.C.

5.5 (75.283) Fig. 51; Pl. 51
Structure 1 TR1 tr1 (8).
Rim fragment, outturned, also preserving portion of wall and horizontal handle.
P.H. 0.038; P.W. 0.038; Th. (max.) 0.003.
Clay reddish yellow 5 YR 7/6 on exterior; grey on interior 2.5 YR 6/1; gold mica.
Exterior: at rim, three painted horizontal lines, red 2.5 YR 5/8, on reserved ground; handle zone, three vertical lines; handle painted.
Interior: dark grey; rim painted red.
Cf. Délos XV, pl.31, 72-73; *Delion*, pl.14, 11-22.
Skyphos.
Late eighth (?)-early seventh century B.C.

5.6 (78.3257) Fig. 51; Pl. 51
Lower City TR3 SE.
Outturned rim and wall fragment.
P.H. 0.028; D. (est.) 0.18.
Clay very pale brown 10 YR 7/4, gold and silver mica.
Exterior: on a very pale brown 10 YR 7/4 slip two horizontal lines at rim; below, to left four vertical lines preserved, all in reddish yellow 5 YR 6/6 paint.
Interior: painted solid except for reserved band below lip.

Skyphos.
Early seventh century B.C.

5.7 (78.66) Fig. 51; Pl. 51
Isthmus TR1 tr1 (4).
Three joining fragments, slightly convex.
P.H. 0.038; P.W. 0.032; Th. 0.003.
Clay light red 2.5 YR 6/6.
Exterior: pink 7.5 YR 7/4; to left in red 2.5 YR 5/6, bird facing right, above which, horizontal zig-zag; to right, portion of cross-hatched lozenge with double outline between three vertical lines.
Interior: painted solid.
For the zig-zag above the bird *cf. Délos* XV, pl.47, 10 and 14; *Samos* V, pl.42, 242.
East Greek bird-kotyle.
Late eighth-early seventh century B.C.

5.8 (78.572) Fig. 51
Isthmus TR1 tr3 (1).
Wall fragment, convex.
P.H. 0.024; P.W. 0.039; Th. 0.004.
Clay pinkish grey 7.5 YR 7/2.
Exterior: horizontal zig-zag between two horizontal lines above and a third below; above, portion of lozenge; to right lower part of vertical line in dilute paint.
Interior: painted black.
Cf. Délos XV, pl.46, 6-9; *IstMitt* 23-24 (1973-1974) pl.23, 53 and 55; *IstMitt* 25 (1975) pl.10, 48; *Samos* V, pl.43, 259 and pl.44, 268; Özgünel, pl.III, figs.14-15; *Alt-Ägina* II, 1 pl.1, 3-4; *Emporio,* pl.42, 443-444.
East Greek bird-kotyle.
Late eighth-early seventh century B.C.

5.9 (75.743) Fig. 51
Lekythos surface.
Wall fragment, slightly convex.
P.H. 0.037; P.W. 0.023; Th. 0.003.
Clay reddish yellow 5 YR 6/6.
Exterior: lower wall painted solid; reserved panel with a trace of a vertical line at right and a horizontal row of diagonal strokes between two sets of parallel lines. Above the topmost a diagonal line (outline of lozenge?).
Interior: painted black.
Cf. IstMitt 23-24 (1973-1974) pl.23, 54; *Tarsus* III, fig.99, 1448 (*JHS* 85 [1965] 6, fig.1, 1448); *Emporio*, pl.42, 446-447; *Eretria* VI, pl.1, 34.
East Greek bird-bowl.
Mid-seventh century B.C.

5.10 (78.1542) Fig. 51; Pl. 51
Isthmus TR3 tr2 (3) B23.
Wall fragment, slightly convex.
P.H. 0.021; P.W. 0.038; Th. (max.) 0.003
Clay light reddish brown 5 YR 6/3.
Exterior: pink 7.5 YR 7/4; in dark brown paint 10 YR 3/3, cross-hatched lozenge with double outline, to left of which three vertical lines; to left, traces of a bird at break.
Interior: painted black.
Cf. Emporio, 134 fig. 83 nos. 449 and 452.
East Greek bird-bowl.
Ca. 630-600 B.C. (?).

5.11 (78.1501) Fig. 51; Pl. 51
Isthmus TR3 tr2 ext.2 (2).
Wall fragment, slightly convex.
P.H. 0.031; P.W. 0.036; Th. (max.) 0.004.
Clay reddish yellow 5 YR 6/6.
Exterior: pink 7.5 YR 7/4; lower part of bowl painted solid; two horizontal lines above; to left, lower tip of lozenge; to right, tip of bird's tail; in between three vertical lines.
Interior: painted lustrous black.
Cf. BSA 44 (1949) pl.15, 26; *Alt-Ägina* II, 1 pl.1, 33.
East Greek bird-bowl.
Second half of the seventh century B.C.

5.12 (76.664) Fig. 51
Isthmus TR2 tr1 (3a).
Two joining fragments preserving entire base and portion of wall.
P.H. 0.12; D. 0.030; Th.(wall) 0.003.
Clay reddish yellow 5 YR 7/6.
Exterior: on lower part of wall, portions of void rays; line at junction of foot and wall.
Underside: two concentric bands and central dot.
Interior: painted dark brown; reserved circle in centre.

Cf. Délos XV, pl.48, 30; *Emporio,* pl. 43, 452; *CVA* Germany 39, Würzburg 1, pl.21, 1-2.
East Greek bird-bowl.
Ca. 630-600 B.C.

5.13 (78.1740) Fig. 52; Pl. 52
Lower City TR1 N (3).
Flaring rim and wall fragment.
P.H. 0.051; D. (est.) 0.17.
Clay light red 2.5 YR 6/6 to dark grey 5 YR 4/1.
Exterior: at lip and upper wall black painted band, below both of which is a reserved zone slipped yellowish red 5 YR 5/6; below, painted solid to break.
Interior: reserved band below edge of lip; painted solid.
Cf. Tocra I, 120 nos. 1219 and 1222, fig.56.
"Ionian" cup.
Sixth century B.C.

5.14 (78.2428) Fig. 52; Pl. 52
Lower City TR3 (3) SW.
Flaring rim and wall fragment.
P.H. 0.043; D.(est.) 0.16.
Clay reddish yellow 5 YR 7/6.
Exterior: at lip and upper wall band in yellowish red 5 YR 5/6 to black paint below both of which is a reserved zone, slipped reddish yellow 5 YR 6/6; below, painted solid to break.
Interior: lip reserved, painted solid.
Cf. as **5.13**.
"Ionian" cup.
Sixth century B.C.

5.15 (78.3098) Fig. 52; Pl. 52
Lower City TR1 Baulk 3.
Outturned rim and wall fragment.
P.H. 0.023; D.(est.) 0.10.
Clay reddish yellow 5 YR 7/6.
Exterior: painted band in red 2.5 YR 5/8 to black below sharp offset between rim and body; above and below reserved ground, slipped reddish yellow 5 YR 6/6.
Interior: painted band at lip; below, reserved zone under which paint solid to break.
Cf. as **5.13**.
"Ionian" cup.
Sixth century B.C.

5.16 (78.2582) Fig. 52; Pl. 52
Isthmus TR1 tr3 (3).
Flaring rim and wall fragment.
P.H. 0.026; D.(est.) 0.18.
Clay reddish yellow 5 YR 7/6.
Exterior: at lip and upper wall band in red 2.5 YR 5/8 to black paint, below both of which reserved zone, slipped reddish yellow 5 YR 6/6.
Interior: reserved band at lip; below, broad painted band above reserved zone.
Cf. as **5.13**.
"Ionian" cup.
Sixth century B.C.

5.17 (78.3252) Fig. 52
Lower City TR 3 SE.
Handle and body fragment, preserving lower portion of rim.
P.H. 0.057; M.P.H. 0.03.
Clay reddish yellow 5 YR 7/6.
Exterior (not indicated in drawing): handle painted solid from red 2.5 YR 5/8 to black, handle zone reserved, slipped reddish yellow 5 YR 6/6; above, painted band. Reserved to upper break; painted solid to lower break.
Interior: painted solid.
Cf. as **5.13**.
"Ionian" cup.
Sixth century B.C.

5.18 (78.3251) Fig. 52; Pl. 52
Lower City TR3 SE.
Low conical foot with broad resting surface, preserving beginning of flaring lower wall.
P.H. 0.021; D. 0.055.
Clay reddish yellow 5 YR 7/6.
Exterior: painted solid black.
Underside: reserved.
Cf. as **5.13**.
"Ionian" cup.
Sixth century B.C.

5.19 (76.832) Fig. 52; Pl. 52
Gate Area TR4 Ext. 1 (4).

Low conical foot, preserving part of floor, shallow groove at junction of foot and wall.
P.H. 0.017; D.(est.) 0.07.
Clay reddish yellow 5 YR 7/6.
Interior: painted solid black.
Exterior: painted solid black.
Underside: reserved.
Cf. as **5.13**.
"Ionian" cup.
Sixth century B.C.

5.20 (75.03) Fig. 52; Pl. 52
Lekythos surface .
Wall fragment, convex.
P.H. 0.016; P.W. 0.031; Th. 0.003.
Clay reddish yellow 7.5 YR 6/6.
Exterior: slipped very pale brown 10 YR 8/3; at left, two thin vertical lines in brownish yellow paint 10 YR 6/8; above, horizontal line; below, double horizontal saw-pattern.
Interior: painted black, on which, two horizontal lines in white paint.
Cf. JHS 44 (1924) 209, fig.39; *BSA* 60 (1965) pl. 42, 10 and pl.44, 10; *Emporio,* pl. 59, 743; *Tocra* I, pl. 41, 780 and 782; *Tocra* II, pl.14, 781; *AA* 1983, 166 no. 28, fig. 8; *Cyrene* II, pl. 29, 492.
Chian chalice.
First half of the sixth century B.C.

5.21 (75.274) Fig. 52
Structure 1 TR1 tr1 (7).
Body fragment preserving handle root.
P.H. 0.035; P.W. (max.) 0.047.
Clay brown 10 YR 5/3.
Exterior: traces of thick pinkish white 7.5 YR 8/2 slip; on handle root black paint (not indicated in drawing).
Interior: traces of thick slip and black paint.
Cf. AA 1983, 168, fig.9, 31-33.
Chian chalice.
First half of the sixth century B.C.

5.22 (75.301) Fig. 52
Structure 1 TR1 tr1 (7).
Two joining wall fragments, convex.
P.H. 0.031; P.W. 0.062; Th. 0.003.
Clay pink 5 YR 7/4; fine silver and gold mica.
Exterior: above solid painted area four vertical lines and, to right, portion of two concentric circles in dark reddish brown 5 YR 3/2.
Interior: painted dilute black.
Cf. the following skyphoi and skyphos fragments found in the northern Aegean: *Olynthus* V, pl.40, P79; *Ét.Thas.* VII, pl. 20, 9-21 and pl. 21, 21bis-29; *AD* 22 *Chron.* B′ 2, 1967 (1969) pl. 312α; *AD* 26 *Chron.* B′ 2, 1971 (1975) pl.392α; *PAE* (1935) 34, fig. 8; PAE (1936-1937) 75 fig.3; *PAE* (1938) 88-89, fig.9, two fragments of top row and middle fragment of right column; *AAA* 18 (1985) 36, figs. 8 and 10.
Skyphos.
Seventh or sixth century B.C.

5.23 (75.627) Fig. 52
Structure 1 TR1 tr1/3 Baulk (4).
Two joining wall fragments.
P.H. 0.025; P.W. 0.045; Th. 0.003.
Clay pink 7.5 YR 7/4; fine silver and gold mica.
Exterior: slipped very pale brown 10 YR 7/4; at left, four vertical lines; at right, portion of two concentric circles, in dark brown paint.
Interior: painted, dilute brown paint 7.5 YR 5/4.
Cf. **5.22**.
Skyphos.
Seventh or sixth century B.C.

5.24 (78.1733) Fig. 52; Pl. 52
Lower City TR3 (3) N lower.
Wall fragment incorporating fragment of horizontal handle.
P.H. (incl. handle) 0.082; P.W. 0.054; Th. 0.005; D. (handle) 0.015.
Clay red 2.5 YR 5/6 with grey core. Gold mica.
Exterior: slipped very pale brown 10 YR 7/4 with reserved area on underside of handle; beneath handle, three concentric circles in black paint around a central dot (compass point); below, solid paint to break, handle black on upper surface.
Interior: painted black.
Cf. **5.22.**
Seventh century B.C. (?).

5.25 (75.249) Fig. 53; Pl. 52
Gate Area TR1 tr2 (2).
Wall fragment, slightly convex.
P.H. 0.050; P.W. 0.049; Th. 0.006.
Clay light red 2.5 YR 6/8; gold and silver mica.
Exterior: on slipped ground, chequer-board pattern above a solidly painted zone; in red 2.5 YR 5/6.
Interior: painted red.
Cf. for chequer-board *Emporio,* pl. 20, 23-25, pl. 29, 142; *Lefkandi* I, pl. 44, 64.
Krater.
Late eighth(?)-early seventh century B.C.

5.26 (75.89) Fig. 53; Pl. 53
Structure 1 TR1 tr1 (5).
Rim fragment, slightly convex, tapering rim of large open vessel.
P.H. 0.036; P.W. 0.04; Th. (max.) 0.009.
Clay pink 7.5 YR 7/4 with red core, exterior slipped; dark reddish brown paint 5 YR 3/2; much gold and silver mica.
Exterior: concentric squares(?) bounded at right by vertical lines.
Interior: painted.
Krater.
First half of the seventh century B.C.
Local(?).

5.27 (76.539) Fig. 53
Isthmus TR1 tr2 (2).
Wall fragment, slightly convex, of large open vessel.
P.H. 0.036; P.W. 0.035; Th. (max.) 0.006.
Clay pink 7.5 YR 7/4, with gold mica.
Exterior: on reserved ground, debased cruciform rosette above a horizontal band; below, painted solid to break; to left, two thin vertical lines and a further trace of painted decoration in black paint.
Interior: painted black.
For the cruciform rosette cf.: *JHS* 60 (1940) 15, fig.7k; *Délos* XVII, pl.12 a-b, pl.14 a; *Tocra* I, pl. 53, 906; *Tocra* II, pl.19, two fragments third row from top; *Samos* V, pl. 87, 492 and pl. 88, 492.
Seventh century B.C.

5.28 (76.353) Fig. 53; Pl. 53
Isthmus TR2 tr1 (2).
Rim fragment of large open vessel.
P.H. 0.025; P.W. 0.029; Th. (max.) 0.006.
Clay reddish yellow 5 YR 7/6; gold mica on interior and exterior surfaces.
Exterior: top of rim painted dark brown; below which, dotted rosette; trace of brown paint to bottom right and below rosette.
Interior: painted solid except for reserved band at rim.
Late seventh century B.C. (?).

5.29 (75.626) Pl. 53
Structure 1 TR1 tr1/3 Baulk (4).
Stirrup-handle fragment of krater.
P.H. 0.078; P.W. 0.089; Th. 0.011.
Clay light red 2.5 YR 6/6.
Painted black.
Cf. Ét.Thas. VII, pl. 23, 48.
First quarter of the sixth century B.C. (?).

5.30 (78.791) Fig. 53; Pl. 53
Isthmus TR2 tr2 (1).
Three joining fragments, from the neck of an amphora.
P.H. 0.083; P.W. 0.095; Th. 0.009.
Clay light red 2.5 YR 6/6.
Exterior: on a cream slip, in black paint, two horizontal bands at top (?); below, wheel with three concentric circles with "spokes" between inner circles; compass point in centre; to left, portion of a rope pattern.
Interior: unslipped.
Cf. *AD.* 26 *Chron.* B'1, 1971 (1974) pl.227α, top row, centre fragment; *BSA* 73 (1978) pl.16b, 10-11.
Euboian (?) SOS amphora.
Late eighth-early seventh century B.C.

5.31 (75.654) Fig. 53; Pl. 53
Structure 1 TR1 tr1/3 Baulk (6).
Wall fragment preserving portion of shoulder and neck of large open vessel.
P.H. 0.054; P.W. 0.055.
Clay light red 2.5 YR 6/6; much silver mica.
Exterior: neck, chequer pattern, in black and

added red, to right of unidentified pattern; shoulder, two double axes, one in black and one in red; paint black 10 YR 2/ 1 to weak red 10 R 4/4.
Cf. Lefkandi I, pl. 57, 303.
Late eighth-early seventh century B.C.

5.32 (78.1136) Fig. 53; Pl. 53
Isthmus TR1 tr3 (3).
Shoulder fragment, large closed vessel, with portion of horizontal handle.
P.H. 0.045; P.W. 0.054; Th. (max.) 0.009.
Clay light brown 7.5 YR 6/4 with reddish yellow core 7.5 YR 7/6; much silver and gold mica.
Exterior: double register of concentric squares (?) bordered at left by three vertical lines in brown paint; wide band of brown paint around handle junction.
Interior: unpainted.
Amphora(?).
First half of the seventh century B.C. (?).
Local(?).

5.33 (76.558) Fig. 53; Pl. 53
Isthmus TR2 tr1 (2).
Wall fragment of large closed vessel.
P.H. 0.043; P.W. 0.053; Th. 0.009.
Clay pink 7.5 YR 8/4 firing to a reddish yellow 5 YR 7/6; red paint 2.5 YR 5/8; much gold mica.
Exterior: double register of concentric squares bounded each side by three vertical lines.
Interior: unpainted.
Amphora (?).
First half of the seventh century B.C. (?).
Local (?).

5.34 (78.974) Fig. 53; Pl. 53
Isthmus TR3 tr2 (3) B23.
Shoulder fragment of a closed vessel.
P.H. 0.051; P.W. 0.068; Th. 0.006.
Clay light reddish brown 5 YR 6/4; gold and silver mica.
Exterior: bird with head turned back and dotted eye in black paint; above, a horizontal band.
Seventh century B.C.(?).

5.35 (78.1731) Fig. 53; Pl. 53
Lower City TR3 (3) N lower.
Wall fragment.
P.H. 0.051; P.W. 0.093; Th. 0.010.
Clay pink 7.5 YR 7/4. Gold mica.
Exterior: on a creamy white slip, three concentric circles around a central dot (compass point) in black paint; to right, three vertical lines.
Interior: unpainted.
For decorative scheme, *cf. Emporio* , pl. 44Y
Hydria (?).
Seventh century B.C.(?).

5.36 (75.369) Fig. 53; Pl. 53
Gate Area TR3 Baulk (1).
Wall fragment of upper part of open vessel.
P.H. 0.053; P.W. 0.049; Th. 0.006.
Clay reddish yellow 7.5 YR 7/6; very pale brown slip 10 YR 7/4.
Exterior: animals' heads facing on either side of blob rosette; details incised; above, painted band.
Interior: painted.
For filling ornament *cf.* Payne, *Necrocorinthia,* 157, fig. 69D; *Corinth* XIII, pl. 88, 182-7.
Open vessel.
Sixth century B.C.

5.37 (78.792) Fig. 53; Pl. 53
Isthmus TR2 tr2 (1).
Wall fragment, nearly vertical with two holes pierced for repairs (?).
P.H. 0.09; P.W. 0.082; Th. 0.01.
Clay pink 5 YR 7/4.
Exterior: roughly drawn unidentified subject (possibly figure with garment with three incised parallel lines at lower hem, small vertical incision above near break); to left, a partially preserved object recalling a folding stool; to right, traces of another figure or object.
Interior: unpainted.
Closed vessel.
Sixth century B.C. (?).

6. THE CORINTHIAN POTTERY

Stavros A. Paspalas

DISCUSSION

Most of the sherds presented in this chapter are in an extremely fragmentary state. In many cases the more precise attribution of a piece to a particular vessel type and period is due to C.W. Neeft's identification.

The Corinthian pottery found in the first three excavation seasons at Torone dates from the Late Geometric period to the Late Corinthian period. Published Corinthian finds from other sites in the Chalkidike, such as Olynthos, Mende and Sane on Pallene, are few and mostly date to the sixth and fifth centuries B.C., although some seventh century pieces are known.[1]

Very little is preserved of the two kotylai **6.1** and **6.2**, so nothing can be said of the vessels' original proportions. **6.1** finds its closest parallels in the Late Geometric period, in kotylai with solidly painted lower bodies and upper bodies decorated with

[1] For a brief report on sixth and fifth century B.C. Corinthian pottery found at Polychrono, Pallene, see I. Vokotopoulou *et al.*, "Ανασκαφές στο Πολύχρονο Χαλκιδικής 1988," *AEMTh* 2, 1988 (1991) 318 n. 3, 320 with n. 4, 321, 326-329, figs. 4, 7, 8, 10, and 13; I. Vokotopoulou, "Polychrono, A New Archaeological Site in the Chalkidike," in J.-P. Descoeudres (ed.), *ΕΥΜΟΥΣΙΑ. Ceramic and Iconographic Studies in Honour of Alexander Cambitoglou* (Sydney 1990) 80, Grave 10 *ca.* 510-500 B.C. (spherical aryballos), 80, Grave 11 *ca.* 480-460 B.C. (kotyle and miniature kotyle), 81, Grave 13 *ca.* 480-470 B.C. (exaleiptron), 81, Grave 14 *ca.* 480-460 B.C. (kotyle), 82, Grave 15 *ca.* 480-470 B.C. (kotyle and cylindrical oinochoe); and I. Vokotopoulou *et al.*, "Ανασκαφές στο Πολύχρονο Χαλκιδικής 1989," *AEMTh* 3, 1989 (1992) 394. For a number of seventh century B.C. and later finds from Sane, Pallene, see M. Tiverios, "Όστρακα από τη Σάνη της Παλλήνης. Παρατηρήσεις στο εμπόριο των ελληνικών αγγείων και στον αποικισμό της Χαλκιδικής," *Egnatia* 1 (1989) 52-53, figs. 6-9; A Rhomiopoulou, "Ἀρχαιότητες καὶ Μνημεῖα τῆς Κεντρικῆς Μακεδονίας, 1974," *AD* 29, 1973-1974 (1980) *Chron.* Β΄3, 696; M. Vojatzi, *Frühe Argonautenbilder* (Würzburg 1982) 71, 114 no. 39; and K. Sismanides, "ΙΣΤ΄ Εφορεία Προϊστορικών καὶ Κλασικών Ἀρχαιοτήτων. Νομός Χαλκιδικής. Σάνη," *AD* 41, 1986 (1990) *Chron.* 147, pl. 114α. For late seventh century B.C. Corinthian aryballoi found at Polychrono see Vokotopoulou *et al.*, *AEMTh* 3, 1989 (1992) 396-397, fig. 23α-γ. For brief reports of Corinthian pottery dating to the seventh century B.C. found at Mende, see I. Vokotopoulou, "Ανασκαφή Μένδης 1988," *AEMTh* 2, 1988 (1991) 331; and I. Vokotopoulou, "Ανασκαφή Μένδης 1989," *AEMTh* 3, 1989 (1992) 412-415, drawing 3 and fig. 16. For brief reports on Corinthian pottery finds at Akanthos, see E. Yioure, "Νεκροταφεῖο Ἱερισσοῦ (Ἀρχαίας Ἀκάνθου)," *AD* 26, 1971 (1975) *Chron.* Β'2, 394; and A. Rhomiopoulou, " Ἀρχαιότητες καὶ Μνημεῖα Κεντρικῆς Μακεδονίας," *AD* 30, 1975 (1983) *Chron.* Β΄ 2, 250. For Corinthian finds from Olynthos see *Olynthus* V, 64-66, pl. 44 and *Olynthus* XIII, 271-272 no. 492, pl. 182 (Corinthian ?), 298 no. 543, pl. 193, 302 nos. 5-8, pl. 194 (from Mekyberna), 388 no 927, pl. 237. The miniature kotylai *ibid.*, 296-301 nos. 542, 554-558 may be Corinthian.

horizontal lines.[2] The upper body of **6.2** bears a series of thinner horizontal lines than those on **6.1**; its lower body would have been decorated with a series of rays, none of which survives on the fragment. This piece dates to the Protocorinthian period. A fragment of a contemporary kotyle has been found at Mende, Pallene.[3]

6.3, also a kotyle fragment, is much later in date than the preceding two fragments. It preserves part of the lower body of a vessel decorated with rays. As there is no horizontal line at the top of the rays, this fragment probably belongs to a long-rayed kotyle. Such kotylai date from the late sixth century B.C. until the second quarter of the fifth century.[4]

6.4 preserves part of the rim and handle of a kotyle; all that remains of its decoration is a vertical line by the handle. **6.5** and **6.6** belong to miniature kotylai, a class of vessel that had a long history in Corinthian pottery workshops, but is most popular in the Late Corinthian period; the shape ceased to be made sometime in the second quarter of the fourth century B.C.[5]

6.5 is closely paralleled by miniature kotylai with banded bodies and horizontal strokes in their handle zone. No decoration is preserved in the small part of the handle zone still extant on **6.5**.[6] The best parallels for it date to the second and third quarter of the sixth century B.C. Too little is preserved of **6.6** to indicate its precise date.

[2] *Cf.* C. W. Neeft, "Corinthian Fragments from Argos at Utrecht and the Corinthian Late Geometric Kotyle," *BABesch* 50 (1975) 109-110, Kotyle types 3-8. For dating see *ibid.*, 110-117.

[3] For the kotyle fragment found at Mende and identified as Middle Protocorinthian, see Vokotopoulou *AEMTh* 3, 1989 (1992) 413, drawing 3. For Protocorinthian kotylai generally see P. Courbin, "Classement informatisé des skyphoi protocorinthiens," *BCH* 107 (1983) 109 nos. 33-34 (680-660 B.C.); R. S. Young, "Graves from the Phaleron Cemetery," *AJA* 46 (1942) 37, fig. 19, 48, 5. For the introduction of rays on Sigma kotylai *ca.* 700 B.C., see Neeft *op. cit.* (*supra* n. 2) 110 n. 111. C. W. Neeft would place **6.2** specifically in the period *ca.* 675-650 B.C.

[4] Cf. Payne, *Necrocorinthia*, 335 no. 1518, fig. 182; M. T. Campbell, "A Well of the Black-figured Period at Corinth," *Hesperia* 7 (1938) 589 nos. 101-114, figs. 15-16; *Corinth* XV. 3, 189-190 no. 1002 (KP 112), pl. 44; *Corinth* XVIII. 1, 86 no. 40 (C-65-119), fig. 6, pl. 6.

[5] For an example of the Transitional period see Payne, *Necrocorinthia*, 279 no.200, fig. 120 B; he discusses late miniature kotylai on pp. 334-335 no. 1517. For their popularity in the Late Corinthian period see *Perachora* II, 290-291, 295-297. For more recent discussions see *Tocra* II, 9, 14 nos. 1911-1950, pls. 7-8; *Corinth* XV. 3, 310-312 nos. 1684-1721, pl. 67 and *Corinth* XVIII. 1, 65, 174-175 nos. 561-568, pl. 52.

[6] For some similar kotylai see P. N. Ure, *Sixth and Fifth Century Pottery from Rhitsona* (Oxford 1927) 23 Type IIA.i, pl. 8; *Perachora* II, 295-297 nos. 2946, 2954-2956, pl. 119; C. Blinkenberg, *Lindos. Fouilles de l'Acropole 1902-1914*, I. *Les petits objets* (Berlin 1931) cols. 628-629 no. 2597, pl. 125 (I owe this reference to C. W. Neeft); A. Adriani et al., *Himera I. Campagne di scave 1963-1965* (Rome 1970) 113 Ac. 196, pl. 21 (H64.76); *CVA* Italy 53, *Gela* 2, 16-17, pl. 26, 1-4; and M. Devillers, *An Archaic and Classical Votive Deposit from a Mycenaean Tomb at Thorikos, Miscellanea Graeca* 8 (Gent 1988) 24-25.

6.7 is a miniature kotyle base and lower wall fragment; its state of preservation does not allow any further comments to be made on it.

The remaining open vessel fragment in the catalogue, **6.8**, comes from a drinking cup, probably also a kotyle; all that remains of its figured decoration is the tail of a siren. **6.8** is best paralleled by kotylai dated to the second quarter of the sixth century B.C.[7]

6.9 comes from a closed figured vase, probably an alabastron. Of its decoration only the lower part of a wing is preserved. It probably dates to the Middle Corinthian period.[8]

6.10 is probably a fragment of a small convex pyxis in the White Style, with tongues on the shoulder and a series of horizontal lines below; it dates to the sixth century B.C.[9]

6.11 belongs to the well-defined class of piriform aryballoi which date from the second half of the seventh to the early sixth century B.C.[10] The rim fragment **6.12** is probably that of a globular aryballos; its best parallels are aryballoi that bear a series of dots on the sides of their rims and concentric bands on their upper surface. They date from the end of the seventh century B.C. to the middle of the sixth.[11]

[7] For dating see P. Lawrence, "Five Grave Groups from the Corinthia," *Hesperia* 33 (1964) 98-99 and *Corinth* VII.2, 56-57 no. 209 (C-47-648), pl. 39.

[8] C. W. Neeft identified **6.9** as "most probably Middle Corinthian". For similarly rendered wings on a Middle Corinthian oinochoe fragment see *Corinth* VII.2, 50 no. 167 (CP-2480) and no. 168 (CP-2481), pl. 30.

[9] Suggestion made by C. W. Neeft. For a report of many convex pyxides of the White Style found at the Sanctuary of Demeter, Corinth, see *Corinth* XVIII.1, 57. For an example of a pyxis with horizontal lines below a zone of bars, not tongues, see *CVA* Denmark 2, Copenhagen 2, 65, pl. 85, 5 (Inv. 1395). For pyxides with a series of tongues in the handle zone underlined by horizontal lines see S. Papaspyride-Karouzou, "Ἀνασκαφὴ τάφων τοῦ Ἄργους," *AD* 15, 1933-1935 (1938) 18, fig. 3.

[10] C. W. Neeft in *Protocorinthian Subgeometric Aryballoi* (Amsterdam 1987) 288, places **6.11** in his list CXIII or CXIV, Subgroup B : 30. For its dating see *ibid.*, 356 and 378-379. For similar aryballoi from Sane, Pallene, see Tiverios *op. cit.* (*supra* n. 1) 53, fig. 9 and *Η Μακεδονία από τους Μυκηναϊκούς Χρόνους ως τον Μέγα Αλέξανδρο* (Thessalonike 1988) 121-122 no. 131.

[11] For some examples see P. N. Ure, *Aryballoi and Figurines from Rhitsona in Boiotia* (Cambridge 1934) 38-40, Class IV.vi.b of the Round Shielded warrior group and a few of Class IV.vi.c, and Devillers *op. cit.* (*supra* n. 6) 17 nos. 90-94; see also R. J. Hopper, "Addenda to Necrocorinthia," *BSA* 44 (1949) 200-201 and Payne, *Necrocorinthia*, 291. For aryballos rims with concentric circles on their upper surfaces, one of which is broader than the others (as on **6.12**), see among others *Délos* X, 93 no. 213 (B 6.475), pl. 22 E; 102 no. 270 (B 6.481), pl. 24, B; 103 no. 272 (B 6.466), pl. 24, C. The outer rim surfacess of these aryballoi bear either one or two bands. The rim of *ibid.*, 106 no. 290 (B 6.548), pl. 24, F, bears a series of dots on its outer surface, as does **6.12**, and a series of concentric circles on its upper surface, one of which is broader than the others. Alabastra may also have rims similar to **6.12**. For alabastra whose rims bear concentric circles on their upper surfaces see *ibid.*, 130 no. 423 (B 6.568), pl. 29, D (with an undecorated outer surface) and 131 no. 429 (B 6.281), pl. 30, A (with a band on its outer surface, not a series of dots).

6.13 and **6.14** are both wall fragments, probably of round aryballoi; each one preserves part of a panther. Professor Neeft places **6.13** "most probably in Middle Corinthian", *ca.* 590-570 B.C., and **6.14** towards the end of Early Corinthian and the early part of Middle Corinthian, *ca.* 610-580 B.C. According to him the figured fragment **6.15** belongs to the Middle Corinthian period; he suggests that it "looks very much like a rather early work of the Geladakis Painter, *i.e. ca.* 580 B.C."; he identifies it as either an oinochoe or a pyxis fragment.[12]

Little can be said of the foot fragment **6.16**, other than it probably comes from a closed Corinthian vessel.[13]

The fragments from Torone found during the first three digging seasons include some of the earliest Corinthian pieces thus far published from the Chalkidike. **6.1** which dates to the second half of the eighth century B.C. is followed by the seventh century fragments **6.2, 6.11** and perhaps **6.14**. As elsewhere in the Chalkidike, and generally in the Greek world, more Corinthian imports reached Torone in the sixth century B.C.[14] than in the fifth. Of the pieces presented here drinking cups and small oil containers are the predominant vessel types; only one large closed vessel fragment is noted.

POSTSCRIPT

Examples of Archaic Corinthian pottery, mainly drinking and unguent vessels, though not exclusively so, have been excavated at sites across the northern Aegean in recent years. Finds have been made at the following sites in the Chalkidike:

Ancient Stageira: Sismanides, K., "Ανασκαφή στην αρχαία Σκιώνη και στα Στάγειρα κατά το 1991" *AEMTh* 5 1991 (1994) 321 (mainly mentions exaleiptra from a sanctuary); *id.*, "Ανασκαφή αρχαίων Σταγείρων 1992" *AEMTh* 6 1992 (1995) 460.

Akanthos: Trakosopoulou-Salakidou, E., Από τις ανασκαφές της ανατολικής Χαλκιδικής," *AEMTh* 7 1993 (1997) 414.

Neos Marmaras: Vokotopoulou, I., "ΙΣΤ′ Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων. Νέος Μαρμαράς Σιθωνίας," *AD* 42 *Chron.* Β′ 2 1987 (1992) 371 pl. 210 ε.

Mt. Itamos sanctuary: Vokotopoulou, I. *et al.*, "Παρθενώνας Χαλκιδικής: ιερό σε κορυφή του Ιτάμου," *AEMTh* 4 1990 (1993) 429 (including miniature phialai).

[12] For a small number of Middle Corinthian figured sherds found at Sane, Pallene, see Tiverios *op. cit.* (*supra* n. 1) 53-54, nn. 137-138, fig. 7α-β, δ-ε, η.

[13] For two examples of vessels with similar feet, see *Corinth* XIII, 176 no. 146-5, pl. 21 and 310-311 no. D44-e, pl. 30.

[14] See Tiverios *op. cit.* (*supra* n. 1) 52 and 56 for sixth century B.C. Corinthian vessels at Sane and Pallene; he attributes their appearance to the foundation of Potidaia, *ca.* 600 B.C. For reports of other Corinthian finds in the Chalkidike see n. 1 above.

Polychrono: Vokotopoulou, I., "Anciennes nécropoles de la Chalcidique" in La Genière, J. de (ed.), *Nécropoles et sociétés antiques (Grèce, Italie, Languedoc). Actes de Colloque International du Centre de Recherches Archéologiques de l'Université de Lille III. Lille, 2-3 décembre 1991* (*Cahiers du Centre Jean Bérard* XVIII) (Naples 1994) 91, fig.15.

Poseidi: Vokotopoulou, I., "Μένδη-Ποσείδι 1990" *AEMTh* 4 1990 (1993) 403.

Mende: Vokotopoulou, I. and Moschonesiote, S., "Το παράλιο νεκροταφείο της Μένδης," *ibid.* 413 fig.11 and fig.12 (*cf.* **6.11**).

Sane: Vokotopoulou, I., "Αρχαϊκό ιερό στη Σάνη Χαλκιδικής" in *Αρχαία Μακεδονία* V,1. *Ανακοινώσεις κατά το πέμπτο διεθνές συμπόσιο, Θεσσαλονίκη 10-15 Οκτωβρίου1989* (Thessalonike 1993) 189, 190, 194 and 196 (including PC olpai, mid-sixth century krater, mesomphaloi phialai and piriform aryballoi [*cf.* **6.11**]).

Potidaia: Kousoulakou, N., "Ανασκαφή Ποτίδαιας 1993," *AEMTh* 7 1993 (1997) 458 fig.4.

For **6.1** and **6.2** reference may now be made to the discussion in Kearsley, R.A., "The Greek Geometric Wares from Al Mina Levels 10-8 and Associated Pottery" *MeditArch* 8 (1995) 14 no.166 and 64 no.264 respectively; and for **6.1** to Buchner, G. and Ridgway, D., *Pithekoussai I. La necropoli: Tombe 1-723 scavate del 1952 al 1961* (Rome 1993) 399 no.354,2, pl.129, 484 no.483,3, pl.143, 496 no.495,2, pl.146 and 628 no.651,2 pl.180 (LPC kotylai).

CATALOGUE

6.1 (78.1539) Fig. 54; Pl. 54
Isthmus TR3 tr2 (3) B25.
Wall fragment.
P.H. 0.030; P.W. 0.022 Th. (top) 0.0028, (bottom) 0.002.
Clay very pale brown 10 YR 7/4.
Exterior: eight horizontal lines above solid painted area to break.
Interior: painted solid.
Cf. Perachora II, 51 no.377, 53 no.382, pl.19; *BABesch* 50 (1975) 108, fig.III, Types 4-6, 8.
Kotyle.
Late Geometric.
750-715 B.C.

6.2 (78.1646) Fig. 54; Pl. 54
Lekythos TR2 (4).
Wall fragment, convex.
P.H. 0.039; P.W. 0.030; Th. 0.003.
Clay pink 7.5 YR 7/4.
Exterior: twelve horizontal lines covering upper half of fragment, on reserved ground.
Interior: painted solid.
Cf. CVA Germany 53, Berlin 6, pl.32, 1 and 3 (A 384), 2 (A 385) and 4 (A 386); *Perachora* II, 69-70 no.567,pl.27; *Corinth* VII.2, 14 no.5 (CP-2648b), pl.2.
Kotyle.
Middle Protocorinthian.
675-650 B.C.

6.3 (76.420) Fig. 54; Pl. 54
Structure 3 TR4 (2).
Wall fragment, convex; groove at junction of wall and base.
P.H. 0.038; P.W. 0.035; Th. 0.003.
Clay very pale brown 10 YR 8/3.
Exterior: portion of two widely spaced rays in black paint on reserved ground springing from horizontal line.
Interior: painted solid.
Cf. Payne, *Necrocorinthia*, 335 no.1518, fig.182; *Corinth* XIII, 86 no.40 (C-65-119), fig.6, pl.6.
Kotyle.
Late Corinthian II.
Late sixth or fifth century B.C.

6.4 (75.218) Fig. 54; Pl. 54
Structure 1 TR1 tr1 (8).
Single fragment preserving handle and portion of rim and wall.
P.H. 0.015; P.W. 0.042; Th. 0.002.
Clay very pale brown 10YR 8/3.
Exterior: on left of handle a vertical line.
Interior: painted solid.
Kotyle.
Late Corinthian(?).

6.5 (78.2423) Fig. 54; Pl. 54
Lower City TR3 SE.
Fragment preserving rim, handle and upper body.
P.H. 0.024; D.(est.) 0.05.
Clay very pale brown 10YR 8/4; red paint 2.5 YR 4/6 to black.
Exterior: under reserved handle two painted lines on reserved ground; below, painted solid to break.
Interior: reserved band at rim; below, painted solid.
Cf. CVA Italy 53, Gela 2, 16-17, pl.26, 1-4; *Corinth* XIII, 186,160-5 (T 3201), pl.24, 191, 172-f (T 1747) and 172-g (T 1870), pl.26, 194, 180-3 (T 1564), pl.27, 210, 249-3 (T 1708), pl.34; A.-F. Laurens, *Montpellier*, 160-161 no.107 (Inv.115).
Miniature kotyle.
Middle Corinthian to mid Late Corinthian II.
590-525 B.C.

6.6 (75.379) Fig. 54; Pl. 54
Gate Area TR1 tr2 (2).
Single fragment preserving handle and portion of rim and wall.
P.H. 0.010; P.W. 0.026; Th. 0.003.
Clay white 5YR 8/2.
Exterior: traces of olive brown paint 2.5 YR 4/4.
Interior: as exterior.
Miniature kotyle.
Late Corinthian (?).

6.7 (75.452) Fig. 54; Pl. 54
Structure 1 TR1 tr3 (5).
Base fragment, preserving portion of flaring wall; disc foot with raised disc in centre of underside.
P.H. 0.013; D.(est.) 0.037; Th. (wall) 0.003.
Clay white to pale yellow 5YR 8/2-8/3.
Exterior: faint traces of paint.
Interior: as exterior.
Miniature kotyle.
Late Corinthian (?).

6.8 (78.1661) Fig. 54; Pl. 54
Lekythos TR1 (4).
Two joining wall fragments, convex.
P.H. 0.028; P.W. 0.04; Th. 0.003.
Clay pink 5YR 7/3.
Exterior: shiny black glaze; tail of siren, details of feathers incised; between two sets of incised vertical parallel lines a large blob of added red; to right, portion of rosette (?).
Interior: painted solid.
Cf. Lawrence, *Hesperia* 33 (1964) 95, E12 (C-60-113) pl.20; *Corinth* VII.2, 56 no.209 (C-47-648),pl.39. For a similarly drawn tail on a kylix see *ibid.* 43 no.139 (MP-6), pl.22, 139A.
Kotyle or kylix.
Late Corinthian I.
575-550 B.C.

6.9 (78.1741) Fig.54; Pl. 54
Lower City TR1 N (3).
Slightly convex wall fragment, of closed vessel.
P.H. 0.041; P.W. 0.037; Th. 0.005.
Clay reddish yellow 7.5YR 7/6.
Exterior: painted black; seven incised oblique lines; below, two incised horizontal lines (part of wing).
Cf. CVA United States of America 5, University of California 1, 18, 2 (8/3303), pl.8, 2a-c.
Alabastron.
Middle Corinthian (?).
590-570 B.C. (?).

6.10 (75.663) Fig.54; Pl. 55
Structure 1 TR1 tr1/3 Baulk (7).
Wall fragment from shoulder of closed vessel.
P.H. 0.026; P.W. 0.035; Th. 0.003.
Clay very pale brown 10YR 8/3 with brownish yellow slip 10YR 6/6.
Exterior: slipped, four horizontal lines in brown paint 10YR 4/4 (two faded) above which, portions of tongues.

Convex pyxis (?).
Late Corinthian.
Sixth century.

6.11 (76.630) Fig. 54; Pl. 55
Isthmus TR1 tr1 (3).
Single fragment preserving entire foot and base and portion of wall of closed vessel, worn.
P.H. 0.036; D.(foot) (est.) 0.015; Th. (max.) 0.003.
Clay reddish yellow 5YR 7/8 with very pale brown slip 10YR 8/4.
Exterior: slipped; in red paint 10R 5/8, tongues in a zone above the foot, framed by band at top and bottom; above,wall decorated with incised scale pattern, small portion only preserved.
Cf. Perachora II 19 no.48, pl.2; *Corinth* XIII 56, 78-3 (T 1467), pl.12; *Délos* XVII 91 nos.4-5, pl. 55, C.
Piriform aryballos.
Late Protocorinthian to Early Corinthian.
640-590/80 B.C.

6.12 (78.1739) Fig. 54; Pl. 55
Lower City TR1 N (3).
Rim fragment.
D.(rim) 0.040; D.(aperture) 0.011; Th. (outer face) 0.008.
Clay light yellowish brown 10YR 6/4.
Top surface: on reserved ground, broad band in red paint 2.5YR 4/6 enclosed by two narrow bands of brown paint on either side; outer face decorated with a row of dots fired brown and red.
Rim underside: unpainted.
Cf. Laurens, *Montpellier*, 83-84 no.29 (Inv.26 [SA 208 B]), 85-86 no.31 (Inv.20), 89 no.35 (2518); *Délos* X 106 no.290 (B 6.548), pl.24, F.
Aryballos.
Late Corinthian I.
570-550 B.C.

6.13 (78.1715) Fig. 54; Pl. 55
Lower City TR3 (3) SW.
Wall fragment of closed vessel.
P.H. 0.031; P.W. 0.030; Th. 0.004.
Clay very pale brown 10YR 7/4.
Exterior: portion of head and neck of panther; details of face incised, above which traces of two black horizontal bands; to left, filling ornament (blob); added purple on panther's neck.
Large aryballos (?).
Middle Corinthian.
590-570 B.C.

6.14 (78.1167) Fig. 54; Pl. 55
Lekythos TR2 (3).
Wall fragment of closed vessel.
P.H. 0.013; P.W. 0.031; Th.(max.) 0.005.
Clay very pale brown 10YR 8/4.
Exterior: portion of head and body of panther to right; to right, palmette with details incised; added purple in arc on panther's body and on neck.
Round aryballos (?).
Early to Middle Corinthian.
610-580 B.C.

6.15 (75.205) Fig. 54; Pl. 55
Structure 1 TR1 tr1 (6).
Wall fragment of closed vessel.
P.H. 0.039; P.W. 0.026; Th. 0.003.
Clay very pale brown 10YR 8/4.
Exterior: portion of front quarter of panther; anatomical details incised; splashes of added purple on chest; filling ornament, hasty incisions on blob rosettes.
Oinochoe or pyxis.
Middle Corinthian.
Ca. 580 B.C.

6.16 (78.755) Fig. 54; Pl. 55
Isthmus TR1 tr3 (3).
Foot fragment of closed(?) vessel. Flaring ring foot with broad, flat resting surface; convex underside; groove at junction of foot and wall; groove at junction of foot and undersurface; flaring wall.
P.H. 0.024; P.W. 0.072; D.(base, est.) 0.090; Th.(wall) 0.005.
Clay very pale brown 10YR 7/3.
Foot exterior: painted purple.

7. THE ATTIC BLACK-FIGURED POTTERY

Stavros A. Paspalas

DISCUSSION

The quantity of Attic black-figured pottery from the first three digging seasons at Torone is modest; only a few small sherds are preserved, and they are of no great artistic value. Their fragmentary state allows only some to be ascribed to a specific vessel shape. They do, however, allow us to lay a foundation for the study of similar material from later excavations at Torone. Whereas the sequence starts in the early sixth century B.C., the majority of the pieces date to the second half of the century, mostly to the fourth quarter, with some extending into the early years of the fifth century B.C.

7.20 is the earliest entry, although it is not certainly Attic. It is possibly a fragment of a plaque on which no edge or corner is preserved. Attic black-figured plaques fall into two categories: funerary plaques and votive plaques. The former are made of coarse clay with a covering of fine clay on which the painter worked, and are decorated on one side. Votive plaques are made of fine clay, are far thinner than the funerary ones and are painted on both sides. **7.20** conforms to all the characteristics of votive plaques. On both its sides are preserved parts of a bird or winged hybrid. While double-sided plaques are known that bear an owl on one side, **7.20** obviously had at least one bird (not an owl), or hybrid, on each side.[1] The two plate fragments **7.17** and **7.18**, and **7.19**, probably a lekanis fragment, date to the second quarter of the sixth century B.C. These three fragments find ready parallels among the work of the Polos Painter.[2]

[1] For owls on plaques see B. Graef and E. Langlotz, *Die Antiken Vasen von der Akropolis zu Athen* I (Berlin 1925) 242 no. 2493, pl. 101, 243 no. 2499, pl. 102 (plaque with semi-circular top), 245 no. 2521, pl. 104 and no. 2522, pl. 101 (one-sided plaques). For Attic funerary plaques see J. Boardman, "Painted Funerary Plaques and Some Remarks on Prothesis," *BSA* 50 (1955) 51-66. For Attic votive plaques see J. Boardman, "Painted Votive Plaques and an Early Inscription from Aegina," *BSA* 49 (1954) 183-201. In *ibid.* 194 it is pointed out that these plaques do not appear to have travelled widely. This observation makes **7.20** all the more interesting as it may have made its way from Athens to Torone. The unique nature of this find raises the possibility that **7.20** may not be Attic. However, on the basis of the visual examination of its clay and its paint, it is indistinguishable from Attic ceramics and has therefore been included in this catalogue.

[2] For the Polos Painter see *ABV* 43-49, 681, and *Paralipomena* 19-21.

The three vessel types most commonly represented are, in decreasing order of frequency, drinking vessels (cups and skyphoi), amphorae and column-kraters - equipment that is used in a symposium setting. The series of drinking vessels begins with the Siana cup fragment **7.21**, and continues into the fifth century B.C.[3] Most of these fragments tell us little more than that they came from open vessels, and in many cases their decoration is not readily identifiable. **7.22** appears to bear the representation of a bird. If this identification is correct, the lines that may be taken to be the creature's leg suggest that it is leaning forward, to the left, with its head lowered.[4] **7.23** and **7.24** are fragments of cups that probably date to the second half of the sixth or into the fifth century B.C. Both preserve parts of horses' (or equids') legs, animals that were often portrayed in the long, narrow decorative zones of cups.

The cup fragment **7.25** has part of a scroll-like pattern that may possibly be floral. This decorative motif is reminiscent of the spiral-like patterns often found on the lower bodies of Droop cups; **7.25** may come from such a cup.[5] **7.26**, **7.28** and **7.29** include in their decoration ivy sprays (or debased branches of fruit) and may well have shown Dionysiac scenes, although this motif also adorned scenes painted at the end of the sixth and beginning of the fifth centuries B.C. that had no association with Dionysos.[6] The decoration preserved on **7.27** finds its best parallels among the handle palmettes most commonly seen on band-cups and lip-cups, the hearts and some petals of which often bear added red paint.[7] If the heart of the palmette on **7.27** was

[3] Professor Martin Robertson suggests that **7.21** may possibly be attributed to the Heidelberg Painter. For a Siana cup (overlap) fragment found at Sane, Pallene, see M. Tiverios, "Όστρακα από τη Σάνη της Παλλήνης. Παρατηρήσεις στό εμπόριο των ελληνικών αγγείων και στον αποικισμό της Χαλκιδικής," *Egnatia* 1 (1989) 40-44, fig.3.

[4] The leg-parts of birds and related hybrids that stand upright are normally not set at such an acute angle as the lines below the wing of the creature on **7.22**; cf. the hens and sirens on Munich SL462 (*CVA* Germany 57, Munich 11 16-17, pl.7, 1-3), and the birds on v.Schoen 50 (*ibid.* 20-21, pl.11, 1-4). Closer comparisons to the scheme on **7.22** are the legs of the fighting cocks on Munich SL 362 (*ibid.* 16-17, pl.7, 1 and 3) and the right fighting-cock on Munich 2151 (Jahn 31;*CVA* Germany 56, Munich 10 38, pl.21, 1 and 4). The lines on **7.22**, however, are still set at a more acute angle than the legs of the cocks in these examples.

[5] The pattern on **7.25** is especially reminiscent of the series of dotted spirals on the Droop Cup Athens CC 821, *CVA* Greece 3, Athens 3, 50-51 no.359, pl.41, 1(B) and 2(A) (for other similar spiral patterns on cups see Louvre C.A. 2901 [P.N. Ure, "Droop Cups" *JHS* 52 (1932) 65 no.105, pl.3]; Reading 35.iv.1 [*CVA* Great Britain 12, Reading 1, 16 no.3, pl.9, 3]; and N. Zapheiropoulos," Ἀνασκαφὴ Σελλάδας Θήρας," *PAE* 1974, 195, pl.135α.

[6] For examples of such scenes on cups see *Agora* XXIII pl.102,1501, pl.103, 1513 and 1519.

[7] The petals of the handle-palmettes of some of these cups are drawn closer together than those of others. For band cups with handle-palmettes see New York 29.131.6 (*CVA* United States of America 11, New York 2, 9, pl.14, 22a-c), New York 06.1021.157 (*ibid.* 9, pl.15, 23a-d), New York 14.147.3 (*ibid.* 10, pl.16,26a-d), and New York 41.162.72 (*ibid.* 10, pl.18, 9a-b). For lip-cups see New York 27.122.30 (*ibid.* 5, pl.8, 9a-b), New York 18.74.2 (*ibid.* 5-6, pl.9, 10a-b), New York 27.122.27 (*ibid.* 6,pl.9, 11a-d), New York 06.1021.155 (*ibid.* 7, pl.11, 14a-d),

ever red, no trace of the added paint is now visible. The edges of the palmette petals are not preserved, but it is evident that they were tightly-packed around the semi-circular heart. It has been noted that this manner of drawing palmettes belongs to the first stage of the development of the band-cup.[8]

The firm ascription of **7.30** to a shape is far easier as it preserves its outturned rim which bears a debased ivy pattern rendered by a horizontal line and a row of blobs above and below. Outturned rims with ivy pattern decoration are characteristic of some of the Attic-type skyphoi of the Heron Class, a class that dates from the third quarter of the sixth century B.C. and into the early fifth.[9] Skyphoi with a degenerate ivy pattern, such as that on **7.30**, are a later development of the same type of vessel with rims decorated by a properly rendered ivy chain.[10]

NewYork 20.251 (*ibid.* 7, pl.11, 13a-c), New York 25.78.86 (*ibid.* 7,pl.12, 15a-c), New York 03.24.31 [GR.421] (*ibid.* 7-8, pl.12,16a-d), Malibu 86.AE.160 (*CVA* United States of America 24, Malibu 2, 50, pl.95, 1-2) and Malibu 82.AE.163 (*ibid.* 51, pl.97, 1-2 and pl.98, 1-2). Similar palmettes also occur on a few Gordion and Siana cups. For a fragmentary Gordion cup with a vertical handle-palmette see M. Robertson, "Gordion Cups from Naukartis," *JHS* 71 (1951) 143-144 no.1, fig.1, 1, top right-hand fragment. For examples of Siana cups with handle palmettes see H.A.G.Brijder, *Siana Cups and Komast Cups* (Amsterdam 1983) 263 no.290, pl.58a-b (London 1906.12-15.1) and 264 no.293, pl.59b-c (Warsaw 142321). According to Brijder the oblique palmettes of London 1906.12-15.1 with their triangular hearts look forward to those on band-cups (*ibid.* 207-210); nonetheless, vertical palmettes are not unknown on Siana cups, e.g. Warsaw 142321, *ibid.* 213, fig.80.

For two band-cups found at Akanthos see E. Yioure, " Ἀρχαιότητες καὶ Μνημεῖα Κεντρικῆς Μακεδονίας. Νεκροταφεῖον Ἱερισσοῦ (Ἀρχαίας Ἀκάνθου)," *AD* 26, 1971 (1975) *Chron.* Β΄ 2,394, pl.392 γ-δ.

[8] J. Boardman, *Athenian Black Figure Vases* (London 1980) 61. Since the petals of **7.27** are not completely preserved it is impossible to determine if the central one was longer than the others, a feature associated with the handle-palmettes of band-cups in the second stage of their development. Handle-palmettes, of course, also occur on other types of Attic cups, such as the Siana cups.

[9] For a recent discussion see *Agora* XXIII 61. For Heron Class cups (of the CHC subgroup) from Aphytis, Pallene, see V. Misaëlidou-Despotidou, "Νέα ευρήματα από τη νεκρόπολη της αρχαίας Αφύτιος," *AD* 34 *Mel.* Α΄ 1979 (1986) 71-75 nos.1 (7692) and 2 (7687), pls.21-22. For cups with decoration of this kind found at Olynthos see *Olynthus* V 77-78 nos.40-42, pls.52-53 and *Olynthus* XIII 68 no.17, pl.23, 17A. For two examples probably from Olynthos see *ibid.* 68, pl.26, 17F-G and Ph. Zapheiropoulou, "Vases peints du Musée de Salonique," *BCH* 94 (1970) 407-409 no.17, fig.53 (Thessalonike Museum inv.1348). For such cups found at Kalyvia (Vrasta) north of Olynthos, see S. Pelekides, "Περὶ τῆς ἀνασκαφῆς τῶν Βραστινῶν Καλυβιῶν," *AD* 9 *Παράρτημα* 1924-1925 (1927) 37, Grave Γ no.1, fig.2.

[10] See Ure's Groups A3, B and C1 in P.N. Ure (ed.), *Sixth and Fifth Century Pottery from Excavations made at Rhitsona by R.M.Burrows in 1909 and by P.N. Ure and A.D. Ure in 1921 and 1922* (London 1927) 58-59 no.18.76, pl.17 (Type A3), 59-61 nos.18.99,133.62, pl.18 (Type B), 61-62 nos.82.35, 26.98, 18.100, 18.98, pl.18 (Type C). Ure also includes one example of a skyphos with a degenerate ivy chain on its rim, *ibid.* 62 no.80.260, pl.19, in his Group C2 which he defines, however, as skyphoi with "Rim black".

For a recent discussion on skyphoi of the Heron Class with properly rendered ivy-chains see *Agora* XXIII 60, pls.100-101.

The rim fragment **7.31** may belong either to a palmette cup or to an Attic-type skyphos of Ure's Class K2, most of which belong to the Haimon Group.[11] Both of these shapes have an outturned rim solidly painted, below which there is a reserved zone. On the former there is a continuous band of palmettes; on the latter a single palmette frames each side of the two handles. As on **7.31** a reserved line may also occur on the interior of the rim of palmette cups[12] or on Haimon Group skyphoi.[13] **7.32** is also part of a cup or skyphos; the identification of its preserved decoration, however, is uncertain. The series of incised lines may have been intended to indicate animal hair or the feathers of a wing.[14] **7.33** is a fragment from the bowl of a drinking vessel. Its decoration of a degenerate lotus suggests that it comes from the area directly below one of the handles. It probably dates to the late sixth century B.C.[15]

The earliest of the eight pieces that belong to large closed vessels (most of them identified as coming from amphorae, and one possibly from a hydria), **7.2**, probably dates to the mid-sixth century B.C. The preserved fragment of a palmette is all that remains of what may have been a large lotus-palmette cross.[16] The other seven pieces range in date from the middle of the sixth century B.C. to the late sixth or early fifth century B.C. **7.1** preserves the lower left hand corner of a closed vessel's decorated panel and an area below it solidly painted. All that remains of the panel's decoration are two feet without any incised details, which overlap the ground line.[17] The feet of

[11]For discussions on the K2 Class and the Haimon Group see Ure, *op. cit.* (*supra* n. 10) 68-69 and *Agora* XXIII, 61. Note that other types (*e.g.* Athenian Agora P 16450, *Agora* XXIII 286 no.1540,pl.104) also supply parallels for **7.31**. Skyphoi with rims comparable to **7.31** were found at Olynthos, see *Olynthus* V pl.51, 37A and *Olynthus* XIII pl.12, 5-7 and pls.21-22, 16. For examples of palmette cups see Munich 2251 (*CVA* Germany 56, Munich 10, 67,pl.46, 3 and 7), Munich Inv.9428 (*ibid.* 67-68, pl.47, 1 and 7), and Munich/Erlangen M1311 (*ibid* 68, pl.47, 5 and 9).

[12] E. Vanderpool, "The Rectangular Rock-Cut Shaft," *Hesperia* 15 (1946) 315 no.223 (P 1379), 315 no.224 (P 1380), pl.62.

[13] *Agora* XXIII 61.

[14] *Cf.* the hair on the top of the head of the goat on the Heron Class skyphos, M.B. Moore, "Attic Black Figure and Black Glazed Pottery," in D. White (ed.), *The Extramural Sanctuary of Demeter and Persephone at Cyrene, Libya. Final Reports*, Volume III (Philadelphia 1987) 33 no.188, pl.35, *ca.* 500 B.C.

[15] Degenerate lotuses like that preserved on **7.33** are often found under the handles of eye-cups (see the parallels listed in the catalogue entry). **7.33** may be an eye-cup fragment. Lotuses under the handles of earlier cups have straighter leaves; see, for example, the Siana cup Athens 444 (CC 833) *ca.* 545-540 B.C., *CVA* Greece 3, Athens 3, pl.21, 2. For another late sixth century B.C. cup with curved lotus leaves see M.B. Moore "Aegina Aphaia-Tempel VIII. The Attic Black-figured Pottery," *AA* 1986, 80 no.57 (N.T.58), fig.18.

[16] For palmette-lotus crosses see, among others, London B 147 (*CVA* Great Britain 4, British Museum 3 III He, 3 pl.24, 1c-d, under the handles) and London B 23 (*ibid.* 3, pl.23, 3a-b). Compare also the more ornate palmettes between the spirals on New York 64.11.13 (*CVA* United States of America 16, New York 4, pl.52, 2-3).

[17] For similar occurences see Leiden PC9 (*ABV* 448, 28, *CVA* The Netherlands 3, Leiden 1, 20-21, pl.25, 1-2, *ca.*

satyrs and maenads cavorting in a Dionysiac milieu are often drawn in this manner and they, like those on **7.1**, overlap the groundline. **7.3** comes from a mythological scene; the ithyphallic equid that it represents may have been ridden by Dionysos,[18] Hephaistos,[19] or a member of the wine god's entourage.[20] Dionysos himself is shown on **7.6**. Very little may be said of **7.7**, other than it is a fragment of the lower body of a closed vessel that preserves the ground line of a panel and the solidly painted area below. **7.8**, a small neck amphora, shows, below a row of debased tongues, a dancing satyr; such figures are not uncommon on vases of this shape in the late sixth and early fifth centuries B.C. and are shown in a number of frenetic poses.[21] Such activities may also be engaged in by mere komasts,[22] and their positions may also be met in the gymnasium.[23] Little can be said of **7.9**. The only surviving element of its figured decoration is the upper part of a shield that bore a device in red paint, and red dots on its rim. **7.4** preserves a portion of a team of horses set within a panel, while **7.5** may provide us with a glimpse of a combat scene. **7.11** also comes from a large closed vessel. It is likely that the lower right-hand corner of a panel is preserved on this piece. The intersecting lines are all that remains of the panel's frame.[24] **7.10** is the only lekythos fragment in the catalogue. It preserves the lower part of a figured scene. It is uncertain what is represented by the object in added white with two curved incised lines and black paint below.[25]

520-510 B.C.); Leiden PC12 (*ABV* 448, 27, *CVA* The Netherlands 3, Leiden 1, 21, pl.25, 3-4, *ca.* 520-510 B.C.); Athenian Agora P 24679 (*Agora* XXIII 112-113 no.96, pl.11, *ca.* 520 B.C.). For feet and lower legs on earlier vessels that do not have any incised details see the figures on New York 41.162.143 (*ABV* 134, 25, *CVA* United States of America 12,New York 3, 9-10, pl.14, *ca.* 540 B.C.) and New York (*ABV* 317, 1, *CVA* United States of America 12, New York 3, 3, pl.5, 1-2, *ca.* 540 B.C.).

[18] See Munich 1526 *(CVA* Germany 37, Munich 8, 77-78, pl.420, ca. 520-510 B.C.) and Frankfurt VF β 286 *(CVA* Germany 25, Frankfurt 1, 29, pl.30, 1, ca. 510-500 B.C.).

[19] See Munich 1522 *(CVA* Germany 37, Munich 8, 79-80, pl.422, 1, ca. 520-510 B.C.).

[20] A satyr: Munich 1529 (*ibid.* 53-54, pl.399, 2, *ca.* 510 B.C.) and Munich 1525 (*ibid.* 54-55, pl.400, 2, *ca.* 520-510 B.C.); a maenad: Athenian Agora P 24679 (*Agora* XXIII 112-113 no. 96, pl.11, 96 Side B).

[21] See: New York 06.1021.59 *(CVA* United States of America 16, NewYork 4, 57-58, pl.46, 15, early fifth century B.C.); Geneva MF198 *(CVA* Switzerland 3, Geneva 2, 23, pl. 55, 2 and 4, end of the sixth century B.C.). For a slightly better executed example see New York X.21.29 *(CVA* United States of America 16, New York 4, 59, pl.47, 3, early fifth century B.C.).

[22] For example: Michigan 2599 *(CVA* United States of America 3, Michigan 1, 30, pl.14, 3b, fourth quarter of the sixth century B.C.).

[23] See: Geneva I 36.1874 *(CVA* Switzerland 3, Geneva 2, 22, pl. 54, 2, end of the sixth century B.C.).

[24] For examples of intersecting lines see the pelike Vannes 2159 *(CVA* France 24, Limoges et Vannes III He, 4, pl.2, 2); the hydria Athenian Agora P 6180 (*Agora* XXIII 186 no. 657, pl. 62) and the oinochoe Athenian Agora P 1135 (*ibid.*190 no. 686, pl. 66, on which the panel is also bordered on the sides by a net-pattern).

[25] For two similar curved incised lines see the wheel of a chariot on the lekythos illustrated in U. Knigge, *Kerameikos* IX. *Der Südhügel* (Berlin 1976) 115 no.109, 1, Haimon Group, *ca.* 480-470 B.C., pl.29, 1-2. Professor

The earliest of the column-krater fragments **7.12** and **7.13** date to the middle of the sixth century B.C. and are handle plates. **7.12** represents a preening bird, a motif common in the mid-sixth century B.C.[26] **7.13** also represents a bird, though as its head and neck are missing it is not possible to determine if it was looking forward or if it too was preening. The two lines on the upper surface of **7.15** find their best parallels on the handle plates of column-kraters, where they define the vertical edges of the plate. As the rim of the overhang preserved on this piece bears an ivy leaf chain, the krater from which this fragment comes dates to the period *ca.* 540-500 B.C.[27] Column-kraters with rims whose upper surfaces bear lotus-bud chains and whose overhangs carry ivy are dated from *ca.* 540 B.C. onwards.[28] **7.14**, which conforms to this decorative scheme, comes from such a vessel.[29] The lower body fragment of a column-krater, **7.16** belongs to a vase that dates from *ca.* 525 B.C. or later.

In summary it may be seen that the series of Attic black-figured pottery fragments presented here starts relatively early. **7.20** (if Attic) is dated to the second quarter of the sixth century B.C. **7.17**, **7.18** and **7.19** are perhaps later, although still in the same quarter. **7.21** may also date to the second quarter of the century. Elsewhere in the Chalkidike excavations have been, until recently, limited and finds of Attic black-figured pottery have been few, often simply chance finds. On the basis of the known material early Attic black-figure is not common in this region, although a number of finds dating to the second quarter of the sixth century B.C. are known.[30] The number

Martin Robertson suggests that the object on **7.10** may be a stone. For other Attic black-figured lekythoi, some associated with the Haimon Painter's circle, found at Polychrono, Pallene, see I.Vokotopoulou, "Polychrono: A New Archaeological Site in the Chalkidike" in J.-P. Descoeudres (ed.), *EYMOYΣIA. Ceramic and Iconographical Studies in Honour of Alexander Cambitoglou* (Sydney 1990) 80, Grave 11, 81, Grave 14, 82, Grave 15.

[26] *Agora* XXIII 25.

[27] For early examples of the parallel lines see Athenian Agora P 198 (*ibid.* 157, no. 439, pl. 43), Athenian Agora P 23276 (*ibid.* 157, no. 442, pl. 43) and Athenian Agora P 14564 (*ibid.* 158, no. 448, pl. 44) *ca.* 550-540 B.C. For a dotted chain where every fourth bud is linked see Leiden I, 1954/2, 1 (*CVA* The Netherlands, Leiden 1, 16-17, pl. 20, 1, *ca.* 525 B.C.).

[28] *Agora* XXIII 25. These schemes may also appear on red-figured kraters: Moore, M.B., *Agora* XXX. *Attic Red-figured and White-ground Pottery* (Princeton 1997) 21-22. E.g. Basel BS 415 (*CVA* Switzerland 7, Basel 3, 21-22, pl. 6).

[29] For an example of a lotus bud chain on a column-krater rim where every second bud is linked see *CVA* Italy 57, Fiesole Coll. Costantini, 15, pl.27, 2 and 4; the dots in this chain, however, are not placed below the buds but between the linking stems.

[30] For a komast cup attributed to the Vienna Komast Painter (Vienna 226, *ABV* 35, 9) found at Potidaia see Brijder *op.cit.*(*supra* n.7) 82-84, 230 no. K98, fig.16, pl. 69. For a kotyle fragment of the Komast Group found at Sane, Pallene, see Tiverios *op. cit.* (*supra* n. 3) 37-40, fig. 2. For a krater fragment by Lydos (*ABV* 108, 10) see *Olynthus* V, 82 (i.8.25), pl. 55, 66. For a Siana cup fragment found at Sane see n. 3. For a discussion on the export of Attic black-figured pottery to the northern Aegean see M. A. Tiverios, *Προβλήματα τῆς μελανόμορφης Ἀττικῆς*

of Attic vases in the Chalkidike increases from the middle of the sixth century B.C.,[31] and this occurence is reflected amongst the Torone finds as most of the pieces in this catalogue date to the period 550-500 B.C. or slightly later.

POSTCRIPT

Attic black-figured pottery has been found regularly during recent excavations at sites in the northern Aegean at which there is evidence of activity in the Archaic period. In the Chalkidike very brief reports on Attic black-figured pottery have appeared for the following sites:

Ancient Stageira: Sismanides, K., "Ανασκαφές στην αρχαία Σκιώνη και στα αρχαία Στάγειρα κατά το 1991," *AEMTh* 5 1991 (1994) 321; *id.*, "Ανασκαφή αρχαίων Σταγείρων 1992," *AEMTh* 6 1992 (1995) 460; *id.*, "Αρχαία Στάγειρα 1993," *AEMTh* 7 1993 (1997) 435 fig.18.

Akanthos: Trakosopoulou-Salakidou, E., "Από τις ανασκαφές της ανατολικής Χαλκιδικής," *AEMTh* 7 1993 (1997) 414.

Neos Marmaras: Vokotopoulou, I., "ΙΣΤ' Εφορεία Προϊστορικών και Κλασικών Αρχαιοτήτων. Νέος Μαρμαράς Σιθωνίας," *AD* 42 *Chron.* Β΄ 2 1987 (1992) 371, pl.210β (lekythos; Lydos workshop?).

Mt Itamos sanctuary: Vokotopoulou, I. *et al.*, "Παρθενώνας Χαλκιδικής: ιερό σε κορυφή του Ιτάμου," *AEMTh* 4 1990 (1993) 429 fig.23. (Compare right-most fragment of top row with **7.30**).

κεραμικῆς (Thessalonike 1981) 151-171. For the krater Polygyros 235, found in the Chalkidike and attributed to the Painter of Louvre F6 (*ca.* 560-550 B.C.) see *ibid. passim.*

[31] For Attic black-figured finds dating to the second half of the sixth century B.C. from Sane see Tiverios *op.cit.* (*supra* n.3) 54, figs.10-13. The few Attic black-figured finds from the Polychrono cemetery so far briefly noted in print are dated from *ca.* 510 to *ca.* 460 B.C.; see Vokotopoulou *op.cit.* (*supra* n.25) 80, Grave 10 (an eye cup), 80, Grave 11, 81, Grave 14 and 82, Grave 15 (lekythoi). For fifth century B.C. Attic black-figured finds from Argilos see D. Grammenos and M. Tiverios, "Ανασκαφή ενός νεκροταφείου στην αρχαία Άργιλο," *AD* 39 *Mel.* Α΄ 1984 (1990) 12-13, pl.14 (Lindos Group, third quarter of the fifth century B.C.) and 38-39, pl.13 (Haimon Workshop, beginning of the fifth century B.C.). For Attic black-figured pottery dating from the end of the sixth and early fifth centuries B.C. from Aphytis see E. Yioure, "Τὸ ἱερὸν τοῦ Ἄμμωνος Διὸς παρὰ τὴν Ἄφυτιν," *AAA* 4 (1971) 363, figs.16-17 (volute-krater fragment) and Misaëlidou-Despotidou *op.cit.* (*supra* n.9) 71-79 nos.1 (7692), 2 (7687), 3 (7690), 4 (7691) and 5 (7700), pls.12-22. For a kylix of the first decades of the fifth century from Kalyvia (Vrasta) see Pelekides *op.cit.* (*supra* n.9) 39 no.8, fig.5. For brief reports of other Attic finds in the Chalkidike see Yioure *op.cit.*(*supra* n.7) 394 (Akanthos), A. Rhomiopoulou, " Ἀρχαιότητες καὶ Μνημεῖα Κεντρικῆς Μακεδονίας. Νεκροταφεῖο Ἀρχαίας Ἀκάνθου (Ἱερισσός)," *AD* 29 *Chron.*. Β΄ 3, 1973-1974 (1980) 678, pl.491α (Akanthos) and A. Rhomiopoulou, " Ἀρχαιότητες καὶ Μνημεῖα Κεντρικῆς Μακεδονίας. Ἄκανθος (σημ. Ἱερισσός)" *AD* 30 *Chron.*. Β'2, 1975 (1983) 250 (Akanthos). For late sixth and early fifth century B.C. Attic black-figured finds from Olynthos see *Olynthus* V pls. 47-56 and *Olynthus* XIII pls. 12, 14-23. For sixth and fifth century B.C. finds from Mekyberna see *ibid.* pls.27-28. For a report of sixth and fifth century B.C. Attic black-figured finds from Poseidi, Pallene, see I.Vokotopoulou, "Ανασκαφή Μένδης 1989," *AEMTh* 3, 1989 (1992) 416. For a pyxis from the "Chalkidike" attributed to the Swan Group see *Paralipomena* 315 (Thessalonike 1625). For lekythoi dated to the first decades of the fifth century B.C. from the Chalkidike see *ibid.* 240 (Thessalonike, Class of Athens 581), 272 (Thessalonike, Manner of the Haimon Painter), 281 (Thessalonike 1624, Manner of the Haimon Painter) and 241 (Thessalonike, from Sykia).

Poseidi: Vokotopoulou, I., "Μένδη-Ποσείδι 1990," *ibid.* 403 fig.16; *id.*, "Ποσείδι 1991" *AEMTh* 5 1991 (1994) 309.

Mende: Vokotopoulou, I. and Moschonesiote, S., "Το παράλιο νεκροταφείο της Μένδης," *AEMTh* 4 1990 (1993) 414 figs.16-17.

Sane: Vokotopouolu, I., "Αρχαϊκό ιερό στη Σάνη Χαλκιδικής" in *Αρχαία Μακεδονία* V,1. *Ανακοινώσεις κατά το πέμπτο διεθνές συμπόσιο. Θεσσαλονίκη, 10-15 Οκτωβρίου 1989* (Thessalonike 1993) 190 no. 4 fig.14 (Polos Painter, *cf.* **7.17-7.19**), 191 no.10 fig. 19 (late Archaic epinetra fragments).

Potidaia: Sismanides, K. and Karaïskou, G., "Σωστική ανασκαφή στην Ποτίδαια Χαλκιδικής," *AEMTh* 6 1992 (1995) 489 fig.14.

From the reports listed above it appears that only at Sane have fragments been found that are contemporary with the earliest Attic black-figured pottery included in the catalogue from Torone. Otherwise, most finds have been dated to the last quarter of the sixth century, though a few date to the third quarter (Neos Marmaras, Poseidi). Final reports must be awaited for definitive dates. For the Attic black-figured pottery of the first half of the sixth century found on Thasos see Maffre, J.J., "Les importations de céramique attique à Thasos pendant la première moitié du VIe siècle av. J.-C.," *Μνήμη Δ. Λαζαρίδη. Πόλις και Χώρα στην Αρχαία Μακεδονία και Θράκη. Πρακτικά Αρχαιολογικού Συνεδρίου Καβάλα, 9-11 Μαΐου 1986* (Thessalonike 1990) 409-417.

For further parallels to the skyphos fragments included in the catalogue see now Pipili, M., *CVA* Greece 4, Athens National Museum 4.

CATALOGUE

CLOSED VASES

7.1 (76.617) Not illustrated
Structure 3 TR13 (4).
Wall fragment, convex.
P.H. 0.047; P.W. 0.059.
Clay reddish yellow 5 YR 6/6.
Exterior: below, solid black with horizontal red line just below top edge; above, reserved ground in which portion of human feet rests on dilute line.
Interior: unpainted.
Cf. Athenian Agora P 24679, *Agora* XXIII 112-113 no. 96, pl.11.
Amphora(?).
Fourth quarter of the sixth century B.C.(?).

7.2 (75.736) Pl. 56
Gate Area TR2 tr2 (6b).
Wall fragment.
P.H. 0.032; P.W. 0.051.
Clay reddish yellow 7.5 YR 8/6-7/6.
Exterior: portion of large palmette(?) incised on black paint, two compass-drawn curving lines from which spring three other more widely spaced incised lines.
Traces of added red on each zone except between the two parallel compass-drawn lines.
Interior: unpainted.
Amphora (?).
Mid-sixth century B.C.(?).

7.3 (78.1081) Pl. 56
Isthmus TR1 tr3 (3).
Wall fragment, convex.
P.H. 0.039; P.W. 0.066.
Clay reddish yellow 5 YR 6/8.
Exterior: in black paint on reserved ground, portion of ithyphallic equid (donkey?); inner markings on legs, and also scrotum, in incision; incised lines at base of phallus.

Cf. Munich 1525, *CVA* Germany 37, Munich 8, 54-55, pl. 400, 2.
Amphora(?).
Fourth quarter of the sixth century B.C.(?).

7.4 (78.1146) Fig. 55; Pl. 56
Isthmus TR1 tr2 (6).
Wall fragment, convex.
P.H. 0.0442; P.W. 0.0392.
Clay reddish yellow 5 YR 7/6.
Exterior: on reserved ground, portion of horse's head and mane, including ears; inner detail done by incision; curving band of added red towards inner edge of mane; touch of red on horse's top-knot. At top left, traces of another figure (horse?). To right, portion of solid black zone.
Interior: unpainted.
Amphora or hydria.
Third or early fourth quarter of the sixth century B.C.

7.5 (78.771) Pl. 56
Hill 2 TR2 Area 3 (1).
Wall fragment, slightly convex.
P.H. 0.0313; P.W. 0.0281.
Clay reddish yellow 5 YR 7/6.
Exterior: in black paint on reserved ground, portion of human chest and thigh; across the chest is a baldric drawn in two parallel incised lines, decorated with three white dots; placed diagonally is a sword outlined by incision with a central rib also indicated by an incised line.
Interior: unpainted.
For sword, baldric and lunging thigh, cf. Reading 51.4.9 (*ABV* 486, 5), D. von Bothmer, *Amazons in Greek Art* (Oxford 1957) pl.54, 1a.
Amphora(?).
Second half of the sixth century B.C.(?).

7.6 (75.477) Pl. 56
Gate Area TR1 tr2 (2).
Two joining wall fragments, from body and shoulder.
P.H. 0.033; P.W. 0.031.
Clay light red 2.5 YR 6/6.
Exterior: head and shoulders of Dionysos facing left, hair shown by long tresses hanging over chest and lying thickly on neck behind; ivy wreath on head; neck of garment indicated by two parallel curved lines, all this shown by incision; behind neck, vine branch with dot leaves; added red for beard; ivy leaves of wreath alternately black and red.
Interior: unpainted.
Cf. Oslo, Museum of Applied Art, 8673, *CVA* Norway 1, 18-19, pl. 7.
Amphora(?).
Late sixth-early fifth century B.C.

7.7 (76.600) Not illustrated
Isthmus TR1 tr2 (3).
Wall fragment, slightly convex.
P.H. 0.055; P.W. 0.0465.
Clay reddish yellow 5 YR 7/6.
Exterior: below, solid black; above, reserved with two horizontal lines parallel to edge of solid black zone.
Interior: unpainted.
Amphora(?).
Second half of the sixth century B.C.(?).

7.8 (76.547) Pl. 56
Structure 3 TR13 (2).
Three joining wall fragments, convex, incorporating portion of shoulder of amphora.
P.H. 0.046; P.W. 0.043.
Clay light red 2.5 YR 6/8.
Exterior: head and shoulders of bearded satyr moving right, with head in profile facing left; his left arm is bent towards his head; the elbow of another figure on the left; above him, roughly painted vertical tongues.
Interior: unpainted.
For satyrs in similar stances *cf.* New York 06.1021.59, *CVA* United States of America 16, New York 4, 57-58, pl. 46, 15.
Small neck-amphora.
Late sixth or early fifth century B.C.

7.9 (75.285) Fig. 55; Pl. 56
Structure 1 TR1 tr1 (8).
Shoulder fragment of closed vessel.

P.H. 0.041; P.W. 0.043.
Clay pink-reddish yellow 7.5 YR 7/4-7/6.
Exterior: shield partly preserved with incised double border, between which, dots in added red. In centre, part of the device is preserved, in added white, consisting of a curved line and a segment of a disc(?). On the neck, remains of two horizontal lines.
Interior: unpainted.
Third or fourth quarter of the sixth century B.C.

7.10 (78.1417) Fig. 55; Pl. 56
Isthmus TR3 tr2 (3) B19.
Wall fragment, convex.
P.H. 0.0372; P.W. 0.0235.
Clay reddish yellow 5 YR 6/6.
Exterior: two horizontal black bands separated by a reserved band; above, white circular object (shield?) outlined by two incised lines; towards the right, leg of a figure(?).
Interior: unpainted.
Lekythos.
Third or fourth quarter of the sixth century B.C.

7.11 (75.238) Not illustrated
Gate Area TR2 tr2 (6).
Wall fragment, slightly convex, of closed vessel.
P.H. 0.0303; P.W. 0.0216.
Clay reddish yellow 5 YR 7/6.
Exterior: at top left, portion of black figure with incised line; to right, two vertical lines and portion of solid black; below, black zone topped by a band of dilute glaze, above which a horizontal line.
Interior: unpainted.
Second half of the sixth century B.C.

OPEN VASES: LARGE

7.12 (75.368) Fig. 55; Pl. 56
Gate Area TR3 S (5).
Handle plate.
L. 0.073; W. 0.055.
Clay red 2.5 YR 5/6.
Exterior: top, swan with back turned neck; wings and feathers marked by incision; two incised parallel curves at base of neck; two sides at right angles to rim painted black; at right, paint encroaches on upper surface.
Underside: painted, worn.
Cf. Thasos 1281π, *Ét.Thas.* VII, 90 no.105, pl.37 (swan's head forward); *AA* 1986, 59 nos.6 (N.T.6) and 7 (N.T.7), fig.9, 87 nos.90 (U.F.30), 91 (U.F.31), 92 (U.F.32) and 94 (U.F.35), fig.21.
Column-krater.
Mid-sixth century B.C.

7.13 (78.968) Fig. 55; Pl. 56
Lower City TR3 (3) N upper.
Handle plate fragment.
L. 0.0761; W. 0.0446.
Clay reddish yellow 5 YR 6/6; core, red 2.5 YR 5/6.
Exterior: upper surface, swan or siren; details of wing and breast incised; on body, added red; all three sides of plate painted black.
Underside: painted, worn.
See **7.12**.
Column-krater.
Mid-sixth century B.C.

7.14 (78.770) Fig. 55
Hill 2 TR1 (2).
Rim fragment; horizontal rim, flat on top, concave outer face.
P.H. 0.021; P.W. 0.044; D. (est.) 0.240.
Clay reddish yellow 5 YR 7/6.
Exterior: in black paint on reserved ground, lotus bud chain with dots on upper surface of rim; overhang, worn, remains of an ivy leaf chain.
Interior: black with red line on inner rim face.
Column-krater.
Second half of the sixth century B.C.

7.15 (78.1166) Fig. 55
Isthmus TR1 tr1 (5a).
Rim fragment including part of handle plate.
P.H. 0.033; P.W. 0.0418; D. unest.
Clay reddish yellow 5 YR 7/6.
Exterior: upper surface, two parallel lines (from the decoration of the handle plate); overhang, ivy leaf chain.

For the parallel lines on the upper surface *cf.* *Olynthus* XIII, pl.27, 1 (M34.31); *CVA* Italy 61, Agrigento 1, 8 (C.1535), pl.5, 1-2, pl.28, 2 and 8-9 (R.143), pl.7, 1-3.
Column-krater.
Second half of the sixth century B.C.

7.16 (78.1010) Not illustrated
Hill 2 TR2 Area 3 (2).
Lower wall fragment, convex.
P.H. 0.0619; P.W. 0.115.
Clay reddish yellow 5 YR 6/6.
Exterior: in black paint on reserved ground, rays, upwards from partially preserved band of black.
Interior: painted.
Cf. Tübingen S./10 816, *CVA* Germany 47, Tübingen 3, 16-17, pl.8 (*ABV* 262, 44).
Column-krater.
Late sixth or early fifth century B.C.(?).

OPEN VASES: SMALL

7.17 (78.1469) Fig. 55; Pl. 57
Hill 2 TR3 (3).
Rim fragment, outturned.
P.H. 0.0195; P.W. 0.0413; D.(est.) 0.180.
Clay reddish yellow 5 YR 7/6, very little mica.
Exterior: under rim, traces of paint in two(?) rows of rays or petals; very thin glaze.
Interior: black band at rim, below which, siren(?); detail by incision, added red on wing.
Cf. for siren Oxford G554, *CVA* Great Britain 9, Oxford 2 III H, 92 no. 23, pl.1, 23 (*ABV* 47, 123); Athens N.M. 1330, Callipolitis-Feytmans, *Les plats attiques*, pl. 56, 20; Eleusis 126, *ibid.*, pl. 57, 53 (*ABV* 47, 103).
Plate.
Second quarter of the sixth century B.C.

7.18 (78.754) Fig. 55; Pl. 56
Isthmus TR1 tr3 (3).
Rim fragment, outturned; groove at junction of rim with floor.
P.H. 0.025; P.W. 0.0334; Th. 0.079.
Clay reddish yellow 7.5 YR 6/6.
Exterior: band of dilute black paint along edge of rim, reserved band; remainder painted dilute brown.
Interior: part of rosette near the lip; added red in centre of rosette; four other blobs of red on petals which are marked by incision. At lower edge, band of paint at junction of rim with floor, dark brown at borders, red-brown in centre.
Cf. Athens N.M. 18717, Callipolitis-Feytmans, *Les plats attiques*, pl. 57, 46 (*ABV* 47, 108).
Plate.
Second quarter of the sixth century B.C.

7.19 (75.476) Fig. 55; Pl. 57
Gate Area TR1 tr2 (2).
Wall fragment, slightly convex.
P.H. 0.0196; P.W. 0.0312; Th. 0.004.
Clay reddish yellow 5 YR 7/6.
Exterior: siren to the right, partly preserved, details indicated by added red and incision. At right, blob. Paint thin and chipped.
Interior: painted.
Cf. Amsterdam 3381, *CVA* The Netherlands 2, Museum Scheurleer 2 III Hd, 6-7, pl. 4, 8 (*ABV* 45, 37); Copenhagen 7361, *CVA* Denmark 3, Copenhagen 3, 81, pl.100, 5 (*ABV* 45, 39).
Lekanis (?).
Second quarter of the sixth century B.C.

7.20 (78.1722) Pl. 57 (2 views)
Lower City TR3 (3) N lower.
Plaque fragment from near one of the edges, as suggested by the slight rise on both sides at one corner.
P.H. 0.044; P.W. 0.0435; Th. 0.0072.
Clay reddish yellow 7.5 YR 6/6.
Side A: on black paint, which has mostly flaked, are incised two parallel curving lines with eleven straight lines radiating, presumably part of the body and wings of a bird or hybrid. Traces of added red on the part of the fragment enclosed by the two parallel curving lines.
Side B: on black paint, which has mostly flaked, are two incised curving lines with five radiating straight lines. Within the area enclosed by the curving lines, remains of red paint and further

incision; presumably part of the body of a bird or hybrid. Further incision in the field, presumably from ornaments now lost. In the field remains of black paint and added red.
Second quarter of the sixth century B.C. (?)
Attic (?).

7.21 (75.365) Fig. 55; Pl. 57
Gate Area TR1 tr2 (2).
Rim fragment, slightly concave.
P.H. 0.021; P.W. 0.018.
Clay light red 2.5 YR 6/8.
Exterior: head and shoulders of a bearded male facing left; details of neck of garment, hair, beard and face indicated by fine incision; portion of garment in added red.
Interior: reserved line just below lip; remainder, black.
For the general type *cf.* Athenian Agora A-P 1846, *Hesperia* 9 (1940) 190-191, fig. 27 no.107 (*ABV* 113, 77); Heidelberg S.1, *CVA* Germany 31, Heidelberg 2, 27, pl.152, 1 (*ABV* 51, 1).
Siana cup.
Second to third quarter of the sixth century B.C.

7.22 (78.220) Fig. 55; Pl. 57
Isthmus TR2 tr1 (3).
Wall fragment, nearly vertical.
P.H. 0.031; P.W. 0.021.
Clay light red 2.5 YR 6/8.
Exterior: portion of black figure with details incised (wing?).
Interior: painted.
Cup.
Third quarter of the sixth century B.C.(?).

7.23 (78.1092) Fig. 55; Pl. 57
Lower City TR3 (3) SW.
Wall fragment.
P.H. 0.0394; P.W. 0.0371.
Clay reddish yellow 5 YR 6/6.
Exterior: lower part of two legs of animal (horse?) standing on ground line of thin glaze; below, thick band of black, then thin reserved band; trace of black at bottom edge.
Interior: painted, except for small part of the tondo which is reserved.
Cf. Altenberg 227, *CVA* Germany 17, Altenberg 1, 38-39, pl. 40, nos.1, 4 and 6.
Cup.
Second half of the sixth century B.C.

7.24 (78.738) Fig. 55; Pl. 57
Hill 2 TR1 (2).
Wall fragment.
P.H. 0.019; P.W. 0.0117.
Clay reddish yellow 5 YR 6/8.
Exterior: portion of horse's legs; hoof of one leg raised; two incised lines sweep across the stiff leg; trace of black beneath.
Interior: painted.
Cup.
Second half of the sixth century B.C.

7.25 (78.1370) Fig. 55; Pl. 57
Isthmus TR4 tr1 (3) B8.
Wall fragment, slightly convex.
P.H. 0.023; P.W. 0.026.
Clay reddish yellow 2.5 YR 6/8.
Exterior: in black paint on reserved ground, portion of floral pattern, below, narrow band of black paint.
Interior: painted.
Droop cup (?).
Late sixth century B.C.(?).

7.26 (75.150) Not illustrated
Gate Area TR3 (2).
Wall fragment.
P.H. 0.0113; P.W. 0.0288.
Clay reddish yellow 5 YR 7/6.
Exterior: portion of garment with drapery incised; to right, portion of spray of dot ivy leaves; some dots on garment in added white, now faded.
Interior: painted.
Cf. Naples 81128, *CVA* Italy 20, Naples 1, 14, pl.31, 3; Leiden K.94/9,15, *CVA* The Netherlands 4, Leiden 2, 10-11, pl. 62, 8; Boston 76.234, *CVA* United States of America 19, Boston 2, 45, pl.104, 1.
Cup.
Late sixth or early fifth century B.C.

7.27 (75.484) Not illustrated

Structure 1 TR1 tr1/3 Baulk (9).
Wall fragment.
P.H. 0.0154; P.W. 0.0163.
Clay reddish yellow 5 YR 7/6.
Exterior: black figure solid palmette with heart and leaves incised.
Interior: painted.
Cf. the palmettes on Adolphseck band cup 21, *CVA* Germany 11, Schloss Fasanerie 1, 15, pl.19, 3.
Cup.
Second half of the sixth century B.C.

7.28 (78.1443) Not illustrated
Hill 2 TR2 ext. (3).
Wall fragment.
P.H. 0.0134; P.W. 0.023.
Clay reddish yellow 5 YR 7/6.
Exterior: in black paint on reserved ground, two sprays of dot ivy leaves; at left, three white dots in a row.
Interior: painted.
Cf. **7.26**.
Cup.
Late sixth or early fifth century B.C.

7.29 (78.1438) Not illustrated
Hill 2 TR2 ext. (3).
Wall fragment.
P.H. 0.01; P.W. 0.011.
Clay reddish yellow 5 YR 7/6.
Exterior: in black paint on reserved ground, spray of dot ivy leaves; at left, part of a figure or object.
Interior: painted.
Cf. **7.26**.
Cup.
Late sixth or early fifth century B.C.

7.30 (75.361) Fig. 55
Structure 1 TR1 tr5 (4).
Body and rim fragment; concave outturned rim.
P.H. 0.042; P.W. 0.056.
Clay reddish yellow 5 YR 6/8.
Exterior: at lip, two rows of blobs on either side of horizontal thin band (debased branch of ivy leaves) parallel to lip; below, unidentifiable painted decoration.
Interior: top edge of lip reserved, then solid black fired red.
Cf. Athenian Agora P 25982, *Agora* XXIII, 281 no. 1499, pl.102; Athenian Agora P.2711, *ibid.* 289 no.1580, pl. 105; Athenian Agora P 2710a, *ibid.* 292 no. 1607, pl. 105.
Attic-type skyphos.
End of the sixth or beginning of the fifth century B.C.

7.31 (75.206) Fig. 55; Pl. 57
Structure 1 TR1 tr1 (6).
Rim and wall fragment; convex wall with slightly outturned rim.
P.H. 0.0346; P.W. 0.060.
Exterior: rim, painted; below, on reserved ground trace of palmette.
Interior: painted; reserved line at rim.
For comparable palmettes see Corinth 262-9, *Corinth* XIII, pl.36; Athenian Agora P 10674, *Agora* XXIII 282, no. 1504, pl. 102; Athenian Agora P 23321, *ibid.* 283 no.1513, pl.103.
Palmette cup or Attic-type skyphos.
Late sixth or early fifth century B.C.

7.32 (75.741) Fig. 55; Pl. 57
Isthmus, Surface.
Wall fragment, slightly convex.
P.H. 0.0197; P.W. 0.033.
Clay light red 2.5 YR 6/8.
Exterior: uncertain subject (winged creature?); at left tip, portion of added white.
Interior: painted.
Skyphos(?).
Late sixth or early fifth century B.C.

7.33 (75.129) Not illustrated
Gate Area TR1 tr1 (4).
Wall fragment, slightly convex.
P.H. 0.0224; P.W. 0.0304.
Clay reddish yellow 5 YR 6/6.
Exterior: in black paint on reserved ground, part of degenerate lotus.
Interior: painted.
Cf. Toronto 919.5.180, *CVA* Canada 1, Toronto 1, 30-31, pl.35, 1-2; Orvieto n. 2597, *Faina*, 123-124 no. 57, fig. 57.2.
Cup.
Late sixth century B.C.

8. THE RED-FIGURED POTTERY

Ian McPhee

INTRODUCTION*

The catalogue that follows lists 198 inventoried fragments of red-figured vases, both Attic and non-Attic, which were found in the excavations at Torone in 1975, 1976 and 1978. Except for a few scraps,[1] this represents all the red-figured pottery brought to light during those years. There is very little of any artistic quality here, but each fragment has at least been fully described if not illustrated, for it forms part of the archaeological record of the site.

The fragments are arranged, in the first instance, by shape: bell-kraters **8.1-8.60**, calyx-kraters **8.61-8.69**, column-kraters (**8.7O-8.75**), kraters of uncertain type (**8.76-8.113**), skyphoi (**8.114-8.141**), skyphoi or kraters (**8.142-8.148**), pelikai (**8.149-8.154**), a lebes gamikos (**8.155**), a hydria (**8.156**), lekythoi (**8.157-8.159**), askoi (**8.160-8.167**), a pyxis (**8.168**), lekanides (**8.169-8.185**), and, finally, fragments of closed shapes (**8.186-8.197**). Within each category the arrangement is chronological, at least to the extent that I give the fragments of the 5th century before those of the 4th. I have not, however, always followed a chronological order for the 4th century: in the case of bell-kraters, for instance, I group together all fragments of lips or all sherds with parts of handle-florals, and so on.

While most of the red-figured potttery found at Torone is of Athenian manufacture, some is not Attic but local. It is normally possible to distinguish Chalkidic from Attic in the case of whole vases,[2] but the red-figured fragments from Torone are often exceedingly small so that one cannot always be sure, either from the fabric or what remains of the drawing, whether an individual piece is Attic or non-Attic. For this reason a Munsell[3] reading has been given for every sherd. Because I am not always

* The red-figured pottery in this catalogue was studied during a brief stay in Polygyros in January 1980 and in two short sessions at Torone in August 1980 and 1981. For permission to work on this material I am grateful to Professor Alexander Cambitoglou, Director of the Torone expedition, and to the Archaeological Society at Athens. My research in Polygyros in 1980 was greatly assisted by Dr. K. Rhomiopoulou and by the late Dr. I. Vokotopoulou. For financial support I am especially indebted to the Australian Government through the Australian Research Grants Scheme.

[1] The following pieces are omitted: 75.265, 75.295, 76.447, 75.507, 75.724, 75.732, 76.573, 78.1451, 78.1194a-b; I am not even certain that all of these are red-figured.

[2] See I. McPhee, "Some Red-figured Vase-Painters of the Chalkidice," *BSA* 76 (1981) 297-308, pls.49-53.

[3] *Munsell Soil Color Charts* (Baltimore 1975).

certain of the fabric, I have not tried to separate the Attic from the non- Attic sherds in my list.

The reader will soon discover that not every sherd is illustrated, though I have tried to figure, either through a photograph or a profile drawing or both, anything likely to be of remotest interest. Almost all the Chalkidic fragments are illustrated, but I did not think it necessary to show every minute piece of Attic red-figure.

Most of the fragments from Torone belong to the 4th century, but some are earlier and datable to the 5th century: **8.1-8.6**, **8.9**, **8.70-8.74**, **8.76-8.85**, **8.114**, **8.149**, **8.186-8.188** all fall into this category. The number would certainly be increased, were it possible to assign more accurately the many fragments, especially of kraters, that I have been able to date only to the last quarter of the 5th or first quarter of the 4th century. Nevertheless, it is clear that at present there are no red-figured fragments from Torone earlier than the second quarter of the 5th century and only **8.1**, **8.76**, **8.77** and **8.149** are likely to belong to the second quarter. On present evidence Attic pottery begins to be imported in quantity only towards the end of the 5th and in the early years of the 4th century. Furthermore, most of the red-figure, both imported and local, falls within the first half of the 4th century. Some fragments may go down into the third quarter of the century, but it is noteworthy that Torone has not yet produced any example of the latest groups of Attic red-figure. We do not, for instance, find any late pelikai from Group G or by the Amazon Painter and no examples of late "Kerch" red-figure. There are also no calyx-kraters of the L.C. Group, but these seem to have been produced largely for the Attic and Boiotian markets. Of course it may well be argued that very little of Torone has so far been excavated, that these preliminary results may be misleading, and that future research may alter them radically. This may well prove correct, but it is interesting that at Olynthos, the only other site in the Chalkidike from which a large quantity of pottery has been published, the red-figure covers a similar chronological range. There are some 670 fragments of red-figure included in volumes V and XIII of the Olynthos publication, but, so far as I can tell, only about 30 belong definitely to the 5th century, and of these 30 only one piece, Thessalonike 458 (5.107.199),[4] part of a cup by the Pithos Painter,[5] is clearly earlier than 480. Most of the red-figured pottery from Olynthos, like that from Torone, falls within the period from the last quarter of the 5th to the middle of the 4th century.

That very little early Attic red-figure, i.e. red-figure of *ca.* 530-480, has been found in the Chalkidike is hardly surprising, for most vases of this period, mainly of

[4] *Olynthus* V, pl. 107. 199.
[5] *ARV*[2] 140, 56.

course cups, were exported to Italy. However, Persian control of Thrace and the Chalkidike during the late 490s and 480s might well have kept Athenian vases from these markets. If the red-figured pottery provides any indication, Athenian trade with the northern Aegean increased only after the retreat of the Persians and the establishment of the Delian League. To what extent events during the Peloponnesian War, especially after the Sicilian disaster, affected the pottery trade in the North Aegean is not yet clear. If there was any problem, the setback was only temporary, for Attic red-figure was imported in quantity during the first quarter of the 4th century, perhaps partly because of the loss of the lucrative markets of Italy (excluding Campania and the Po Valley). The first half of the 4th century, when the import of Attic red-figure reached its height, despite the production of a local red-figure fabric, coincides with the most prosperous period for the city-states of the Chalkidike, the heyday of the Chalkidic League, which ended with the destruction of Olynthos in 348 and the Macedonian conquest.[6]

We now look at the question of shapes. Of the 198 fragments presented in the catalogue, at least 113 seem to come from kraters. Of these 113 some 60 represent bell-kraters, while only 9 are definitely from calyx-kraters and 6 from column kraters. There are also 38 fragnents of kraters of uncertain type, mainly, no doubt, either bell-kraters or calyx-kraters. Most of the 113 fragments are Attic. That the fourth type of krater, the volute-krater, should not be definitely represented is perhaps not surprising since the bulk of the Torone sherds fall into the 4th century and the last Attic red-figure volute-kraters are not later than *ca.* 390-380.[7] This is true also for the column-krater: that it is found at Torone merely indicates that during the 5th century it was a more common shape than the volute-krater. The bell-krater was produced in quantity during the second half of the 5th century, and exported widely from Athens; during the 4th century, when the number of shapes decorated in red-figure was restricted, the bell-krater retained its popularity as an item of export.[8]

[6] The import of Attic red-figure into Olynthos and the North Aegean is discussed by Brian R. MacDonald, "The Emigration of Potters from Athens in the Late Fifth Century B.C.," *AJA* 85 (1981) 163, and at greater length in his unpublished dissertation, *The Distribution of Attic Pottery 450 to 375 B.C. The Effects of Politics on Trade* (1979) 89-90, 200. The red-figure from Kition in Cyprus, published by Martin Robertson in *Excavations at Kition* IV (1981) 51-74, shows a chronological range similar to that at Olynthos and Torone; there is no 6th century red-figure and most belongs to the late 5th or 4th century. The situation is similar at Al Mina, as Robertson (p. 68) observed.

[7] See I. McPhee, "Attic Red Figure of the Late 5th and 4th Centuries from Corinth," *Hesperia* 45 (1976) 381, note 3.

[8] *Pnyx* II, 8-10.

After the krater the next most common shape is the skyphos, of which there are at least 28 sherds, as well as another 7 that may come from skyphoi. Some of these skyphoi were imported from Athens (at least 9 fragments are Attic), but over half the sherds seem to be Chalkidic (at least 14, perhaps another 4). Though some of the Attic pieces are 5th century, most belong to the first half of the 4th, perhaps mainly the first quarter. The Chalkidic fragments also belong to the first half of the 4th, for the most part later rather than earlier.

18 fragments come from lids or bowls of lekanides: 9 seem to be Attic, at least 5 Chalkidic. The lekanis was an important shape in Attic red-figure during the first half of the 4th century, and was produced both for the Athenian market as well as for export.[9]

At least 8, and perhaps 10 fragments represent askoi, of which perhaps half are Attic, the rest Chalkidic imitations. All seem to belong to the 4th century, though the Attic fragment **8.187,** which may come from an askos, should be 5th century. At least two of the askoi had strainer-tops, but it is not possible to be sure of the exact shape of the remainder. At Olynthos both the type with nipple and overreaching handle and that with strainer-top, round or lionhead spout and circular handle are found.[10] The Attic red-figured askos was produced as early as *ca.* 500-480 but achieves its greatest popularity in the last quarter of the 5th century and first half of the 4th. To judge from findspots in the 4th century, the Attic red-figured askos was made mainly for export. The Chalkidic versions, on present evidence, begin in the first quarter of the 4th century in imitation of the nipple-type.

The other shapes represented among the Torone fragments are the pelike (at least 5, perhaps 10 sherds), the hydria (**8.156**, perhaps **8.189, 8.192** and **8.193**), the lebes gamikos (type 2; **8.155**), the squat-lekythos (**8.158**, **8.159**) and perhaps the lekythos (**8.157**), the powder-pyxis (type D; **8.168**), perhaps the chous (**8.195**) and possibly the amphora (**8.186**). Notably absent are any examples of Attic red-figured cups or stemless cups, oinochoai of shape 2, and lebetes gamikoi of type 1.

I can attribute very few of the Attic red-figured fragments to individual hands: the bell-krater fragment **8.9** is compared with work by the Nikias Painter, the bell-krater fragment **8.21** comes from the Telos Group and is probably by the Retorted Painter; the krater fragment **8.113** is compared with the work of the Toya Painter and the Filottrano Painter; the handle-floral on the skyphos fragment **8.114** is like that which occurs in the Penelope Painter; the fragment **8.137** is probably from a skyphos

[9] *Ibid.*, 10-11. See also S. Roberts, "Evidence for a Pattern of Attic Pottery Production *ca.* 430-350 B.C.," *AJA* 77 (1973) 435-437.

[10] See B. Sparkes and L. Talcott, *The Athenian Agora* XII. *Black and Plain Pottery* (Princeton 1970) 157-160.

of the Fat Boy Group; and **8.140** reminds me of the same Group; the lekanis **8.169** may be attributed to the Otchët Group, as also **8.170**; **8.173** goes with the nuptial lekanides listed in *ARV*^{2} 1498-99.

The non-Attic fragments form only a very small proportion of the red-figured pottery from Torone: only 33 sherds seem to me certainly of Chalkidic fabric, though there are at least another 20 pieces, listed either as Attic or Chalkidic, about which I am not certain. There is no evidence that any of this pottery was made locally at Torone rather than imported from elsewhere in the Chalkidic peninsula.

Chalkidic pottery is one of a number of local red-figure fabrics which were produced in Greece during the second half or the 5th or first half of the 4th century. I have given some account of Chalkidic pottery in *BSA* 76, 1981 (see above note 2), where the reader will find a fuller treatment than is attempted here. In that article[11] I remarked that the terracotta of Chalkidic vases "is quite fine, usually reasonably hard and contains many flecks of golden mica; the colour varies from a light brown to a reddish-yellow (Munsell: 7.5 YR 6/4-6, 7/6). The reserved area may show traces of a reddish miltos. The glaze is usually a dull black, and may be applied thinly." The fabric of most of the fragments found at Torone, as also at Olynthos, conforms to this description (**8.31**, **8.54**?, **8.75**?, **8.108**, **8.115**?, **8.118**?, **8.121-8.123**, **8.124**?, **8.129-8.130**, **8.135**, **8.136**, **8.138**, **8.139**, **8.141**, **8.147**, **8.148**, **8.152**, **8.154**, **8.155**?, **8.157**?, **8.160**?, **8.164**, **8.165**, **8.166**?, **8.175**?, **8.184**?, **8.193**, **8.194**, **8.197**), although in terms of the *Munsell Soil Color Chart* the fired clay may be 5 YR 6/6, 6/8, 7/6 or 7.5 Y 6/6, 7/6, 7/8. Fragments **8.121 - 8.123**, **8.129**, **8.130**, **8.135**, **8.136**, **8.138**, **8.139**, **8.141** and perhaps **8.147** and **8.148** come from skyphoi; **8.152** and **8.154** from pelikai; **8.155**, if Chalkidic, is part of a lebes gamikos (probably type 2); **8.164**, **8.165** and perhaps **8.166** and **8.194** come from askoi; **8.175** and **8.184** may be from Chalkidic red-figured lekanides; and **8.193** and **8.197** represent closed shapes. I have left **8.31**, **8.54**, **8.75** and **8.108** to the last. **8.31** and **8.108** seem to me definitely Chalkidic: **8.31** comes from a bell-krater; **8.108** from a bell or calyx-krater; **8.54** and **8.75** may be Chalkidic: **8.54** is the handle of a bell-krater; **8.75**, part of the shoulder and neck of a column-krater, a shape not otherwise attested in Chalkidic red-figure. Apart from this last, the range of shapes is standard for the local red figure. With the unlikely exception of **8.75**, none of these fragments is earlier than the last quarter of the 5th century. Little can be said about the painters of these fragments: the figure on **8.138** may be compared with figures by the Painter of Olynthos 5.156; **8.164** is probably by the same painter.

Fragments **8.117**, **8.133**, **8.134**, **8.192** and perhaps **8.131** and **8.146** belong to a

[11] McPhee *op. cit.* (*supra* n. 2) 297.

second fabric. The fired clay may have mica but is rather better levigated than that of fabric 1. The colour of the fired clay varies from a very pale brown to a greyish cream, more or less 10 YR 7/4 on the Munsell Chart. Fragments **8.117**, **8.133** and **8.134** come from skyphoi; **8.192** is part of a vase of closed shape. All seem to date to the first half of the 4th century.

What appears to be a third fabric is represented by fragments **8.172**, **8.180**, **8.181**, **8.183** and **8.191**. The fired clay is hard, with many specks of mica, especially on the surface. The colour varies from a reddish yellow to light brown on the surface but is grey in the core. With the exception of **8.191** (probably a pelike), the fragments come from lekanides; the date is the first half of the 4th century.

It may be that these three fabrics were produced at three different places in the Chalkidike, but at present it is not possible to be sure. The non-Attic fragments from Olynthos seem to belong mainly to the first fabric, which may suggest that the vases were made at that city. Olynthos was the chief city of the Chalkidic League (formed probably in 432/1) until its destruction in 348 and the demise of the League. It is interesting to note that on present evidence no example of this local fabric is earlier than *ca.* 430 or later than *ca.* 350.

Concordance 1 sets out the pottery by find-spot. The reader will note that the same catalogue numbers may appear under two different findspots. This merely indicates that an inventoried fragment consists of two joining sherds from different proveniences. Fragments of red-figured pottery have been found in almost all the areas so far excavated at Torone, but it will be seen that about two-thirds of the inventoried pieces come from the Isthmus.

POSTSCRIPT

This chapter on the Attic and non-Attic red-figure fragments found at Torone was originally submitted in 1983, and slightly revised early in 1988. It has not been possible to alter the text further to take into consideration works of the last decade that are concerned with red-figure pottery. Perhaps I may draw attention to the publication of Attic red-figure from two particular sites, the Agora in Athens, and Cyrene in Libya:

Mary B. Moore, *The Athenian Agora, Vol. XXX, Attic Red-Figured and White-Ground Pottery* (Princeton 1997).

Ian McPhee, *The Extramural Sanctuary of Demeter and Persephone at Cyrene, Libya, Final Reports VI, Part II: Attic Pottery* (Philadelphia 1998).

For brief comments on Chalkidic red-figure, see the following:

Kristine Gex and Ian McPhee, "The Painter of the Eretria Cup: A Euboian Red-figure Vase-painter," *AntK* 38 (1995) 3-10.

Ian McPhee, "Greece, ancient V, 6 (iii): Red-figure pottery: Other areas," *The Dictionary of Art* (London 1996) 533-535.

For fragments of red-figure found in the excavations at Torone since 1978, see *PAE* 1982 (1984) pl. 54 β-γ; 1984 (1988) pls. 68 α, 69 α-β; *Ergon* 1982 (1983) figs. 43-44; 1984 (1985) fig. 34 α-β; *AR* 1982-1983 (1983) 43, fig. 66.

CATALOGUE

8.1 (78.1260) Fig. 56; Pl. 58
Isthmus, TR1 tr2 (6a).
Fragment from the wall of a bell-krater.
H. 0.080; W. 0.094; Th. 0.007 (top) - 0.009 (bottom).
Clay light red, 2.5 YR 6/8. Glaze shiny black.
Legs and lower abdomen of a male walking to right. He carries a chlamys or himation over his left arm and a staff in his right hand. Infibulated penis. Dilute glaze for the navel - pubes line and the pubes. Considerable preliminary sketch. The inside is glazed.
I take the figure to be a komast. For the position of the legs compare the bearded komast on Cleveland 30.104, *CVA* Cleveland 1, pl. 23, *ARV*^{2} 516, 1. Compare also the left-hand figure on the obverse of a stamnos by the Copenhagen Painter, E. Berger and R. Lullies, *Antike Kunstwerke aus der Sammlung Ludwig* (Basel 1979) 106.
Attic.
Ca. 470-450 B.C.

8.2 (75.78). Pl. 58
Structure 1, TR1 tr1 (5).
Fragment from the body of a bell-krater. Wall slightly convex.
H. 0.035; W. 0.037; Th. 0.005 - 0.006.
Clay reddish yellow, 5 YR 6/6-7/6. Glaze dull black, chipped. Red miltos over reserved area.
Legs of a male figure, the proper left leg in three-quarter view to left, the right in profile to left. A small section of garment is visible to left of the left shin. Relief contour along both legs. Dilute glaze for the calf muscles of both legs.
Attic.
Ca. 450-400 B.C.

8.3 (78.833) Fig. 56; Pl. 58
Isthmus, TR3 tr2 (3) B14.
Fragment from the rim and lip of a bell-krater. Considerable wear at rim on inside.
H. 0.044; W. 0.052; Th. rim.0.021.
Clay light red, 2.5 YR 6/6, but light grey in places from secondary burning. Glaze shiny black.
On the lip, a section of laurel (leaves with spines) to right. The inside is glazed.
Attic.
Ca. 470-430 B.C.

8.4 (75.313). Fig. 56
Structure 1, TR1 tr1 (6).
Fragment of the lip of a bell-krater,
H. 0.057; W. 0.041; Th. rim 0.017.
Clay light red, 2.5 YR 6/8. Glaze lustrous black.
On the lip, a section of laurel, to right; below this, a band of egg-pattern. An area of dilute glaze at the lower break may be the top of a head. Glazed inside except for a reserved band at the rim and another (W. 0.006) just above the lower break.
See also **8.5** and **8.6**.
Attic.
Ca. 450-420 B.C.

8.5 (75.199) Not illustrated
Structure 1, TR1 tr1 (7).
Fragment from the wall of a bell-krater.
H. 0.022; W. 0.028; Th. 0.005.
Clay light red, 2.5 YR 6/8. Glaze black.
The exterior probably shows a section of drapery. Fine relief lines. Glazed inside.
Perhaps from the same vase as **8.4**.
Attic.

Ca. 475-425 B.C.

8.6 (75.275). Not illustrated
Structure 1, TR1 tr1 (7).
Fragment from the wall of a bell-krater; the beginning of the stump of a handle seems to be preserved at the bottom left.
H. 0.043; W. 0.044; Th. 0,006.
Clay light red, 2.5 YR 6/8. Glaze lustrous black.
A small section of drapery is preserved at the right-hand break. Glazed inside. Perhaps from the same vase as **8.4**.
Attic.
5th century B.C.

8.7 (78.1226) Not illustrated
Isthmus, TR1 tr3 (4).
Fragment from the wall of a bell-krater.
H. 0.020; W. 0.044; Th. 0.006 - 0.007.
Clay light red, 2.5 YR 6/6. Glaze lustrous black.
What remains is part of the right upper arm and right breast (frontal view) of a male figure. The inside is glazed. Some preliminary sketch lines.
Attic.
Ca. 450-375 B.C.

8.8 (78.761) Not illustrated
Lower City, TR2 (1).
Fragment, slightly convex, from the wall of a bell-krater.
Max. dim. 0.032; Th. 0.005.
Clay light red, 2.5 YR 6/8; relatively soft. Glaze slightly shiny, black.
At the left, a section of drapery (himation) over the legs (?) of a figure. The inside is glazed.
Attic.
Ca. 450-375 B.C.

8.9 (78.1713 + 78.1714) Pl. 58
Lower City, TR1 S (4).
Two joining fragments from the wall of a bell-krater.
H. 0.095; W. 0.110; Th. 0.006 - 0.008.
Clay reddish yellow, 5 YR 6/8. Glaze slightly shiny, off-black.
Lower part of male standing to right, wearing an himation. Below, a section of the pattern-band: stopped meanders running to right and a chequer square. The inside is glazed. From a reverse.
See **8.10.**
What remains may be compared with the left hand draped youth on the reverses of earlier vases decorated by the Nikias Painter: see, for example, Vienna 2000,
CVA Vienna 3, pl. 122, 5; *ARV*^{2} 1334, 17.
Attic.
Ca. 425-400 B.C.

8.10 (78.1712) Not illustrated
Lower City, TR1 S (4).
Fragment of the handle of a bell-krater.
Max. dim 0.090.
Clay light red, 2.5 YR 6/8. Glaze shiny greyish - black.
What remains is one arm of a handle and part of the wall of the vase. The handle is glazed. Around the base, egg-pattern. This might belong with **8.9.**
Attic.
Ca. 425-375 B.C.

8.11 (78.1716). Not illustrated
Lower City, TR3 (1) S.
Fragment from the lower wall of a bell-krater.
H. 0.031; W. 0.036; Th. 0.006 - 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny black.
Below, a section of the pattern-band: two meanders, to left. Above, an arched band with a row of black dots and scumbling in dilute glaze, no doubt a rock. The inside is glazed.
Dotted rocks are not uncommon in the first half of the 4th century: see London F 75, *ARV*^{2} 1419, 1; S. Agata de' Goti, Rainone 181; London F 80, *ARV*^{2} 1426, 22; Athens 12254, *ARV*^{2} 1426, 34; Marseilles 2934 (not in *ARV*^{2} but by the Retorted Painter); Capua 7538, *ARV*^{2} 1432, 21
Attic.
Ca. 425-375 B.C.

8.12 (78.933). Pl. 58
Lower City, TR3 (1) N.
Fragment from the wall of a bell-krater.

H. 0.035; W. 0.037; Th. 0.007.
Clay reddish yellow, 5 YR 6/6; soft; surface mica. Glaze black, slightly shiny.
At the right, one end of a striped cushion. To the left and below, pleat lines of the himation worn by a symposiast. Some preliminary sketch. Glazed inside.
Attic.
Ca. 425-375 B.C.

8.13 (78.350) Pl. 58
Isthmus, TR2 tr1 (3a).
Fragment preserving part of the lip and upper wall of a bell-krater.
H. 0.038; W. 0.056; Th. 0.006 (lower break).
Clay light red, 2.5 YR 6/6. Glaze shiny, brownish-black.
At the top, the horizontal reserved groove at the base of the lip and above, a bit of a laurel leaf. At the lower break, the upper half of the head of a woman (maenad?) in profile to right; then a section of the wings of a figure (Nike or Eros), to right. Relief contour for the two leaves in the woman's hair, the line of her brow, the wings. White washed with dilute glaze over the two leaves. The inside is glazed except for a reserved band just above the lower break.
Attic.
Ca. 425-375 B.C

8.14 (78.571) Not illustrated
Isthmus TR1 tr3 (1).
Fragment from the upper wall of a bell-krater.
H. 0.036; W. 0.036; Th. 0.006 - 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black.
Uncertain remains preserved at the left. Two legs of a tripod set upon a column (part of abacus)? The inside is glazed except for a reserved band (W. 0.006) towards the top.
For a tripod upon a column. see the examples illustrated in H. Froning, *Dithyrambos und Vasenmalerei in Athen* (Würzburg 1971).
Attic.
Ca. 425-375 B.C.

8.15 (78.509) Not illustrated
Isthmus, TR1 tr1 (4-5a).
Fragment from the wall of a bell-krater; slightly convex in profile. Max. dim. 0.045; Th. 0.005.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black.
Part of a figure from shoulder to waist, standing to right, wrapped in an himation. The inside is glazed.
Attic.
Ca. 425-375 B.C.

8.16 (78.786) Pl. 58
Isthmus, TR2 tr2 (1).
Fragment from the wall of a bell-krater.
H. 0.033; W. 0.054; Th. 0.008 - 0.009.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, black.
The upper body of a draped male standing to right. One arm seems to have been extended, perhaps holding a strigil, discus or walking-stick. Probably one of the figures from a reverse. The fragment is glazed inside.
Attic.
Ca. 425-375 B,C.

8.17 (78.822) Pl. 58
Isthmus TR3 tr2 (3) B13.
Fragment from the lower wall of a bell-krater.
H. 0.051; W. 0.044; Th. 0.007 - 0.008.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, brownish black.
Lower part of the himation worn by a man standing to left. The diagonal zigzag line represents part of the hem. Below the figure, at the right hand break, part of the upper horizontal line framing a meander is preserved. The interior is glazed.
Attic.
Ca. 425-375 B.C.

8.18 (78.1372). Pl. 58
Isthmus, TR4 tr1 (3) B8.
Fragment from the wall of a bell-krater.
H. 0.034; W. 0.046; Th. 0.005.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black.

Below, parts of two stopped meanders to left from the horizontal pattern-band. Above, the feet and hem of the himation of a draped male standing to right. The interior is glazed.
Attic.
Ca. 425-375 B.C.

8.19 (78.1283) Pl. 58
Hill 2, TR2.Ext. (2).
Fragment from the wall of a bell-krater.
H. 0.048; W. 0.046; Th. 0.005-0.006.
Clay light red, 2.5 YR 6/8.
Section of drapery (himation). The glaze on the inside has fired a reddish-brown.
Attic.
Ca. 425-375 B.C.

8.20 (78.1441) Pl. 58
Hill 2, TR2 Ext. (3).
Fragment from the upper wall of a bell-krater.
H. 0.040; W. 0.016 Th. 0.006-0.007.
Clay reddish yellow, 5 YR 6/6. Glaze dull black.
Part of the head, neck and left shoulder of a woman seen in profile to left. Pleat lines of her garment run across her shoulder. Inside glazed except for a reserved band (W. 0.004) towards the top.
Attic.
Ca. 425-375 B.C.

8.21 (78.111) Pl. 58
Isthmus, TR1 tr1 (4).
Fragment from the upper wall of a bell-krater. At the upper break, the beginning of the lip.
H. 0.058; W. 0.062; Th. lower break 0.007.
Clay light red, 2.5 YR 6/8, but yellower on the surface. Glaze shiny black on exterior, fired red in places; on interior, glaze has fired red.
Upper part of woman (maenad?) seated to left but looking back. Her right arm is bent up and back as though holding out her garment. She wears a belted peplos decorated at the neck, and a *sakkos*. Her flesh is painted in white; anatomical details, necklace, and bracelets in dilute glaze. At the right, the right hand and wrist of a second figure, perhaps a satyr. The interior is glazed except for a reserved band (W. 0.005) at upper break.
The drawing may be connected with Beazley's Telos Group, particularly with the Retorted Painter. The distinctive dotted *sakkos* is found in the later work of this painter: see Naples 943, *ARV*^{2} 1429, 7, and Valencia CB-C-364, Trias de Arribas, pl. 163, 9, which is not in *ARV*^{2} but was said by H.R.W. Smith, *AJA* 57 (1953) p. 36, to recall the style of the Retorted Painter.
Attic.
Ca. 390-370 B.C.

8.22 (78.210) Pl. 59
Isthmus, TR1 tr1 (4).
Two joining fragments from the wall of a bell-krater.
H. 0.031; W. 0.043; Th. 0.005.
Clay reddish yellow, 5 YR 6/8. Glaze slightly shiny black. The scene on the outside is not completely intelligible; it may have been a symposium. What remains is a right hand and the lower line of the right forearm, a section of drapery over a leg (?), and the upper part of a pillow (?). On the pillow (?) at least two strokes of diluted glaze. The inside is glazed.
Attic.
Ca. 400-350 B.C.

8.23 (78.437) Not illustrated
Isthmus, TR1 tr2 (4).
Fragment from the lower wall of a bell-krater.
H. 0.024; W. 0.045; Th. 0.006.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black.
Part of an himation over the lower legs of a male who was standing to right; a reverse-figure. The fragment is glazed inside.
Attic.
Ca. 400-350 B.C., probably second quarter.

8.24 (78.660) Not illustrated
Isthmus, TR3 tr2 (3) B18.
Two joining fragments from the wall of a bell-krater.
H. 0. 048 ; W. 0.074; Th. 0. 007.
Clay reddish yellow, 5 YR 6/8. Glaze slightly shiny, greyish black.

At the lower left-hand break, an ovule from the egg-pattern around one handle-stump. To the right, the body, from shoulder to waist, of a man standing to right, draped in a himation. Probably the left-hand figure from a reverse. The fragment is glazed inside.
Attic.
Ca. 400-350 B.C.

8.25 (78.785) Pl. 59
Isthmus, TR2 tr2 (1).
Two joining fragments from the wall of a bell-krater.
H. 0.054; W. 0.074; Th. 0.007-0.008.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black. What remains is a large section of the himation of a male (?) figure, to left (?). The glaze of the pleat-lines has worn away. The fragment is glazed inside.
Attic.
Ca. 450-350 B.C.

8.26 (78.667) Pl. 59
Isthmus, TR1 tr2 (5).
Fragment from the wall of a bell-krater.
H. 0.056; W. 0.043; Th. 0.006.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny, black.
Tail, hip and right thigh of a satyr standing (perhaps bent forward) to right. Dilute glaze wash on tail, Relief contour along the thigh. The fragment is glazed inside.
Attic.
Ca. 400-350 B.C.

8.27 (78.23) Pl. 59
Isthmus, TR2 tr1 (3a).
Fragment from the upper wall of a bell-krater; the fragment begins to curve out at the top.
H. 0.044; W. 0.040; Th. 0.006 - 0.007.
Clay reddish yellow, 5 YR 7/6. Glaze shiny black. What remains is the upper half of a Nike, head in profile to left, and arms stretched out. Her hair is bound up in a *sphendone*. Her flesh is painted white, with dilute glaze for the lines of her chiton. Traces of preliminary sketch. The inside is glazed. Perhaps from the same vase as **8.28**.
Attic.
Ca. 380-350 B.C.

8.28 (78.233) Pl. 59
Isthmus, TR2 tr1 (3a).
Two joining fragments from the wall of a bell-krater.
H. 0.038; W. 0.056; Th. 0.006 (top) - 0.008 (bottom).
Clay reddish yellow, 5 YR 7/6. Glaze dull black.
At the left, the lower part of a chiton with decorated hem over the legs of a female (maenad?) who stands to right, her left (?) leg raised. At the right, an ivy spray. White for the foot of the woman and the stem of the ivy spray. The inside is glazed. Perhaps from the same vase as **8.27**.
Attic.
Ca. 380-350 B.C.

8.29 (78.367) Pl. 59
Isthmus, TR2 tr1 (3a).
Fragment from the upper wall of a bell-krater.
H. 0.055; W. 0.053; Th. 0.006.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny, black.
At the left, the left arm and raised left leg, in added white, of Eros. At the right, the right arm of a male (?) figure (Dionysos?) holding a thyrsos or sceptre. Relief contour for the arm and thyrsos. Traces of preliminary sketch on the arm. Glazed on the inside.
For the attitudes compare the group of Eros and Dionysos on the bell-krater Vatican 17839, *ARV*^{2} 1421, 2.
Attic.
Ca. 380-350 B.C.

8.30 (78.1707) Pl. 59
Isthmus TR3 tr1 (3) B5.
Fragment from the wall of a bell-krater.
H. 0.061; W. 0.072; Th.0.006.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black.
At the lower left, left hand, bent back, and wrist with double white bracelet, of a female figure. The hand may have been holding out an end of

drapery from the shoulder. At the upper left, the elbow and wrist of a left arm bent at right angles; white bracelet around the wrist. This second female figure may have been seated to left and only partially visible. To the right, part of the head, right arm, side and thigh of a third female, seated to right. Her flesh is painted in white. She wears a diaphanous chiton, and a himation around her legs. She holds a thyrsos in her right hand. This figure may be Ariadne, the other two women, maenads. Relief contour on the elbow of the first figure, the wrist of the second, the thyrsos and the right side of Ariadne. The fold-lines of Ariadne's chiton are indicated in dilute glaze. Traces of preliminary sketch. The inside is glazed.
The style recalls the work of the Plainer Group of vase painters, especially the Painter of London F 64 and the Painter of London F 1 (*ARV*^{2} pp. 1419-1422). For the right-hand figure on the fragment compare the figure of Artemis on London 1924.7 - 16.1, *ARV*^{2} p.1420, 6, H.Metzger, *Les représentations dans la céramique attique du IVe siècle* (Paris 1951), p1.23.
Attic.
Ca. 400-375 B.C.

8.31 (75.82) Not illustrated
Structure 1, TR1 tr1 (5).
Fragment of the wall of a bell-krater.
H. 0.028; W. 0.038; Th. 0.006.
Clay reddish yellow, 5 YR 6/8; soft, micaceous. Glaze dull black.
At the right, the side of a male figure and a section of his himation (?). A wavy strip (border ?) in dilute glaze runs down the garment. The inside is glazed.
Chalkidic.
Ca. 400-350 B.C.

8.32 (76.174) Not illustrated
Isthmus, TR1 tr1 (1).
Fragment from the lower wall of a bell-krater.
H. 0.037; W. 0.040; Th. 0.009.
Clay reddish yellow, 5 YR 7/6. Glaze shiny black.
What remains is a section of the pattern-band: a dotted saltire square, and a meander, to left. The fragment is glazed inside.
Attic.
Ca. 425-375 B.C.

8.33 (78.1405) Pl. 59
Isthmus, TR3 tr2 (3) B21.
Fragment from the wall of a bell-krater.
H. 0.050; W. 0.055; Th. 0.008.
Clay light red, 2.5 YR 6/8. Glaze shiny, brownish black.
A section of a horizontal pattern-band: meander to left, dotted saltire, two stopped meanders to left. Above, a reserved area, which looks like a horse's hoof but is perhaps the front foot with himation hem of a draped male standing to right.
Attic.
425-375 B.C.

8.34 (78.807) Not illustrated
Isthmus, TR3 tr2 (3) B18.
Fragment from the wall of a bell-krater.
H. 0,027; W. 0.028; Th. 0.007 -0.008.
Clay reddish yellow, 7.5 YR 7/6. Glaze slightly shiny, brownish black, fired red on the inside.
At the top, a section of horizontal pattern-band: a dotted saltire square and a meander running to right.
Attic.
Ca. 425-375 B.C.

8.35 (78.1450) Not illustrated
Isthmus, TR3 tr1 (3) Road Surface B8.
Fragment from the lower wall of a bell-krater.
H. 0.043; W. 0.045; Th. 0.009.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black.
At the top, a section of horizontal pattern-band: a dotted saltire square and parts of two meanders to right. The inside is glazed.
Attic.
Ca. 425-375 B.C.

8.36 (76.707) Not illustrated
Isthmus, TR2 tr1 (3).
Fragment from the lower wall of a bell-krater.
H. 0.074; W. 0.059; Th. 0.008 - 0.009.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, brownish black.

On the outside, a section of a pattern-band; a chequer with five reserved squares, and a meander to left. The inside is glazed.
Attic.
Ca. 425-375 B.C.

8.37 (78.110) Pl. 59
Isthmus, TR2 tr1 (3).
Three joining fragments from the wall of a bell-krater.
H. 0.070; W. 0.075; Th. 0.007 - 0.010.
Clay reddish yellow, 5 YR 6/6. Glaze dull black.
Lower palmette and side tendrils of akroterion-type of floral under one handle. Below, a section of pattern-band: dotted chequer and a bit of meander. Glazed on the inside. Probably from the same vase as **8.38**.
I do not know an exact parallel for this handle floral, but the closest are on vases from the area of the Budapest Group and the Oinomaos Painter, *ARV*^{2} 1439-40.
Attic.
Ca. 390-360 B.C

8.38 (78.5O8) Not illustrated
Isthmus, TR1 tr1 (4-5a).
Fragment from lower wall of a bell-krater.
H. 0.033; W. 0.047; Th. 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, black.
What remains is a small section of the pattern-band: a dotted chequer, and a bit of a meander. Glazed on the inside. Probably from the same vase as **8.37**.
Attic.
Ca. 390-360 B,C

8.39 (78.1130) Not illustrated
Isthmus, TR1 tr3 (3).
Fragment from the lower wall of a bell-krater.
H. 0.088; W. 0.090; Th. 0.007 - 0.009.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black.
At the upper break, a section of the horizontal pattern-band: meanders to right. Glazed on the inside.
Attic.
Ca. 425-350 B.C.

8.40 (78.1059) Not illustrated
Isthmus, TR2 tr1 (3-4).
Fragment from the lower wall of a bell-krater or, just possibly, a column-krater.
H, 0.043; W. 0.062; Th. 0.009.
Clay light red, 2.5 YR 6/6. Glaze brownish black, dull, especially on the inside.
A section of a band of pattern: meander, chequer (five reserved squares), meander. The reserved areas above the pattern-band are unintelligible.
Attic.
Ca. 400-350 B.C.

8.41 (78.942) Not illustrated
Isthmus, TR2 tr1 (3a-4a).
Two joining fragments from the lower wall of a bell-krater.
H. 0.044; W. 0.033; Th. 0.007 - 0.008.
Clay reddish yellow, 5 YR 6/6, with traces of secondary burning. Glaze shiny, brownish-black.
Below, a chequer square from the horizontal pattern band below the picture. At the upper break, a bit of added white.
Attic.
Ca. 400-350 B.C.

8.42 (75.731) Not illustrated
Gate Area, TR4 (2a).
Fragment from the lower wall of a bell-krater.
H. 0.038; W. 0.031; Th. 0.006.
Clay light red, 2.5 YR 6/8, fired greyish in places. Glaze black, slightly lustrous.
Below, two stopped meanders, to right, of a pattern-band. Above, part of the palmette-floral under one handle. Glazed on inside.
Attic.
Ca. 400-350 B.C.

8.43 (78.1183). Pl. 59
Isthmus, TR1 tr2 (6b).
Fragment from the lower wall of a bell-krater.
H. 0.078; W. 0.072; Th. 0.007 - 0.009.
Clay reddish yellow, 5 YR 6/6. Red miltos. Glaze brownish black.
Below, a saltire square with dotted V's from a

horizontal pattern-band; above, unidentified remains (draped youth?) of the picture.
For the pattern-band compare the bell-krater formerly at Nostell Priory, *ARV*^{2} 1448, 6, Christie, *Sale Cat.* 30 April, 1975, pl. 18, 52.
Attic.
Ca. 370-330 B.C.

8.44 (75.666] Not illustrated
Structure 1, TR1 tr1/3 baulk (8).
Four joining fragments from the lower wall of a bell- krater.
H. 0.038; W. 0.035; Th. 0.005.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black to brownish-black.
At the lower break, the top of a band of stopped meanders running to left. Above this at the left, a reserved area (perhaps the back of a draped figure). Glazed inside.
Attic.
Ca. 380-340 B.C.

8.45 (78. 1524) Pl. 60
Isthmus, TR3 tr1 (3) Road Surface B8.
Fragment from the lower wall of a bell-krater.
H. 0.048; W. 0.039; Th. 0.006 (top) - 0.009 (bottom).
Clay reddish yellow, 5 YR 6/6. Glaze shiny black outside, fired red on inside.
Above, the heart and some leaves of a handle-palmette. Below, a section of the horizontal pattern-band: two stopped meanders to left.
Attic.
Ca. 400-350 B.C.

8.46 (75.224) Pl. 59
Gate Area, TR2 tr2 (6).
Two joining fragments from the lower wall of a bell krater.
H. 0.035; W. 0.079; Th. 0.007.
Clay reddish yellow, 5 YR 7/6. Glaze dull black.
Pattern-band: saltire, and two stopped meanders to left. Above, the heart of the palmette under one handle. The inside is glazed.
The saltire-square is really a variant of the normal type in which the dots are replaced by V's or arcs. It begins about 370-360, e.g. on the late vases by the Black-Thyrsus Painter, such as Vienna 177, *CVA Vienna* 3, pl. 128, 1-2, and is not uncommon on bell-kraters listed by Beazley in chapter 81, *ARV*^{2} 1446 f.
Attic.
Ca. 370-330 B.C.

8.47 (75.38) Not illustrated
Structure 1, TR1 tr1 (4).
Fragment from the wall of a bell-krater.
Max, dim. 0.052; Th. 0.008-0.010.
Clay light red to reddish yellow, 2.5 YR 6/8 - 5 YR 6/8. Glaze dull black.
At the upper break, part of the reserved area around a handle-stump. Below, one vertical leaf of the floral below the handle. At the right, a small reserved area. Interior glazed.
Attic.
Ca. 425-350 B.C.

8.48 (75.187) Not illustrated
Structure 1, TR1 tr1 (7).
Fragment from the wall of a bell-krater.
H. 0.037; W. 0.044; Th. 0.005 - 0.006.
Clay light red, 2.5 YR 6/8. Dull black glaze. Red miltos on reserved areas.
At the left, part of the spiral-tendril of a handle-palmette. Glazed inside.
Attic.
Ca. 425-375 B.C.

8.49 (78.117) Not illustrated
Isthmus, TR1 tr1 (4).
Fragment from the lower wall of a bell-krater.
Max. dim. 0.045; Th. 0.006.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny, black.
At the left, part of the palmette below a handle. Above, a section of the reserved area between the handle stumps. The fragment is glazed inside.
Attic.
Ca. 425-375 B.C.

8.50 (78.1238) Not illustrated
Isthmus, TR1 tr3 (3a).
Fragment from the wall of a bell-krater.

H.0.033; W. 0.043; Th. 0.005-0.006.
Clay reddish yellow, 5 YR 6/6. Glaze shiny black, fired red on inside of sherd.
Leaves of a palmette, probably from below a handle.
Attic.
Perhaps 425-375 B.C.

8.51 (78.101) Not illustrated
Isthmus, TR2 tr1 (3).
Fragment preserving part of the wall, and base of one handle, of a bell-krater.
Max. dim. 0.041; Th. wall 0.005.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, black.
What remains is a section of the egg-pattern around one stump of the handle (outer arcs and bordering line in relief). The inside is glazed.
Attic.
Ca. 425-375 B.C.

8.52 (78.163) Not illustrated
Isthmus, TR2 tr1 (3a).
Fragment preserving part of the wall, and one handle-stump, of a bell-krater.
Max. dim. 0.027; Th. 0.006 - 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, black.
At the upper break, a section of the egg-pattern around one handle-stump. The inside is glazed.
Attic.
Ca. 425-350 B.C.

8.53 (78.546) Not illustrated
Isthmus, TR2 tr1 (4-5).
Two joining fragments from the wall of a bell-krater. At the upper break, half of a hole for an ancient dowel.
H. 0.055; W. 0.062; Th. 0.005 (bottom) - 0.009 (top).
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black. Red miltos.
The fragments come from between the stumps of a handle and preserve part of the reserved area that is usual in this position, as well as, at the left, a section of the outer bounding-line of the pattern-band around one stump.
Attic
Ca. 425-350 B C

8.54 (75.14) Not illustrated
Structure 1, TR1 tr1 topsoil.
Fragment of the handle of a bell-krater.
Max. dim. 0.082; D. handle at break 0.017.
Clay reddish yellow, 5 YR 7/6-8. Red miltos on reserved area. Glaze shiny, brownish black.
Handle glazed. Pattern of strokes around stump of handle.
I can recall only a few Attic bell-kraters of the 4th century which have strokes around the stumps of the handles: Vienna 1143, *CVA* Vienna 3, pl. 123, early Meleager Painter; Athens 12197, *ARV*^{2} 1437, 6, Upsala Painter. In the first and second quarters egg-pattern is used; though occasionally we find blobs (e.g. Vatican 17926, *ARV*^{2} 1421, 3) or hooks (Benevento,from Montesarchio T393, by the Black-Thyrsus Painter). Sometimes the stumps are simply reserved, and this becomes the norm in the middle and third quarter of the century. The few Chalkidic bell-kraters at present known (e.g. Thessalonike 10306) are small and have black handle stumps.
Chalkidic (?).
Ca. 400-350 B.C.

8.55 (78.3062) Not illustrated
Isthmus Surface.
Fragment broken on all sides from the wall of a bell-krater where it adjoins the root of the handle, a small portion of which is preserved.
Max.dim. 0.070 x 0.059; Th. 0.006 - 0.008.
Clay light red, 2.5 YR 6/6. Glaze dull black, misfired in patches of light red and yellowish brown.
In the reserved area around the root of the handle, a curved band of egg-and-dot-pattern.
This fragment was once thought to be from a lekanis lid.
PAE 1977 (1980) pl. 76θ, top right.
Attic.
Ca. 425-350 B.C., more likely 4th century.

8.56 (75.311). Fig. 56
Structure 1, TR1 tr1 (8).
Fragment from the foot of a bell-krater,

H. 0.029; W. 0.049; D. foot (est.) 0.12.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black, chipped.
Interior of foot and resting surface unpainted. Upper surface and side glazed except for reserved fillet at top of side.
This form of foot is characteristic of bell-kraters in the last quarter of the 5th century and in the early 4th, often with the addition of a reserved band on the side at the bottom.
Attic.
Ca. 425-375 B.C.

8.57 (75.555) Not illustrated
Structure 1, TR1 tr1 (8).
Fragment from the foot of a bell-krater; much chipped and worn.
H. 0.038; W. 0.10;.D. est. base 0.18.
Clay reddish yellow, 5 YR 7/8.
The inside is reserved. The upper surface is glazed as is the side. There was a broad band, probably reserved, at the top of the side, and a tooled groove at the bottom where the beginning of a second element is preserved.
The form of the foot was like that of *CVA* Turin 2, III I, pl. 11, 5-6, though the lower element may not have been quite so pronounced.
Attic.
Ca. 390-360 B.C

8.58 (78.195) Fig. 56
Isthmus, TR1 tr1 (4).
Fragment from the two-element foot of a bell-krater.
H. 0.042; W. 0.088; D. of foot not recoverable.
Clay reddish yellow, 5 YR 6/6. Glaze shiny black, fired unevenly.
The top of the upper element of the foot is glazed, as also the side, except for a broad reserved band at the top and a reserved groove at the junction with the lower element, the side of which is glazed. The resting surface and underside of the foot are reserved. On the underside, a graffito:

KY [

The graffito is complete at the left but may have continued to right. For KV see A. W. Johnston, *Trademarks on Greek Vases* (Warminster 1979) p. 154; type 5F, but these are all much earlier than **8.58**; see also p. 162, type 15 F; and on the meaning of KV, p. 224.
Attic.
Ca. 380-350 B.C.

8.59 (75.597) Fig. 56
Structure 1, TR1 tr2 b (6).
Fragment preserving the bottom of the bowl and part of the stem of a bell-krater, chipped and worn.
H. 0.042; W. 0.11.
Clay light red, 5 YR 7/8. Glaze shiny black except in bowl where it has fired reddish.
The inside of the stem is reserved and covered with a light, reddish wash. The bowl and outside of the stem are glazed.
Attic.
Ca. 450-350 B.C.

8.60 (78.913). Not illustrated
Isthmus, TR3 tr1 Feature 1 B7.
Fragment from the stem and bowl of a bell-krater.
Max. dim. 0.115.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny, black.
What remains is part of the stem (glazed outside, reserved inside) and bowl (glazed).
Attic.
Ca. 450-325 B.C., perhaps 4th century.

8.61 (78.535) Pl. 60
Isthmus, TR1 tr1 (5).
Fragment from the convex cul of a calyx-krater.
H. 0.042; W. 0..053 Th. 0.008.
Clay light red, 2.5 YR 6/6. Glaze slightly shiny, brownish-black.
The upper half of the fragment has a section of the band of decoration on the cul; what remains is part of a lotus with heart of double spirals. Relief contour for the spirals. The fragment is glazed inside.
Attic.
Ca. 450-375 B.C.

8.62 (78.180) Pl. 60

Isthmus, TR3 tr1 (2).
Fragment from the wall of a calyx-krater.
H. 0.049; W. 0.046; Th. 0.007.
Clay light red, 2.5 YR 6/8. Glaze black, slightly shiny.
At the lower break, one end of a table. Above, the horizontal beam of a couch and a small part of the himation (double stripe along one edge) worn by a symposiast. Relief contour for the table and couch. Preliminary sketch lines. The inside is glazed.
Attic.
Ca. 450-375 B.C.

8.63 (78.536) P1. 60
Isthmus, TR1 tr1 (5).
Fragment from the convex cul of a calyx-krater.
H. 0.028; W. 0.022; Th. 0.008.
Clay light red, 2.5 YR 6/6. Glaze shiny black.
One meander from the pattern-band on the cul; above, the reserved groove between the cul and the wall. The inside is glazed.
The meander seems to have run to the right. There was only one zone of pattern, not two: something like that on Athens 13892, *ARV*^{2} 1449, 5.
Attic.
Ca. 400-325 B.C, later rather than earlier.

8.64 (78.543) Fig. 56; Pl. 60
Isthmus, TR2 tr1 (4-5).
Eight joining fragments from the foot and stem of a calyx-krater.
H. 0.042;W. 0.114, D. base (est.) 0.130.
Clay reddish yellow, 5 YR 6/6. Glaze shiny black. Red miltos.
The stem and the top of the foot are glazed. The side of the foot, which flares slightly, is also glazed except for a deep reserved groove at the top. The resting surface and the underside are reserved.
This cannot come from a bell-krater as the upper surface of the foot of a bell-krater is normally reasonably flat and separated from the stem by a tooled groove. It must be the foot of a calyx-krater, but not of the first quarter of the 4th century, for at that time the reserved groove is usually on the upper surface, not the side of the foot. One might compare Munich 2388, *ARV*^{2} 1446, 2.
Attic.
Ca. 370-340 B.C.

8.65 (78.507) Fig. 56
Isthmus, TR1 tr1 (4-5a)
Fragment from the lip of a calyx-krater.
H. rim 0.014; W. 0.056.
Clay reddish yellow, 5 YR 6/6. Glaze shiny black.
The upper surface is glazed. A reserved groove separates the rim from the offset, convex lip which is decorated with egg-pattern. The underside is glazed.
This must be from the lip of a calyx-krater. Attic calyx-kraters of the 4th century normally have laurel on the lip, but not always: see Vatican, Astarita 495 and Munich 2388 (the edge of the lip is black), *ARV*^{2} 1446, 1 and 2, or London, B.M. 1931.1-13.1, *ARV*^{2} 1455, 2.
Attic.
Ca. 375-325 B.C.

8.66 (78.677). Fig. 57
Isthmus, TR2 tr1 (5a).
Single fragment from the rim and flaring lip of a calyx-krater.
H. 0.051; W. 0.068; D. rim (est.) 0.37.
Clay light red, 2.5 YR 6/8. Glaze shiny black.
The lip is glazed inside except for a narrow reserved band at the rim. The edge of the lip is decorated with egg-pattern (solid centres, relief line for outer arcs) below a reserved groove. The underside is black.
Attic.
Ca. 375-325 B.C.

8.67 (78.1361) Fig. 57
Isthmus, TR3 tr2 (3) Bl4.
Fragment from the rim and lip of a calyx-krater. The rim was strongly flaring.
H. 0.028; W. 0.056; H. rim 0.012; D. est. 0.39.
Clay light red, 2.5 YR 6/8. Glaze shiny black.
The interior is glazed. The rim is decorated with an egg-pattern (solid centres). The lip is glazed.
Attic.
Ca. 375-325 B.C.

8.68 (78.1362) Fig. 56
Isthmus, TR3 Tr 1 (3) B8.
Fragment of the rim and lip of a calyx-krater. The rim shows much wear.
H. 0.049; W. 0.046; Th. lip 0.009.
Clay light red to reddish yellow, 2.5 YR 6/8 - 5 YR 6/6. Glaze slightly shiny, brownish black.
The lip inside is glazed. The echinus rim is decorated with an egg- pattern (solid centres). On the outside of the lip are remains of a laurel wreath. See also **8.69**.
Attic.
Ca. 375-325 B.C.

8.69 (78.1522) Fig. 57
Isthmus, TR4 tr2 (3) B5.
Fragment from the rim and lip of a calyx-krater. Considerable wear on upper edge of rim.
H. 0.042; W. 0.057; Th. 0.009 (lower break); D. est. 0.39.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black.
The lip inside is glazed. The echinus rim is decorated with an egg-pattern (solid centres). On the lip outside is a section of laurel wreath. See also **8.68**.
Attic.
Ca. 375-325 B.C.

8.70 (75.247) Pl. 60
Gate Area, TR3 S (2).
Fragment from the wall of a column-krater, slightly convex.
H. 0.051; W. 0.077; Th. 0.006.
Clay light red, 2.5 YR 6/8. Glaze black to greyish-black, applied unevenly.
At the left, part of the himation of a draped male standing to left; to the right, a section of the vertical frame: debased ivy. Glazed on inside, See **8.73**.
Attic.
Ca. 450-400 B.C.

8.71 (78.943). Not illustrated
Isthmus, TR2 tr1 (3a-4a).
Fragment from the wall of a column-krater.
H. 0.031; W. 0.054; Th. 0.005.
Clay light red to reddish yellow, 2.5 YR 6/8 - 5 YR 6/6.
Glaze slightly shiny, brownish black outside, dull and streaky inside.
Along the righthand break, a section of a vertical frame decorated with ivy.
Attic.
5th century B.C.

8.72 (76.749) Not illustrated
Gate Area, TR6 tr2 W (3).
Fragment of the lip of a column-krater.
W. 0.058; Th. rim 0.036.
Clay light red, 2.5 YR 6/8; soft in places. Glaze dull black.
The lip is glazed on top and inside, reserved underneath. The side is decorated with ivy.
Attic.
Ca. 475-400 B.C.

8.73 (75.377) Not illustrated
Gate Area, TR1 tr2 (2).
Fragment from the lower bowl of a column-krater.
H. 0.024; W. 0.027; Th. 0.006.
Clay red, 2.5 YR 5/6. Glaze black except on inside where it is brownish-black and applied thinly.
What remains are parts of two rays from the band around the lower bowl. See **8.70**.
Attic.
5th century B.C.

8.74 (75.362) Fig. 57; Pl. 60
Structure 1, TR1 tr4 "Below B" (3).
Fragment from the base of a column-krater; badly worn and chipped.
Max. dim. 0.135; D. foot 0.23.
Clay reddish yellow, 5 YR 7/6. Glaze black.
What remains is a segment of the foot in two elements and part of the bowl. The resting surface and underside are reserved, the topside of the foot glazed. The upper element is marked off from the bowl and the lower element by a narrow fillet painted red.

Attic.
Ca. 450-400 B.C.

8.75 (78.1452) Not illustrated
Isthmus, TR3 tr1 (3) Road Surface B8.
Fragment preserving parts of the shoulder and neck of a column-krater.
W. 0.044; Th. neck 0.009.
Clay reddish yellow, 5 YR 6/8; micaceous surface, white inclusions in core. Glaze slightly shiny, black.
The neck is glazed on both sides. The shoulder is decorated with parallel strokes; the underside is reserved.
Attic red-figure column-kraters normally have a tongue-pattern on the shoulder, not simply strokes as here.
Chalkidic (?).
Ca. 450-375 B.C.

8.76 (78.659) Pl. 60
Isthmus, TR3 tr1 (3)B 17.
Fragment from the wall of a bell- or calyx-krater.
H. 0.034; W. 0.046; Th. 0.006 - 0.007.
Clat reddish yellow, 5 YR 6/6 -7/6. Glaze shiny, black to greenish black.
Head, to right, shoulders and right arm, outstretched, of a woman standing, or more probably, moving to left but looking back. She wears chiton, himation, and a sakkos. No relief contour but the relief lines are quite fine. Dilute glaze for the single lock of hair. The inside is glazed.
Attic.
Ca. 460 B.C.

8.77 (78.950) Pl. 60
Isthmus, TR2 tr1 (3-4).
Two joining fragments from the wall of a bell or volute-krater.
H. 0.048; W. 0.066; Th. 0.007 -0.008.
Clay light red, 2.5 YR 6/8. Glaze shiny black.
At the lower break, two horizontal reserved bands forming a ground-line. Above, part of a circular shield resting on the ground in frontal view. The shield is emblazoned with a wheel. The rim of the wheel and outer contour of the shield are compass drawn. To the right of the shield, also in frontal view, are the toes of a left foot, presumably of the male holding the shield. Relief contour throughout. The inside is glazed.
The chariot-wheel is a common device in the Group of the Niobid Painter: see, for example, Boston 33.56, *CB* II, no. 108, pls. 49-50, and Beazley's remark on p. 79. The wheel on the Torone fragment must have had eight spokes like that on the frontal shield on the obverse of Louvre, G 341, *ARV*^{2} 601, 22.
Attic.
Ca. 470-440 B.C.

8.78 (78. 295) Pl. 60
Isthmus, TR1 tr1(5).
Fragment from the wall of a bell or calyx-krater.
H. 0.039; W. 0.046; Th. 0.007-0.008.
Clay light red, 2.5 YR 6/6-6/8. Glaze shiny black.
The remains show the pleat lines of an himation over the bent legs of a male reclining on a couch (the horizontal line at the lower break represents the top of the couch). The fragment is glazed inside.
Attic.
Ca. 450-400 B.C., later rather than earlier.

8.79 (76.150) Pl. 60
Isthmus, TR1 tr1 (2).
Fragment from the rim, lip and upper wall of a bell or calyx-krater.
H. 0.070; W. 0.072; Th. at lower break 0.008; H. of palmette band 0.028.
Clay reddish yellow, 5 YR 7/6. Glaze shiny black.
On the lip, pairs of slanting palmettes, to right. Relief line for the spiraling stems of the palmettes. The fragment is glazed inside except for a reserved band (W. 0.002) near the rim.
Attic.
Ca. 450 -425 B.C.

8.80 (78.1269) Not illustrated
Isthmus, TR1 tr2 (6a).
Fragment from the wall of a bell-krater or column-krater, perhaps the latter since the glaze inside is dull.

H. 0.040; W. 0.041; Th. 0.006 - 0.007.
Clay light red, 2.5 YR 6/8. Glaze brownish black.
At the lower break, one end of a horizontal band of meander running to right. The inside is glazed.
Attic.
5th century B.C., perhaps 475-425.

8.81 (78.1185) Fig. 56
Isthmus, TR1 tr2 (6b).
Fragment from the rim and lip of a bell or calyx-krater.
H. 0.052; W. 0.056; D. (est.) 0.35.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black.
On the lip, laurel to right. The inside is glazed except for a reserved band (W. 0.003) at the rim.
Attic.
Ca. 450-400 B.C., perhaps last quarter.

8.82 (75.280) Not illustrated
Structure 1, TR1 tr1 (8).
Fragment from the lip of a bell or calyx-krater; slightly concave.
Max.dim. 0.025, Th. 0.009.
Clay light red, 2.5 YR 6/8, quite soft. Glaze black.
Part of a laurel wreath, to right. Glazed inside.
Attic
Ca. 450-400 B.C.

8.83 (78.1233) Not illustrated
Isthmus, TR1 tr2 (6).
Fragment from the lip of a bell or calyx-krater, broken on all sides; nothing of the rim is preserved.
H. 0.031; W. 0.052; Th. (max.) 0.007.
Clay light red, 2.5 YR 6/6. Red miltos. Glaze slightly shiny, brownish-black.
On the lip, laurel to left. The inside is glazed.
Attic.
Ca. 450-400 B.C.

8.84 (75.618) Not illustrated
Structure 1, TR1 tr4b (6).
Fragment from the base of a krater (column-krater?).
Max. dim. 0.070.
Clay reddish yellow, 5 YR 7/6. Glaze black.
The foot was in two elements, but only a section of the upper remains. This element was separated from the bowl by a narrow fillet bounded by tooled grooves. The underside of the foot was reserved
Attic.
Ca. 450-400 B.C.

8.85 (78.1164) Pl. 60
Isthmus, TR1 tr1 (5a).
Fragment from the wall of a bell or calyx-krater, I think, rather than a skyphos.
Max. dim. 0.026; Th. 0.006.
Clay light red, 2.5 YR 6/6. Glaze black, slightly shiny.
The fragment preserves a section of drapery, probably part of a peplos or chiton open down one side (two wavy lines for the edges). Fine relief line. The inside is glazed.
Attic.
Ca. 475-400 B.C., perhaps 450-425.

8.86 (75.145) Fig. 57
Gate Area. TR3 (2).
Fragment from the lip of a bell or calyx-krater; chipped and worn,
W. 0.063; D, est. 0.380.
Clay light red, 2.5 YR 6/6. Glaze shiny black inside except for a reserved band (W. 0.005) below rim.
Out-turned rolled rim, glazed. Reserved groove on outside between rim and lower part of lip which was decorated with laurel (the upper part of one leaf remains).
Attic.
Ca. 450-375 B.C.

8.87 (78.1742) Fig. 59
Lower City, TR1 N (3).
Fragment of the lip of a bell- or calyx-krater; signs of wear at rim on inside.
Max. dim. 0.062; Th. (bottom) 0.008.
Clay reddish brown, 5 YR 6/4-5/4; secondary burning. Glaze slightly shiny, brownish-black.
The inside is glazed except for a reserved band

(W. 0.002) at the top. On the lip outside, part of a wreath of laurel with berries to left.
Attic.
Ca. 425-375 B.C

8.88 (78.1684) Not illustrated
Lekythos, TR2 (1).
Fragment from the rim and lip of a bell or calyx-krater.
Max. dim. 0.050; Th. at lower break 0.008.
Clay light red, 2.5 YR 6/6, but for the most part fired light grey, 5 YR 6/1; secondary burning. Glaze slightly shiny, greyish-black.
On the lip, section of a wreath, to left, of laurel and berry. The fragment is glazed inside except for a reserved band (W. 0.005) below the rim.
Attic.
Ca. 425-375 B.C.

8.89 (75.23) Not illustrated
Structure 1, TR1 tr1 topsoil.
Fragment from the lip of a bell or calyx-krater.
H. 0.049; W. 0.050; Th. lower break 0.009.
Clay reddish yellow, 5 YR 7/6. Glaze black. Red miltos.
Laurel wreath, to left, on lip. Glaze on inside except for reserved band (W. 0.007) below rim.
Attic.
Ca. 425-375 B.C.

8.90 (78.602 + 78.1363) Fig. 57
Isthmus, TR3 tr1 (3) B8.
Five joining fragments from the rim, lip and upper wall of a bell or calyx-krater. Reserved grooves between rim and lip, and lip and wall. Considerable wear on rim on inside.
Max. dim. 0.155; D. rim (est.) 0.390; Th. wall 0.006.
Clay light red, 2.5 YR 6/6. Glaze shiny black but tending to red on inside; reserved bands (W. 0.006) at top and bottom of the lip on the inside.
On the lip, laurel to left. Below, the head of a male (?) figure, to left; the righthand figure in the picture.
Attic.
Ca. 425-375 B.C.

8.91 (78.902) Fig, 57
Isthmus, TR3 tr1 (3) B8.
Fragment of the rim and lip of a bell or calyx-krater. Reserved grooves between the rim and lip, and lip and wall. Traces of wear at the rim inside.
H. 0.049; W. 0.100; D. rim (est.) 0.340.
Clay light red, 2.5 YR 6/6. Glaze slightly shiny, brownish black.
On the lip, a section of a laurel wreath, to left. Glazed on inside, except for a reserved band (W. 0.006) below rim.
Attic.
Ca. 425-375 B.C.

8.92 (78.1751) Fig. 58
Isthmus, TR3 tr1 (3) B8.
Fragment of the rim and lip of a bell or calyx-krater. Reserved grooves between rim and lip, and lip and wall.
H. 0.045; W. 0.073; D rim (est.) 0.34.
Clay light red, 2.5 YR 6/8. Glaze shiny, greenish black.
On the lip, a section of a wreath of laurel and berry, to left. The inside is glazed except for a reserved band (W. 0.009) below the rim.
Attic.
Ca. 425-375 B.C.

8.93 (78.1418) Fig. 58
Isthmus, TR3 tr2 (3) B19.
Two joining fragments from the rim and lip of a bell or calyx-krater.
H. 0.046; W. 0.054; D. rim (est.) 0.31.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black.
The inside is glazed except for a reserved band (W.0.005) below the rim. The echinus rim is glazed. Between the rim and the lip, a reserved groove. On the lip a section of laurel, to left.
Attic.
Ca. 400-375 B.C.

8.94 (78.1083) Not illustrated
Isthmus, TR1 tr3 (3).
Fragment of rim and lip of a bell or calyx-krater, probably the former.

H. 0.036; W. 0.026; Th. lower break 0.006.
Clay light red, 2.5 YR 6/8. Glaze dull black.
On the lip, part of a laurel spray. The inside is glazed except for a reserved band (W. 0.002) near the rim. Near the right-hand break is a hole and the remains of a lead dowel from an ancient repair.
Attic.
Ca. 425-350 B.C.

8.95 (78.299) Not illustrated
Isthmus, TR2 tr1 (4).
Fragment, broken on all sides, from the lip of a bell or calyx-krater.
H. 0.044; W. 0.037; Th. 0.007 - 0.008.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, greyish black.
Section of laurel to left. Glazed on inside.
Attic.
Ca. 425-350 B.C.

8.96 (78.1753) Not illustrated
Isthmus, TR3 tr1 Ext.3 (3) B3.
Fragment, broken on all sides, from the lip of a bell or calyx-krater.
H. 0.030; W. 0.040; Th. 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze black, slightly shiny.
On the outside, parts of two laurel leaves. Inside glazed except for a reserved band (W. 0.005) at the bottom.
Attic.
Ca. 400-350 B.C.

8.97 (78.1230) Fig. 58
Isthmus, TR1 tr1 (5a).
Fragment from the lip of a bell or calyx-krater. Traces of wear on inner edge of rim.
H. 0.030; W. 0.047; Th. (lower break) 0.007.
Clay reddish yellow, 5 YR 6/6-6/8. Glaze brownish black. On the outside, a portion of a laurel wreath. Inside glazed except for a reserved band (W. 0.005) at inner edge of rim.
Attic.
Ca. 400-350 B.C.

8.98 (75.87) Fig. 58
Structure 1, TR1 tr1 (5).
Fragment from the lip of a bell or calyx-krater.
H. 0.055; W. 0.110; D. lip (est.) 0.32.
Clay reddish yellow, 7.5 YR 6/6, relatively soft.
Glaze dull brownish-black.
On the lip, a laurel wreath to left. The inside is glazed except for reserved band (W. 0.005) below rim.
Attic.
Ca. 400-350 B.C.

8.99 (78.1127) Not illustrated
Isthmus, TR2 tr2 (3).
Fragment, broken on all sides, from the lip of a bell or calyx-krater.
H. 0.034; W. 0.033; Th. 0.008.
Clay reddish yellow, 5 YR 6/8. The glaze has fired reddish brown, especially on the inside.
Part of two leaves of a laurel wreath.
Attic.
Ca. 400-350 B.C.

8.100 (78.1620) Fig. 59
Hill 2, TR3 (4).
Fragment of the lip of a bell or calyx-krater.
H. 0.035; W. 0.045; Th. at lower break 0.005.
Clay reddish yellow, 5 YR 6/6. Glaze slightly lustrous, black.
On the lip, section of two laurel leaves. Inside glazed except for a reserved band (W. 0.004) below rim.
Attic.
Ca. 400-350 B.C.

8.101 (78.1582) Not illustrated
Lekythos, TR1 (3).
Four joining fragments from the rim and lip of a bell or calyx-krater.
Max. dim. 0.064, D. rim (est.) 0.44.
Clay light red, 2.5 YR 6/8. Dull brownish-black glaze on the inside.
Parts of two leaves and the stem of a laurel wreath, to left. On the inside, the fragment is glazed except for a reserved band (W. 0.002) below the rim.
Attic.
Ca. 400-350 B.C.

8.102 (78.181) Fig. 58
Isthmus, TR3 tr2 (2).
Fragment from the rim, lip and wall of a bell or calyx-krater.
H. 0.053; W. 0.094; D. rim (est.) 0.40.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black.
Echinus rim, glazed. The interior is glazed except for a reserved band (W. 0.005) below the rim. Reserved grooves mark off the lip from the rim above and the wall below. On the lip, part of a laurel wreath, to left. What remains of the wall is glazed.
Attic.
Ca. 400-350 B.C.

8.103 (78.3O8) Fig. 59
Isthmus, TR2 tr1 (4a).
Fragment from the lip of a bell or calyx-krater. Some wear on inner edge of rim.
W. 0.063; D. (est.) 0.36; Th. 0.006 - 0.007.
Clay light red, 2.5 YR 6/6. Glaze slightly shiny, greyish black. On the outside, part of a single laurel leaf. The inside is glazed.
Attic.
Ca. 400-350 B.C., later rather than earlier.

8.104 (78.1204) Not illustrated
Isthmus, TR1 tr3 (2a).
Fragment, broken on all sides, from the lip of a bell or calyx-krater.
H. 0.036; W. 0.068; Th. 0.005-0.007.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish- black.
On the lip, laurel to left. The inside is glazed.
Attic.
Ca. 380-330 B.C.

8.105 (78.322) Fig. 58
Isthmus, TR2 tr1 (4).
Two joining fragments from the rim and lip of a bell or calyx- krater. Near the left-hand break on the line of join between the two sherds is a hole for one end of an ancient clamp.
H. 0.040; W. 0.056; Th. (lower break) 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black. Red miltos.
Parts of the stem and two long leaves of a laurel wreath; above, the reserved groove below the rim. The inside is glazed.
Attic.
Ca. 380-330 B.C. There is no reserved band on the inside of the rim, a standard feature which begins to disappear after *ca.* 380 B.C.

8.106 (78.963) Not illustrated
Lower City, TR2 (1).
Fragment, broken on all sides, from the lip of a bell or calyx-krater.
Max. dim. 0.070; Th. 0.006.
Clay reddish yellow, 5 YR 6/6; some mica. Glaze slightly shiny, black.
What remains is part of a leaf and the stem of a laurel wreath, to left. The inside is glazed.
Attic.
Ca. 380-330 B.C.

8.107 (78.1261) Not illustrated
Isthmus, TR1 tr2 (6a).
Fragment from the rim and lip of a bell or calyx-krater .
H. 0.048; W. 0.041; Th. lower break 0.008.
Clay light red, 2.5 YR 6/8. Glaze shiny, brownish black.
On the lip, parts of two laurel leaves. The inside is glazed except for a narrow reserved band at the rim.
Attic.
Ca. 380-330 B.C., later, I think, rather than earlier.

8.108 (76.299) Fig. 58; Pl. 60
Isthmus, TR1 tr1 (2).
Fragment from the rim and lip of a small bell or calyx-krater (?).
H. 0.022; W. 0.026; Th. at lower break 0.005, D. est. 0.19.
Clay reddish yellow, 5 YR 6/6; some mica. Glaze dull greyish black.
On the lip outside, part of what looks like a zone of zigzags with dots in the interstices. The sherd is glazed inside except for a reserved band (W. 0.004) near the rim.
Chalkidic.
Ca. 400-350 B.C.

8.109 (78.1734) Pl. 61
Lower City, TR1 S (4).
Fragment from the wall of a bell or calyx-krater.
H. 0.026; W. 0.020; Th. 0.006 -0.007.
Clay light red, 2.5 YR 6/6. Glaze lustrous black.
What remains is a right hand outstretched to right. The inside is glazed.
Attic .
Ca. 450-350 B.C.

8.110 (78.513) Pl. 61
Isthmus, TR1 tr1 (5).
Fragment from the wall of a bell or calyx-krater; large chip from right-hand side.
H. 0.035; W. 0.061; Th. 0.007 - 0.008.
Clay reddish yellow, 5 YR 6/6. Glaze shiny black.
Raised arm holding a javelin, and the bonnet of an Oriental. The squiggles on the arm represent decoration on the sleeve of the Oriental's garment. The bonnet is washed with dilute glaze and covered with white dots. Preliminary sketch on the arm. The inside is glazed.
The scene may have represented Bellerophon's fight with the Chimaera: see Corinth C-31-82, *Hesperia* 45 (1976) pl. 90, 28, and Lecce 4530, M. Bernadini, *I vasi attici del Museo Provinciale di Lecce* (1965), p. 67, on both of which the Orientals have bonnets similar to that here. I do not recall any 4th century vases on which Orientals fighting Greeks wear black bonnets.
Attic.
Ca. 390-360 B.C.

8.111 (78.1511) Not illustrated
Isthmus, TR3 tr2 Ext. 2 (3) B6.
Fragment from the upper wall of a bell or calyx-krater.
H. 0..035; W. 0.038; Th. 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze shiny black.
At the lower right-hand break, the back of the head of a figure, to right, and a section of garment, perhaps a draped male from a reverse. The inside is glazed except for a reserved band (W. 0.002) at the upper break.
Attic.
Ca. 425-350 B.C.

8.112 (78.1241) Pl. 61
Isthmus, TR1 tr3 (4).
Fragment from the wall of a bell or calyx- krater.
H. 0.044; W. 0.041; Th. 0.008.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black.
The remains are difficult to interpret: perhaps the lower part of a chiton with decorated hem over the legs of a female figure. Some preliminary sketch. The inside is glazed.
Attic .
Ca. 390-360 B.C.

8.113 (78.857 + 78.1176) Pl. 61
Isthmus, TR1 tr3 (3) SW.
Two joining fragments from the wall of a bell or calyx-krater.
H. 0.063; W. 0.069; Th. 0.005.
Clay reddish yellow, 5 YR 6/6, but the core is grey in places and the surfaces yellowish grey, probably through secondary burning. Glaze slightly shiny, black.
Head, neck, left shoulder and part of the garment of a woman seated to left. Her left arm was forward. Her flesh and garment are rendered in added white with diluted glaze for the pleat lines. To right, the legs, covered with a garment, of a second woman seated to right; the left leg is outstretched, the right drawn up. The inside is glazed.
What remains is not incompatible so far as the line work is concerned with vases by the Toya Painter, *ARV*^{2} 1448-49, and the Filottrano Painter, *ARV*^{2} 1453-55, but it is not possible to say more.
Attic.
Ca. 380-330 B.C., perhaps *ca.* 350-330.

8.114 (76.189) Fig. 59; Pl.61
Gate Area, TR6 tr1, Robbery Dump.
Fragment of the rim and wall of a skyphos. The base of one stump of the handle is partly preserved at the left-hand break.
H. 0.047; W. 0.075; Th. at lower break 0.004; D. est. 0.17 - 0.18.

Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black.
Spiral tendril and lotus-bud offshoot from the handle-floral. Glazed on inside.
This form of handle-floral on skyphoi begins in the circle of the Lewis Painter, cf. H.R.W. Smith, *Der Lewismaler* (1939), pl. 32. The scheme found on **8.114** is, however, closer to that on skyphoi by the Penelope Painter, e.g. Copenhagen inv. 597, *ARV*^{2} 1301, 5.
Attic .
Ca. 460-430 B.C.

8.115 (75. 41) Not illustrated
Structure 1, TR1 tr1 (4)
Fragment of rim and upper wall of skyphos. Rim curves out slightly.
H. 0.027; W. 0.025; Th. lower break 0.005.
Clay reddish yellow, 7.5 YR 7/6. Glaze dull black, applied thickly, abraded in places.
Below the rim, a band of egg-pattern. Unidentified reserved areas at the lower left and right breaks. The inside is glazed.
Chalkidic (?)
Ca. 425-375 B.C.

8.116 (78.491) Fig. 58; Pl. 61
Isthmus, TR2 tr1(5a).
Fragment from the rim and upper wall of a skyphos; the rim is out-turned.
H. 0.039; W. 0.057; Th. 0. 003 (lower break) ; D. rim (est.) 0.110.
Clay reddish yellow, 5 YR 6/6 - 7/6. Glaze dull brownish black. Red miltos.
At the left, the spiral-tendril from the floral under the left handle; to the right, the head and upper body of a youth standing to right, draped in a himation. The inside is glazed.
Compare *Olynthus* V, pl. 99, 154.
Attic.
Ca. 380-350 B.C.

8.117 (78.422) Pl. 61
Isthmus, TR2 tr1 (4a).
Fragment from the rim and upper wall of a skyphos; the rim is slightly out-turned.
H. 0.030; W. 0.028; Th. 0.003.
Clay very pale brown, 10 YR 7/4. Glaze slightly shiny, greyish black.
Below the rim, a horizontal band of egg-pattern. Of the picture, there remains only part of the head of a woman (maenad ?) to right, and a row of ivy leaves from the head of the thyrsos that was probably held by the woman. The maenad wears a tiara decorated with dotted arcs. Relief contour for the brow-nose line of the maenad and the ivy leaves. The inside is glazed.
Chalkidic.
Ca. 400-350 B.C., probably first quarter.

8.118 (78.316) Not illustrated
Isthmus, TR1 tr1 (5).
Fragment from the rim (out-turned) and upper wall of a skyphos; worn.
H. 0.027; W. 0.036; Th. 0.003; D. (est.) 0.13.
Clay reddish yellow, 5 YR 6/6; some mica. Glaze slightly shiny, greyish black.
What remains is the spiral tendril from a handle palmette. The glaze has flaked badly. The interior is glazed.
Chalkidic.?
Ca. 400-350 B.C.

8.119 (78.305 A-B) Pl. 61
Isthmus, TR2 tr1 (4a)
A: Fragment of out-turned rim and upper wall of a skyphos.
B: two joining fragments of wall.
A: H. 0.037; W. 0.044; D. rim (est.) 0.150.
B: Max. dim. 0.032: Th. 0.003.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny, brownish black. Red miltos.
A: At the top, a horizontal row of blobs; below, part of the spiral tendril of a handle-palmette.
B: The heart of one handle- palmette (not illustrated).
Both fragments are glazed inside.
Chalkidic.
Ca. 390-360 B.C.

8.120 (78.1080) Pl. 61
Isthmus, TR1 tr3 (3).

Fragment from the upper wall of a skyphos or bell-krater.
H. 0.051; W. 0.041; Th. 0.005.
Clay reddish yellow, 5 YR 6/6. Glaze shiny, brownish black.
Head, right side and right arm of a youth standing to left. He held a stick or possibly a strigil. The black blob above the lower break is the end of a stripe along the top of his himation. The inside is glazed.
For the attitude of the youth compare the figure on the reverse of a skyphos in Tokyo, Academy of Art 258, *CVA* Tokyo 1, pl. 44, 2.
Attic.
Ca. 400-360 B.C.

8.121 (78.1209) Pl. 61
Isthmus, TR1 tr2 (6).
Fragment from the rim and upper wall of a skyphos; out-turned rim.
H. 0.035; W. 0.055; D. rim (est.) 0.15; Th. lower break 0.004.
Clay reddish yellow, 7.5 YR 6/6; some mica. Glaze greyish-black. Red miltos.
Below the rim, horizontal band of egg-pattern. Then the head of a youth standing to left, and, to right, part of a tendril from the floral below one handle. The inside is glazed.
Chalkidic.
Ca. 390-360 B.C.

8.122 (78.604) Fig. 59; Pl. 61
Isthmus, TR3 tr1 (3) B8, TR3 tr1 (3) B5.
Four joining fragments from the rim and wall of a skyphos. Out-turned rim, double curve to wall.
H. 0.105; W. 0.093; Th. 0.004 (lower break); D. rim (est.) 0.200.
Clay reddish yellow, 5 YR 7/6 - 6/6; fine golden mica. Glaze slightly lustrous, greyish black.
Egg-pattern (solid centres) below rim. Two zones of decoration: in the upper, lotus offshoot from handle-floral, and a feline crouching to right, left foreleg raised; in the lower, the back of the head of an Oriental wearing a bonnet, and a plant. The inside is glazed.
I know of one Attic skyphos of the 4th century with two zones of decoration: Athens, Agora P 16382. There are two zones of decoration on the Chalkidic fragment Thessalonike 610 (5.122,271), *BSA* 76 (1981) p. 305 and pl. 52 e-f.
For Oriental heads on Chalkidic vases see *BSA* 76 (1981) pls. 49c and 53b.
Chalkidic.
Ca. 375-350 B.C.

8.123 (76.247) Fig. 59; Pl. 61
Isthmus, TR1 tr2 (1).
Fragment from the rim and wall of a kotyle (skyphos type C).
H. 0.048; W. 0.037; Th. at lower break 0.004.
Clay reddish yellow, 7.5 YR 6/6-7/6; fine particles of mica. Glaze black, fired unevenly.
At the rim, a band of egg-pattern. Below this, part of a spiral, probably from a handle-floral. The fragment is glazed inside.
This would not be the only Chalkidic red-figure kotyle: compare London, B.M. 1955.4-18.1, *BSA* 76 (1981) p. 300 and pl. 51 d, f.
Chalkidic.
Ca. 400-350 B.C.

8.124 (75.86) Fig. 59
Structure 1, TR1 tr1 (5).
Fragment of the foot and lower wall of a skyphos.
H. 0.028; W. 0.060; D. foot (est.) 0.075; Th. upper break 0.003.
Clay reddish yellow, 5 YR 7/6; some mica. Traces of red miltos, especially on reserved undersurface of vase. Glaze dull black.
The inside is glazed. The inner and outer edges of the ring foot are glazed, the resting surface reserved. The under side is reserved. The lower wall is glazed. Above this is a ground-line and some unidentifiable remains of the scene. Perhaps from the same vase as **8.139.**
Probably Chalkidic.
Ca. 400-375 B.C.

8.125 (78.1444) Not illustrated
Hill 2, TR2 Ext. (3).
Fragment from the wall of a skyphos (?).
Max. dim. 0.027; Th. 0.004 - 0.005.

Clay reddish yellow, 5 YR 6/6.
The outside is reserved and crossed by relief lines: unintelligible. Lustrous black glaze on inside.
Attic.
5th, rather than 4th, century B.C.

8.126 (76.616) Fig. 59
Structure 3, TR13 (4).
Fragment from the upper wall of a skyphos; much worn.
H. 0.034; W. 0.041; Th. 0.005.
Clay light red, 2.5 YR 6/8. Glaze shiny black.
At the upper break, two horizontal relief lines and part of a band of egg-pattern. Below this, the head, to right, of a bearded satyr with bald pate. No relief contour. Inside glazed.
Attic.
Ca. 450-375 B.C.

8.127 (75.660) Not illustrated
Structure 1, TR1 tr1/3 baulk (7).
Fragment from the wall of a skyphos.
Max. dim. 0.019; Th. 0.003 - 0.004.
Clay reddish yellow, 5 YR 7/8. Glaze shiny black.
What remains is a section of drapery with a double black stripe. Glazed inside.
Attic.
Ca. 450-350 B.C.

8.128 (76.564) Not illustrated
Isthmus, TR1 tr2 (2).
Fragment from the wall of a skyphos, slightly convex.
H. 0.030; W. 0.020; Th. 0.003 - 0.004.
Clay reddish yellow, 5 YR 7/6; some surface mica. Glaze slightly shiny, black.
What remains are the pleat lines of an himation worn by a figure standing to right (?).
Attic or Chalkidic.
Ca. 450-375 B.C.

8.129 (78. 1391) Not illustrated
Isthmus, TR3 tr1 (3) B17.
Fragment, slightly convex, from the wall of a skyphos.
Max. dim. 0.032; Th. 0. 003 .
Clay reddish yellow, 5 YR 6/6; some mica. Glaze slightly shiny, greyish black.
What remains is the proper right side of a figure standing to right, dressed in an himation (the two vertical lines represent the edge of the overfall).
Chalkidic.
Ca. 425-350 B.C.

8.130 (78.186) Not illustrated
Isthmus, TR3 tr2 (2).
Fragment, slightly concave, from the lower wall of a skyphos.
H. 0.028; W. 0.032; Th. 0.004 - 0.005.
Clay reddish yellow, 5 YR 7/6; relatively soft, micaceous. Glaze slightly shiny, greyish black. Red miltos.
The reserved area at the left perhaps comes from the himation, with two fold-lines preserved, of a draped male standing to left. The small area at the lower right-hand break would be part of the handle-palmette.
Chalkidic .
Ca. 400-350 B.C.

8.131 (78.1355) Pl. 62
Isthmus, TR4 tr2 (1).
Fragment, convex in profile, from the wall of a skyphos.
H. 0.035; W. 0.044; Th. 0.003.
Clay pinkish grey to pink, 7.5 YR 7/2-7/4. Rather gritty black glaze on inside.
Parts of five leaves of a palmette, probably a handle-palmette.
Chalkidic.
Ca. 400-350 B.C.

8.132 (78.758) Not illustrated
Lower City, TR1 (2).
Fragment from the wall of a skyphos; slightly concave.
H. 0.020; W. 0.027; Th. 0.003 - 0.004.
Clay light red, 2.5 YR 6/8, slightly grey in core. Glaze shiny black.
Outside, below, horizontal lines below the main scene of which only a small, unidentifiable portion remains. The inside is glazed.

Attic.
Ca. 400-350 B.C.

8.133 (78.1509) Pl. 62
Isthmus, TR3 tr1 (3) B8.
Fragment, slightly convex, from the wall of a skyphos.
Max. dim. 0.035; Th. 0.002 - 0.003.
Clay light yellowish to very pale brown, 10 YR 6/4 - 7/4. Glaze slightly shiny, greyish black.
At the left, the bottom right end of a piece of drapery. To the right, a sash, with the decorated hem at the lower break. The inside is glazed. Probably from the same vase as **8.134**.
Chalkidic.
Ca. 400-350 B.C.

8.134 (78.818) Pl. 62
Isthmus, TR3 tr1 (3) B8.
Fragment, slightly convex, from the wall of a skyphos.
Max. dim. 0.051; Th. 0.003.
Clay light yellowish to very pale brown, 10 YR 6/4 - 7/4; some fine mica. Glaze slightly shiny, greyish black.
Body of a male (?) figure dressed in an himation decorated with wave pattern at the diagonal upper hem. The vertical line at the right might be the proper left side of the figure, and the drapery to the right of this might be the himation wrapped around the left arm. Probably from she same vase as **8.133**.
Chalkidic.
Ca. 400-350 B.C.

8.135 (75.126) Not illustrated
Gate Area, TR1 tr1 (4).
Fragment from the lower wall of a skyphos just above the base.
H. 0.017; W. 0.029; Th. 0.004.
Clay reddish yellow, 7.5 YR 6/6. Glaze slightly shiny greyish-black.
At the left is part of the himation of a draped figure standing to the left (?); at the right, an unidentified reserved area. The inside is glazed.
Chalkidic.
Ca. 400-350 B.C.

8.136 (75.481) Not illustrated
Structure 1, TR1 tr4b (2).
Fragment from the upper wall of a skyphos; worn.
H. 0.022; W. 0.031; Th. 0.003.
Clay reddish yellow, 7.5 YR 7/8; much mica. Glaze greyish black, applied unevenly, slight sheen.
At the upper break, a horizontal line and the bottom of one egg from the egg-pattern below the rim. Below this at the left, the upper part of a tendril of the handle-floral. The inside is glazed.
Chalkidic.
Ca. 400-350 B.C.

8.137 (78.323) Not illustrated
Isthmus, TR2 tr1 (4).
Fragment: from the lower wall of a skyphos; the upper half of the fragment is slightly concave.
H. 0.031; W. 0.031; Th. 0.003.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black. Red miltos.
At the right, the lower left side of the handle-palmette and, to the left, part of a draped figure standing to left. The inside is glazed.
Probably Fat Boy Group (*ARV*^{2} 1490-92). Compare what remains with the corresponding area of the right-hand draped youth and the palmette on the Jaén skyphos, *ARV*^{2} 1491, 188 ter., Trias de Arribas, pl. 242, 1. *Cf.* **8.140**.
Attic.
Ca. 400-350 B.C., later rather than earlier.

8.138 (78.164) Not illustrated
Isthmus, TR2 tr1 (3a).
Fragment from the lower wall of a skyphos; the fragment is slightly concave.
H. 0.026; W. 0.028; Th. 0.004 - 0.005.
Clay mainly reddish yellow, 5 YR 7/6, but also slightly grey, 5 YR 6/2, in places in core; micaceous. Glaze dull greyish black.
At the left, the tips of two leaves of a palmette below one handle; to the right, part of the himation of a draped figure standing to right, a zigzag stripe down the edge of the garment. The interior is glazed.
Compare the left-hand youth on the reverse of

Polygyros 247 listed in *BSA* 76 (1981) p. 302, among the vases by the Painter of Olynthos 5.156.
Chalkidic.
Ca. 400-350 B.C., perhaps second quarter.

8.139 (75.195) Not illustrated
Structure 1, TR1 tr1 (6).
Fragment from the lower wall of a skyphos. The wall curves out slightly and is thinner towards the top.
H. 0.033; W. 0.035; Th. 0.003 - 0.004.
Clay reddish yellow, 5 YR 6/6. Glaze dull black.
At the lower break, a ground-line above a zone of glaze. The remains of the picture are difficult to interpret: perhaps part of a draped male figure standing to left, and, at the right, part of a handle-palmette. Perhaps from the same vase as **8.124**.
Chalkidic.
Ca. 400-350 B.C., perhaps second quarter.

8.140 (78.116) Pl. 62
Isthmus, TR1 tr1 (4).
Fragment from the lower wall of a skyphos, slightly concave.
H. 0.040; W. 0.038; Th. 0.004.
Clay reddish yellow, 5 YR 7/8. Glaze dull black.
At the left, leaves of a palmette below one handle. At the right, part of the himation worn by a figure standing to right. The fragment is glazed inside.
What remains reminds one of skyphoi from the Fat Boy Group, *ARV*^{2} 1490-1492. *Cf.* **8.137**.
Attic.
Ca. 380-360 B.C.

8.141 (76.394) Not illustrated
Structure 3, TR13 (4).
Fragment from the lower wall of a skyphos; slightly concave in profile.
H. 0.025; W. 0.027; Th. 0.003 - 0.004.
Clay reddish yellow, 7.5 YR 6/6-7/6; very little mica. Glaze fired greyish brown.
Heart and some leaves of a handle-palmette. Inside glazed.
Published: *PAE* 1977, pl. 75α.
Chalkidic.
Ca. 375-350 B.C.

8.142 (78.1376) Pl. 62
Isthmus, TR3 tr2 (3) B14.
Two joining fragments from the wall of a calyx-krater or skyphos.
H. 0.066; W. 0.061; Th. 0.004 - 0.006.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black.
At the left, the lower back and buttocks of a figure, to left, wearing an himation. Then, parts of the body and legs of a woman moving to left, wearing a peplos with overfall. Some preliminary sketch lines. The interior is glazed.
Perhaps from the same vase as **8.143**.
Attic.
Ca. 425-375 B.C.

8.143 (78.900) Pl. 62
Isthmus, TR3 tr2 (3) B14.
Two joining fragments from the wall of a krater or skyphos. The wall is slightly concave in profile.
H. 0.033; W. 0.054; Th. 0.005.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black.
Section of a peplos, with the edge of the overfall, worn by a female figure. Some preliminary sketch lines. The interior is glazed.
Perhaps from the same vase as **8.142**.
Attic.
Ca. 425-375 B.C.

8.144 (75.194) Not illustrated
Structure 1, TR1 tr1 (6).
Fragment from the wall of a bell-krater or skyphos. Very slightly convex.
H. 0.016; W. 0.029; Th. 0.005.
Clay reddish yellow, 5 YR 6/8-7/8. Glaze dull black.
At the right, a section of drapery. Glazed inside.
Attic.
Ca. 425-375 B.C.

8.145 (78.545) Not illustrated
Isthmus, TR2 tr1 (4-5).

Fragment from the wall of an open vase, skyphos or bell-krater. Slightly convex in profile.
Max. dim. 0.025; Th, 0.005 - 0.006.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, black.
On the outside, part of a spiraling tendril. The inside is glazed.
Attic.
Ca. 450-350 B.C., probably 400-350 B.C.

8.146 (78.315) Pl. 62
Isthmus, TR1 tr1 (5).
Fragment from the wall of an open vessel, perhaps a krater or skyphos.
Max. dim. 0.027; Th, 0.005.
Clay pinkish grey to light reddish brown, 5 YR 6/2-6/3; rather gritty. Glaze greyish-black.
Curving relief line and at least three rows of added white flecks, perhaps parts of two wings. The fragment is glazed inside.
Chalkidic.
Ca. 425-350 B.C.

8.147 (78.674) Not illustrated
Isthmus, TR2 tr1 (5a).
Single fragment from the wall of an open vessel (skyphos?). Slightly convex in profile.
Max. dim. 0.026; Th. 0.003 - 0.004.
Clay reddish yellow, 5 YR 7/6; micaceous. Glaze greyish black.
What remains seems to be a section of drapery of a figure moving to right (?). The inside is glazed.
Chalkidic.
Ca. 425-350 B.C.

8.148 (75.684) Not illustrated
Gate Area, TR2 tr4 (1).
Fragment from the wall of an open vessel (skyphos?); very worn.
Max. dim. 0.028; Th. 0.003.
Clay reddish yellow, 5 YR 7/6-7/8. Glaze on outside partly rubbed off.
An unidentifiable reserved area remains on the outside. Traces of dilute glaze on inside.
Chalkidic.
Ca. 400-350 B.C. ?

8.149 (78.715) Fig. 59; Pl. 62
Isthmus, TR2 tr1 (5a).
Fragment from the convex wall of a pelike (?).
H. 0.034; W. 0.032; Th. 0.003 - 0.005.
Clay reddish yellow, 5 YR 6/6-7/6. Glaze brownish black.
Body and left (?) thigh of a figure moving to right. The figure wears a short tunic and an himation which hangs down along the left side. The pleat lines of the tunic are in dilute glaze. The horizontal wavy line is perhaps the edge of an overfall. The inside is painted, but the glaze is thin and dull.
For the short, diaphanous chiton with pleats rendered in dilute glaze, see the garment of Poseidon on Vienna 3737, S. Kaempf-Dimitriadou, *Die Liebe der Götter in der attischen Kunst des 5. Jahrhunderts v. Chr.* (1979) pl. 5, 1, or that of Kephalos in the tondo of a cup formerly on the Basel market, Kaempf-Dimitriadou, *ibid.*, pl. 7, 3.
Attic.
Ca. 470-440 B.C.

8.150 (75.439) Not illustrated
Structure 1, TR1 tr2 (2).
Fragment from the shoulder of a pelike.
Max. dim. 0.036; Th. 0.005 - 0.007.
Clay reddish yellow, 5 YR 7/8. Glaze dull brownish black.
At the left break, part of a head (male?) to right. Above, two horizontal relief lines. Relief contour for the brow-nose line of the figure. The inside is covered with glaze applied thinly and unevenly.
Attic.
Ca. 450-350 B.C., later perhaps rather than earlier.

8.151 (75.492) Not illustrated
Gate Area, TR4 (2).
Fragment from the neck of a pelike.
H. 0.036; W. 0.039; Th. 0.007-0.008.
Clay light red, 2.5 YR 6/8. Glaze dull black.
Part of three stopped meanders, to right, from the horizontal pattern- band. Below, the crown of a head. Streaky glaze on inside.
Attic.
Ca. 400-350 B.C.

8.152 (75.687) Not illustrated
Gate Area, TR2 tr4 (1) topsoil.
Fragment from the junction of shoulder and neck of a pelike.
H. 0.037; W. 0.033; Th. 0.003-0.004.
Clay reddish yellow, 7.5 YR 7/6; micaceous. Glaze dull brownish-black. Red wash on reserved areas.
At the lower break, part of a horizontal band of egg-pattern. Inside glazed but unevenly.
Chalkidic.
Ca. 400-350 B.C.

8.153 (78.1497) Not illustrated
Isthmus, TR4 tr2 (3) B5.
Fragment from the base of a vertical handle of a pelike. Strap handle with part of the hole for an ancient dowel at the left-hand break.
H. 0.035; W. 0.028.
Clay reddish yellow, 5 YR 6/6. Glaze slightly shiny, brownish black.
On the outside, one half of a palmette. The lower half of the inside is glazed, the upper reserved except for a blob of glaze at the right.
Attic.
4th century B.C.

8.154 (75.575) Fig. 59
Structure 1, TR1 tr3 (2).
Fragment from the lip of a pelike; chipped and worn. At the lower left hand break, the beginning of a vertical handle.
Max.dim. 0.091; H. edge of lip 0.022.
Clay reddish yellow, 5 YR 7/6, but in places reddish brown, 2.5 YR 5/4; micaceous.
The outer face of the lip was probably glazed, but the glaze has worn off; the interior is glazed so far as preserved; thin glaze on exterior.
Chalkidic.
4th century B.C.

8.155 (75.123) Not illustrated
Gate Area, TR1 tr1.
Fragment from the shoulder of a lebes gamikos (type 2), slightly concave in profile.
Max. dim. 0.020; Th. 0.003.
Clay reddish yellow, 7.5 YR 6/6. Glaze dull black.
What remains is part of the tongue-pattern (the tongues are separated by relief lines) on the shoulder of the vase. The inside is reserved.
The lebes gamikos type 2 is a favourite shape in Chalkidic red-figure: see for example *Olynthus* V, pl. 100, 156. As on Attic examples, the shoulder is decorated with a tongue-pattern.
Chalkidic ?
Ca. 400-350 B.C.

8.156 (76.669) Not illustrated
Isthmus, TR2 tr1 (3a),
Fragment, broken all around, from the lip of a hydria.
Max. dim. 0.040.
Clay reddish yellow, 5 YR 6/6 - 7/6; some secondary burning. Glaze black.
Partly glazed underneath. Glazed on inside of neck. Upper surface of lip reserved. Egg-pattern on edge of lip.
Attic.
Ca. 425-350 B.C.

8.157 (78.1259) P1. 62
Isthmus, TR1 tr2 (6a).
Fragment from the base and lower wall of a lekythos (?).
H. 0.037; D. base (est.) 0.070.
Clay reddish yellow, 7.5 YR 6/6 - 7/6; very fine mica; some voids. Glaze shiny black.
Reserved ground-line. Above, a wool-basket. At the left-hand break there is a small reserved area. The inside and the side of the foot are reserved.
Chalkidic (?).
Ca. 425-375 B.C.

8.158 (75.437) Not illustrated
Structure 1, TR1 tr1 (10).
Fragment from the wall of a squat lekythos.
H. 0.016; W. 0.036; Th. 0.003 - 0.004; D. at pattern-band (est.) 0. 050.
Clay reddish yellow, 7.5 YR 7/6; some mica. Glaze brownish black.
Below, a band of egg-pattern; above, two uniden-

tifiable reserved areas, the larger once covered with added white washed with dilute glaze. Interior reserved.
Attic.
Ca. 400-350 B.C.

8.159 (78.1280) Not illustrated
Hill 2, TR1 (3) .
Fragment from the body of a small squat lekythos.
Max. dim. 0.030; Th. 0.003-0.004.
Clay reddish yellow, 7.5 YR 6/6. Glaze black, slightly shiny.
Three leaves from a palmette. Inside reserved.
Attic.
Ca. 400-350 B.C.

8.160 (78.430) Pl. 62
Isthmus, TR1 tr1 (4a).
Fragment from the shoulder of an askos; the shoulder was in two sections with a step between.
Max. dim. 0.045; Th. 0.003 - 0.004.
Clay reddish yellow, 7.5 YR 6/6; some mica. Glaze slightly shiny greyish black.
At the upper break, a zone of egg-pattern; below this, a second zone with a laurel wreath and, at the left, the back of a female head. The underside is reserved.
For a female head flanked by laurel see the askos once London Market, Christie's, *Catalogue* 21 November 1978, pl. 29, 180. Compare also the askoi with strainer top such as Ferrara 5675, Massei, *Gli askoi* pl. 66, 2.
Chalkidic (?)
Ca. 375-350 B.C.

8.161 (78.102). Not illustrated
Isthmus, TR2 tr1 (3).
Fragment from the shoulder of an askos; wheel marks on underside.
Max. dim. 0.042; Th. 0.004 - 0.005.
Clay reddish yellow, 7.5 YR 6/6 - 7/6. Glaze brownish black.
At the right, two leaves of a palmette; below, the reserved band at the junction of shoulder and wall. The inside is reserved.
Palmette-askoi were found at Olynthos: see *Olynthus* V, pl.140, 402, and *Olynthus* XIII, pl. 174, 59. See also Massei, *Gli askoi* pl. 18, 2, pl. 24, 2, pl. 25, 2, pl. 49, 2 and pl. 52, 2.
Attic.
Ca. 400-350 B.C.

8.162 (78.1378) Pl. 62
Isthmus, TR3 tr1 (3) Road Surface B8.
Fragment, slightly convex, from the shoulder of an askos. Wheel-marks on the unpainted underside.
Max. dim. 0.035; Th. 0.005.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny greyish black.
Uncertain subject: at the lower break, the raised forepaw of a feline (?); above right, floral (?).
Attic (?).
Ca. 400-350 B.C.

8.163 (78.587) Pl. 62
Hill 2, TR2 Area 3 (1).
Fragment from the shoulder of an askos; at the right-hand break is the beginning of the spout.
Max. dim. 0.023; Th. 0.003.
Clay reddish yellow, 5 YR 7/6. Glaze brownish black.
Part of the head, to right, neck and raised left forepaw of a feline. Traces of preliminary sketch. Reserved inside.
The feline was no doubt of the same type as that on the askos Ferrara 20969, Massei, *Gli askoi* pl, 3, 4.
Attic.
Ca. 400-350 B.C.

8.164 (78.373). Pl. 63
Isthmus, TR2 tr1 (3).
Fragment from the shoulder of an askos.
Max. dim. 0.045; Th. 0.005.
Clay reddish yellow, 5 YR 6/6; micaceous. Dull greyish black glaze.
Part of the hair and decorated sakkos covering the hair of a woman's head, to left. Reserved on the inside.
This should be by the Painter of Olynthos 5.156:

see *BSA* 76 (1981) pp. 302-305, and especially the askos p. 303, 17, illustrated in *Olynthus* XIII pl. 84, 58.
Chalkidic.
Ca. 400-350 B.C.

8.165 (75.733) Pl. 63
Gate Area, TR4 (2a).
Fragment from the shoulder of an askos. Wheel marks on the inside. The fragment thickens at the top, perhaps for a knob.
Max. dim. 0.031; Th. 0.003-0.004.
Clay reddish yellow, 7.5 YR 7/6; slightly micaceous, soft. Glaze greyish-black, applied unevenly. Red wash on reserved areas.
Head, to right, and part of arched back of a feline. Two unidentified reserved areas. Inside is reserved.
Chalkidic.
Ca. 400-350 B.C.

8.166 (78.457). Not illustrated
Isthmus, TR1 tr1 (5a).
Fragment: from the shoulder and strainer of an askos (strainer-top).
Max. dim. 0.027; Th. 0.002; D. strainer- top (est.) 0.03.
Clay reddish yellow, 7.5 YR 6/6; some mica. Glaze greyish black.
The interior of the strainer is reserved with traces of three holes. The raised collar is black. Below, there is a reserved fillet. Then part of a palmette: the tip of the central leaf and that immediately to the right. The underside is reserved.
Compare the Attic askoi (strainer-top) illustrated in Massei, *Gli askoi*, pl. 24, 2 and 25, 2.
Chalkidic ?
Ca. 400-350 B.C.

8.167 (78.1424) Not illustrated
Isthmus, TR3 tr2 (3) B18.
Two joining fragments from the shoulder, rim and strainer of an askos (strainer-top).
Max. dim. 0.037; D. mouth of strainer 0.030.
Clay reddish yellow, 5 YR 7/6; micaceous, but perhaps only on the surface. Glaze brownish black.
On the shoulder outside the offset rim is a zone (not bordered) of egg-pattern (solid centres). The outer edge and top of the rim are reserved, the inner edge glazed. The strainer was unglazed; there are parts of three holes. The underneath is reserved.
Attic (?)
4th century B.C.

8.168 (78.1525) Pl. 63 (2 views)
Isthmus, TR4 tr1 (3) B6.
Fragment, broken on all sides, of the lid of a pyxis, type D. The lid thickens slightly towards the centre. The upper surface of the rim consists of a groove between two ridges, all reserved. The edge of the rim is not fully preserved but seems to have been glazed.
Max. dim. 0.040; D. (est.) 0.05 - 0.06; Th. at centre 0.006.
Clay reddish yellow, 5 YR 6/6. Glaze shiny brownish black.
Reserved ground-line. Above, a lion standing to left, right foreleg raised. Relief contour throughout. The underside of the lid is glazed with a graffito in the centre:

Γ Σ Τ Ο
Τ Ρ

Of the letter in front of Σ only the right end of the horizontal bar remains; it might have been T or Γ. The first letter of the second line might also have been T or Γ. TP occurs on Attic red-figure vases of the second half of the 5th century, but not on pyxis lids. See A.W. Johnston, *Trademarks on Greek Vases* (Warminster 1979) p. 165, Type 20F. I do not know any parallel for the graffito in the first line, or for a two-line graffito on the underside of a pyxis lid. For examples of incised marks on pyxides of type D and for their function, see *ibid.*, pp. 38 and 180, and *Agora* XII, p. 178, and note 38. For a pyxis (type D) lid with a lion crouching to left, see *Olynthus* V, no.201, pl. 108 (D. 0.064), also with a graffito.
Attic.
Ca. 400-350 B.C.

8.169 (76.188) Pl. 63
Isthmus TR2 tr1 (2)-(3a).
Ten joining fragments from the lid of a lekanis.
Max.dim. 0.18; D. lid est. 0.215; Th. 0.005-0.007.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black. Red miltos on reserved areas.
At the left, a hand (?) (no doubt of a female figure) holding a box and sash. Then, the lower part of a female figure wearing an himation, who stands in three-quarter view to right. Her right hand, down by her side, is also preserved. The third figure is also a woman, seated on a chest to left, but perhaps looking back to right. She wears a peplos. Along the edge of the lid is a pattern of egg and dot. The underside is glazed.
The lid may have had five figures, two seated women, two running, and one standing, maids, as on Toronto 451: *AJA* 77 (1973) pl. 86, fig, 6. The Toronto fragments, though not by the same hand, are related in style and belong to the same group of lekanides, the Otchët Group, *ARV*^{2} pp. 1496 - 1498. A number of lekanides of this group were also found at Olynthos: see, for example, Thessalonike 38.216 (13.87.64), *Olynthus* X1II, pl. 87. Six fragments of what remains of the lid have been published in *PAE* (1977) pl. 76 ι. (Two further fragments illustrated in the same figure do not seem to belong).
Attic.
Ca. 390 - 360 B.C.

8.169a (78.1122) Not illustrated
Isthmus, TR1 tr2 (5).
Fragment from the lid of a lekanis.
Max.dim. 0.067.
Clay light red, 2.5 YR 6/8. Glaze slightly shiny, black. Red miltos on reserved areas.
The fragment gives the lower legs, covered with an himation, of a woman who is seated to right. Egg-and-dot pattern on the edge.
This fragment cannot be proved to be from the same lid as **8.169** and has been kept separate. The style indicates that this lid, like **8.169** belongs to the Otchët Group.
Attic.
Ca. 390-360 B.C.

8.170 (78.297) Pl. 63
Isthmus, TR2 tr1 (4).
Fragment from the lid of a lekanis.
Max. dim. 0.047; Th. 0.006.
Clay reddish yellow, 5 YR 6/6, but redder in places in core. Glaze shiny brownish black. Red miltos.
Hand, no doubt of a woman ("the zealous maid" as Beazley calls her, *ARV*^{2}, p.1496,), holding a box and a sash. Traces of preliminary sketch. Glazed underneath.
The drawing is just as in the Otchët Group: compare a fragment from the Pnyx, *Pnyx* II, pl. 14, 166; *ARV*^{2} 1497, 11.
Attic.
Ca. 390-360 B.C.

8.171 (78.638) Pl. 64
Isthmus, TR3 tr1 (3) B8.
Fragment from the lid of a lekanis.
Max. dim. 0.068; Th. 0.007.
Clay reddish yellow, 5 YR 6/6 - 7/6. Glaze slightly shiny, black. Red miltos.
At the right, male figure leaning forward, left elbow resting on bent left leg, right arm raised, perhaps holding the sash, the decorated ends of which hang in the field. Below, at the left break, the billowing hem of a chiton. Relief contour for upper line of the right forearm and right breast of the male. Dilute glaze on the sash. Preliminary sketch on male. The underside is glazed.
Attic.
Ca. 390-360 B.C.

8.172 (78.1708) P1. 64
Isthmus, TR3 tr1 (3) B5.
Fragment from the lid of a lekanis including the base of the knob.
Max. dim. 0.078; Th. 0.005 (outer edge).
Clay light brown to reddish yellow, 7.5 YR 6/4 - 7/6, on the surface but pinkish grey in the core, 7.5 YR 6/2; micaceous. Glaze dull greyish black.
At the left, part of the head, left side, left arm and wings of an Eros, no doubt seated to left. Then

the upper part of a woman standing to right. She wears a peplos with overfall (black hem) and sphendone (?). There are reserved areas in front of the woman at the upper and lower breaks. Uneven relief lines, often quite thick. Above the heads of the figures is a reserved band separating the zone of the picture from the base of the handle. The underside of the lid is reserved.
Chalkidic.
Ca. 400-350 B.C.

8.173 (78.85) Pl. 64
Isthmus, TR2 tr1 (3a).
Fragment from the lid of a lekanis.
Max. dim. 0.045; Th. 0.005; H. edge 0.015.
Clay reddish yellow, 5 YR 7/8. Glaze slightly shiny, black.
The underside is glazed. The edge is decorated with egg-pattern; the upper surface, with a box and parts of the garment over the legs of the female seated on the box. Some dilute glaze scumbling on the garment.
This goes with the nuptial lekanides listed by Beazley in *ARV*^{2}, pp. 1498-99.
Attic.
Ca. 390-360 B.C.

8.174 (78.1141) Pl. 64
Isthmus, TR1 tr3 (3) SW.
Fragment from the lid of a lekanis.
Max. dim. 0.056; Th. 0.004 - 0.005.
Clay reddish yellow, 5 YR 6/6, on surface but pinkish grey in core, 5 YR 6/2; very micaceous, some white (lime) inclusions. Glaze greyish black, applied unevenly.
One wing of a figure (Eros ?) flying to left. The short diagonal line at the lower left break may represent the nape of the figure's neck. The underside of the sherd is glazed. Probably from the same vase as **8.183**.
Chalkidic.
Ca. 400-350 B.C.

8.175 (76.577) Pl. 64
Isthmus, TR1 tr2 (3)
Fragment from the lid of a lekanis.
Max. dim. 0.034; Th. 0.005.
Clay reddish yellow, 5 YR 7/8. Glaze dull black.
Red miltos on reserved areas. What remains are sections of a floral tendril or perhaps part of a tendril and the tips of two wings.
Chalkidic (?).
Ca. 400-350 B.C.

8.176 (78.1409) Not illustrated
Isthmus, TR3 tr1 (3) B6.
Fragment from the lid of a lekanis preserving part of the base of the knob.
Max. dim. 0.038; Th. 0.006 (outer edge).
Clay reddish yellow, 5 YR 6/6. Glaze shiny, greyish black.
What remains is a section of the egg pattern around the base of the knob-handle, with zones of glaze on either side. The underside of the lid is glazed.
Attic.
Ca. 400-350 B.C.

8.177 (78.1517) Not illustrated
Isthmus, TR3 tr1 (3) Road Surface B8.
Fragment from the lid of a lekanis, with part of the base of the handle.
Max. dim. 0.054; Th. 0.006 (outer break).
Clay light red to reddish yellow, 2.5 YR 6/6 - 5 YR 6/6. Glaze shiny, brownish black.
What remains is a section of the band of egg-pattern around the base of the handle, bordered on either side by zones of glaze. The underside is glazed.
Attic.
Ca. 400-350 B.C.

8.178 (75.50) Not illstrated
Structure 1, TR1 tr1 (4).
Fragment from the edge of a lekanis lid.
Max. dim. 0.030; Th. edge 0.014.
Clay reddish yellow, 5 YR 7/6, burnt grey in core. Glaze dull black.
The fragment is glazed on the upper surface so far as preserved, and underneath. Egg-pattern on the edge.
Attic or Chalkidic.
Ca. 400-350 B.C.

8.179 (78.417) Not illustrated
Isthmus, TR1 tr1 (5a).
Fragment from the edge of a lekanis lid.
H. edge 0.015; W. 0.030.
Clay reddish yellow, 5 YR 6/8. Glaze dull greyish black. The inside is glazed. Egg-pattern on the edge.
Attic ?
Ca. 400-350 B.C.

8.180 (78.438) Pl. 64
Isthmus, TR2 tr1 (4).
Single fragment from the rim of a lekanis lid.
H. flange 0.015; W. 0.035; D. (est.) 0.15.
Clay yellowish red, 5 YR 5/8, firing to grey, 5 YR 6/2, in core; micaceous. Glaze dull greyish black.
What remains of the upper surface of the lid is glazed. The flange is decorated with egg-pattern. The resting surface is reserved. The underside of the lid is glazed.
Chalkidic.
Ca. 400-350 B.C.

8.181 (78.1514) Not illustrated
Isthmus, TR3 tr2 Ext. 2 (3) B6.
Fragment of the rim of a lekanis lid. Full height of rim not preserved.
H. 0.011; W. 0.035; Th. top of lid 0.003.
Clay reddish yellow, 5 YR 6/6, but tending to grey, 5 YR 6/2, in the core; micaceous. Glaze slightly shiny, greyish black.
What remains of the top upper surface of the lid is glazed. The rim on the outside is decorated with an egg-pattern. The under- side of the lid is glazed.
Chalkidic.
Ca. 400-350 B.C.

8.182 (78:334) Pl. 64
Isthmus, TR2 tr1 (3a).
Fragment preserving the knob from the lid of a lekanis; the rim is chipped.
H. 0.028; D. rim (est.) 0.070.
Clay reddish yellow, 5 YR 6/6. Red miltos. Glaze shiny brownish-black.
The stem, side of knob, inner edge of rim and the central depression are glazed. The top of the rim is reserved as is the top of the knob which is decorated with an egg-pattern between bounding lines.
Attic.
Ca. 400-350 B.C.

8.183 (78.1135) Pl. 64
Isthmus, TR1 tr3 (3).
Fragment from the knob of a lekanis-lid.
Max. dim. 0.044; D. rim (est.) 0.065.
Clay pinkish grey, 7.5 YR 7/2. Red miltos. Glaze greyish-black, applied unevenly.
The sides of the flange and the underside of the knob are glazed. The top of the flange is reserved. The upper surface of the knob was decorated with a circular band of zigzag (dots in the interstices). Probably from the same vase as **8.174**.
Chalkidic.
Ca. 400-350 B.C.

8.184 (76.645) Pl. 64
Isthmus, TR2 tr1 (3a).
Fragment from the bowl of a lekanis.
H. 0.041; W. 0.063; D. flange (est.) 0.20.
Clay reddish yellow, 7.5 YR 7/6. Red miltos. Glaze slightly shiny, brownish black.
The inside of the bowl and the outside of the flange are glazed; the top of the flange is reserved. On the bowl alternate pendant and upright palmettes.
Similar Attic lekanides were found at Olynthos: see *Olynthus* XIII, pl. 119, 201 M and pl. 129, 11. The upright and pendant palmette pattern is the most common decoration on the bowls of Attic lekanides of the Otchët Group and among the nuptial lekanides of the first half of the 4th century. Sometimes, however, there is a laurel wreath (Ferrara 4252, Alfieri, *Spina*, figs. 292-3), a palmette tendril (Ferrara 10343, Alfieri, *Spina*, figs. 294-5), or meander (Ferrara 2421, from Spina T.597).
Chalkidic (?).
Ca. 400-350 B.C.

8.185 (78.553) Not illustrated

Isthmus, TR2 tr1 (5).
Fragment from the side of the bowl of a lekanis; the sherd is slightly convex.
Max. dim. 0.033; Th. 0.007 - 0.008.
Clay reddish yellow, 5 YR 7/6. Glaze slightly shiny, brownish black.
One half of a palmette, probably from a zone of alternating upright and pendant palmettes. The inside is glazed.
Attic.
Ca. 400-350 B.C.

8.186 (76.747) Pl. 65
Gate Area, TR6 tr2 W (3).
Fragment from the convex wall of a closed shape (amphora?).
H. 0.052; W. 0.064; Th. 0.006 - 0.007.
Clay reddish yellow, 5 YR 6/6. Glaze dull black.
Left-hand end of a horizontal band of continuous meander running to left. Above, the beginning of a vertical band for a framed picture. The inside is reserved.
The fragment is reserved on the inside, which indicates a closed vessel. The thickness perhaps suggests an amphora rather than a pelike. In either case the pictures were framed.
Attic.
Ca. 475-425 B.C.

8.187 (78.1718) Pl. 65
Lower City, TR3 Surface.
Fragment from the thin convex shoulder of a closed shape, probably an askos, in which case the glaze inside would suggest that the upper break comes near the beginning of the spout; chipped.
Max. dim. 0.035; Th. 0.002 - 0.003.
Clay reddish yellow, 5 YR 6/6; some surface mica. Glaze brownish black.
Part of head and shoulders of a naked male (satyr?), bearded, to right. His arms were forward and down. Some preliminary sketch. The sherd is reserved inside except for streaks of glaze at the upper break.
Attic.
Ca. 425-400 B.C.

8.188 (78.1021) Pl. 65
Hill 2, TR1 (3).
Fragment from the slightly convex wall of a closed shape, perhaps a pelike.
Max. dim. 0.040; Th. 0.005.
Clay reddish yellow, 5 YR 6/6; some mica. Glaze brownish black.
Arms and cross-bar of a lyre; the strings were not indicated. Reserved vertical at right-hand break. Relief contour for the lyre. Reserved inside.
Attic ?
Perhaps 475-425 B.C.

8.189 (78.719) Pl. 65
Isthmus, TR2 tr1 (5a).
Fragment from the junction of the neck and shoulder of a hydria or pelike.
H. 0.038; W. 0.045; Th. 0.006 (bottom) - 0.008 (top).
Clay reddish yellow, 5 YR 6/6. Glaze brownish-black.
At the upper break, a section of the horizontal band of pattern on the neck: floral? The inside is covered with dull, streaky glaze.
Attic.
Ca. 450-375 B.C.

8.190 (78.1360) Fig. 59; Pl. 65
Isthmus, TR4 tr1 (3) B8.
Fragment from the wall of a closed shape (pelike?); slightly convex profile.
Max. dim. 0.035; Th. 0.002 - 0.003.
Clay reddish yellow, 5 YR 7/6; some mica. Glaze brownish black.
Part of an himation; the vertical lines at the left should be the folds of the overfall. The upper half inside is black, the remainder covered with a thin wash.
Attic or Chalkidic.
Ca. 425-350 B.C.?

8.191 (78.1142) Pl. 65
Isthmus, TR1 tr3 (3) SW.
Four joining fragments from the body of a closed shape (probably a pelike).
H. 0.047; W. 0.071; Th. 0.003-0.004.

Clay reddish yellow, 5 YR 6/6, in general but greyish in places; micaceous.
Below the upper break, a horizontal band of egg pattern. The fragment is reserved inside.
Chalkidic.
Ca. 400-350 B.C.

8.192 (78.1519) Pl. 65
Isthmus, TR3 tr2 (3) B18.
Fragment, slightly convex in profile, from a closed shape (shoulder of a hydria?).
Max. dim. 0.035; Th. 0.003.
Clay greyish cream, 7.5 YR 7/4 (pink); micaceous. Glaze dull greyish black.
At the left, the wavy vertical edges, each decorated with a black stripe, of an himation worn by a standing male. To the right, part of a staff (?) against which the figure may have been leaning. Fine preliminary sketch lines. The interior is reserved.
The fabric is very similar to **8.133** and **8.134** (78.1509; 78.818).
Chalkidic.
Ca. 400-350 B.C.

8.193 (78.1410) Not illustrated
Isthmus, TR3 tr2 (3) B18.
Fragment of a closed shape (shoulder of a small hydria?). The orientation is not clear as wheel marks are not discernible on the reserved interior.
Max. dim. 0.031; Th 0.004.
Clay reddish yellow, 7.5 YR 6/6; micaceous. Glaze greyish black.
The remains may represent part of a wing, the dots standing for the pin-feathers, the relief lines separating the quills.
For a small hydria with a flying Eros see Thessalonike 226 (5.84.140), *Olynthus* V, pl. 140.
Chalkidic.
Ca. 400-350 B.C.

8.194 (75.681) Not illustrated
Gate Area, TR2 tr4 (1).
Fragment from the slightly convex wall of a closed shape (askos?); much worn.
Max. dim. 0.048; Th. 0.003.
Clay reddish yellow, 5 YR 7/8; some mica. Glaze greyish black. Red miltos on reserved areas.
Two reserved areas remain, not identifiable. The interior has a wash of dilute glaze.
Chalkidic.
Ca. 400-350 B.C.?

8.195 (75.54) Not illustrated
Structure 1, TR1 tr1 (4).
Fragment from the body of a closed shape (oinochoe shape 3 ?).
Max. dim. 0.030; Th. 0.003.
Clay reddish yellow, 7.5 YR 7/6, very soft, laminating. Thin brownish black glaze.
On the outside at the right , a torch (?). The inside is reserved.
Attic (?).
Ca. 425-350 B.C.

8.196 (75.98) Pl. 65
Gate Area, TR2, tr1.
Fragment from the slightly convex wall of a closed shape.
Max. dim. 0.025; Th. 0.005.
Clay reddish yellow, 5 YR 7/6; soft. Glaze dull brownish-black.
Raised left forearm and part of the left hand, holding something, of a draped figure. The garment, himation or sleeved chiton, covered the upper left arm. Relief contour for inner side of forearm. Preliminary sketch on the arm. The inside is reserved.
Attic?
Ca. 425-375 B.C.

8.197 (75.700) Not illustrated
Gate Area, TR2 tr4 (2).
Fragment from the slightly convex wall of a closed shape. Much worn.
Max. dim. 0.030; Th. 0.003.
Clay reddish-yellow, 7.5 YR 7/6; micaceous.
Glaze brownish-black. Red wash on reserved areas.
At the lower right-hand break, the head of a thyrsos. The reserved area above is abraded, and the object unidentifiable.
Inside reserved.
Chalkidic.
Ca. 400-350 B.C.

9. THE PLAIN BLACK-GLAZED POTTERY

Alexander Cambitoglou and Olwen Tudor-Jones

INTRODUCTION

The importance of black-glazed pottery as a guide to the chronology of a Classical site can hardly be over-estimated. This is due mainly to the publication in 1970 by B. A. Sparkes and L. Talcott of *Agora* XII, in which significant, well-stratified deposits have enabled the authors to establish a firm chronology for this ware in Athens. In this chapter selected fragments of plain black-glazed pottery from the first three excavation seasons (1975, 1976 and 1978) at Torone are presented. The category includes the following shapes: skyphos; Type C cup, Vicup and Acrocup; one-handler; small condiment container (either salt cellar or plain small bowl); fish-plate; lekanis; lekane; askos; olpe; lekythos; kyathos and thymiaterion. Shapes which generally bear stamped decoration are presented in Chapter 10.

It seems that, with a few exceptions (for instance the skyphoi **9.32**, **9.33** and the one-handlers **9.84**, **9.87**, **9.88**), the 5th century black-glazed pottery found at Torone is all imported from Athens. During the 4th century, however, the ware seems to be predominantly of local manufacture, in spite of the fact that the shapes still adhere fairly strictly to their Attic counterparts.

Although the presence of gold and, to a lesser extent, silver mica in a fabric is a characteristic of Chalkidic pottery[1] it cannot be used as the sole criterion of provenance since these elements are common also in the pottery of the eastern and northern Aegean, and the west coast of Asia Minor. The presence of mica, however, in the form of fine flecks or surface dusting, in the fabric of canonical black-glazed shapes found in the Chalkidike, considered together with other factors such as texture and colour, strongly supports a local attribution. Compared with Attic pottery, the local black-glazed product tends on the whole to have a harder texture and, although it is well levigated, it has occasional voids and is sometimes gritty. The glaze is, at times, good with quite a glossy sheen, but it never achieves the lustrous quality of the best of Attic black-glaze and is generally thin and dullish.

In our study we have been able to identify three fabric groups. The first, which far outnumbers the other two, is reasonably hard-fired and although it now and then

[1] J. K. Papadopoulos, "An Early Iron Age Potter's Kiln at Torone" *MeditArch* 2 (1989) 9-44, especially 27, where both gold and silver mica are found in pots from the same kiln.

looks dull and muddy, it has a colour range from light red and reddish yellow through to pink and light reddish brown, mainly falling between 2.5YR 6/4, 6/6 and 5YR 6/6, 7/3 or 7/6 on the Munsell Colour Chart; examples: **9.49, 9.51, 9.56, 9.57, 9.59.**

The clay of the second group tends to be softer in texture, light-weight and more friable. Its colour is its main distinguishing feature, varying from very pale brown through to light grey 10YR 8/4,7/1-7/4; in one instance it is pink, 7.5YR 7/4: **9.198**. The glaze also tends to be fairly thin: **9.32-9.33**, **9.35-9.37**.

The third fabric is by far the heaviest, extremely hard-fired and approaching stone-ware both in weight and texture. The colour ranges from light red through to pinkish grey 10R 6/6; 2.5YR 6/6, 6/8; 5YR 7/4 and 7.5YR 7/2: **9.34, 9.38**, **9.44-9.46**, **9.62**. The surface frequently fires grey.

Other fragments with a hard, brittle texture but with a thinner, and therefore not so heavy a fabric, should perhaps be included in the third group: **9.63- 9.65, 9.67**.

In this publication both Dr. Ian McPhee and Dr. Ann Steiner have distinguished more than one fabric group in the non-Attic components of the red-figured and the stamped black-glazed pottery (Chapters 8 and 10 respectively). It is gratifying to note that, although working independently, we have all reached more or less similar conclusions as to local fabric grouping.

SHAPES

SKYPHOI **9.1-9.67**

The most popular shape among the plain black-glazed drinking vessels during the Classical period at Torone is the skyphos, where the Corinthian type is far outnumbered by the Attic Type A. Selected examples of both types are presented here.

Corinthian type **9.1-9.7** Fig. 60; Pl. 66

In the Athenian Agora the earliest version of the Corinthian-type skyphos with thick vertical lines decorating the reserved zone above the foot, is dated to the early 6th century B.C. As the shape develops, the lines become finer, eventually giving way, in the second half of the 5th century, to cross-hatching, which lasts down into the third or the last quarter of the 4th century.[2]

The fine and carefully drawn lines on the earliest examples from Torone, **9.1-9.3**,

[2] *Agora* XII 81-83.

place them in the second half of the 5th century, while the cross-hatching on **9.6** indicates a 4th century date for it. Both **9.5** and **9.7** have a plain reserved zone around the lower body which extends over the top of the foot; there is a glazed band in the middle of the upper surface of the foot of the former and a glazed band with an added red line around the outer edge of the latter. **9.4** is totally glazed except for the underside.

With the exception of **9.7,** which may be Chalkidic, all the Corinthian-type skyphoi are Attic, with a fine hard texture and lustrous black glaze; in all cases the underside appears to have been reserved and decorated with circles.

Of the few examples of Corinthian-type skyphoi which appear in the Olynthos publication none has vertical lines in the zone above the foot. Five from Olynthos and three from Mekyberna are cross-hatched;[3] two have a plain reserved zone[4] and three appear to be totally glazed.[5] Three of these vases are of grey fabric[6] and are most probably Olynthian products.

Attic Type A **9.8-9.67** Figs. 60-63; Pl. 66

Evidence from the Athenian Agora excavations indicates that the body of the Attic Type A skyphos, before the second quarter of the 5th century, displays a single curve from foot to rim with the widest diameter at the rim or a little below. The slight concavity which appears in the lower wall during the second quarter of the century, develops into the characteristic double curve of the later skyphoi.[7] In the catalogue that follows, base fragments with a convex profile in the lower body have been dated to the first half of the 5th century B.C. Others, distinguished by a developing concave profile, are placed in a period starting approximately in the middle of the 5th century and ending in the late 4th century B.C., by which time the diameter of the base has become quite small and the lower body almost a stem. With only a few exceptions, early examples are Attic, while after the middle of the 5th century the number of skyphoi of Chalkidic fabric increases to become definitely predominant during the 4th century B.C.

Many Attic Type A skyphoi are published by Robinson in *Olynthus* V and XIII. Most of the 5th century skyphoi with convex bodies and wide bases come from graves and appear to be of Attic manufacture; the later versions cover the transition

[3] *Olynthus* XIII 306-307, nos. 570, 571, pl.198; Mekyberna, nos. 2, 3, 4, pl. 194; *Olynthus* V 83, nos. 74-76, pl. 56.
[4] *Olynthus* XIII 307, nos. 572, 573, pl.198.
[5] *Olynthus* V 242, 244, no. 952, pl. 183; no. 968, pl. 184; *Olynthus* XIII 307, no. 574, pl. 200, with three incised lines around body.
[6] *Ibid.* nos. 571, 572 and 574.
[7] *Cf. Agora* XII 84-85.

from the wide to narrow base and from the convex to the convex-concave body, and the body with double curved profile in the 4th century. They are said to have a distinctive micaceous clay of reddish or buff colour and are almost certainly local Olynthian products.[8]

CUPS **9.68-9.83** Fig. 64; Pls. 66-67

The extremely fragmentary state of preservation of the sixteen cup fragments catalogued here make their attribution to specific shapes difficult. All seem to be Attic, with the possible exception of **9.81**.

Most of the cups belong to Type C, the most common stemmed cup of the late 5th and early 4th centuries, which, in addition to a concave lip and shallow body, has a reserved torus outer face of the foot and a short thick stem. In some of the earliest versions, however, the outer face of the foot is black,[9] a feature which is also typical of the Acrocup. Although the foot fragment **9.68** has a black outer face it could not possibly come from an Acrocup since it has a thick stem. Acrocups are characterised by sharp or rising feet.

The concave upper outer edge of the foot of **9.75** and the outer face of the foot on **9.76**, both reserved, indicate that they are Vicups and should be dated to about 460 B.C.[10] In spite of its concave lip, the deep body profile of **9.79** suggests that it is an Acrocup[11] rather than a Type C cup.

ONE-HANDLERS **9.84-9.99** Fig. 65; Pls. 66-67

The one-handler is a sturdy shallow bowl with either a flat or rounded rim, and a single horizontal handle. Earlier versions of the shape, in the Archaic period, are reserved on the outside and decorated with glazed bands; the inside is glazed, with usually a reserved disk, circles and dot, in the centre of the floor. Throughout the Classical period, when the shape becomes very popular, the one-handler is mostly totally glazed.[12]

[8] For some examples: *Olynthus* V 241-243, nos. 947-951, 953-955, 958-967, pls.183-184; *Olynthus* XIII 303-304, nos. 559-563, pl. 196. For comments on the fabric of 5th and 4th century skyphoi see pp. 302 and 308.
[9] *Cf. Agora* XII 91, nos. 398-399, pl.19, fig. 4.
[10] *Ibid.* 93, nos. 434-438, pl. 20, fig. 5.
[11] *Ibid.* 93-94, no. 442, pl. 20, fig. 5.
[12] *Ibid.* 124-127.

Of the earlier banded variety, two complete handles with part of the rim, **9.84** and **9.87** and two fragments which preserve the foot and lower body, **9.85** and **9.86**, are presented here. The remaining twelve pieces, **9.88-9.99**, are entirely black.

Judging from the Torone material, the one-handler was fairly commonly made in the Chalkidike, since of the sixteen examples in this catalogue, only three appear to be definitely Attic (**9.85-9.86**, **9.95**) the others being of local fabric. At Olynthos a great number of plain black-glazed one-handled bowls were found also believed to be of local Olynthian fabric, and dated to the 4th century.[13]

SMALL CONTAINERS **9.100-9.146** Figs. 66-67; Pls. 67-68

On some Classical sites small open plain black-glazed pots with rounded or concave profiles, which range in shape from narrow and deep to wide and shallow, are usually classified as salt-cellars, pyxides or small bowls. Those from Torone are all presented here under one heading as small containers.

Salt-cellars or Pyxides? **9.100-9.101** Fig. 66

9.100-9.101 may have been salt-cellars or small lidded pyxides intended for toiletry unguents or jewellery: they are placed in this category on the basis of Athenian Agora parallels.[14] They are both Attic.

Salt-cellars **9.102-9.135** Figs. 66-67

9.102-9.135 have close parallels with Classical and Early Hellenistic examples from the Athenian Agora which Sparkes and Talcott have classified into four groups. The Torone salt-cellars may also be placed in similar categories.

Type 1 (Convex body) **9.102-9.103** Fig. 66

Both these Attic pots have the distinctive thick convex body and flat underside of a type which appears at the beginning of the Classical period and disappears before the end of the 5th century.[15]

[13] *Olynthus* V 234-240, nos. 895-942, pls.178-181; *Olynthus* XIII 338-339, nos. 696-706, pl. 216. There is no published example from Olynthos of a black-glazed banded one-handler although coarse one-handled native Olynthian bowls with painted bands are mentioned from "pre-Persian" levels, *cf. ibid.* 334-336, nos. 681, 683-684, pl. 214 and *Olynthus* V 29, no. P35, pl. 27.

[14] *Agora* XII 136-137, nos. 921-927, pl. 34, fig. 9 and nos. 1295-1297, pl. 43.

[15] *Ibid.* 135-136, nos. 894, 897, pl. 34, fig. 9.

Type 2 (Echinus body) **9.104-9.107** Fig. 66; Pl. 67

These salt-cellars have a fairly thin, shallow body which tapers in at the bottom. Their mouth has a diameter greater than that of their base.[16] There are two versions of the underside: the earlier, which is represented by **9.104-9.105**, is recessed and disappears *ca.* 450, and the later which is represented by **9.106-9.107**, is flat and is typical of the late 5th century. Similarly shaped salt-cellars are also found at Olynthos.[17] The underside of **9.106** bears an incised graffito depicting a five pointed star.

By the beginning of the 4th century the popularity of black-glazed pottery for use as table-ware has been firmly established and with the appearance of the following Types 3 and 4 we begin to see a significant increase in the local production of this ware.

Type 3 (Concave body) **9.108-9.119** Fig. 66; Pl. 67

Probably the most popular shape of salt-cellar in the 4th century; it was totally glazed and "spool-shaped" with a concave, or almost vertical body sloping down into a base with a rounded or flat resting surface, and with a recessed underside.[18] The rim which is usually rounded, tends to become wide and flat in the Hellenistic period.[19] The almost vertical profile, particularly noticeable in **9.115-9.117**, is shared in various degrees by the salt-cellars at Olynthos.[20]

Of the twelve spool shaped salt-cellars in this catalogue, seven are local products; the remaining five are Attic.

Type 4 (Outwardly thickened body and ring foot) **9.120-9.135** Figs. 66-67; Pl. 67

The second 4th century shape of salt-cellar, Type 4, is characterised by an outwardly thickened body profile, incurved rim and a ring foot with a grooved resting surface.[21]

Of the sixteen Type 4 salt-cellars in this catalogue eight are Attic, three are probably Attic and five are Chalkidic. It is interesting to note that all the local pots are totally glazed as against only two in the other two categories. As total glazing became

[16] *Ibid.* 136, nos. 901-914, pl. 34, fig. 9.

[17] *Olynthus* V 230-231, nos. 862 and 864-867, pl.175; *Olynthus* XIII 347, 348, nos. 743-746, pl. 219.

[18] *Agora* XII 136-137, nos. 934-938, pl.3 4, fig. 9.

[19] *Cf.* S. I. Rotroff, "Spool Saltcellars in the Athenian Agora" *Hesperia* 53 (1984) 343-344, fig. 1, pl. 67, 1-3. 325-295 B.C.

[20] *Olynthus* V 253, nos. 1040, 1042, pl. 189; *Olynthus* XIII, 389-391, nos. 934-938, pl. 238, nos. 940-944, pl. 232.

[21] *Agora* XII 137-138, nos. 946-950, pl. 34, fig. 9.

the general practice toward the end of the production of this type of salt-cellar in Athens, the local examples should be later than their Attic counterparts.

Small Bowls **9.136-9.146** Fig. 67; Pls. 67-68

The bowls of this type follow, chronologically, the decline in popularity of the Type 2 salt-cellar in the late 5th century.[22] They are wider and shallower than the later 4th century Type 4 salt-cellars, discussed above, with their much heavier profile and would make suitable sauce containers. The shape seems to have been much favoured in the Chalkidike as hundreds of these "saucers", as Robinson refers to them, were found at Olynthos.[23] Apart from three very worn fragments, **9.136-9.138**, which should be Attic, the fabric of all our small bowls is local, and similar to that in Olynthos. A common feature, which is rare in Attic, is the recessed underside and central nipple.

FISH-PLATES **9.147-9.173** Figs. 68-69; Pl. 68

A broad, sloping floor with a central depression, an overhanging rim and a heavy ring foot distinguish the plain black-glazed fish-plate throughout the 4th century and into the Hellenistic period.[24] The shape, which is rarely seen before the end of the 5th century, frequently bears red-figured decoration.[25]

In the earliest phases, the floor is almost flat, and the overhanging rim almost vertical; the resting surface is flat or oblique, and the underside reserved. As the shape develops the floor rises more steeply to the rim, which gradually becomes more flaring. The elaborately moulded foot with concave moulding on the inner face and a plain resting surface, which denotes the first stage in the development of the fish-plate at the end of the 5th century, soon disappears, to be replaced by a ring foot which retains the plain resting surface. After 375 B.C. the resting surface is generally grooved and the underside glazed.[26]

The difficulty in the placing of a fish-plate correctly in the series is pointed out in

[22] *Ibid.* 134.

[23] *Olynthus* V 232, nos. 879, 880, pl.176; see also Boxes 13, 14, 16 from Olynthos in the Archaeological Museum, Thessalonike.

[24] *Agora* XII 147-148.

[25] See *Olynthus* XIII 128-132, nos. 73-74, pls. 92-93, first half of the 4th century; *Olynthus* V 143-144, nos. 231-232, pl. 113, 4th century. For a black-figured fish-plate from Olynthos see *ibid.* 81-82, no. 64, pl. 55.

[26] *Agora* XII, no. 1071, fig. 10.

Agora XII and is also experienced here, since even with complete profiles, individual features appear to contradict each other; for example: **9.151** combines the early almost flat floor with the later grooved resting surface, and in **9.150** the late deep sloping floor appears together with the early features of a plain oblique resting surface and a vertical rim.

The moulded ring foot of **9.147** makes this our earliest fish-plate, dated between the late 5th and early 4th century. We have placed those pieces which have both a reserved underside and a plain resting surface in the first quarter of the 4th century because the combination of these features suggests a fairly early date; **9.148-9.149** are Attic and **9.167-9.168** are of Chalkidic fabric.

Examples with a flat or oblique resting surface have been dated to the first half of the 4th century. Those with a nipple on the underside are placed in the second half. The remainder are simply dated to the 4th century B.C. None of the rims of the fish-plates catalogued here has yet developed the flaring profile which is typical of the later Hellenistic period. Attic fish-plates dominate, with fourteen certain, and six probable, examples. The remaining seven are Chalkidic of a hard, micaceous fabric; most of them preserve a dull glaze with the unusual exception of **9.173** which is of local clay but unglazed and burnished.

Of the Attic fish-plates four preserve a graffito on the underside, **9.150**, **9.154**, **9.156**, **9.158**.

LEKANIDES **9.174-9.184** Fig.70

The plain black-glazed lidded lekanis is a flat bowl with two horizontal handles and a ring foot, used to contain toilet articles such as jewellery or cosmetics. During the second half of the 5th century it is very popular, but later on in the 4th century, plain black-glaze appears to give way to red-figured decoration. Two types of handle are noted, the most common being the ribbon handle, possibly a copy of a wicker-basket handle,[27] and the horizontal cup handle.

Rim and upper body fragments from two ribbon-handled (**9.177**, **9.179**), one cup-handled (**9.180**), and one unclassified (**9.178**) lidded lekanis are presented here. The remaining pieces comprise three lid and four lid-knob fragments. Changes in the development of the foot of the lidded lekanis are the principal criterion for the dating

[27] *Ibid.* 165-167.

of this shape[28] which is used from the 6th through to the last quarter of the 4th century B. C.; therefore it is unfortunate that no base fragments of lekanides from Torone are preserved. As there is very little change in the profile of the upper body during this period any attempt at precise dating would be unwise.

With the exception of **9.176**, a spool shaped knob which is probably Attic, all our pieces are of local Chalkidic fabric, although the characteristic mica content is not always visible. In Olynthos too, where both ribbon and cup-handled lekanides are well represented, all seem to be locally produced.[29]

LEKANAI **9.185-9.186** Fig. 71

A lekane or basin is an essential item of domestic pottery not usually associated with black-glazed tableware. The two examples catalogued here have been included because they are partially black-glazed.

9.185 is a rim and body fragment of a deep bowl with an estimated diameter of 0.250 m. It is of local fabric, glazed on the inside and reserved on the outside, on which can be detected faint traces of miltos. **9.186** is a rim fragment with a flat top which finds a fairly close parallel in a fragment from the Athenian Agora from a late 5th century context.[30] Although worn, the soft texture suggests that the fabric may be Attic.

Similar lekanai from Olynthos, apparently of local fabric, are dated by the excavators from the late 5th to the early 4th century B. C.[31]

ASKOI **9.187-9.199** Fig. 71; Pl. 68

An askos is a small spouted container probably intended for perfume, but also for oil or other unguents which need to be dispensed carefully, drop by drop. The black-glazed askos of the early 5th century has a disk foot with a flat underside and a com-

[28] *Ibid.* for changes in the development of the foot.

[29] Ribbon-handled: *Olynthus* V 248-249, nos. 1006-1013, pl. 187, 4th century; *Olynthus* XIII 321-322, nos. 635-636, pl. 206, late 5th or early 4th century; Cup-handled: *Olynthus* V 249-250, nos. 1014-1020, pl. 188, 4th century; *Olynthus* XIII 319-321, nos. 622, 624-5, 627-8, pl. 204; nos. 632-3, pl. 206, late 5th or early 4th century. The majority of these vessels were found in graves.

[30] *Agora* XII 213, no. 1809, fig. 21.

[31] *Olynthus* V 240, no. 943, pl. 182, late 5th or early 4th century; *Olynthus* XIII 418, no. 1044, pl. 253, late 5th century.

pletely closed oval body, either deep or shallow, with an overarching handle attached to a short concave spout at one end of the body.[32] There is usually a slight projection of the inner side of the rim which controls the flow of liquid from the askos. The shallow-bodied shape is the more popular, and lasts through to about the mid-4th century, while the deep body disappears before the end of the 5th. Two examples of the shallow type appear in this catalogue: **9.187** is a body fragment; **9.197** a spout.

In the early 4th century a new shape is introduced with a vertical spout set in the centre of the body, classified as "Guttus Type", which predominates until late in the century. It is characterised by a low bulbous body, which is occasionally vertically ribbed (**9.189** is an example of such ribbing),[33] a low ring foot, and usually a ridge at the junction of the body and neck. The flaring mouth is set upon a concave vertical neck and a ridged ring handle is attached to the shoulder immediately below the ridge. Ten examples of this type are presented here, **9.188-9.189**, **9.191-9.196**, **9.198-9.199**.

With the exception of **9.188-9.189** which are Attic, all our guttus-type askoi are of local Chalkidic fabric. The shape seems to have been fairly popular in the Chalkidike, where it is well represented at Olynthos and classified by Robinson as a "lagynos with ring handle" of local Olynthian fabric.[34]

The relief top decorated with the face of a silen, **9.190**, is also probably Attic; **9.187** must be Attic, and could perhaps be from an askos with a strainer or a relief top.

OLPAI **9.200-9.208** Fig. 72

During the 5th and 4th centuries B.C. small ovoid one-handled jugs or olpai, usually fairly consistent in size and shape, were probably used as standard measures.[35] They are one of the most common shapes of local fabric found at Olynthos.[36]

The nine fragmentary olpai presented here are all Chalkidic, dating to the second and third quarters of the 4th century. They all preserve either the whole or part of the lower body and the foot with the exception of **9.201** which is almost intact, missing

[32] For the development of the shape see *Agora* XII 157-160, pl. 39, fig. 11.

[33] *Ibid.*, 160 and note 22.

[34] *Olynthus* V 224-225, nos. 813-814 and 820-823, pl. 172; *Olynthus* XIII 245-248, nos. 411-421, pl. 168.

[35] *Agora* XII 78.

[36] *Olynthus* V 205-210, nos. 666-708, pls. 162-164; parallels for Torone shapes can also be found in *Olynthus* XIII 230-233, nos. 336-353, pls. 163-164.

only the handle. The slender footless profile of **9.200** flares out and turns into a flat resting surface and an almost flat underside, which suggests that this is probably slightly earlier than the others.

9.201-9.206 and **9.208** all preserve a disk foot with a slightly protruding torus or slightly chamfered profile, but the straight lower body of **9.203** sets it a little apart from the others. The distinctly chamfered ring foot of **9.207** is unusual for an olpe, but it may occur also at Olynthos.[37]

LEKYTHOI **9.209-9.215** Fig.72

The seven pieces listed under this heading represent two types of lekythos: the globular Deianeira type and the squat lekythos, which, between them, cover a period lasting from the beginning of the 6th to the end of the 4th century B.C. Attic and Chalkidic examples of both types are represented in Torone.

Two types of black Deianeira lekythoi with a drip-ring below the mouth are current in the 6th century. One has a curved elongated body and the other is globular. The former does not last beyond the middle of the century, but the latter continues until the end of the 4th century.[38] The drip-ring around the neck of **9.211**, the wide bowl-shaped mouth with the double curve of **9.214** and the smooth sloping shoulder of **9.215** identify these pieces as 4th century Deianeira lekythoi. The latter two fragments are of local fabric but **9.211** is probably Attic.

The squat lekythos has a rounded body with a wide foot and the neck, which is offset from the shoulder, has a cup-shaped mouth with an incurved edge to the rim. The shape becomes common in the third quarter of the 5th century and continues into the 4th when a smaller version becomes increasingly popular.[39] Two base fragments, **9.209-9.210** are certainly from squat lekythoi, and also probably **9.213** although its lower body profile, which is all that is preserved, seems slimmer and taller than the others. All appear to be Attic.

The squat lekythos is one of the most common shapes to be found at Olynthos (over 200 squat lekythoi were recorded from the 1928-1938 excavations).[40] The majority seem to be Attic but more than 60 are probably Olynthian.

The complete mouth, **9.212**, which has the flat rim with inner projection desirable for this shape, is probably from a smaller late 4th century squat lekythos.

[37] *Olynthus* V 207-208, no. 690, pl. 163.
[38] *Agora* XII 151-152.
[39] *Ibid.* 153-154.
[40] *Olynthus* XIII 41.

KYATHOS **9.216** Fig. 72; Pl. 68

The long-handled kyathos or ladle, **9.216**, could be dated anywhere between the mid 5th and 4th centuries,[41] but its context suggests a 4th century date. A double-rolled straight handle extends from the bowl, and the black glaze in which it was dipped covers part of the handle shaft. The fabric is local.

Similar ladles of coarse native clay are also found at Olynthos.[42]

THYMIATERION **9.217** Fig. 72; Pl. 68

A thymiaterion is a shallow bowl attached to a tall stand designed to contain lighted charcoal, on which incense is sprinkled and burned. The stemmed thymiaterion, or thurible, was the principal type in use during the late 6th and early 5th centuries, though a low stemless variety also came into use later in the 5th century.

The concave collar around the stem of **9.217** which would make it easier to carry, finds a parallel in a similar feature in an Attic example dated *ca.* 500 B. C.[43] The gold mica and the heavy fabric, however, and the reserved shaft decorated only with glazed bands, set it apart from the Attic example and identify it as Chalkidic.[44]

POSTSCRIPT

The provenance attributions of the pottery discussed and catalogued in this chapter were based exclusively on a visual study of the material. More recently, however, a PIXE-PIGME analysis of eighteen pieces of black-glazed ware from Torone (see O. Tudor-Jones, "PIXE-PIGME Analysis of Pottery from Torone," *AE* 1995, 99-114) confirmed eight of our attributions.

The PIXE-PIGME analysis confirmed our attribution of the fish-plates **9.169** and **9.170** to the Chalkidike region since they fell into the same group as that of material tested from Olynthos and Pyrgadikia. Three skyphos fragments **9.34**, **9.46** and **9.63**, which had been described as Chalkidic, can now be identified as being of local manufacture. The Corinthian type skyphos **9.6**, which was classified as Attic, was identified by the analysis as belonging to one of the groups assigned to the Chalkidike region, and the skyphos **9.16**, which was also classified as Attic, turned out to be of local manufacture. The skyphoi **9.32**, **9.39**, **9.40**, **9.58** and the salt-cellar **9.134**, the small bowls **9.140** and **9.146**, and the lekanis **9.180**, which were classified as Chalkidic, were shown to be Attic.

[41] *Agora* XII 143, no. 999, pl. 35 and note 2 for examples from Thasos.

[42] *Olynthus* XIII 418, no. 1047, pl. 253.

[43] *Agora* XII 182, no. 1351, pl. 44.

[44] *Olynthus* XIII 406, nos. 1006-1022, pls. 244, 245, 247 for tall-stemmed vessels.

Comparison of provenance attributions in Chapter 9 and PIXE-PIGME analysis
(from O. Tudor-Jones, "PIXE-PIGME Analysis of Pottery from Torone," *AE* 1995, 99-114)

Catalogue No.	Inv. No.	Description	Chap. 9 Provenance	PIXE-PIGME Provenance
9.6	78.1480	Corinthian type Skyphos	Attic	Chalkidike region
9.16	75.246	Attic type A Skyphos	Attic	Chalkidic: Local
9.26	79.1413	Attic type A Skyphos	Attic	Attic
9.30	78.365	Attic type A Skyphos	Attic	Attic
9.32	78.1086	Attic type A Skyphos	Chalkidic	Attic
9.34	78.118	Attic type A Skyphos	Chalkidic	Chalkidic: Local
9.39	78.1040	Attic type A Skyphos	Chalkidic	Attic
9.40	75.212	Attic type A Skyphos	Chalkidic	Attic
9.46	78.653	Attic type A Skyphos	Chalkidic	Chalkidic: Local
9.58	78.99	Attic type A Skyphos	Chalkidic	Attic
9.63	78.1246	Attic type A Skyphos	Chalkidic	Chalkidic: Local
9.134	76.678	Salt-cellar	Chalkidic	Attic
9.137	78.167	Small bowl	Attic	Attic
9.140	78.1473	Small bowl	Chalkidic	Attic
9.146	78.830	Small bowl	Chalkidic	Attic
9.169	76.706	Fish-plate	Chalkidic	Chalkidike region
9.170	78.1160	Fish-plate	Chalkidic	Chalkidike region
9.180	78.2704	Lekanis	Chalkidic	Attic

CATALOGUE

SKYPHOI

Corinthian Type

9.1 (75.154) Fig. 60; Pl. 66
Structure 1 TR1 tr1 (6),
Fragment of foot and lower wall.
P.H. 0.028; D. foot (est.) 0.083.
Clay reddish yellow 5YR 7/6; texture hard, well levigated.
Glaze lustrous black.
Flaring ring foot, rounded resting surface. Reserved and covered with miltos: underside except for trace of one circle; outer edge of foot; upper part of foot; zone above foot decorated with fine vertical lines.
Cf. Agora XII, nos. 310-320, pls. 14, 15, fig. 4 (although some with glazed outer edge of foot) 530-425 B.C.; *Corinth* XIII, no. 355-5, pl. 56, third quarter of 5th century.
Attic.
530-425 B.C.

9.2 (75.569) Fig. 60
Structure 1 TR1 tr3 (4).
Fragment of foot and lower body.
P.H. 0.016; D. (est.) 0.07.
Clay light red 2.5YR 6/8.
Glaze lustrous black.
Flaring ring foot with rounded resting surface. Reserved and covered with miltos: zone around lower body extending over junction of foot, the lower body decorated with fine vertical lines; outer face of foot (not indicated in drawing).
Cf. above **9.1**
Attic.
530-425 B.C.

9.3 Fig. 60
Hill 2 TR2 (3).
Fragment of foot and lower body.
P.H. 0.015; D. foot (est.) 0.063.
Clay pink 5YR 7/4.
Glaze lustrous black, fired red on interior.
Flaring ring foot, rounded resting surface. Reserved and covered with miltos: underside; outer edge of foot, upper part of foot; zone above foot, decorated with fine vertical lines.
Cf. above **9.1**.
Attic.
530-425 B.C.

9.4 (75.115) Fig. 60
Gate Area TR1 tr1.
Fragment of foot and lower body.
P. H. 0.019; D. foot (est.) 0.060.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black, though discoloured.
Flaring ring foot, rounded resting surface. Reserved and covered with miltos: underside except for trace of circle. The rest is glazed.
Cf. Agora XII, no. 316, pl. 14, *ca.* 450 B.C.; no. 324, pl. 15, 375-360 B.C; no. 332, pl. 15, fig. 4, *ca.* 500 B.C; *Olynthus* V, no. 952, pl. 183; no. 968, pl. 184, late 5th to early 4th century.
Attic.
500-360 B.C.

9.5 (78.3734) Fig.60
Structure 3 TR2 (3).
Fragment of underside, foot and lower body.
P.H. 0.022; D. foot (est.) 0.068.
Clay pink 5YR 7/4.
Glaze lustrous, fired reddish brown.
Flaring ring foot, rounded resting surface, rounded body.
Reserved and covered with deep pink miltos: band around lower body at junction with foot; foot and underside except for glazed band on upper face of foot; wide band on resting surface and part of band between two lines preserved on underside (the inner one just visible at break).
Cf. Corinth XIII, no. 341-3, pl. 51, mid-5th century or earlier; no. 357-3, pl. 56, third quarter of 5th century; no. 367-6, pl. 59, third to fourth quarter of 5th century, and p. 127; *Olynthus* XIII, nos. 572-573, pl. 198, late 5th or early 4th century.

Attic.
425-375 B.C.

9.6 (78. 1480) Fig. 60
Isthmus TR3 tr2 Ext. 2 (2).
Fragment preserving almost complete lower body and foot.
P.H. 0.029; D. foot 0.041.
Clay pink 5YR 7/4, fine surface mica.
Glaze lustrous black, discoloured on interior.
Flaring ring foot, rounded resting surface, body tapering to narrow base. Reserved: underside except for two circles and dot in dilute glaze; outer edge of foot; zone above foot, decorated with cross-hatching.
Cf. Agora XII, no. 326, pl. 15, 350-330 B.C.; *Olynthus* XIII, nos. 3-4, pl. 194, 5th century, and nos. 570-571, pl. 198, end of 5th or early 4th century; *Olynthus* V, nos. 74-76, pl. 56, 5th century; *Corinth* XIII, no. 446-4, pl. 71, middle of 4th century, nos. 452-6, 455-3, pl. 74, third quarter of 4th century.
Attic (see postscript, p. 402).
400-325 B.C.

9.7 (78.561) Fig. 60; Pl. 66 (2 views)
Isthmus TR2 trl (5a).
Fragment of foot and lower body.
P.H. 0.023; D. foot (est.) 0.042.
Clay reddish yellow 7.5YR 8/6, fine gold surface mica, well levigated.
Glaze thinnish, shiny black, added red.
Flaring ring foot, slightly rounded wide resting surface. Groove at junction of foot and body. Tapering lower body. Nipple on underside. Reserved and covered with miltos: lower body and most of top of foot; underside except for two uneven circles around central nipple. Glazed band, with added red line, around outer edge of foot; glazed resting surface except for junction with underside. Centre of floor roughly finished at point of attachment to wheel.
Cf. Olynthus XIII, no. 572, pl. 198 from Grave 303, late 5th or early 4th century; *Corinth* XIII, 124-126 (Groups i, ii, semi-glazed skyphoi, 3rd-4th quarters 5th century) no. 365-1, p1. 59; the added red suggests the 5th century group i, but the body tapering to a narrow base, and the nipple suggest the later 4th century date of group iii (*Cf. ibid.* 125).
Chalkidic (?).
450-375 B.C.

Attic type A Skyphoi

9.8 (78.931) Fig. 60
Lower City TR3 (1) S.
Fragment of foot and lower body.
P.H. 0.022; D. foot (est.) 0.075.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black.
Torus ring foot. Scraped groove at junction of foot and body. Reserved and covered with miltos: resting surface and underside.
Cf. Agora XII, nos. 340-341, pl. 16, 480-450 B.C.
Attic.
First half of the 5th century B.C.

9.9 (78.1435) Fig. 60
Hill 2 TR2 Ext (3).
Fragment of foot and lower body.
P.H. 0.042; D. foot (est.) 0.086.
Clay reddish yellow 5YR 7/6.
Glaze good black, discoloured.
Torus ring foot. Reserved and covered with miltos: resting surface; underside; fine scraped groove at junction of foot and body.
Cf. Agora XII, no. 342, pl. 16, 470-460 B.C.
Attic.
First half of the 5th century B.C.

9.10 (78. 936) Fig. 60
Lower City TR3 S(1).
Fragment of foot and lower body.
P.H. 0.027; D. (est.) 0.010.
Clay reddish yellow 5YR 6/6, fine surface mica.
Glaze lustrous black.
Torus ring foot. Reserved and covered with miltos: underside; resting surface; junction of foot and body.
Cf. Agora XII, no. 343, pl. 16, 460-440 B.C.
Attic.
First half of the 5th century B.C.

9.11 (75.144) Fig. 60
Gate Area TR3 (2).
Fragment of foot and lower body.
P.H. 0.028; D. foot (est.) 0.066.
Clay light red 2.5YR 6/6.
Glaze lustrous black.
Torus ring foot. Reserved and covered with miltos (?): resting surface and underside.
Cf. above **9.8**.
Attic.
First half of the 5th century B.C.

9.12 (75.58) Fig. 60
Structure 1 TR1 tr 1 (5).
Fragment of foot and lower body.
P.H. 0.034; D. foot (est.) 0.071.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black, worn.
Ring foot with narrow, shallow groove around outer face. Reserved and covered with miltos: resting surface; underside except for trace of decoration in centre.
Graffito on underside A I.
Attic
First half of the 5th century B.C.

9.13 (76.211) Fig.60
Gate Area TR4 (4).
Three joining fragments of foot and lower body, restored in plaster to form complete base.
P.H. 0.029; D. foot 0.102.
Clay reddish yellow 5YR 7/6, fine surface mica.
Glaze lustrous black.
Torus ring foot. Reserved: resting surface; underside, covered with miltos. No decoration preserved on underside.
Cf. above **9.9**.
Attic.
First half of the 5th century B.C.

9.14 (75.570) Fig. 60
Structure 1 TR1 tr3 (4).
Fragment of foot and lower body.
P.H. 0.027; D. foot 0.100.
Clay reddish yellow 5YR 7/6.
Good black glaze, fired red on inside.
Torus ring foot. Groove at junction of foot and body.
Reserved and covered with miltos: resting surface; underside; groove at junction of foot and body.
Cf. Agora XII, no. 346, pl. 16, *ca.* 420 B.C.
Attic.
Second half of the 5th century B.C.

9.15 (75.458) Fig. 60
Structure 1 TR1 tr3 (4).
Fragment of foot and lower body.
P.H. 0.033; D. foot (est.) 0.087.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black, mottled red on outside.
Torus ring foot. Reserved and covered with miltos: resting surface and underside.
Cf. above **9.14**.
Attic.
Second half of the 5th century B.C.

9.16 (75.246) Fig. 60
Gate Area TR3 S (2).
Fragment of foot and lower body.
P.H. 0.026; D. foot (est.) 0.113.
Clay pink 5YR 7/4, fired grey in places. Fabric heavy, medium-soft texture, chipped and worn.
Glaze lustrous black on outside, duller on inside.
Torus ring foot. Reserved and covered with miltos: resting surface (?); underside except for three circles and dot.
Cf. Agora XII, no. 339, pl. 16, *ca.* 480 B.C.
Attic (see postscript, p. 402).
First half of the 5th century B.C.

9.17 (78.700) Fig. 60
Hill 2 TR2 Area 3 (1).
Two joining fragments of foot and lower body.
P.H. 0.026; D. foot (est.) 0.078.
Clay light red 2.5YR 6/6.
Glaze lustrous black.
Torus ring foot. Scraped groove at junction of foot and body. Reserved and covered with miltos: resting surface; underside; groove.
Graffito on underside.
Cf. Agora XII, no. 349, pl. 16, fig. 4, 400-375 B.C.

Attic.
Late 5th to early 4th century B.C.

9.18 (75.566) Fig. 60
Structure 1 TR1 tr3 (2).
Fragment of foot and lower body.
P.H. 0.022; D. foot (est.) 0.102.
Clay reddish yellow 5YR 7/6.
Glaze good black, mottled in places, fired red on inside.
Torus ring foot. Scraped groove at junction of foot and wall. Reserved and covered with miltos: resting surface and underside.
Cf. Agora XII, no. 347, pl. 16, 420-400 B.C.
Attic.
Late 5th century B.C.

9.19 (78.1218) Fig. 60
Hill 2 TR2 Ext. (1).
Three joining fragments of foot and lower wall.
P.H. 0.058; D. foot (est.) 0.110.
Clay reddish yellow 5YR 7/6, soft texture.
Torus ring foot. Reserved and covered with miltos: resting surface, underside except for traces of circle.
Cf. above **9.17**.
Attic.
Late 5th to early 4th century B.C.

9.20 (76.08) Fig. 60
Structure 3 TR2 (2).
Fragment of foot and lower body.
P.H. 0.025; D. foot (est.) 0.088.
Clay reddish yellow 5YR 7/6 (orange).
Glaze lustrous black.
Torus ring foot. Reserved: groove at junction of foot and wall; resting surface; underside with traces of miltos.
Attic.
Late 5th to early 4th century B.C.

9.21 (78.676) Fig. 61; Pl. 66
Isthmus TR2 trl (5a).
Several joining fragments preserving large part of rim and upper body with part of handle.
P.H. 0.082; D. rim (est.) 0.138; Th. handle 0.011.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black.
Slightly convex upper body, vertical rim, horizontal handle round in section placed immediately below rim.
Cf. Agora XII, no. 342, pl. 16, fig. 4, 470-460 B.C.
Attic.
First half of the 5th century B.C.

9.22 (78.2240) Fig. 61
Isthmus TR1 tr3 (1).
Complete handle and part of body.
P.H. 0.025; D. rim (est.) 0. 150.
Clay pink 5YR 7/4 shading to green.
Glaze lustrous black.
Bell handle, round in section, attached at rim.
Attic.
Late 6th century B.C.

9.23 (78.494) Fig. 61
Isthmus TR2 trl (5a).
Fragment preserving complete handle and part of rim.
L. 0.045; D. rim (est.) 0.165; Th. handle 0.015.
Clay reddish yellow 5YR 7/4.
Glaze lustrous black.
Horseshoe handle, round in section, placed immediately below rim.
Cf. Agora XII, nos. 338-344, pl. 16, 500-425 B.C.
Attic.
5th century B.C.

9.24 (75.372) Fig. 61
Gate Area TR1 tr2 (2).
Two joining fragments preserving complete handle and small part of rim.
L. 0.033; D. rim (est.) 0.110; Th. handle 0.011.
Clay pink 7.5YR 7/4.
Glaze good black.
Horseshoe handle, round in section, placed immediately below rim.
Cf. above **9.23**.
Attic.
5th century B.C.

9.25 (78.3082) Fig. 61
Lower City TR1 Baulk (3).

Fragment of foot and lower body.
P.H. 0.020; D. foot (est.) 0.062.
Clay light red 2.5YR 6/6, fine gold mica, texture hard.
Glaze fired red.
Torus ring foot, convex body, groove at junction of foot and body. Faint grooves around lower body and underside at junction of foot. Reserved: resting surface; underside with trace of miltos near foot.
Cf. Agora XII, no. 336, pl. 16, fig. 4, *ca.* 500 B.C.
Attic (?).
First half of the 5th century B.C.

9.26 (78.1413) Fig. 61; Pl. 66
Isthmus TR4 trl (3).
Fragment of foot and lower wall.
P.H. 0.053: D. foot (est.) 0.102.
Clay reddish yellow 5YR 7/6, texture hard, some fine mica.
Glaze good black.
Torus ring foot. Wide, flat resting surface. Two incised lines around lower body. Reserved: resting surface and underside.
Cf. Agora XII, no. 350, pl. 16, 375-350 B.C; *Olynthus* XIII, no. 579 and also no. 574, for incised lines around body, pl. 200, second quarter 4th century.
Attic (see postscript, p. 402).
First half of the 4th century B.C.

9.27 (78.773) Fig. 61
Hill 2 TR2 (3).
P.H. 0.024; D. foot (est.) 0.072.
Clay pink 5YR 7/4, texture hard, fine gold mica.
Glaze good black.
Torus ring foot. Reserved and covered with deep pink miltos: resting surface and underside.
Cf. Agora XII, no. 350, pl. 16, 375-350 B.C.
Attic (?).
First half of the 4th century B.C.

9.28 (78.590) Fig. 61
Isthmus TR1 tr3 (1).
Fragment of foot and lower body.
P.H. 0. 030; D. foot (est.) 0.060.
Clay reddish yellow 5YR 7/6, texture medium-soft , some fine mica.
Glaze black with high sheen.
Torus ring foot. Reserved: resting surface; underside except for two circles and dot (thickly painted); line around junction of foot and body, covered with miltos (?).
Cf. Agora XII, no. 353, p1.17, *ca.* 320 B.C.; *BCH* 109 (1985) 305-307, no. 142, fig. 17.
Attic (?).
Second half of the 4th century B.C.

9.29 (78.1495) Fig. 61
Isthmus TR3 tr1 (3) B6.
Fragment preserving almost complete foot and part of lower body.
P.H. 0.056; D. foot 0.043.
Clay reddish yellow 5YR 6/6, fired soft grey in places, texture hard to medium, fine surface mica. Wheel marks visible on surface.
Glaze greyish green mottled black with low sheen.
Torus ring foot. Reserved: resting surface, underside except for circle and dot.
Cf. Agora XII, nos. 352, 353, fig. 4, pl. 17, 330-320 B.C.
Attic (?).
Last quarter of the 4th century B.C.

9.30 (78.365) Fig. 61
Isthmus TR2 tr1 (3).
Fragment preserving almost complete foot and lower body.
P.H. 0.067; D. foot 0.045.
Clay light red 2.5YR 6/8, fine surface mica.
Glaze streaky black with dull sheen.
Torus ring foot. Reserved: resting surface; underside except for two circles.
Cf. Agora XII, no. 353, pl. 17, *ca.* 320 B.C.
Attic (see postscript, p. 402).
Last quarter of the 4th century B.C.

9.31 (75.629) Fig. 61
Structure 1 TR1 tr1/3 Baulk (4).
Rim and handle fragment.
P.H. 0.039; D. rim (est.) 0.100.

Clay reddish yellow 7.5YR 7/6 - 5YR 7/6, texture soft.
Double curve in body; out-turned rim.
Attic (?).
4th century B.C.

9.32 (78.1086) Fig.62
Lower City TR3 (1) N.
Fragment of foot and lower wall.
P.H. 0.023; D. foot (est.) 0.059.
Clay very pale brown 10YR 8/4, light friable texture, fine mica.
Glaze dark brown to black, thin and flaking, almost completely gone on outer face of foot.
Torus ring foot. Groove at junction of foot and wall. Reserved: resting surface; underside with miltos and traces of two circles and dot.
Cf. Agora XII, no. 341, pl. 16, 480-450 B.C.
Chalkidic (see postscript, p. 402).
480-450 B.C.

9.33 (75. 202) Fig. 62
Structure 1 TR1 tr1 (7).
Two joining fragments of foot and lower wall.
P.H. 0.024; D. foot (est.) 0.059.
Clay very pale brown 10YR 7/3, fine mica.
Glaze dullish black, thin and streaky.
Torus ring foot. Reserved and covered with miltos: resting surface; underside except for two circles; wide band at junction of foot and wall with dribble of glaze.
Cf. Agora XII, no. 342, fig. 4, pl. 16, 470-460 B.C.
Chalkidic.
470-440 B.C.

9.34 (78.118) Fig. 62
Isthmus TR1 tr1 (4).
Fragment of foot and lower wall.
P.H. 0.028; D. foot (est.) 0.080.
Clay pinkish grey 7.5YR 7/2, texture hard, some mica.
Glaze dull, greyish black.
Torus ring foot. Reserved and covered with miltos: resting surface; underside except for part of two circles; wide band at junction of foot and wall.
Cf. Agora XII, no. 348, pl. 16, *ca.* 400 B.C.
Chalkidic (see postscript, p. 402).
First half of the 4th century B.C.

9.35 (76.431) Fig. 62
Structure 3 TR6 (6).
Fragment of foot and lower body.
P.H. 0.024; D. foot (est.) 0.080.
Clay very pale brown 10YR 7/4, fine mica, texture soft to medium.
Glaze thin, fairly shiny black.
Torus ring foot. Reserved and covered with miltos: resting surface and underside.
Cf. Agora XII, no. 349, fig. 4, pl. 16, 400-375 B.C.
Chalkidic.
First half of the 4th century B.C.

9.36 (76.05) Fig. 62
Structure 3 TR 2 (3).
Fragment of foot and lower wall.
P.H. 0.019; D. foot (est.) 0.064.
Clay very pale brown 10YR 7/4, much fine mica, texture medium. Very worn thin black glaze fired light brown on inside.
Torus ring foot. Scraped groove at junction of foot and body. Reserved and covered with miltos: resting surface and underside.
Chalkidic.
First half of the 4th century B.C.

9.37 (75. 37) Fig. 62
Structure 1 TR1 tr1 (4).
Fragment of foot and lower body.
P.H. 0.025; D. foot (est.) 0.078.
Clay very pale brown to light grey 10YR 7/4 - 7/1, texture soft, mica.
Glaze very dark grey, thin.
Torus ring foot. Reserved: underside covered with miltos; resting surface with traces of glaze. Part of junction of foot and body accidentally unglazed.
Cf. Agora XII, nos. 349, 350, fig. 4, pl. 16, 400-350 B.C.
Chalkidic.
First half of the 4th century B.C.

9.38 (78.3142) Fig. 62
Isthmus TR3 tr2 (3) B14.
Fragment of foot and lower body.
P.H. 0.036: D. foot (est.) 0.094.
Clay pink 5YR 7/4, fine mica, texture hard, fabric heavy.
Glaze thin streaky black, fired light brown on lower body.
Torus ring foot. Reserved: resting surface; underside; inner face of foot.
Chalkidic.
First half of the 4th century B. C.

9.39 (78.1040) Fig. 62
Isthmus TR1 tr1 (4).
Two joining fragments of foot and lower body.
P.H. 0.035; D. foot (est.) 0.088.
Clay very pale brown 10YR 8/4, texture soft, some mica.
Glaze light brown to black , very dull and very worn.
Torus ring foot. Groove at junction of foot and body. Reserved: resting surface, perhaps outer face of foot, underside. Top of foot glazed black.
Chalkidic (see postscript, p. 402).
First half of the 4th century B.C.

9.40 (75.212) Fig. 62
Structure 1 TR1 tr1 (7).
Fragment of foot and lower body.
P.H. 0.031; D. foot 0.079.
Clay very pale brown 10YR 7/4, texture medium hard, some voids, fine mica.
Glaze dullish, thin, black, very worn.
Torus ring foot. Reserved and covered with miltos on resting surface; underside except for wide band, two circles and dot; line at junction of foot and wall.
Chalkidic (see postscript, p. 402).
First half of the 4th century B.C.

9.41 (78.2784) Fig. 62
Isthmus TR1 tr2 (4a).
Two joining fragments of foot and lower body.
P.H. 0.024; D. foot (est.) 0.076.
Clay pink (very pale brown) close to 7.5YR 7/4, much fine surface mica, texture hard.
Glaze good black.
Torus ring foot. Concave lower body. Reserved and covered with miltos: resting surface; underside; small section at junction of foot and body.
Chalkidic.
First half of the 4th century B.C.

9.42 (78.2783) Fig. 62
Isthmus TR1 tr2 (4a).
Fragment of foot and lower body.
P.H. 0.029; D. foot (est.) 0.084.
Clay pink 7.5YR 7/4, much fine mica, texture hard.
Glaze good black.
Torus ring foot. Reserved and covered with miltos: resting surface; underside except for part of circle; band at junction of foot and wall.
Chalkidic.
First half of the 4th century B.C.

9.43 (78.2586) Fig. 63; Pl. 66
Isthmus TR1 tr3 (3) SW.
Fragment preserving complete handle and part of rim and body.
P.H. 0.032; D. rim (est.) 0.110.
Clay pink 7.5YR 7/4, fine mica, texture medium.
Glaze shiny black inside, worn and dull outside, fired brown in places.
Triangular handle attached immediately below slightly out-turned rim.
Cf. Agora XII, no. 349, fig. 4, pl. 16, 400-375 B.C.
Chalkidic.
First half of the 4th century B.C.

9.44 (78.1384) Fig. 62
Isthmus TR3 tr1 (3) B7.
Fragment of foot and lower wall.
P.H. 0.030; D. foot 0.079.
Clay red 2.5YR 6/8, core grey, very hard fired, heavy fabric, fine mica.
Glaze dullish black, fired red on underside.
Torus ring foot. Groove at junction of foot and underside. Reserved: resting surface; underside except for two circles fired red; band at junction

of foot and wall fired brownish grey. Centre of floor fired red within stacking mark.
Chalkidic.
First half of the 4th century B.C.

9.45 (78.2505) Fig. 62
Isthmus TR3 tr2 Ext 2 (3) B7.
Fragment of foot and lower body.
P.H. 0.024; D. foot (est.) 0.096.
Clay light red 2.5YR 6/6, fired greyish brown on surface, very hard fired, heavy fabric, fine mica.
Glaze good black with low sheen.
Torus ring foot. Reserved: resting surface (?); underside except for narrow and wide band; wide band at junction of foot and body.
Chalkidic.
First half of the 4th century B.C.

9.46 (78.653) Fig. 62
Isthmus TR3 tr1 (3) B17.
Fragment of foot and lower body.
P.H. 0.030; D. foot (est.) 0.080.
Clay light red 10R 6/6, fired very hard, grey in places, fine mica.
Glaze dull black, fired red in places.
Torus ring foot. Reserved and fired grey: resting surface and band on top of foot at junction with body. Reserved and partly fired grey: underside except for two circles and dot. Stacking mark, fired dull red, around centre of floor.
Chalkidic (see postscript, p. 402).
First half of the 4th century B.C.

9.47 (76.714) Fig. 62
Isthmus TR2 tr1 (3).
Fragment of foot and lower wall.
P.H, 0.039; D. foot (est.) 0.068.
Clay reddish yellow 5YR 7/6, fired grey-green in places, texture hard, fine mica.
Glaze thin, streaky black with low sheen.
Torus ring foot. Reserved: resting surface and underside except for part of dilute glaze circle.
Cf. Agora XII, nos. 351-352, fig. 4, pl. 17, 350-330 B.C.
Chalkidic.
Second half of the 4th century B.C.

9.48 (78.2414) Fig. 62
Isthmus TR3 tr2 (2).
Fragment preserving complete base and small part of lower body.
P.H. 0.017; D. 0.060.
Clay light red 2.5YR 6/6, fine mica, texture hard, fabric heavy.
Glaze shiny black.
Torus ring foot. Slight nipple on underside. Reserved and covered with red miltos: resting surface; underside except for circle and dot.
Chalkidic.
Second half of the 4th century B.C.

9.49 (78.713) Fig. 62
Isthmus TR2 tr1 (5a).
Three joining fragments of foot and body.
P.H. 0.032; D. foot 0.053.
Clay light red 2.5YR 6/6, fired unevenly hard with greyish-brown patches, fine gold mica.
Glaze good black, slightly metallic on inside.
Torus ring foot. Reserved and covered with miltos: resting surface; underside except for two circles.
Chalkidic.
Second half of the 4th century B.C.

9.50 (78.534) Fig. 62
Isthmus TR1 tr1 (5).
Fragment of foot and lower body.
P.H. 0.025; D. foot (est.) 0.063.
Clay discoloured, light red to reddish brown 2.5YR 5/4, texture heavy, some mica, very worn.
Glaze thin black with high sheen.
Ring foot. Resting surface broken. Reserved: underside covered with miltos, except for band around outer edge and two circles.
Chalkidic.
Second half of the 4th century B.C.

9.51 (78.605) Fig. 62
Isthmus TR3 trl (3) B8.
Fragment preserving complete foot and part of lower body.
P.H. 0.022; D. foot 0.047.
Clay reddish yellow 5YR 6/6, fired soft grey in places, texture hard, fine mica.

Glaze thinnish black with dull sheen, hairline cracks.
Torus ring foot. Reserved: resting surface; underside except for circle and dot.
Chalkidic (?).
Second half of the 4th century B.C.

9.52 (78.409) Fig. 62
Isthmus TR1 tr1 (4).
Fragment of foot and lower body.
P.H. 0.024; D. foot (est.) 0.043.
Clay reddish yellow 5YR 7/6, a few small voids, texture medium hard.
Glaze thick, fired shiny yellowish red.
Torus ring foot. Reserved: resting surface; underside except for band at junction of foot, and circle and dot.
Chalkidic (?).
Second half of the 4th century B.C.

9.53 (78.3725) Fig. 63; Pl. 66
Isthmus TR4 tr2 (2).
Fragment preserving complete handle, and part of rim and body
P.H. 0.028; D. rim (est.) 0.140.
Clay red 2.5YR 5/6, well levigated, texture hard, traces of fine mica.
Glaze glossy black inside, worn and dull outside.
Triangular handle attached a little below outturned rim.
Chalkidic (?).
First half of the 4th century B.C.

9.54 (76.320) Fig. 62
Isthmus Surface.
Two joining fragments of almost complete foot and lower body.
P.H. 0.025; D. foot 0.046.
Clay light reddish brown 5YR 6/4, core pale grey, fine gold mica, texture hard.
Glaze shiny black, slightly metallic on inside.
Torus ring foot. Reserved: resting surface; underside except for two circles.
Chalkidic.
Second half of the 4th century B.C.

9.55 (78.1649) Fig. 62
Lekythos TR1 (2).
Fragment preserving complete foot and part of lower body.
P.H. 0.018; D. foot 0.042.
Clay light reddish brown 5YR 6/6, texture hard, fine gold mica.
Glaze thinnish black with low sheen.
Torus ring foot, bevelled outer edge. Reserved: resting surface; underside except for circle and dot. Nipple on underside.
Chalkidic.
Second half of the 4th century B.C.

9.56 (78.1098) Fig. 62; Pl. 66
Isthmus TR1 tr2 (4b).
Fragment of foot and lower body.
P.H. 0.034; D. foot (est.) 0.050.
Clay light reddish brown (mauvish-pink) 2.5YR 6/4, texture hard, some voids, fine silvery gold mica.
Glaze thinnish with low sheen.
Torus ring foot. Two pairs of incised lines around lower body. Reserved: resting surface; underside except for part of circle preserved.
Cf. **9.26** for incised lines.
Chalkidic.
Second half of the 4th century B.C.

9.57 (78.1268) Fig. 62
Isthmus TR1 tr2 (6a).
Fragment of foot and lower body.
P.H. 0.031; D. foot (est.) 0.049.
Clay pink 5YR 7/3, fired grey in places, large voids, fired hard, fine gold mica.
Glaze black with dull sheen.
Torus ring foot. Reserved and covered with miltos: resting surface; underside except for circle and dot.
Chalkidic.
Second half of the 4th century B.C.

9.58 (78.99) Fig. 62
Isthmus TR2 tr1 (3).
Fragment of foot and lower body.
P.H. 0.043; D. foot 0.053.
Clay reddish yellow 5YR 7/6, texture medium hard, a few small voids, gold mica.

Torus ring foot. Reserved: resting surface and underside except for small dot.
Chalkidic (see postscript, p. 402).
Second half of the 4th century B.C.

9.59 (78.1055) Fig. 63
Isthmus TR2 tr1 (3-4).
Two joining fragments preserving complete foot, floor and part of lower body.
P.H. 0.034; D. foot 0.048.
Clay reddish yellow 5YR 7/6, texture fine hard, fine gold mica.
Glaze with dull sheen fired yellowish-red with black streaks.
Reserved: resting surface; underside except for circle and dot.
Chalkidic.
Second half of the 4th century B.C.

9.60 (75.111) Fig. 63; Pl. 66
Gate Area TR2 tr2 (5).
Two joining fragments preserving almost complete handle with part of rim and body.
P.H. 0.028; D. rim (est.) 0.092.
Clay light red 2.5YR 6/8, mottled greyish-green, texture medium hard.
Glaze thin black with faint sheen, mottled and patchy on inside.
Convex upper body, out-turned rim, triangular handle attached just below rim.
Chalkidic.
Second half of the 4th century B.C.

9.61 (78.1229) Fig. 63
Isthmus TR1 tr1 (5a).
Fragment preserving complete handle and part of rim and body.
P.H. 0.043; D. rim (est.) 0.130.
Clay reddish yellow 5YR 7/6, fired light grey 10YR 7/2 for the most part, much fine mica, texture hard.
Glaze fired reddish brown with black patches, dull sheen.
Triangular handle attached just below out-turned rim.
Chalkidic.
First half of the 4th century B.C.

9.62 (78.654) Fig. 63
Isthmus TR3 tr1 (3) B17.
Fragment of foot and lower part of body.
P.H. 0.037; D. foot 0.053.
Clay light red 10R 6/6, very hard fired, heavy fabric, fired grey on surface; very little mica.
Glaze dull black, slight metallic tinge.
Torus ring foot. Slight nipple.
Reserved and fired grey: resting surface; underside except for two circles; interrupted band at junction of foot and body. Stacking mark, fired reddish brown, in centre of floor.
Chalkidic.
Second half of the 4th century B.C.

9.63 (78.1246) Fig. 63
Isthmus TR1 tr3 (4).
Two joining fragments of foot and lower body.
P.H. 0.049; D. foot 0.047.
Clay reddish yellow 2.5YR 6/6, core grey, fired very hard.
Glaze thinnish black with metallic sheen.
Torus ring foot. Reserved and covered with miltos: resting surface; underside.
Chalkidic (see postscript, p. 402).
Second half of the 4th century B.C.

9.64 (78.655) Fig. 63
Isthmus TR3 tr1 (3) B17.
Fragment of handle, rim and body.
P.H. 0.046; D. rim (est.) 0.110.
Clay light red 2.5YR 6/6.
Double curve in upper body. Out-turned rim. Horizontal handle.
Chalkidic.
Second half of the 4th century B.C.

9.65 (78.1225) Fig. 63; Pl. 66
Isthmus TR1 tr3 (4).
Fragment preserving complete handle and part of rim and body.
P.H. 0.022; D. rim (est.) 0.120.
Clay light red 2.5YR 6/6, well levigated, texture hard brittle.
Glaze thin black, dull sheen, fired brownish black outside.

Horseshoe handle attached just below rim.
Chalkidic.
First half of the 4th century B.C.

9.66 (78.1728) Fig. 63
Lower City TR3 (1) N.
Fragment preserving complete handle and part of rim and body.
P.H. 0.029; D. rim (est.) 0.090.
Clay reddish yellow 7.5YR 7/6.
Double curve in upper body, out-turned rim. Handle more horseshoe than triangular.
Chalkidic.
Second half of the 4th century B.C.

9.67 (78.656) Fig. 63
Isthmus TR3 tr1 (3).
Fragment preserving complete handle and part of rim.
P.H. 0.034; D. rim (est.) 0.130.
Clay fired grey 10YR 5/1.
Out-turned rim. Triangular handle.
Chalkidic.
Second half of the 4th century B.C.

CUPS

9.68 (76.359) Fig. 64
Gate Area TR4 Ext. 2 (4).
Fragment of foot and stem of Type C cup.
P.H. 0.024; D. foot (est.) 0.076.
Clay reddish yellow 5YR 7/6, texture soft.
Glaze dull thin black, brownish and peeling on outside of foot.
Torus outer face of foot, flat resting surface. Underside curves into floor. Short thick stem. Reserved and covered with miltos: resting surface and band at junction of underside and flat surface beneath floor.
Cf. Agora XII, nos. 398-399, fig. 4, pl. 19, *ca.* 525 B.C.
Attic.
Ca. 525 B.C.

9.69 (76.741) Fig. 64; Pl. 67
Gate Area TR6 tr2 (3).
Fragment of foot and stem of Type C cup.
P.H. 0.025; D. foot (est.) 0.082.
Clay light red 2.5YR 6/8, fired grey in parts, texture soft.
Glaze thin black, fired brownish-grey in parts. Added red.
Torus outer face of foot, flat resting surface. Underside curves into flat centre of stem. Short thick stem with added red band. Reserved: resting surface; centre of stem inside except for trace of glazed circle; outer face of foot. Small splash of glaze on outer edge of resting surface.
Cf. Agora XII, no. 415, fig. 4, *ca.* 525-500 B.C.
Attic.
525-500 B.C.

9.70 (75.364) Fig. 64
Structure 1 TR1 tr3 (7).
Fragment preserving complete foot and stem of Type C cup.
P.H. 0.034; D. foot 0.077.
Clay reddish yellow 5YR 7/6, texture soft.
Glaze good black on floor, very thin and streaky on foot and underside.
Torus outer face of foot with shallow groove near top edge. Underside curves into flat centre of stem. Short thick stem with slight fillet, grooved above and below, at junction with foot.
Reserved: outer face of foot with trace of miltos in groove; resting surface; centre of stem inside except for circle and dot.
Cf. Agora XII, no. 420, fig. 4, pl. 20, 500-480 B.C.
Attic.
Ca. 500-480 B.C.

9.71 (76.421) Fig. 64
Structure 3 TR4 (2).
Fragment of foot of Type C cup.
P.H. 0.013; D. foot (est.) 0.082.
Clay light red 2.5YR 6/8, texture hard.
Glaze lustrous black.
Torus outer face of foot. Curving underside.
Reserved: outer face of foot; resting surface.
Cf. above **9.70**.
Attic.
500-480 B.C.

9.72 (76.609) Fig. 64
Isthmus TR1 tr1 (3).
Fragment of foot of Type C cup.
P.H. 0.026; D. foot (est.). 0.086.
Clay light reddish brown to pink 5YR 7/6, some voids, texture hard.
Glaze thin, shiny black.
Torus outer face of foot, flat resting surface, curving underside. Scraped groove at junction of stem and foot (fillet).
Reserved: outer face of foot and resting surface.
Cf. Agora XII, no. 404, pl. 19, *ca.* 500 B.C.
Attic.
Ca. 500 B.C.

9.73 (78.3738) Fig. 64
Hill 2 TR2 Ext. (3).
Fragment of foot of Type C cup.
P.H. 0.011: D. (est.) 0.080.
Clay reddish yellow 5YR 7/6, texture hard.
Glaze good black, thin on under-surface.
Torus foot slightly concave on top, flat resting surface. Reserved and covered with miltos: outer face of foot and resting surface.
Attic.
525-480 B.C.

9.74 (75.193) Fig. 64
Structure 1 TR1 tr1 (6).
Fragment of foot of Type C cup.
P.H. 0.019; D. foot (est.) 0.071.
Clay light red 2.5YR 6/6, texture hard.
Glaze lustrous black.
Torus outer face of foot, edge of foot concave. Top of foot slopes. Scraped groove at junction of stem and foot (fillet). Reserved: band at junction of underside and flat surface beneath floor; outer face of foot; resting surface.
Cf. Agora XII, no. 413, fig. 4, pl. 19, 480-450 B.C.
Attic.
480-450 B.C.

9.75 (78.3737) Fig. 64
Hill 2 TR1 (3).
Fragment of foot of Vicup.
P.H. 0.011; D. (est.) 0.080.
Clay reddish yellow 5YR 7/6, texture hard.
Glaze lustrous black.
Foot: top surface slightly concave. Edge of foot concave. Reserved and covered with miltos: outer face of foot and resting surface.
Cf. Agora XII, no. 438, pl. 20, *ca.* 460 B.C., no. 426, fig. 20, early 5th century B.C.; *Samothrace* 5, 385, no. 86, second quarter of the 5th century.
Attic.
475-450 B.C.

9.76 (76.87) Fig. 64
Structure 3 TR10 (3).
Fragment of foot of Vicup.
P.H. 0.014; D. (est.) 0.150.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black, thin in places on top.
Foot flat on top, in two degrees. Reserved: resting surface; concave moulding covered in miltos.
Cf. above **9.75**.
Attic.
475-450 B.C.

9.77 (75.482) Fig. 64
Structure 1 TR1 tr1/3 Baulk (10).
Fragment of rim, lip and body of Type C cup.
P.H. 0.037; D. rim (est.) 0.160.
Clay reddish yellow 5 YR 7/8, texture soft.
Glaze dull thick black, worn.
Curving body, sharply articulated concave lip, out-rolled rim.
Cf. Agora XII, nos. 398-413, fig. 4, pl. 19, *ca.* 525 B.C.; *Samothrace* 5, 391-2, no. 102, first quarter of the 5th century.
Attic.
525-450 B. C.

9.78 (78.2400) Fig. 64
Lower City TR3 (3) S.
Fragment of lip, rim and body of Type C cup.
P.H. 0.026; D. rim (est.) 0.200.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black.
Curving body, sharply articulated concave lip, out-rolled rim.

Cf. above **9.77**.
Attic.
525-450 B.C.

9.79 (75.558) Fig. 64
Structure 1 TR1 tr1 (8).
Fragment of rim, lip and body of Acrocup (?).
P.H. 0.045; D. rim (est.) 0.180.
Clay red 2.5YR 5/6.
Glaze with high sheen.
Concave lip, thickened out-turned rim.
Cf. Agora XII, no. 442, fig. 5, pl. 20, *ca.* 475 B.C.
Attic.
500-450 B.C.

9.80 (78.2882) Fig. 64; Pl. 66
Lower City TR1 S (3).
Two joining fragments preserving complete cup handle and part of body.
P.H. 0.032.
Clay reddish yellow 5YR 7/6.
Glaze lustrous black on interior, thinner on handle.
Canted handle, round in section. Outer surface glazed.
Attic.
480-450 B.C.

9.81 (78.3254) Fig. 64
Lower City TR3 SE
Fragment of cup handle and part of body.
P.H. 0.024.
Clay light red 2.5YR 6/6, fine mica, texture hard.
Glaze shiny black.
Canted handle, round in section. Outer surface glazed.
Attic (?).
Ca. 480 B.C.

9.82 (76.731) Fig. 64
Gate Area TR6 tr1 N (3).
Fragment of cup handle and part of body.
P.H. 0.022.
Clay reddish yellow 7.5YR 7/6, fine mica.
Glaze lustrous black on interior, thin and discoloured elsewhere.
Canted handle, glazed on outer face.
Cf. Agora XII, no. 449, fig. 5, pl. 21, 500-480 B.C.
Attic.
500-450 B.C.

9.83 (75.572) Fig. 64
Structure 1 TR 1 tr3 (4).
Fragment of cup handle and part of body.
P.H. 0.023.
Clay light red 2.5YR 6/8.
Glaze thin black on handle, lustrous on interior.
Canted handle, round in section. Glazed outer face.
Attic.
500-450 B.C.

ONE-HANDLERS

Banded

9.84 (78.672) Fig. 65; Pl. 67
Isthmus TR2 tr1 (5a).
Handle and rim fragment of banded one-handler.
P.H. 0.026; D. rim (est.) 0.179.
Clay pink 5YR 7/4, texture hard, some voids, mica, small white inclusions.
Glaze thin black with dull sheen.
Bell handle, glazed outside. Rim rounded on top, projecting outwards. Reserved handle zone, part of glazed band preserved.
Cf. Agora XII, no. 734, pl. 30, *ca.* 500 B.C.
Chalkidic.
500-450 B.C.

9.85 (78.2010) Fig. 65
Isthmus TR1 tr3 (1).
Fragment of foot, floor and lower body of banded one-handler.
P.H. 0.0117; D. base (est.) 0.061.
Clay light red 2.5YR 6/6, fine mica, texture hard.
Glaze good black on interior of foot, thinner on outside.
Low ring foot, groove at junction of foot and body. Reserved and covered with miltos: smoothed outer surface except for part of one glazed band preserved; foot except for band around lower inner

edge; underside; centre of floor. The inside is glazed.
Cf. Agora XII, nos 734, 737, fig. 8, pl. 30, 500-480 B.C.
Attic.
500-450 B.C.

9.86 (75.797) Fig. 65
Gate Area TR5 tr1 S (2).
Eleven joining base and lower body fragments, probably of banded one-handler.
P.H. 0.032; D. 0.065.
Clay orange 2.5YR 7/6, texture medium, a little fine mica.
Glaze fired reddish brown to red.
Ring foot, narrow resting surface, convex underside. Reserved and covered with miltos: lower body except for glazed band; foot except for inner face; underside except for two circles; central disc on floor with trace of circle preserved.
Cf. above **9.85**.
Attic.
500-450 B.C.

9.87 (75.217) Fig. 65; Pl. 67
Structure 1 TR1 tr1 (8).
Handle and fragment of rim of banded one-handler.
P.H. 0.025; D. rim (est.) 0.120.
Clay reddish yellow 5YR 7/8, texture hard, some voids, micaceous, very worn and encrusted.
Glaze black, fired light brown in places, almost completely worn away.
Horseshoe handle. Rim flat on top, sloping inwards. Reserved: upper body; under surface of handle.
Cf. Agora XII, nos. 737-743, pl. 30, fig. 8, 480-450 B.C.
Chalkidic.
500-450 B.C.

Black (as distinct from banded)

9.88 (75.216) Fig. 65; Pl. 67
Structure 1 TR1 tr1 (8).
Handle and rim fragment.
P.H. 0.028; D. rim (est.) 0.110.
Clay light red 2.5 YR 6/8. Fired greyish brown in places, texture hard.
Glaze thin, black with dull sheen.
Horseshoe handle. Rim flat on top. Curving wall.
Cf. Agora XII, no. 751, pl. 31, 450-425 B.C.
Chalkidic.
450-400 B.C.

9.89 (78.2557) Fig. 65; Pl. 67
Isthmus TR1 tr2 (6b).
Two joining fragments preserving complete handle and part of rim and body.
P.H. 0.016; D. rim (est.) 0.110.
Clay yellowish red 5YR 5/6 with grey core. Hard fired and brittle, fine mica.
Glaze thin black, dull sheen.
Triangular handle attached at rim. Rim flat on top, sloping inwards. Handle rises slightly above rim.
Cf. Agora XII, no. 760, pl. 31, 375-350 B.C.
Chalkidic.
375-350 B.C.

9.90 (75.48) Fig. 65; Pl. 66
Structure 1 TR1 tr1 (4).
Four joining fragments preserving complete handle and part of rim.
P.H. 0.020; D. rim (est.) 0.111.
Clay reddish yellow 5YR 7/6, gold mica.
Glaze thin and worn.
Flat rim, triangular handle, slightly canted.
Cf. above **9.89**.
Chalkidic.
375-350 B.C.

9.91 (78.2587) Fig. 65
Isthmus TR1 tr3 (3) SW.
Fragment preserving almost half of handle and part of rim and body.
P.H. 0.024; D. rim (est.) 0.110.
Clay light reddish brown 5YR 6/4 with grey core almost to surface, fine mica, texture hard, brittle.
Glaze thin, shiny black with metallic sheen.
Triangular handle attached immediately below rim. Rim flat on top, sloping inwards.

Cf. above **9.89**.
Chalkidic.
375-350 B.C.

9.92 (78.1143) Fig. 65
Isthmus TR1 tr3 (3) SW.
Two joining handle and rim fragments.
P.H. 0.023; D. rim (est.) 0.110.
Clay reddish brown 5YR 5/3, fired very hard, brittle.
Glaze thin, black with high metallic sheen.
Triangular handle attached immediately below rim. Thickened rim, sloping inwards.
Cf. above **9.89**.
Chalkidic.
375-350 B.C.

9.93 (78.720) Fig. 65
Isthmus TR2 tr1 (5a).
Fragment preserving complete profile.
H. 0.030; D. rim (est.) 0.075; D. base (est.) 0.050.
Clay light yellowish brown 10YR 6/4.
Glaze chipped and worn, misfired on underside and interior.
Ring foot with rounded resting surface, articulated body, rim flat on top. Horizontal handle, round in section, attached directly to rim. Reserved and covered with miltos: resting surface (?); underside except for part of band preserved; band at junction of foot and body.
Cf. Agora XII, nos. 757, 762, fig. 8, pl. 31, 375-325 B.C.
Attic (?).
375-325 B.C.

9.94 (75.284) Fig. 65
Structure 1 TR1 tr1 (7).
Fragment of body and rim.
P.H. 0.025; D. rim (est.) 0.100.
Clay very discoloured greyish brown, texture soft; impossible to obtain Munsel number.
Glaze thin and worn black.
Angled body, inward sloping flat rim.
Cf. above **9.93**.
Attic (?).
375-325 B.C.

9.95 (78.3745) Fig. 65; Pl. 67
Isthmus TR3 tr1 Ext. 3 (3) B3.
Fragment preserving complete handle and part of rim and body.
P.H. 0.026; D. rim (est.) 0.110.
Clay light red close to 2.5YR 6/6, texture soft and smooth, evenly fired and well levigated.
Glaze thin black with dull sheen, flaking and discoloured on interior.
Triangular handle, rim rounded on top. Double curve in body.
Attic.
375-350 B .C.

9.96 (78.2756) Fig. 65
Isthmus TR2 tr1 (3).
Two joining fragments preserving almost complete handle and part of rim and body.
P.H. 0.023; D. rim (est.) 0.110.
Clay light brown 7.5YR 6/4 to grey, fine mica, texture hard.
Glaze dull black.
Triangular handle rather unevenly attached to body at rim. Rim flat on top, articulated body.
Cf. above **9.93-9.94**.
Chalkidic.
375-325 B.C.

9.97 (78.2537) Fig. 65
Isthmus TR4 tr2 (3) B5.
Fragment of rim and body (one-handler?).
P.H. 0.030; D. (est.) 0.100.
Clay reddish yellow 5YR 7/6, shading to light brown 7.5YR 6/4, very hard fired, much fine mica.
Glaze shiny thinnish black. Sharply incurving body with handle scars immediately below rim. Rim rounded on top. Double curve in body.
Cf. above **9.95**.
Chalkidic.
375-325 B.C.

9.98 (78.2491) Fig. 65
Isthmus TR2 tr1 (3a).
Fragment of rim and body.
P.H. 0.025; D. rim (est.) 0.100.
Clay red 2.5YR 5/6, very hard fired, fine mica.

Glaze metallic black.
Shallow angled body, one handle scar preserved immediately below rim. Rim sloping inwards, angled body.
Cf. as above **9.93-9.94**, **9.96**.
Chalkidic.
375-325 B.C.

9.99 (76.619) Fig. 65
Isthmus TR2 tr1 (3a).
Fragment of body, rim and handle roots.
P.H. 0.040; D. rim (est.) 0.095.
Clay light red 2.5YR 6/6, texture hard.
Glaze thin, shiny black.
Deep convex body, rim rounded on top. Handle roots very close together, oval in section, attached to body just below rim.
Two graffiti: near rim and under handle.
Cf. Agora XII, no. 769, pl. 30, fig. 8, but without the incurved rim, *ca.* 325 B.C.
Chalkidic.
350-325 B.C.

SMALL CONTAINERS

Salt-cellars or pyxides

9.100 (75.630) Fig. 66
Structure 1 TR1 tr1/3 Baulk (4).
Fragment of base and body.
P.H. 0.014; D. foot (est.) 0.066.
Clay reddish yellow 5YR 7/6.
Glaze lustrous.
Disc foot, flat bottom, nearly vertical body. Scraped groove at junction of foot and wall, covered with miltos. Reserved underside, traces of miltos.
Cf. Agora XII, no. 923, fig. 9, pl. 34 and nos. 1295-1297, 1308, pl. 43, *ca.* 500-425 B.C.
Attic.
Ca. 500-425 B.C.

9.101 (78.2507) Fig. 66
Isthmus TR3 tr2 Ext. 2 (3) B7.
Fragment of base and body.
P.H. 0.035; D. base (est.) 0.060.
Clay reddish yellow 5YR 6/6, well levigated, fired hard.
Glaze lustrous black.
Flat bottom, concave lower body becoming almost vertical. Deep groove, reserved and covered with miltos, around lower body. Reserved underside.
Cf. Agora XII, no. 927, pl. 34, fig. 9, *ca.* 475-460 B.C.
Attic.
Second quarter of the 5th century B.C.

Salt-cellars

Type 1. Convex body, flat bottom

9.102 (75.716) Fig. 66
Gate Area TR2 tr2 (6b).
Fragment of base and body.
H. 0.024; D. base (est.) 0.062.
Clay light red 2.5YR 6/6.
Glaze thin and streaky on exterior, high sheen. Dipped.
Flat bottom, convex to almost vertical body curving in slightly at top. Reserved underside covered with miltos, streak of glaze at outer edge.
Cf. Agora XII, no. 894, fig. 9, pl. 34, *ca.* 480-450 B.C.
Attic.
480-400 B.C.

9.103 (78.745) Fig. 66
Hill 2 TR2 Area 3 (1).
Fragment preserving complete profile. Reconstructed in plaster.
H. 0.023; D. base 0.068; D. rim 0.057.
Clay pink 5YR 7/4.
Glaze very worn.
Flat bottom probably reserved, patch of glaze on outer edge. Convex body.
Cf. Agora XII, no. 897, fig. 9, pl. 34, *ca.* 425 B.C.
Attic.
480-400 B.C.

Type 2. Echinus body with slightly recessed or flat underside

9.104 (75.442) Fig. 66
Structure 1 TR1 tr3 (7).

Two joining fragments of lower part of body.
P.H. 0.012; D. base 0.036.
Clay reddish yellow 5YR 6/6 shading to greenish grey.
Recessed underside, convex body. Totally glazed, resting surface worn.
Cf. Agora XII, nos. 901-907, pl. 34, fig. 9, 500-450 B.C.
Attic.
500-450 B.C.

9.105 (78.2904) Fig. 66
Isthmus TR1 tr2 (6).
Fragment of base and body.
P.H. 0.020; D. base (est.) 0.030.
Clay pink 5YR 7/4, fine mica, texture hard.
Glaze thin black almost completely worn away.
Slightly concave underside with two unevenly incised circles, convex body. Reserved: underside and outside body.
Cf. above **9.104**.
Attic.
500-450 B.C.

9.106 (78.1263) Fig. 66; Pl. 67
Isthmus TR1 tr2 (6a).
Two joining fragments preserving complete profile. Restored.
H. 0.023; D. base 0.038.
Clay pink 5YR 7/4.
Glaze lustrous.
Flat underside with slightly raised and worn resting surface. Convex body, slighlty incurved rim. Totally glazed.
Graffito on underside: a five-pointed star.
Cf. Agora XII, nos. 909-915, fig. 9, pl. 34, 500-400 B.C.; *Olynthus* XIII, nos. 743-746, pl. 219, second half 5th-early 4th century; *Olynthus* V, nos. 862, 864-867, pl. 175, late 5th century.
Attic.
500-400 B.C.

9.107 (78.3739) Fig. 66
Hill 2 TR2 Ext. (3).
Fragment preserving complete profile.
H. 0.020; D. rim (est.) 0.056.
Clay light red 2.5YR 6/6, texture hard.
Glaze good black.
Flat bottom, convex body, slightly incurved rim.
Totally glazed.
Cf. above **9.106**.
Attic.
500-400 B.C.

Type 3. Concave body, recessed underside

9.108 (75.155) Fig. 66
Structure 1 TR1 tr1 (6).
Two joining fragments preserving complete profile.
H. 0.029; D. foot (est.) 0.072; D. rim (est.) 0.065.
Clay reddish yellow 5YR 7/6.
Glaze very worn, black, fired red and brown on outside.
Recessed underside. Concave body; flat resting surface. Thickened rim. Totally glazed.
Cf. Agora XII, no. 937, pl. 34, fig. 9, 350-325 B.C.; *Olynthus* XIII, nos. 935-936, 938, pl. 239.
Late 5th to early 4th century B.C.
Attic.
375-325 B.C.

9.109 (78.661) Fig. 66
Isthmus TR3 tr2 (3) B18.
Fragment of floor, body and rim. Resting surface missing.
P.H. 0.029; D. foot (est.) 0.069; D. rim (est.) 0.070.
Clay reddish yellow 5YR 7/6.
Glaze shiny.
Recessed underside. Concave body, thickened rim, rounded on top. Totally glazed.
Cf. above **9.108**.
Attic.
375-325 B.C.

9.110 (78.1206) Fig. 66
Isthmus TR1 tr3 (2a).
Fragment of floor, body and rim. Resting surface missing.
P.H. 0.026; D. rim (est.) 0.065.
Clay pink 5YR 7/4.
Glaze lustrous.

Recessed underside. Concave body, out-turned rim, rounded on top. Totally glazed.
Cf. above **9.108**.
Attic.
375-325 B.C.

9.111 (78.3721) Fig. 66
Isthmus TR3 tr2 Ext. 2 (3) B6.
Fragment preserving complete profile.
H. 0.029; D. rim (est.) 0.068.
Clay light reddish brown 5YR 6/4 shading to grey, texture hard.
Glaze glossy black, fired red in places.
Recessed underside. Concave body. Flat resting surface, slightly out-turned rim. Faint groove in resting surface. Totally glazed.
Cf. above **9.108**.
Attic.
375-325 B.C.

9.112 (78.658) Fig. 66
Isthmus TR3 tr1 (3) B17.
Fragment preserving complete profile. Restored.
H. 0.041; D. foot 0.096; D. rim 0.110.
Clay pink 5YR 7/4.
Glaze with dull sheen.
Recessed convex underside. Concave body, broad resting surface with flat outer edge. Wide flat out-turned rim, faint groove at junction with body. Totally glazed.
Cf. S.I. Rotroff, "Spool Saltcellars in the Athenian Agora," *Hesperia* 53 (1984) 343-344, fig. 1, pl. 67, 1-3, 325-295 B.C.
Attic.
Late 4th century B.C.

9.113 (75.543) Fig. 66; Pl. 67
Structure 1 TR1 tr3 (2).
Two joining fragments preserving complete profile. Restored in plaster.
H. 0.026; D. foot 0.062; D. rim 0.062.
Clay reddish yellow 5YR 7/6.
Glaze dull black to brown, very worn.
Recessed underside, concave body; flat rim, flat resting surface with chamfered edge. Incised line or scratch around lower body. Totally glazed.
Cf. above **9.112**.
Chalkidic.
Second half 4th century B.C.

9.114 (78.1103) Fig. 66
Isthmus TR1 tr2 (4a).
Fragment preserving complete profile.
H. 0.027; D. foot (est.) 0.060; D. rim (est.) 0.058.
Clay reddish yellow 5YR 6/6, texture hard.
Glaze dull.
Recessed underside, concave body; rounded resting surface. Out-turned rim. Totally glazed.
Chalkidic.
4th century B.C.

9.115 (78.1115) Fig. 66
Isthmus TR1 tr3 (3).
Fragment preserving complete profile.
H. 0.030; D. foot (est.) 0.066.
Clay very pale brown 10YR 8/3.
Glaze fired light brown.
Recessed underside, almost vertical body; rounded resting surface. Out-turned rim. Totally glazed.
Cf. Olynthus XIII, nos. 934, 937, pl. 238, end of 5th-early 4th century.
Chalkidic.
4th century B.C.

9.116 (78.1173) Fig. 66
Isthmus TR1 tr3 (3).
Fragment preserving complete profile.
H.0.028; D. foot (est.) 0.064; D. rim (est.) 0.060.
Clay pinkish grey 7.5YR 7/2, mottled with green.
Glaze shiny, completely worn off interior.
Recessed underside, rounded resting surface. Almost vertical body, out-turned rim. Totally glazed.
Cf. above **9.115**.
Chalkidic (?).
4th century B.C.

9.117 (78.1250) Fig. 66
Isthmus TR1 tr2 (6).
Fragment preserving complete profile.
H. 0.028; D. base (est.) 0.068; D. rim (est.) 0.074.
Clay pink 5YR 7/3.
Glaze thin and worn.

Recessed flat underside. Almost vertical body, flat resting surface. Out-turned rim. Totally glazed.
Cf. above **9.115**.
Chalkidic.
4th century B.C.

9.118 (78.3659) Fig. 66
Isthmus TR3 tr2 Ext. 2 (2).
Four joining fragments preserving complete profile.
H. 0.033; D. rim (est.) 0.060; D. base 0.064.
Clay very pale brown 10YR 7/3, texture hard, fine mica.
Glaze fired light brown for the most part, dull sheen.
Recessed underside. Concave body, rounded resting surface. Flat top on rim sloping out, shallow fine groove around upper body. Totally glazed.
Chalkidic.
4th century B.C.

9.119 (78.3720) Fig. 66
Isthmus TR4 tr1 (3) B7.
Fragment preserving complete profile.
H. 0.026; D. rim (est.) 0.070.
Clay light brown 7.5YR 6/4, light red core in floor, texture hard, fine mica.
Glaze thin shiny black, very worn.
Recessed underside, rounded resting surface. Concave body, thick wall, rim rounded on top. Totally glazed.
Chalkidic.
4th century B.C.

Type 4. Outwardly thickened body and ring foot

9.120 (78.1102) Fig. 66; Pl. 67
Isthmus TR1 tr2 (4a).
Fragment preserving complete profile.
H 0.032; D. foot 0.046; D. rim 0.064.
Clay pink 5YR 7/4, texture hard.
Glaze with fairly high sheen.
Ring foot with grooved resting surface. Groove at junction of foot and body. Convex body thickening on outside toward the rounded rim. Reserved: resting surface and band at junction of foot and body. Stacking mark on outside surface of body. Central nipple and graffito on underside.
Cf. Agora XII, nos. 946-949, pl. 34, fig. 9, 350-325 B.C.
Attic.
350-325 B.C.

9.121 (78.379) Fig. 66
Isthmus TR2 tr1 (4a).
Fragment preserving complete profile.
H. 0.035; D. foot (est.) 0.047; D. rim (est.) 0.065.
Clay pink 5YR 7/4, shading to greyish green.
Glaze with fairly high sheen.
Ring foot with grooved resting surface. Convex body thickening on outside toward rounded rim. Reserved: resting surface and band at junction of foot and body. Stacking mark on outside of body.
Cf. above **9.120**.
Attic.
350-325 B.C.

9.122 (78.570) Fig. 66
Isthmus TR1 tr3 (1).
Fragment preserving complete profile.
H. 0.031; D. foot (est.) 0.055; D. rim (est.) 0.076.
Clay light red 2.5YR 6/6, shading to green.
Glaze lustrous.
Ring foot with grooved resting surface. Convex body thickening on outside toward inturned rim. Scraped groove at junction of foot and body. Reserved: resting surface with traces of miltos.
Cf. above **9.120**.
Attic.
350-325 B.C.

9.123 (78.378) Fig. 66
Isthmus TR2 tr1 (4a).
Two joining fragments preserving complete profile.
H. 0.035; D. foot (est.) 0.043; D. rim (est.) 0.057.
Clay reddish yellow 5YR 7/6, shading to greyish green.
Glaze discoloured, fairly high sheen.
Ring foot with worn grooved resting surface. Convex body thickening on the outside to slightly inturned rim. Reserved: resting surface and band at junction of foot and body.
Cf. above **9.120**.

Attic.
350 -325 B.C.

9.124 (78.1193) Fig. 66
Isthmus TR1 tr2 (6).
Fragment of foot and body preserving complete profile.
H. 0.030; D. foot (est.) 0.048; D. rim (est.) 0.070.
Clay reddish yellow 5YR 7/8.
Glaze lustrous.
Ring foot with grooved resting surface. Thick convex body thickening slightly on the outside toward inturned rim. Reserved: resting surface and band at junction of foot and body.
Cf. above **9.120**.
Attic.
350 -325 B.C.

9.125 (78.493) Fig. 66
Isthmus TR2 trl (5a).
Fragment preserving complete profile.
H. 0.031; D. foot (est.) 0.042; D. rim (est.) 0.068.
Clay light red 2.5YR 6/6, shading to green.
Glaze lustrous.
Ring foot with worn grooved resting surface. Convex body thickening on outside toward inturned rim. Reserved: resting surface and band at junction of foot and body.
Cf. above **9.120**.
Attic.
350-325 B.C.

9.126 (78.1134) Fig. 67
Isthmus TR1 tr3 (3).
Fragment of foot, body and rim. Resting surface broken.
P.H. 0.033; D. foot (est.) 0.050; D. rim (est.) 0.062.
Clay pink 5YR 7/4, shading to grey.
Glaze lustrous.
Ring foot. Convex body thickening on outside toward slightly inturned rim. Reserved: band at junction of foot and wall.
Cf. above **9.120**.
Attic.
350-325 B.C.

9.127 (75.04) Fig. 67
Isthmus, Surface at Wall C.
Fragment preserving complete profile.
H. 0.037; D. foot 0.048; D. rim (est.) 0.064.
Clay reddish yellow 5YR 7/6.
Glaze with fairly high sheen.
Ring foot with grooved resting surface. Nipple on underside. Thick convex body thickening slightly on the outside toward rounded rim. Stacking marks around body. Totally glazed.
Cf. above **9.120**.
Attic.
350-325 B.C.

9.128 (76.269) Fig. 67
Isthmus TR1 trl (2).
Fragment preserving complete profile.
H. 0.033; D. foot (est.) 0.050; D. rim (est.) 0.064.
Clay reddish yellow 5YR 7/6, fine mica.
Glaze has greyish brown tinge with sepia band just below widest part of bowl, fairly high sheen.
Ring foot with grooved resting surface. Thick convex body thickening on the outside to slightly inturned rim. Reserved: resting surface covered with miltos.
Cf. above **9.120**.
Attic.
350-325 B.C.

9.129 (78. 354) Fig. 67
Isthmus TR2 trl (3).
Two joining fragments preserving complete profile.
H. 0.031; D. foot 0.053; D. rim (est.) 0.073.
Clay reddish yellow 5YR 7/6, texture medium.
Glaze dullish, worn away in parts.
Ring foot with bevelled outer face. Grooved resting surface. Centre of underside missing. Convex body thickening on outside toward rounded rim. Totally glazed.
Cf. above **9.120**.
Attic (?).
350-325 B.C.

9.130 (78.1056) Fig. 67
Isthmus TR2 trl (3-4).

Three joining fragments preserving complete profile.
H. 0.034; D. foot 0.054; D. rim (est.) 0.067.
Clay light red 2.5YR 6/6, texture hard.
Glaze discoloured, dull sheen.
Ring foot with grooved resting surface. Convex body, slightly inturned rim. Nipple on underside. Totally glazed.
Cf. Agora XII, no. 949, fig. 9, pl. 34, 350-325 B.C.
Chalkidic.
Second half 4th century B.C.

9.131 (78.3071) Fig. 67
Lower City TR2 NW corner.
Fragment preserving complete profile.
P.H. 0.028; D. foot 0.034; D. rim 0.050.
Clay reddish yellow 5YR 7/6, pale grey core, texture medium to soft, fine mica.
Thin dull black glaze, probably dipped.
Ring foot with grooved resting surface. Convex body, inturned rim. Reserved: foot, resting surface and underside. Area at bottom of lower body suggests careless dipping.
Cf. above **9.130.**
Attic (?).
Second half 4th century B.C.

9.132 (78.318) Fig. 67
Isthmus TR1 tr1 (5).
Fragment of rim and body.
P.H. 0.028; D. rim (est.) 0.084.
Clay pink 5YR 7/3, fine mica, texture hard.
Glaze good black.
Thick convex body, thickening outwardly toward incurved rim.
Cf. above **9.130.**
Chalkidic.
Second half 4th century B.C.

9.133 (76.106) Fig. 67
Gate Area TR6 tr1 S (2).
Intact.
H. 0.038; D. foot 0.045; D. rim 0.076.
Clay very pale brown 10YR 8/4.
Glaze thin and worn.
Ring foot with grooved resting surface. Thick convex body with inturned rim. Nipple on underside. Totally glazed.
Cf. above **9.130.**
Chalkidic.
Second half 4th century B.C.

9.134 (76.678) Fig. 67
Isthmus TR2 tr1 (3).
Fragment preserving complete profile.
H. 0.034; D. foot 0.043; D. rim 0.062.
Clay pink 7.5YR 7/4, some voids.
Glaze flaked off in some places.
Ring foot with bevelled outer face, grooved resting surface. Thick convex body, slightly inturned rim. Nipple on underside. Totally glazed.
Cf. above **9.130.**
Chalkidic (see postscript, p. 402).
Second half of 4th century B.C.

9.135 (78.557) Fig. 67; Pl. 67
Isthmus TR2 tr1 (5a).
Fragment preserving complete profile.
H. 0.027; D. foot (est.) 0.047; D. rim (est.) 0.067.
Clay light reddish brown 2.5YR 6/4, texture hard, some mica, unevenly fired.
Glaze dull and peeling.
Ring foot with bevelled outer face. Grooved resting surface. Thick convex body thickening slightly on the outside toward rounded inturned rim. Totally glazed. *Cf.* above **9.130.**
Chalkidic.
Second half 4th century B.C.

SMALL BOWLS

9.136 (76.726) Fig. 67
Gate Area TR6 tr2 (1).
Fragment preserving complete profile.
H. 0.022; D. foot 0.060; D. rim 0.088.
Clay reddish yellow 5YR 7/8, soft texture, worn.
Glaze red,worn off in patches on interior.
Ring foot. Shallow outcurving body, inturned rim. Reserved: resting surface; underside.
Cf. Agora XII, no. 871, pl. 33, 425-400 B.C., no.

828 with rouletting inside, pl. 33, fig. 8, 375-350 B.C.; *Olynthus* XIII, nos. 789-790, pl. 224, late 5th or early 4th century.
Attic.
425-350 B.C.

9.137 (78.167) Fig. 67
Isthmus TR2 tr1 (3a).
Fragment preserving complete profile.
H. 0.025; D. foot (est.) 0.058; D. rim (est.) 0.086.
Clay light red 2.5YR 6/8 shading to grey, misfired, some voids.
Glaze dull black, discoloured and worn. Dipped.
Ring foot with chamfered outer face. Smooth wide resting surface. Thick shallow curving body, incurved rim. Reserved: foot; underside except for dribbles of glaze.
Cf. above **9.136**.
Attic (see postscript, p. 402).
425-350 B.C.

9.138 (75.472) Fig. 67
Structure 1 TR1 tr4 "below B" (6).
Fragment preserving complete profile.
H. 0.024; D. foot 0.050; D. rim 0.069.
Clay pink 5YR 8/4, texture soft.
Glaze thin black, very worn.
Ring foot. Convex body, uneven profile with wheel marks on upper wall. Rounded rim thickened on either side. Totally glazed.
Attic.
4th century B.C.

9.139 (78.227) Fig. 67; Pl. 67
Isthmus TR2 tr1 (3).
Fragment preserving complete profile.
H. 0.025; D. foot (est.) 0.051; D. rim (est.) 0.075.
Clay light red 2.5YR 6/6, texture hard.
Glaze thin, fairly shiny black, peeling.
Ring foot. Thick curving body thickening on outside to slightly inturned rim. Totally glazed.
Cf. above **9.136**.
Chalkidic (?).
Late 5th or 4th century B.C.

9.140 (78.1473) Fig. 67; Pl. 68
Hill 2 TR3 (4).
Four joining fragments preserving complete profile.
H. 0.030; D. foot 0.048; D. rim 0.070.
Clay reddish yellow 5YR 6/6, texture hard, some voids.
Glaze dull black, unevenly dipped.
Ring foot, bevelled outer face, flat resting surface. Underside with central depression and nipple. Flaring body thickening upward with sharp angle at junction with rounded rim. Totally glazed.
Graffito on underside.
Cf. Olynthus V, nos. 879-880, pl. 176 for nearly 200 "native" Olynthian bowls, late 5th or 4th century.
Chalkidic (see postscript, p. 402).
Late 5th or 4th century B.C.

9.141 (78.850) Fig. 67; Pl. 67
Isthmus TR2 tr1 (5a).
Two joining fragments preserving complete profile.
H. 0.028; D. foot 0.050; D. rim 0.086.
Clay reddish yellow 5YR 7/6, fired grey in places, some voids, texture hard.
Glaze shiny black, mottled and discoloured on part of exterior.
Ring foot, bevelled outer face, flat resting surface. Underside with central depression and nipple. Shallow curving body thickening on outside toward heavy rounded rim. Totally glazed.
Cf. above **9.140**.
Chalkidic.
Late 5th or 4th century B.C.

9.142 (78.714) Fig. 67; Pl. 68
Isthmus TR2 tr1 (5a).
Fragment preserving complete profile.
H. 0.025; D. foot 0.056; D. rim (est.) 0.084.
Clay reddish yellow 5YR 6/6, texture hard, some voids.
Glaze thin shiny black. Dipped.
Ring foot with bevelled outer face, flat resting surface. Underside with central depression and nipple. Shallow flaring body thickening upward with sharp angle at junction with slightly rounded rim. Totally glazed.

Cf. above **9.140**.
Chalkidic.
Late 5th or 4th century B.C.

9.143 (78.166) Fig. 67
Isthmus TR2 tr1 (3a).
Fragment preserving complete profile.
H. 0.034; D. foot 0.042; D. rim (est.) 0.070.
Clay light red 2.5YR 6/8, texture hard, fine mica.
Glaze brownish, discoloured, unevenly dipped, two finger marks visible.
Ring foot, flat resting surface. Underside with central depression and nipple. Shallow curving wall. Thick rim flat on top, sloping outwards. Reserved: foot; underside except for dribbles of glaze.
Cf. above **9.140**.
Chalkidic.
Late 5th or 4th century B.C.

9.144 (78.828) Fig. 67
Isthmus TR3 tr2 (3) B14.
Fragment preserving complete profile.
H. 0.026; D. base (est.) 0.045; D. rim (est.) 0.085.
Clay light brown 7.5YR 6/4, texture hard, faint mica.
Glaze thin, metallic tinge on interior; carelessly dipped.
Ring foot with bevelled outer face, flat resting surface. Recessed underside. Shallow sloping body, short upright rim, rounded on exterior. Reserved: resting surface; underside except for dribbles of glaze.
Cf. Tocra II, 93-94, no. 2360, fig. 42 for rim.
Chalkidic.
Late 5th or 4th century B.C.

9.145 (78.115) Fig. 67; Pl. 68
Isthmus TR1 tr2 (4).
Two joining fragments of foot and body.
P.H. 0.015; D. foot 0.046.
Clay pale red 10R 6/3, fired olive grey on surface.
Glaze thin black with metallic tinge dribbled over lower body, foot and underside.
Ring foot with chamfered outer face, flat resting surface, ridge at outer edge of underside. Nipple within faint circular impression. Flaring body. Reserved foot and underside.
Chalkidic.
Late 5th or 4th century B.C.

9.146 (78.830) Fig. 67
Isthmus TR3 tr2 (3) B 14.
Fragment of foot and body preserving complete profile.
H. 0.030; D. foot (est.) 0.048; D.rim (est.) 0.071.
Clay very pale brown 10YR 7/3, many white inclusions, texture sandy.
Glaze thin dull black, discoloured and worn. Dipped.
Ring foot Flaring body, short slightly incurving rim, rounded on exterior. Reserved: resting surface; underside.
Chalkidic (see postscript, p. 402).
Late 5th or 4th century B.C.

FISH-PLATES

9.147 (78.3021) Fig. 68
Lower City TR1 NW Ext. (2)
Fragment of foot, floor and central depression.
P.H. 0.023; D. foot (est.) 0.074.
Clay light red 2.5YR 6/6, reddish yellow on surface, texture hard , some voids, trace of surface mica.
Glaze black on floor, discoloured brownish green elsewhere.
Moulded ring foot with two shallow grooves on outer face. Flat resting surface. Concave moulding on inner face of foot, two shallow grooves at junction of foot and underside. Groove around central depression. Reserved: resting surface; groove around depression.
For moulded ring foot *cf. Agora* XII, nos. 1061 and 1063-1066, fig. 10, pl. 37, 425-375 B.C.
Attic (?).
Late 5th to early 4th century B.C.

9.148 (78.1243) Fig. 68
Isthmus TR1 tr3 (4).
Fragment of foot and floor; the surface of the underside gone.

P.H. 0.024; D. foot (est.) 0.116.
Clay pink 5YR 7/4, texture hard, fine mica.
Glaze lustrous.
High flaring ring foot with flat resting surface. Groove around central depression. Reserved and covered with miltos: resting surface; underside; band at junction of foot and undersurface; band around central depression.
Attic.
Early 4th century B.C.

9.149 (78.435) Fig. 68
Isthmus TR1 tr2 (4).
Fragment of foot and floor.
P.H. 0.021; D. foot (est.) 0.076.
Clay reddish yellow 5YR 7/6.
Glaze shiny, brownish in spots.
High ring foot, flat resting surface. Groove around central depression. Reserved: resting surface; underside except for wide glazed band and narrow band in dilute glaze; band around depression.
Attic.
Early 4th century B.C.

9.150 (78. 1618) Fig. 68; Pl. 68
Hill 2 TR3 (4).
Three joining fragments of foot, floor and rim preserving complete profile.
H. 0.032; D. foot (est.) 0.108.
Clay reddish yellow 5YR 7/6, hard texture.
Glaze metallic in places, irridescent on undersurface.
Ring foot with oblique resting surface. Two grooves around central depression, shallow groove at outer edge of floor. Overhanging vertical rim, sloping floor. Reserved: resting surface; band around depression.
Graffito on underside.
Attic (?).
First half of 4th century B.C.

9.151 (75.07) Fig. 68; Pl. 68
Isthmus, Surface at Wall C.
Three joining fragments of foot, floor and rim preserving complete profile.
H. 0.022; D. foot 0.104; D. rim (est.) 0.194.
Clay reddish yellow 5YR 6/6. Secondary burning at one edge.
Glaze shiny, discoloured in spots.
Ring foot with grooved resting surface. Groove around central depression and outer edge of floor. Overhanging vertical rim; fairly flat floor. Reserved: part of resting surface; band/s (?) around depression and edge of floor.
Cf. Agora XII, no. 1075, fig. 10, 325-310 B.C.
Attic (?).
4th century B.C.

9.152 (78.383) Fig. 68
Isthmus TR2 tr1 (4a).
Fragment of foot, floor and rim.
H. 0.023; D. foot (est.) 0.096; D. rim (est.) 0.161.
Clay reddish yellow 5YR 7/6.
Glaze lustrous.
Ring foot. Groove in resting surface and around outer edge of floor. Overhanging vertical rim with convex profile. Reserved and covered with miltos: resting surface; band around outer edge of floor.
Cf. above **9.151**.
Attic.
4th century. B.C.

9.153 (78.1117) Fig. 68
Isthmus TR1 tr2 (5).
Two joining fragments of foot and floor.
P.H. 0.034; D. foot (est.) 0.225.
Clay reddish yellow 5YR 7/6, texture hard.
Glaze lustrous.
Ring foot. Groove in resting surface and around outer edge of floor. Reserved: resting surface with traces of miltos; band around edge of floor.
Cf. Agora XII, nos. 1072, 1074, fig. 10, 350-325 B.C.
Attic.
4th century B.C.

9.154 (78.1368) Fig. 69
Isthmus TR3 tr1 (3) B6.
Fragment of foot and floor.
P.H. 0.030; D. foot (est.) 0.113.
Clay pink 5YR 7/4 shading to greenish grey.

Glaze lustrous.
Ring foot. Scraped groove painted with miltos in resting surface and around central depression.
Graffito on underside.
Cf. above **9.153**.
Attic.
4th century B.C.

9.155 (76.640) Fig. 69
Isthmus TR2 tr1 (3a).
Two joining fragments of foot and floor.
P.H. 0.029; D. foot (est.) 0.130.
Clay pink 7.5YR 7/4, fine mica.
Glaze with dull sheen.
Ring foot. Groove in resting surface and around central depression. Reserved: groove in resting surface with miltos; band around depression.
Cf. above **9.153**.
Attic.
4th century B.C.

9.156 (78.1147) Fig. 69
Isthmus TR1 tr2 (6).
Fragment of foot and floor.
P.H. 0.034; D. foot (est.) 0.134.
Clay reddish yellow 5YR 7/6, micaceous.
Glaze lustrous.
High ring foot. Groove in resting surface and around central depression. Stacking mark on floor. Reserved: band around depression; resting surface covered with miltos.
Graffito on underside.
Cf. above **9.153.**
Attic (?).
4th century B.C.

9.157 (78.15) Fig. 69
Isthmus TR2 tr1 (3).
Fragment of foot and floor.
P.H. 0.027; D. foot 0.097.
Clay pink 5YR 7/4, shading to greenish grey.
Glaze lustrous.
Ring foot. Reserved and covered with miltos: groove between resting surface and inner face of foot; groove around central depression. Nipple on underside.
Cf. Agora XII, nos. 1072, 1074, 1075, fig. 10, 350-310 B.C.
Attic.
Second half 4th century B.C.

9.158 (78.846) Fig. 69
Isthmus TR1 tr2 (4).
Fragment of foot and floor.
P.H. 0.022; D. foot (est.) 0.100.
Clay reddish yellow 5YR 7/6, texture hard, fine mica.
Glaze lustrous.
Ring foot. Groove in resting surface and around central depression. Reserved: resting surface with traces of miltos; band around depression.
Nipple and graffito on underside.
Cf. above **9.157**.
Attic.
Second half 4th century B.C.

9.159 (78.250) Fig. 69
Isthmus TR3 tr1 (2).
Fragment of foot and floor.
P.H. 0.023; D. foot (est.) 0.076.
Clay reddish yellow 5YR 7/6, some voids.
Glaze very worn, lustrous in places.
Torus ring foot with flat resting surface. Groove around central depression. Reserved: resting surface; band around depression.
Attic.
First half of 4th century B.C.

9.160 (78.621) Fig. 69
Isthmus TR3 tr1 (3) B8.
Fragment of foot and floor.
P.H. 0.021; D. foot 0.075.
Clay pink 5YR 7/4, texture hard, some voids and inclusions.
Glaze thin and shiny on upper surface, lustrous on underside.
Ring foot, slash on outer face of foot. Groove in resting surface and around central depression. Nipple on underside with small protrusion in centre of depression. Reserved: band around depression; resting surface with traces of miltos in groove.
Cf. above **9.157**.
Attic.
Second half 4th century B.C.

9.161 (78.3727) Fig. 69
Isthmus TR2 tr1 (4).
Fragment of rim and part of floor.
P.H. 0.033; D. rim (est.) 0.330.
Clay pink 5YR 7/4 shading to pale grey green, texture hard.
Glaze lustrous black.
Deep overhanging rim, slightly convex outer face. Groove at outer edge of floor. Reserved band over groove and outer edge of floor. Scraped groove at junction of rim and undersurface.
Cf. Agora XII, nos. 1072, 1074, fig. 10, 350-325 B.C.
Attic.
4th century B.C.

9.162 (78.347) Fig. 69
Isthmus TR2 tr1 (3a).
Fragment of floor and rim.
P.H. 0.023; D. rim (est.) 0.228.
Clay light reddish brown 2.5YR 6/4 with greenish grey patches, some voids and inclusions, hard texture.
Glaze dull.
Deep overhanging vertical rim, convex profile. Reserved and covered with miltos: groove around outer edge of floor.
Cf. above **9.161**.
Attic (?).
4th century B.C.

9.163 (76.662) Fig. 69
Isthmus TR2 tr1 (3a).
Fragment of rim and floor.
P.H. 0.016; D. (est.) 0.227.
Clay reddish yellow 5YR 7/6.
Glaze with dull sheen.
Vertical overhanging rim with convex profile. Groove and reserved band around outer edge of floor.
Cf. above **9.161**.
Attic.
4th century B.C.

9.164 (76.415) Fig. 69
Structure 3 TR8 (7).
Fragment of rim and floor.
P.H. 0.014; D. (est.) 0.210.
Clay reddish yellow 5YR 7/6.
Glaze with dull sheen.
Vertical overhanging rim. Reserved: band around outer edge of floor.
Attic.
4th century B.C.

9.165 (78.3415) Fig. 69
Lower City TR2 (1).
Fragment of rim and floor.
P.H. 0.015; D. rim (est.) 0.240.
Clay reddish yellow 5YR 7/6 shading to grey in parts, fired hard, well levigated with a few very small voids and fine mica.
Glaze dull black, mottled on undersurface.
Shallow overhanging rim. Deep reserved groove at outer edge of floor.
Cf. Agora XII, no. 1075, fig.10, 325-310 B.C.
Attic (?).
4th century B.C.

9.166 (78.314) Fig.68
Isthmus TR1 tr1 (5).
Two joining fragments of floor.
P.H. 0.014.
Clay pink 7.5YR 7/4.
Glaze lustrous.
Groove around central depression. Reserved: underside except for glazed band and dilute line; band around depression.
Attic.
Early 4th century B.C.

9.167 (78.258) Fig. 68
Isthmus TR3 tr2 (2).
Fragment of foot and floor.
P.H. 0.022; D. foot (est.) 0.085.
Clay reddish yellow 5YR 7/8, some voids and fine mica.
Glaze thin and streaky in places.
Ring foot, broad resting surface. Groove around central depression. Reserved: resting surface; underside except for wide glazed band; band around depression.
Chalkidic.
Early 4th century B.C.

9.168 (78.236) Fig. 68
Isthmus TR2 tr1 (3a).
Fragment of foot and floor.
P.H. 0.017; D. foot (est.) 0.083.
Clay pink 5YR 7/4, gritty, micaceous, texture hard.
Glaze dull, thin, dipped.
Flaring ring foot with deep groove at junction of foot and undersurface. Groove around central depression. Reserved: resting surface and underside, splashed with glaze.
Chalkidic.
4th century B.C.

9.169 (76.706) Fig. 68
Isthmus TR2 tr1 (3).
Fragment of foot, floor and rim.
H. 0.029; D. foot (est.) 0.085; D. rim (est.) 0.160.
Clay reddish yellow 5YR 6/6, heavy fabric, texture hard, some mica.
Glaze dull, thin, fired from dark to light brown giving the impression of having been rubbed off before firing.
Ring foot, oblique resting surface. Sloping floor, curved overhanging rim, broken around edge. Groove around central depression and outer edge of floor.
Cf. for curved rim *Agora* XII, no. 1061, pl. 37, fig. 10, 425-400 B.C.
Chalkidic (see postscript, p. 402).
First half 4th century B.C.

9.170 (78.1160) Fig. 68
Isthmus TR1 tr3 (3).
Two joining fragments preserving complete profile.
H 0.034; D. foot 0.069; D. rim (est.) 0.208.
Clay light brown 7.5YR 6/4, fired grey in core and undersurface, hard gritty texture, voids, some fine silver mica.
Glaze black with brown patches on upper surface.
High ring foot with flat resting surface. Sloping floor with central depression. Two shallow grooves around outer edge of floor. Rolled rim, slightly overhanging. Faint wheelmarks on underside.
Cf. Olynthus XIII, no. 75, pl. 94, first half of 4th century B.C.
Chalkidic (see postscript, p. 402).
First half 4th century B.C.

9.171 (78.3269) Fig. 69
Isthmus TR2 tr2 (3).
Fragment of foot, floor and part of central depression.
P.H. 0.022; D. foot (est.) 0.070.
Clay pink (light brown) 7.5YR 7/4, traces of fine mica, texture hard.
Glaze very worn dull black.
Flaring ring foot, flat resting surface. Convex underside, groove around shallow central depression. Reserved (?) resting surface, but possibly totally glazed.
Chalkidic.
First half 4th century B.C.

9.172 (78.1460) Fig. 69
Lekythos TR2 (3).
Fragment of foot, floor and central depression.
P.H. 0.018; D. foot (est.) 0.084.
Clay reddish yellow 7.5YR 7/6, fine golden mica, texture sandy.
Glaze reddish brown with low sheen.
Ring foot, flat wide resting surface. Deep reserved (?) groove around very shallow central depression. Incised line around outer edge of depression.
Chalkidic.
First half 4th century B.C.

9.173 (78.2780) Fig. 69
Isthmus TR1 tr2 (4a).
Two joining fragments preserving part of foot and floor and part of central depression.
P.H. 0.020; D. foot (est.) 0.070.
Clay light grey to grey 5YR 6/l, texture sandy, hard, fine mica.
Unglazed, smoothed on surface.
Ring foot, faint groove around part of outer face. Sloping floor curves into wide depression. Convex underside.
Chalkidic.
First half 4th century B.C.

LEKANIDES

9.174 (78.620) Fig. 70
Isthmus TR3 tr1 (3) B8.
Almost complete knob, chipped and broken.
P.H. 0.032; D. (est.) 0.056.
Clay reddish yellow 5YR 6/6, texture hard.
Glaze dull black.
Round knob, vertical edge, recessed top with conical depression at centre. Thick stem. Reserved and covered with miltos: upper surface except for wide band and circle around central depression which is outlined in black glaze.
Cf. Agora XII, nos. 1237-1239, pl. 41, 425-400 B.C., *Olynthus* XIII, nos. 636, pl. 206, late 5th century.
Chalkidic.
Late 5th to early 4th century B .C.

9.175 (75.47) Fig. 70
Structure 1 TR1 tr1 (4).
Fragment of lid knob, chipped and worn.
P.H. 0.012; D. (est.) 0.060.
Clay light red 2.5YR 6/8, texture medium.
Glaze black, worn.
Round knob, vertical edge, recessed top with conical depression at centre. Reserved and covered with miltos: upper surface except for two circles around central depression; the top of the raised edge may have been reserved.
Chalkidic.
Cf. above **9.174**.
Late 5th to early 4th century B.C.

9.176 (76.724) Fig. 70
Gate Area TR6 tr1 N (3).
Fragment preserving complete knob.
P.H. 0.021; D. 0.018.
Clay reddish yellow 5YR 7/6, texture medium.
Glaze shiny black, thin in spots.
Cylindrical spool-shaped knob with central ridge.
Cf. Agora XII, no. 1272, pl. 42, 475-450 B.C.
Attic (?).
Fifth century B.C.

9.177 (76.660) Fig. 70
Isthmus TR2 tr1 (3a).
Three joining fragments of body and rim.
P.H. 0.052; D. rim (est.) 0.174.
Clay red 2.5YR 5/8, mottled red to grey, hard fired.
Glaze shiny metallic.
Rounded body flanged on outside, vertical rim. One end of ribbon handle preserved.
Cf. Agora XII, nos. 1219-1220, fig. 11, pl. 40, 450-425 B.C.; *Olynthus* XIII, nos. 635-636, pls. 206 and 211, late 5th or early 4th century B.C.
Chalkidic.
5th to early 4th century B.C.

9.178 (78.3740) Fig. 70
Isthmus Tr3 tr2 Ext. 2 (3) B7.
Three joining rim fragments.
P.H. 0.33; D. rim (est.) 0.220.
Clay light red 2.5YR 6/8, fired grey on surface in places, hard fired and brittle.
Thin black glaze, dull on inside, fairly shiny outside.
Convex body, flange on outside with inset vertical rim.
Cf. above **9.177**.
Chalkidic.
5th to early 4th century B.C.

9.179 (78.2703) Fig. 70
Isthmus TR3 tr1 (3) B5.
Fragment of rim, handle and body.
P.H. 0.037; D. rim (est.) 0.185.
Clay reddish yellow 5YR 6/6, well levigated, fine gold mica, fired hard.
Glaze thin black.
Curving body, flange on outside, inset slightly concave rim. Horizontal ribbon handle, slightly canted, with concave outer face.
Cf. above **9.177**.
Chalkidic.
5th to early 4th century B.C.

9.180 (78.2704) Fig. 70
Isthmus TR3 tr1 (3) B5.
Fragment of body, rim and handle of cup-handled lekanis.

P.H. 0.036; D. rim (est.) 0.185.
Clay light reddish brown 5YR 6/4, hard fired, brittle.
Glaze thin shiny black.
Curving body, flanged outside. Inset plain rim sloping inwards. Horizontal handle, sharply rising.
Cf. Agora XII, nos. 1247-1249, pl. 42, 425-400 B.C.; *Olynthus* XIII, nos. 622-630, pls. 204-205.
Second half of 5th to mid 4th century B.C.
Chalkidic (see postscript, p. 402).
5th to early 4th century B.C.

9.181 (76. 637) Fig. 70
Isthmus TR2 tr1 (3a).
Three joining fragments of lekanis lid.
P.H. 0.038; D. (est.) 0.212.
Clay red 2.5YR 5/8, mottled red to grey, hard fired.
Glaze shiny metallic.
Convex lid with plain vertical rim. Scraped line around upper surface just above rim.
Could belong to lekanis **9.177**.
Chalkidic.
5th to early 4th century B.C.

9.182 (76.661) Fig. 70
Isthmus TR2 tr1 (3a).
Fragment of rim and wall of lid.
P.H. 0.026; D. rim (est.) 0.207.
Clay reddish yellow 5YR 6/6, gold mica, texture brittle, surface smooth.
Glaze thinnish black, dull inside, slightly shiny outside.
Convex upper surface, articulated near rim, grooved resting surface. Reserved: upper surface except for wide glazed band around rim; outer edge of resting surface.
Cf. Agora XII, no. 1236, fig. 11, pl. 41, *ca.* 450 B.C.
Chalkidic.
Second half 5th century B.C.

9.183 (78.1203) Fig. 70
Isthmus TR1 tr3 (3).
Fragment of rim and wall of lid.
P.H. 0.042; D. (est.) 0.150.
Clay reddish yellow 5YR 6/6, gold mica, texture brittle.
Glaze streaky, shiny metallic, smooth surface.
Rounded wall curving into grooved resting surface. Reserved: upper surface except for wide glazed band around rim; groove in resting surface.
Cf. above **9.182**.
Chalkidic.
Second half 5th century B.C.

9.184 (78.3367) Fig. 70
Lower City TR3 (1) N.
Fragment of lid and stem of knob.
P.H. 0.017.
Clay reddish yellow 5YR 7/6, much fine silvery gold mica, texture powdery.
Glaze thin black, surface smooth.
Slightly sloping top, stem round in section. Reserved: stem; band on upper surface around base of stem; underside.
Probably lid of lekanis.
Chalkidic.
Second half 5th century B.C.

LEKANAI

9.185 (78.769) Fig. 71
Hill 2, TR2 Area 3 (1).
Fragment of rim and body.
P.H. 0.054; D. (est.) 0.250.
Clay light red 2.5YR 6/6, mica, hard texture.
Glaze thin black.
Slightly curving body, rounded overhanging rim. Reserved exterior with traces of miltos (?).
Cf. Agora XII, no. 1820, fig. 15, *ca.* 320-290 B. C. *Olynthus* XIII, no. 1044, pl. 253, late 5th century.
Chalkidic.
5th-4th century B.C.

9.186 (76.210) Fig. 71
Gate Area TR4 (4).
Fragment of rim and body.
P.H. 0.019; D. (est.) 0.190.

Clay reddish yellow 5YR 6/6, texture soft.
Glaze thin black, worn.
Sloping body with ridge on outside at junction with rim. Rim flat on top, deeply overhanging with convex outer face. Reserved interior and exterior except for wide glazed band over top and outer face of rim, extending on to inside surface.
Cf. Agora XII, no. 1806, fig, 15, context *ca.* 430-420 B.C. (?).
Attic (?).
5th-4th century B.C.

ASKOI

9.187 (75.636) Fig. 71
Structure 1 TR1 tr1/3 Baulk (5).
Fragment of base and body of shallow askos.
P.H. 0.031.
Clay reddish yellow 5YR 7/6, mottled pink to green.
Glaze worn. Dribble of glaze on inside.
Disc foot, shallow convex body.
Cf. Agora XII, no. 1174, fig. 11, *ca.* 430 B.C.
Attic.
Ca. 430 B.C.

9.188 (78.3742) Fig. 71; Pl. 68
Isthmus TR3 tr1 Ext. 3 (3) B3.
Three joining fragments preserving complete neck and mouth of guttus-type askos. Ridge at junction with shoulder.
Cf. Agora XII, no. 1192, pl. 39, 400-375 B.C.
Attic.
400-375 B .C.

9.189 (76.771) Fig. 71
Isthmus TR2 tr1 (3a).
Three joining fragments preserving part of shoulder and neck of ribbed guttus-type askos.
P.H. 0.035.
Glaze lustrous black.
Rounded body with vertical ribbing. The ribs narrow at the top and join immediately below rounded ridge between shoulder and neck. Concave neck.
Attic.
4th century B.C.

9.190 (75.325) Fig. 71; Pl. 68
Structure 1 TR1 tr1 (8).
Fragment of relief top.
Dimensions: 0.040 x 0.035.
Clay reddish yellow 5YR 6/6.
Glaze thin black.
Portion of face of a silen preserved.
For relief askoi *cf. Agora* XII, 159, nos. 1179-1186, pl. 46, late 5th to early 4th century B.C.
Attic (?).
Late 5th to early 4th century B.C.

9.191 (78.1614) Fig. 71
Hill 2 TR3 (4).
Fragment of foot and wall of guttus-type askos.
P.H. 0.026; D. foot 0.062.
Clay reddish yellow 7.5YR 6/6, fine mica.
Glaze black with high sheen.
Low ring foot. Slight angle in body.
Cf. Agora XII, no. 1194, fig. 11, *ca.* 350 B.C.
Chalkidic (?).
Ca. 350 B.C.

9.192 (78.106) Fig. 71
Isthmus TR2 tr1 (3).
Two joining fragments of foot and body of guttus type askos.
P.H. 0.019; D. foot 0.076.
Clay pink 7.5YR 7/4.
Dipped (?), splashes of glaze on interior surface.
Very low ring foot, faint grooves on outer face.
Cf. Agora XII, nos. 1192-1196, fig. 11, pl. 39, 400-320 B.C.
Chalkidic (?).
Ca. 400-320 B.C.

9.193 (78.288) Fig. 71
Isthmus TR2 tr1 (3a).
Fragment of handle of guttus-type askos.
Clay reddish yellow 5YR 7/6.
Ring handle with vertical grooves.
Cf. Agora XII, nos. 1192-1196, fig. 11, pl. 39, 400-320 B.C.
Chalkidic.
Ca. 400-320 B.C.

9.194 (76.2023) Fig. 71
Isthmus TR2 trl (3a)
Three joining fragments of shoulder and body of guttus-type askos.
P.H. 0.040; D. max. 0.090.
Clay reddish yellow 5YR 7/6 - light grey 10YR 7/2, texture hard.
Glaze black, very worn.
Squat rounded body, ridge at junction with concave shoulder.
Cf. Agora XII, no. 1194, fig. 11, pl. 39, 350 B.C.
Chalkidic (?).
Ca. 350 B.C.

9.195 (76.549) Fig. 71; Pl. 68
Structure 3 TR11 S Ext (5).
Complete neck and mouth of guttus-type askos.
P.H. 0.047.
Clay reddish yellow 5YR 6/6, very worn.
Glaze dull black, very worn.
Slightly concave tall neck, flaring mouth, oblique outer face. Outer face of rim reserved (?) except for thin band at upper edge.
Chalkidic (?).
4th century B.C.

9.196 (78.198) Fig. 71
Isthmus TR1 tr1 (4).
Fragment preserving part of neck and complete mouth of guttus-type askos.
P.H. 0 33; D. mouth 0.037.
Clay light red 2.5YR 6/8.
Glaze with metallic tinge.
Wide curving out-turned rim.
Cf. Agora XII, nos. 1194-1196, pl. 39, fig. 11, 350-320 B.C.
Chalkidic.
Ca. 350-320 B.C.

9.197 (78.241) Fig. 71
Isthmus TR1 tr1 (4a).
Fragment preserving complete mouth, neck and handle attachment of shallow askos.
P.H. 0.045; D. mouth 0.030.
Clay reddish yellow 5YR 7/6, fine mica, texture hard.
Glaze dull black around inside and most of outside rim, with dribble extending down neck.
Neck flattens beneath handle and widens to cup-shaped mouth. Strap handle attached immediately below rim. Very roughly made.
Cf. Agora XII, nos. 1174-1178, fig. 11, pl. 39, 430-350 B.C.
Chalkidic.
430-350 B.C.

9.198 (76.104+76.550) Fig. 71
Structure 3 TR 7 (1) (2); TR11 S Ext. (5).
Joining fragments of complete base and part of wall and shoulder of guttus-type askos.
P.H. 0.048; D. foot 0.065.
Clay pink 7.5YR 7/4.
Glaze dull black.
Low ring foot, broad flat resting surface. Squat body, two shallow grooves around body at junction with foot. Shoulder slightly concave, pronounced ridge at junction between body and shoulder.
Cf. above **9.194**.
Chalkidic.
4th century B.C.

9.199 (78.549) Fig. 71
Isthmus TR1 tr2 (4).
Fragment of shoulder, body and handle of guttus-type askos.
P.H. 0.045.
Clay reddish yellow 5YR 7/6-7/8, fine mica.
Glaze dull, chipped.
Shoulder offset from body with groove at junction. Root of ring handle preserved.
Cf. Agora XII, nos. 1194-1196, p1.39, fig. 11, *ca.* 350-320 B.C.
Chalkidic.
350-320 B.C.

OLPAI

9.200 (76.369) Fig. 72
Gate Area TR4 Ext. 1 (4).
Two joining fragments of base and body.

P.H. 0.090; D. base 0.048.
Clay light red 2.5YR 6/8, fine mica.
Glaze discoloured and worn; dipped.
Tall slender body flaring sharply at bottom and turning to a flat resting surface. Slightly concave underside. Deep interior wheelmarks.
Cf. Olynthus V, 205, no. 666, pl. 162, 5th century; *Agora* XII, nos. 274-275 pl. 13, 375-325 B.C.; *Olynthus* XIII, no. 352, pl. 164, second quarter of 4th century.
Chalkidic.
375-325 B.C.

9.201 (78.837) Fig. 72
Isthmus TR1 tr2 (5).
Almost complete, handle missing.
H. 0.113; D. foot 0.036; D. rim 0.035.
Clay reddish yellow 5YR 7/6, fine mica.
Glaze fired light brown for the most part, thin and flaking, dull; unevenly dipped.
Disk foot, slightly concave underside. Ovoid body, out-turned rim.
Cf. Agora XII, no. 283, pl. 13, 350-325 B.C.; *Olynthus* XIII, nos. 339-340, pl. 163, second quarter of 4th century.
Chalkidic.
375-325 B.C.

9.202 (78.1145) Fig. 72
Isthmus TR1 tr3 (3) SW.
Three joining fragments of foot, body and shoulder.
P.H. 0.095; D. foot 0.040.
Clay light red 2.5YR 6/6, well levigated, hard fired, fine mica.
Glaze metallic, dipped.
Disk foot, ovoid body with deep wheelmarks on interior. Reserved slightly concave underside. Handle scar.
Cf. above **9.201.**
Chalkidic.
375-325 B.C.

9.203 (78.119) Fig. 72
Isthmus TR1 tr1 (4).
Fragment of foot and lower body.
P.H. 0.034; D. foot 0.035.
Clay pink 7.5YR 7/4, faint mica.
Glaze discoloured, carelessly dipped.
Projecting disk foot, concave underside. Two faint horizontal tool marks around steeply flaring lower body. Reserved: underside; foot; lower part of body.
Chalkidic.
375-325 B.C.

9.204 (78.264) Fig. 72
Isthmus TR3 tr2 (2).
Two joining fragments of foot and lower body.
P.H. 0.036; D. foot 0.038.
Clay reddish yellow 5YR 7/6-7/8, fine mica.
Glaze dark brown to black, carelessly dipped.
Disk foot, slightly concave underside. Shallow groove at junction of foot and body. Interior wheelmarks. Reserved underside.
Chalkidic.
375-325 B.C.

9.205 (76.455) Fig. 72
Structure 3 TR13 (4).
Two joining fragments of foot and body.
P.H. 0.056; D. foot (est.) 0.040.
Clay light red 2.5YR 6/8, traces of mica.
Glaze slightly mottled, dipped.
Disk foot, slightly projecting. Concave underside.
Cf. above **9.204.**
Chalkidic (?).
375-325 B.C.

9.206 (78.1282) Fig. 72
Hill 2 TR2 Ext (2).
Fragment of foot and lower body.
P.H. 0.034; D. foot 0.035.
Clay pink 7.5YR 7/4, mica on underside.
Glaze fairly lustrous, thin; unevenly dipped.
Disk foot.
Chalkidic.
375-325 B.C.

9.207 (78. 1192) Fig. 72
Isthmus TR1 tr2 (6).
Two joining fragments of foot and body of olpe (?).

P.H. 0.055; D. foot 0.042.
Clay reddish yellow 5YR 7/6, mica.
Glaze thin, dipped.
Ring foot, chamfered outer face, flat resting surface. Wheelmarks visible on outside wall, mark of attachment to wheel on underside. Reserved: underside, foot; uneven area on lower body.
Cf. Olynthus V, no. 690, pl. 163, 5th century B.C.
Chalkidic.
375-325 B.C.

9.208 (78.3613) Fig. 72
Lower City TR2 (1).
Fragment of base and lower body of olpe.
P.H. 0.020; D. foot (est.) 0.048.
Clay light red 2.5YR 6/6, fine gold mica, hard fired.
Glaze thin black, dipped.
Disk foot, rounded lower body. Reserved underside with incised circle and shallow central depression.
Cf. above **9.207.**
Chalkidic.
375-325 B.C.

LEKYTHOI

9.209 (78.3735) Fig. 72
Structure 3 TR2 (3).
Fragment of base and lower body of squat lekythos.
P.H. 0.015; D. foot (est.) 0.070.
Clay light red 2.5YR 6/6, texture hard.
Glaze lustrous black.
Ring foot, plump body. Reserved: underside; outer face of foot except for thin dilute band of glaze; resting surface and inner face of foot.
Cf. Agora XII, no. 1120, pl. 38, 450-425 B.C.; *Olynthus* XIII, nos. 399- 400, pl. 167, late 5th or first quarter of 4th century B.C.
Attic.
5th to early 4th century B.C.

9.210 (78.2802) Fig. 72
Lekythos TR2 (2).
Fragment of foot and body of squat lekythos.
P.H. 0.022; D. foot (est.) 0.060.
Clay light red 2.5YR 6/6.
Glaze lustrous black, smooth surface.
Ring foot with square profile, narrow flat resting surface, concave moulding on inner face. Squat body. Reserved and covered with miltos: underside; resting surface; inner face of foot.
Cf. above **9.209**.
Attic.
5th to early 4th century B.C.

9.211 (78.1101) Fig. 72
Isthmus TR1 tr2 (5).
Fragment of neck and shoulder of Deianeira lekythos.
P.H. 0.073.
Clay light red to reddish yellow 2.5YR 6/6 - 5YR 7/6, a little fine mica, hard fired.
Glaze shiny black.
Cylindrical neck curving into mouth and shoulder. Upper handle attachment fixed over dripring. Inside neck glazed, trace of glaze on inside of body.
Cf. Agora XII, no 1108, pl. 38, fig. 11, *ca.* 325-310 B.C.
Attic (?)
Late 4th centuy B.C.

9.212 (75.29) Fig. 72
Structure 1 TR1 tr1 topsoil.
Fragment preserving complete mouth and part of neck of small squat lekythos (?).
P.H. 0.016; D. 0.023.
Clay reddish yellow 7.5YR 7/6, texture medium.
Glaze mottled, very worn.
Cylindrical neck curving out to flat rim which protrudes slightly on interior.
Cf. Agora XII, nos. 1139-41, pl. 38, 375-300 B. C; *Olynthus* V, no. 468, p1. 145, 4th century.
Attic (?)
4th century B.C.

9.213 (78.3624) Fig. 72
Isthmus TR2 tr1 (3).
Fragment of foot and body of squat lekythos (?).

P.H. 0.027; D. foot (est.) 0.050.
Clay reddish yellow 5YR 7/6, well levigated, hard fired.
Glaze glossy black.
Torus ring foot, flat resting surface. Concave moulding on inner face. Reserved: interior; foot; underside. Glaze accidentally applied over part of outer face of foot.
Cf. Agora XII, no. 1128, pl. 38, 420-400 B.C.
Attic (?).
End of 5th century B.C.

9.214 (78.2308) Fig. 72
Isthmus TR1 tr1 (4).
Fragment of mouth of Deianeira lekythos.
P.H. 0.017; D. mouth (est.) 0.050.
Clay light red 2.5YR 6/6, texture brittle.
Glaze dullish black.
Bowl shaped mouth with double curve.
Cf. Agora XII, no. 1108, pl. 38, fig. 11, 325-310 B.C.
Chalkidic.
Late 4th century B.C.

9.215 (78.1100) Fig. 72
Isthmus TR1 tr2 (4a).
Fragment of shoulder and neck of Deianeira lekythos.
P.H. 0.045.
Clay pink 5YR 7/4 shading to greenish grey in places, much gold mica, well levigated, texture hard.
Thin walled globular body curving into very narrow cylindrical neck. Handle stump attached around approximately half of neck. Scar of lower handle attachment on shoulder.
Cf. above **9.211**, **9.214**.
Chalkidic.
Late 4th century B.C.

KYATHOS

9.216 (78.343) Fig. 72; Pl. 68
Isthmus TR1 tr1 (5a).
Fragment of handle and part of bowl of ladle.
P.H. 0.025; D. bowl (est.) 0.100.
Clay light brown 7.5YR 6/4, gold mica, hard fired.
Glaze black, thin and shiny.
Double handle, each part roughly rectangular in section and of uneven width. The bowl and lower part of handle dipped in glaze.
Cf. Olynthus V, 259, nos. 1085-1086, 1088, pl. 193, 4th century; *Olynthus* XIII, 418-419, nos. 1047-1049, first half 4th century; *Agora* XII, nos. 999-1000, pl. 35, 425-350 B.C.
Chalkidic.
425-350 B.C.

THYMIATERION

9.217 (78.1395) Fig. 72; Pl. 68
Lekythos TR2 (6).
Fragment of stem chipped and broken.
P.H. 0.100; D. 0.027.
Clay light red 2.5YR 6/6, gold mica, heavy fabric, very hard fired.
Glaze poor black.
Heavy cylindrical shaft, tapering slightly towards two raised rings forming a concave collar around upper part. Reserved shaft. Glazed: band around top surface of each ring, dribble of paint between; a narrow and a wide band around lower part of shaft.
Cf. Agora XII, no. 1351, pl. 44, *ca.* 500 B.C.
Chalkidic.
5th century B.C.

TORONE I

THE EXCAVATIONS OF 1975, 1976, AND 1978

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