

Durham E-Theses

*After Sulla: study in the settlement and material
culture of the Piraeus peninsula in the Roman and
Late Roman period*

Dimitris Grigoropoulos

How to cite:

Grigoropoulos, Dimitris (2005) *After Sulla: study in the settlement and material culture of the Piraeus peninsula in the Roman and Late Roman period*. Doctoral thesis, Durham University.

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a <https://etheses.durham.ac.uk/id/eprint/2630/> is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

AFTER SULLA:
A study in the settlement and material culture
of the Piraeus peninsula in the Roman and
Late Roman period

Dimitris Grigoropoulos

(2 volumes)

Thesis submitted in fulfillment of the requirements for
the submission of the title of Doctor of Philosophy

University of Durham

2005



VOLUME 1
TEXT

**A copyright of this thesis rests
with the author. No quotation
from it should be published
without his prior written consent
and information derived from it
should be acknowledged.**

2 1 SEP 2005

After Sulla: A study in the settlement and material culture of the Piraeus peninsula in the Roman and Late Roman period

Dimitris Grigoropoulos

Abstract

Modern text-based and ancient historical accounts take the sack of Piraeus, the port of Athens in Greece, by the Romans under Sulla in 86 BC as the terminal point of the history of the area in antiquity. Archaeological work on the town has tended so far to regard the post-Classical phases of the settlement as less interesting than those marking the 'heyday' of the port in the Classical period.

This thesis explores the nature and scale of settlement in the area in the centuries spanning the town's destruction by the Romans in 86 BC and the Late Roman period. The study is based on a re-assessment of archaeological data from old and recent rescue excavations in the modern town up to 1997. It also presents and discusses in detail the results of post-excavation work by the author on unpublished material from an extensive site excavated in the early 1980s. These results are compared to and synthesized with epigraphic and other testimonies to answer questions about the nature of settlement and the degree of social and cultural change in the area during the period in focus.

The discussion focuses in particular on: 1) exploring continuity and change in the settlement patterns, demography and topography of the town, 2) the changing nature of domestic space and its organization, and 3) investigating patterns of pottery consumption and trade. These issues are examined in the context of the social, economic and cultural changes documented for the Roman imperial and Late Roman period by previous archaeological fieldwork and excavations in the region of southern Greece and the Aegean.

Statement of copyright

The copyright of this thesis rests with the author. No quotation from it should be published in any form, including electronic and the Internet, without the author's prior written consent. All information derived from this thesis must be derived appropriately.

Dedicated to the memory of D.

Table of contents

VOLUME 1: TEXT

Preface	i
Abbreviations	ii
List of illustrations	iv
<i>Introduction</i>	1
1. Studying the urban landscapes of Roman Greece	1
2. The example of the Piraeus	3
3. Towards an alternative research framework	7
4. Definition of study area and previous research	9
5. Aims, methodology and summary of chapters	12
<i>Chapter 1:</i>	
<i>Enemy at the gates: the siege and sack of the Piraeus in 87/6 BC</i>	15
1.1 Introduction	15
1.2 Sources of evidence	15
1.3 An overview of the military operations	17
1.1 The evidence of damage to the urban fabric	20
1.2 Terror, anxiety and alienation	23
1.3 Understanding the siege	27
1.4 Conclusion	30
<i>Chapter 2:</i>	
<i>Settlement and population in the post-Sullan landscape</i>	31
2.1 Introduction	31
2.2 Roman Piraeus in the ancient sources	31
2.3 The nature of the archaeological evidence	37
2.4 Urban sites and settlement area in diachronic perspective	38
2.5 Problematising urban contraction	42
2.6 Continuity and change in local demography	44
2.6.1 Sources of evidence	46
2.6.2 Reconsidering the evidence from epitaphs	47
2.6.3 Decline or prosperity?	52
2.7. Conclusion	57
<i>Chapter 3:</i>	
<i>Exploring continuity and change in the urban fabric</i>	59
3.1 Introduction	59
3.2 The waterfront and the harbours	60
3.3 Recreational facilities	65
3.4 Cults and sanctuaries	71
3.5 Cemeteries and quarries	76
3.6 Continuity and change: some conclusions	80
<i>Chapter 4:</i>	
<i>The Dikastiko Megaro site: a window into the settlement history of the Piraeus in the Roman period</i>	82

4.1	Introduction.....	82
4.2	Excavation, preservation and study of the site.....	82
4.3	Re-constructing the site's history.....	84
4.4	Early architectural remains and features.....	85
4.5	A commercial agora in the Late Hellenistic & Early Roman period?.....	87
4.6	Conclusion.....	90

Chapter 5:
Water supply and local identity **91**

5.1	Introduction.....	91
5.2	Water supply and management in the domestic context.....	92
5.3	Public cisterns and reservoirs.....	98
5.4	The Roman aqueduct and the urban network of the water supply.....	99
5.5	The aqueduct in use: necessity, function and symbolism.....	103
5.6	Conclusion.....	106

Chapter 6:
Domestic space in the Early Roman period **107**

6.1	Introduction.....	107
6.2	House 1 in the 2nd-later 3rd century AD.....	108
6.3	House 2 in the 2nd-later 3rd century AD.....	110
6.4	The houses and the street grid.....	112
6.5	Circulation patterns.....	113
6.6	Experiencing domestic space in House 1.....	115
6.7	House 1: an 'atrium-house'?.....	117
6.8	Conclusion.....	119

Chapter 7:
Domestic space in the Late Roman period **121**

7.1	Introduction.....	121
7.2	House 1 in the Late Roman period.....	121
7.3	House 2 in the Late Roman period.....	122
7.4	Architectural subdivision in context.....	125
7.5	Subdivision and "poor households": a critique of the paradigm.....	127
7.6	Why were houses subdivided?.....	132
7.7	The example of Roman Egypt.....	136
7.8	Patterns of occupancy in House 2.....	138
7.9	Towards an enhanced understanding of subdivision.....	142
7.10	Conclusion.....	146

Chapter 8:
Analyzing domestic finds: From Pompeii to the Piraeus **148**

8.1	Introduction.....	148
8.2	Classical archaeology and domestic finds.....	148
8.3	Analyzing domestic finds: two case studies.....	151
8.3.1	Halieis, Greece.....	152
8.3.2	Karanis, Egypt.....	153
8.4	Methodology and limitations of this study.....	154
8.4.1	Sampling the collection.....	154
8.4.2	Spatial control of the assemblages.....	155
8.4.3	Stratigraphic control of the assemblages.....	156
8.4.4	The dating of the sampled contexts.....	158
8.4.5	Collection strategies and bias.....	160

8.4.6	The finds and typology.....	164
8.4.7	Recording and quantification.....	167

Chapter 9:

*A neighbourhood in motion: Space, people and things
in the Late Roman shops and houses* **171**

9.1	Introduction.....	171
9.2	Identifying formation processes.....	172
9.3	Formation processes of the assemblages in House 1.....	173
9.4	Formation processes of the assemblages in House 2.....	178
9.5	Artefacts, deposition and the abandonment of the houses.....	180
9.5.1	Abandoning House 1.....	182
9.5.2	Abandoning House 2.....	185
9.6	Artefactual variability and the use of space.....	189
9.6.1	Finds and the use of space in House 1.....	190
9.6.2	Finds and the use of space in House 2.....	195
9.7	Conclusion.....	204

Chapter 10:

Urban economy and consumption: The evidence of pottery **207**

10.1	Introduction.....	207
10.2	Pottery as a source of evidence for economy and consumption.....	207
10.3	The Piraeus sample and the approach to the study.....	211
10.4	The Early Roman period.....	214
10.4.1	The 1st century BC.....	214
10.4.2	The 1st century AD.....	216
10.5	The Middle Roman period.....	218
10.5.1	The 2nd century AD.....	219
10.5.2	First half of the 3rd century AD.....	222
10.6	The Late Roman period.....	225
10.6.1	Later 3rd – ca. Mid-4th century AD.....	226
10.6.2	Later 4th – ca. Mid-5th century AD.....	229
10.6.3	Later 5th – ca. Mid-6th century AD.....	231
10.7	The regional context.....	234
10.7.1	The Piraeus and Athens.....	236
10.7.2	Kenchreai and Corinth.....	238
10.7.3	Methana peninsula.....	239
10.7.4	Argos.....	240
10.7.5	Knossos.....	241
10.7.6	Benghazi (Berenice).....	242
10.8	Conclusion.....	243

Conclusion **246**

1.	Re-assessing the Roman Piraeus.....	246
2.	Settlement and landscape change.....	247
3.	Urban character and function.....	249
4.	Economic and social structures.....	254
5.	Social performance and cultural identity.....	257

VOLUME 2: APPENDICES & ILLUSTRATIONS

Part A: Appendices & Bibliography

Appendix 1: Excavated sites/ plots in the Piraeus with Roman material	258
Appendix 2: The use of Piraeus limestone in building construction during the Roman period	260
Appendix 3: Dikastiko Megaro site: Important stratigraphic contexts for the dating of Houses 1 and 2 and find summaries of associated deposits	261
Appendix 4: Dating evidence for the latest occupation levels	273
Appendix 5: Abbreviations and descriptions of main fabrics for pottery vessels from the latest occupation levels of Houses 1 and 2	276
Appendix 6: Summary of finds from the latest occupation levels of House 1	287
Appendix 7: Summary of finds from the latest occupation levels of House 2	320
Appendix 8: Overview of amalgamated contexts used in pottery analysis	356
Bibliography	357

Part B: Illustrations

Preface

This study represents the results of PhD research, undertaken at the Department of Archaeology, University of Durham, between 2002 and 2005. The research was funded by the Greek branch of the A.S. Onassis Public Benefit Foundation.

Many people and institutions in both Britain and Greece have contributed with their help, facilities and expertise to this thesis. My foremost thanks go to my supervisors at the Department of Archaeology, University of Durham, Dr Richard Hingley and Prof. Jennifer Price, who provided invaluable help and guidance as well as their friendship and support throughout the project. I am truly indebted to Mr Aris Tsaravopoulos, archaeologist of the 26th Ephorate of Prehistoric and Classical Antiquities in Greece, who kindly made available to me detailed documentation of and access to the excavation archive and finds from the Dikastiko Megaro site, on which a large part of this thesis is based, and who on many occasions patiently explained to me several aspects of the evidence.

My sincere thanks are also due to the Ephor of the 26th Ephorate of Prehistoric and Classical Antiquities, Dr G. Steinhauer for granting me access to re-examine excavated material managed by the Ephorate, and Dr C. Axioti, Director of the Piraeus Archaeological Museum, for enabling my research visits there between 2002 and 2004. The staff of archaeologists, conservators, photographers, archivists and guards at the Museum, especially Miss Maria Giannopoulou and Miss Eleni Kallianezou, were instrumental in facilitating many aspects of the project.

The following people provided much useful help, advice and support on several issues and at critical moments in the course of this project: Dr Steve Willis for his valuable comments and advice in the early stages; Mr John Donaldson at the Museum of Classical Archaeology, University of Cambridge, for kindly allowing me to consult the Sherd Reference Collection and for his hospitality during this research visit; Dr Ardle McMahon for sharing his knowledge and helpful comments on domestic architecture and shops in the Roman Empire; Mrs Yvonne Beadnell, Mr Jeff Veitch and Mr Trevor Woods for help and advice on archaeological photography and illustration; Mr Giorgos Papamichelakis, for studying the Roman coins from the Dikastiko Megaro site; Mr Christos Milionis, who helped out with fieldwork at the Dikastiko Megaro site; the staff of the Photographic Archive of Eleftherotypia newspaper in Athens, especially Mr Vassilis Tzavelas, for providing figure 53; Mr James Bruhn, Mr Andreas Pantazatos and Miss Anastasia Siouzouli for advising, editing and commenting on several aspects of the text; finally, my parents for their unconditional support.

To all these persons, and those who I may have forgotten to name, I wish to extend my deepest thanks, but I should state that they are not accountable for what mistakes made or the views voiced in the following pages.

Dimitris Grigoropoulos

Durham, March 2005

Abbreviations

<i>AAA</i>	<i>Αρχαιολογικά Ανάλεκτα ἐξ Ἀθηνῶν/ Athens Annals of Archaeology</i>
<i>ΑΔ</i>	<i>Αρχαιολογικόν Δελτίον</i>
<i>AE</i>	<i>Αρχαιολογική Εφημερίς</i>
<i>AJA</i>	<i>American Journal of Archaeology</i>
<i>AJPh</i>	<i>American Journal of Philology</i>
<i>AK</i>	<i>Antike Kunst</i>
<i>AM</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts. Athenische Abteilung</i>
<i>AR</i>	<i>Archaeological Reports</i>
<i>BAR</i>	<i>British Archaeological Reports</i>
<i>BCH</i>	<i>Bulletin de Correspondance Hellénique</i>
<i>BICS</i>	<i>Bulletin of the Institute of Classical Studies</i>
<i>BMC</i>	<i>Coins of the Roman Empire in the British Museum</i> (edited by H. Mattingly et al., London: Trustees. 1923 –)
<i>BSA</i>	<i>Annual of the British School at Athens</i>
<i>CPhil</i>	<i>Classical Philology</i>
<i>CIL</i>	<i>Corpus Inscriptionum Latinarum</i> (Berlin, 1863-)
<i>CQ</i>	<i>Classical Quarterly</i>
<i>DOP</i>	<i>Dumbarton Oaks Papers</i>
<i>IG</i>	<i>Inscriptiones Graecae</i> (Berlin, 1873)
<i>IJNA</i>	<i>International Journal of Nautical Archaeology and Underwater Exploration</i>
<i>JAR</i>	<i>Journal of Anthropological Research</i>
<i>JHS</i>	<i>Journal of Hellenic Studies</i>
<i>JRA</i>	<i>Journal of Roman Archaeology</i>
<i>JRS</i>	<i>Journal of Roman Studies</i>
<i>NC</i>	<i>Numismatic Chronicle</i>
<i>OJA</i>	<i>Oxford Journal of Archaeology</i>
<i>ΠΑΕ</i>	<i>Πρακτικά της εν Αθήναις Αρχαιολογικής Εταιρείας</i>
<i>P. Abinn.</i>	Bell, H.I. (ed.) (1962) <i>The Abinnaeus Archive: Papers of a Roman Officer in the Reign of Constantius II</i> . Oxford: Clarendon Press
<i>P. Corn.</i>	Westermann, W.L. & Kraemmer Jr., C.J. (eds.) (1926) <i>Greek Papyri in the Library of Cornell University</i> . New York: Columbia University Press
<i>PCPS</i>	<i>Proceedings of the Cambridge Philological Society</i>
<i>P. Fay. Towns</i>	Grenfell, B.P., Hunt A.S. & Hogarth, D.G. (eds.) (1900) <i>Fayum Towns and their Papyri</i> . London: Egypt Exploration Society
<i>P. Kell.</i>	Worp, K. (ed.) (1995) <i>Greek Papyri from Kellis</i> . Oxford: Oxbow
<i>P. Mich. X</i>	Browne, G.M. (ed.) (1970) <i>Documentary Papyri from the Michigan Collection</i> (American Studies in Papyrology vol. 6). Toronto: A.M. Hakkert
<i>RIC</i>	<i>Roman Imperial Coinage</i> (edited by H. Mattingly, London: Spink. 1923 –)

- SB X Krießling, E. (ed.) (1971) *Sammelbuch Griechischer Urkunden aus Ägypten, X. Band.* Wiesbaden: Otto Harrassowitz
- SB XVI Rupprecht, H.A. (ed.) (1988) *Sammelbuch Griechischer Urkunden aus Ägypten, XVI. Band.* Wiesbaden: Otto Harrassowitz
- SEG *Supplementum Epigraphicum Graecum* (Leiden, 1923)
- TAPA *Transactions and Proceedings of the American Philological Association*
- ZPE *Zeitschrift für Papyrologie und Epigraphik*

List of illustrations

- Figure 1: North-eastern coast of Attica with location of Piraeus peninsula. Scale: 1: 5000 (map by author based on Encarta World Atlas)
- Figure 2: Piraeus peninsula with locations mentioned in text (map by author based on Eickstedt 1991: folding map 2)
- Figure 3: Map of Piraeus with Venetian fortifications on Mounichia hill and across the isthmus (source: Sophou 1973)
- Figure 4: Map of Piraeus by Stuart & Revett (source: Stuart & Revett 1792)
- Figure 5: Colonel W.M. Leake's map of Piraeus and environs (source: Panagos 1995)
- Figure 6: Map of Piraeus and environs by Curtius and Kaupert (source: Panagos 1995)
- Figure 7: Reported excavations in Piraeus from the later 19th to the end of the 20th century.
- Figure 8: Aerial view of Piraeus peninsula from the east in the late 1960s (source: Raymond & Schoder 1974)
- Figure 9: Plan of the remains of ship-sheds excavated at Zea harbour in 1885 (source: Petrakos 1987)
- Figure 10: Remains of the ship-sheds at Zea harbour after their excavation. From a late 19th century photo (source: Eickstedt 1991)
- Figure 11: Early Roman building at Zea harbour excavated in 1892 (source: Dragatsis 1892)
- Figure 12: Silver bracelet probably from Piraeus (now in private collection; not to scale). The inscription reads: ΑΡΧΕΛΛΑΟC CΤΡΑΤΟΠΕΔΑΡΧΗC ΤΩΝ ΕΝ ΠΕΙΡΑΙΕΙ ΑΠΟΛΛΩΝΙΩΙ ΑΠΟΛΛΩΝΙΟΥ CΥΡΩΙ ΑΡΙCΤΕΙΟΝ (source: Empereur 1981)
- Figure 13: Sulla's siege and sack of Piraeus in 86 BC. Numbers indicate sites with reported evidence for damage. Letters indicate places of the discovery of stone missiles associated with the siege. (map drawn by author based on Eickstedt 1991)
- Figure 14: 'House of the Dionysiasts' (source: Dörpfeld 1888)
- Figure 15: Stone missiles from Piraeus. Not to scale (source: Kyriacopoulos 1997)
- Figure 16: Bronze statues of Athena and Artemis in situ. From the cache of statuary discovered in Piraeus in 1959 (photo: Vanderpool 1960)
- Figure 17: Map of Athens and Piraeus in the 5th c. BC with fortifications (source: Travlos 1971)
- Figure 18: Method of extracting round missiles from funerary columns (source: Kyriacopoulos 1997)
- Figure 19: Stone missiles from funerary columns discovered in Piraeus with preserved part of original inscription (source: Kyriacopoulos 1997)
- Figure 20: Plots/ Sites with building remains dating between the Classical and the Late Roman period (source: Eickstedt 1991: folding map 2)
- Figure 21: Plots/ Sites with material dating to the Roman period discovered in Piraeus. Red line indicates modern coastline. For brief

descriptions and explanation of the data see Appendix 1 (map by author based on Eickstedt 1991: folding map 2)

- Figure 22: Site continuity in Piraeus, 4th – 1st c. BC. Based on excavated urban sites with datable building remains only; data include sites with uncertain and possible dating evidence after Eickstedt 1991, 261 ff.
- Figure 23: Regional distribution of new sites per century in the pre-Sullan era. For the regions, see Figure 2. Urban sites with building remains only (including sites for which dating evidence is uncertain or probable). Data after Eickstedt 1991, 261 ff.
- Figure 24: Density maps of surface data for the Classical/ Early Hellenistic and Late Hellenistic/Early Roman periods from an urban survey of the city of Thespieae, Boeotia, Greece (source: Alcock 1993)
- Figure 25: Inscribed tombstones of Roman imperial date from Piraeus: chronological distribution (based on *IG II²* and *IG III ed. minor*)
- Figure 26: Groups commemorated on tombstones discovered in Roman Piraeus (total = 37 names)
- Figure 27: Structure of epitaph on the tombstone of Alexandros, son of Alexandros from Miletos. Found near Piraeus, 2nd c. AD (photo from Casson 1994)
- Figure 28: Deme origin of male citizens commemorated on tombstones discovered in region Ib (Piraeus/ Phaleron), 400 – 200 BC; total= 177 names (source: Damsgaard-Marsden 1988)
- Figure 29: Deme origin of male citizens commemorated on tombstones discovered in/ nearby Piraeus and Phaleron, 1st – 3rd c. AD (total= 25 names)
- Figure 30: Origins of foreigners commemorated on tombstones of Roman imperial date from Piraeus (total= 63 tombstones)
- Figure 31: Building remains and other discoveries of Roman date in the central isthmus area, superimposed on the modern street grid (brown). Site numbers as in Appendix 1. Red: modern coastline. Light blue: approximate area of the Emporion. Dark blue: remains of building and water supply features. Green: tombs
- Figure 32: Venice, Arsenal. Marble statue of lion of Roman imperial date from Piraeus (photo: author)
- Figure 33: Marble portraits of Claudius (right) and Trajan (left) recovered from the seabed of the Kantharos harbour. Not to scale (source: Steinhauer 1997)
- Figure 34: Colossal marble bust of Hadrian from the eastern waterfront area of the Kantharos harbour (source: Steinhauer 1997)
- Figure 35: Marble statue of Balbinus from the eastern waterfront area of the Kantharos harbour (source: Steinhauer 1997)
- Figure 36: Pedestal of the Roman imperial period discovered underneath Late Roman building remains near the eastern waterfront area of the harbour (source: Steinhauer 1989c)
- Figure 37: Plan of excavated Roman building at Zea redrawn to show elements of different architectural phases and other structural features (after Dragatsis 1892)
- Figure 38: Mosaic floor from the early Roman building at Zea (source: Panagos 1995)

- Figure 39: Sarno baths, Pompeii. A: Bath suite on street level. B: Baths and chambers on lower terrace (source: Fagan 2002)
- Figure 40: Aerial view of the remains of the Hellenistic theatre at Zea (source: Eickstedt 1991)
- Figure 41: Late Roman bath at Kolokotroni 118 St. Actual state plan (source: Steinhauer 1988)
- Figure 42: Plan and section of a Late Classical – Early Hellenistic subterranean bath from Piraeus (source: Yegül 1992)
- Figure 43: Marble inscription (A) and document relief (B) from the sanctuary of Paralos at Piraeus. Discovered in the cargo deposits of the Mahdia shipwreck. Not to scale (source: A: Petzl 1994; B: Bauchhenß 1994)
- Figure 44: Map of the central – western part of the Piraeus peninsula, showing the location of the sanctuaries of Asklepios and Artemis. (Source: Eickstedt 2001)
- Figure 45: Plan of building remains associated with the sanctuary of Artemis Mounychia, discovered on the site of the Piraeus Yacht Club on Koumondourou Hill (source: Palaiokrassa 1994)
- Figure 46: Dedicatory statue of a young boy, Roman imperial period. From the Asklepieion in Piraeus (source: Eickstedt 2001)
- Figure 47: Roof tile with incised dedication from the sanctuary of Artemis Mounychia, 1st or 2nd c. AD (source: Palaiokrassa 1994)
- Figure 48: Actual state plan of site at Distomou 9 showing quarry cuttings and cisterns of Late Classical – Hellenistic date followed by Late Hellenistic – Early Roman cemetery (source: Eickstedt 1991)
- Figure 49: Chamber tomb dating to the Roman imperial period from the northern part of the Akte peninsula (source: Eickstedt 1991)
- Figure 50: Distribution of limestone quarry sites in Piraeus. Sites of all periods, including undated ones (source: Eickstedt 1991)
- Figure 51: Chronological distribution of ancient limestone quarry sites assessed by dating criteria for their main period of use. Certainly datable sites only (N= 30). Data from Eickstedt 1991
- Figure 52: “Continuity graph” of ancient limestone quarry sites in Piraeus (N= 38, including sites where dating within a century is probable). Data from Eickstedt 1991
- Figure 53: General view of Dikastiko Megaro site from NE during excavation with approximate area occupied by late 19th c. houses (red) and extension trench (blue) (based on photo provided by the photographic archive of *Eleftherotypia* newspaper)
- Figure 54: General view of the Dikastiko Megaro site from E shortly after excavation (photo: Archive of 26th Ephorate of Prehistoric and Classical Antiquities)
- Figure 55: Standing masonry at Dikastiko Megaro site. View from SW (photo: author)
- Figure 56: Vertical extent of excavation in the Dikastiko Megaro site by surface area (data compiled from excavation notebooks and site plan reproduced in figure 58)
- Figure 57: House 1, NE corner wall enclosing the residential block. View from N – NE (photo: author)

- Figure 58: Areas and early features in the Dikastiko Megaro site discussed in Chapter 4 (redrawn by author based on actual state plan, archive of the 26th Ephorate of Prehistoric and Classical Antiquities)
- Figure 59: Shallow cuttings on bedrock in R23. View from S (photo: author)
- Figure 60: Black-glazed fish-plates (left) and salt-cellar (right) with traces of red colour from a Hellenistic deposit excavated in R17 (photos: author)
- Figure 61: Clay extraction and manufacturing waste pits of Late Hellenistic and Early Roman date in the SE part of the civic agora at Thessaloniki (source: Valavanidou 2001)
- Figure 62: Inscription of the market officers of Piraeus from the Dikastiko Megaro site (source Steinhauer 1997)
- Figure 63: Marble standard for the measurement of liquids from the Dikastiko Megaro site (source: Steinhauer 1997)
- Figure 64: Layout of the Classical street grid with location of commercial market as reconstructed by Hoepfner & Schwandner 1994. Arrow shows location of DM site
- Figure 65: Excerpt from the excavation notebook showing position of stone – grinder kit (comprising elements α and β in sketch) found above bedrock in R7 (source: Archive of the 26th Ephorate of Prehistoric & Classical Antiquities)
- Figure 66: Marble slab (abacus) with inscribed characters discovered in R7 (photo: author)
- Figure 67: Marble breast-weight discovered in R7 (photo: author)
- Figure 68: Water storage and management features at the Dikastiko Megaro site discussed in text (based on plan reproduced in figure 58)
- Figure 69: Dikastiko Megaro site. Water pool in the courtyard of House 1. View from SE (photo: author)
- Figure 70: System of water storage cisterns and tunnels underneath House 1. Not to scale (adapted from Tsaravopoulos 1996)
- Figure 71: Late Roman water tank in House 2. View from N (photo: author)
- Figure 72: Drain channel in entrance corridor of House 1. View from NW (photo: author)
- Figure 73: Graffiti on the N wall of T2 showing Middle – Late Roman ships; scale as shown (Source: Tsaravopoulos 1996)
- Figure 74: Graffiti on the S wall of T2 showing Middle – Late Roman ships; scale as shown (Source: Tsaravopoulos 1996)
- Figure 75: Section of cistern C1 (based on sketch in excavation notebook, Archive of 26th Ephorate Of Prehistoric & Classical Antiquities)
- Figure 76: Plan and section of tunnel T1 leading to cistern C1 (based on sketch in excavation notebook, Archive of the 26th Ephorate of Prehistoric and Classical Antiquities)
- Figure 77: Aerial view of 1971 excavation on Peiraios St. from N with exposed N segment of Classical Long Walls marked by arrow on photo (source: Liangouras & Papachristodoulou 1972)
- Figure 78: N segment of Classical Long Walls with rectangular features of the Roman period (source: Liangouras & Papachristodoulou 1972)

- Figure 79: Simplified plan showing alternating piers of Roman aqueduct set on top the N segment of the Classical fortifications (source: Liangouras & Papachristodoulou 1972)
- Figure 80: Piraeus, Kountourioti St. 54 – 56 site: plan and section of Roman aqueduct tunnel (source: Petritaki 2002b)
- Figure 81: Piraeus, Kountourioti St. 54 – 56 site: view of Roman aqueduct tunnel from N, showing inspection shaft in the foreground (source: Petritaki 2002b)
- Figure 82: Excerpt from Judeich's map of ancient remains in Piraeus, with arrow pointing to the location of the rock-cut channel discovered along modern Iron Polytechniou Ave. (source: Judeich 1931)
- Figure 83: Piraeus, Dikastiko Megaro site: Simplified plan with area/ room numbers and buildings discussed in text (drawn by author, based on plan reproduced in figure 58)
- Figure 84: Simplified plan of House 1 in the 2nd century AD (drawn by author, based on plan reproduced in figure 58)
- Figure 85: Wall between House 1 and House 2 showing detail of masonry construction (view S) (photo: author)
- Figure 86: Surviving patch of Phase 1 pebble mosaic NW of pool in House 1 (photo: author)
- Figure 87: Simplified plan of House 1 in the later 2nd/ 3rd century AD (drawn by author, based on the plan reproduced in Figure 58)
- Figure 88: Blocked access between R33 and R35. View SE to R33 (photo: author)
- Figure 89: Marble-paving in pool of House 1. Detail of well (covered after excavation) and preserved marble slabs (photo: author)
- Figure 90: Simplified plan of House 2 in 2nd – 3rd century AD (drawn by author, based on plan reproduced in figure 58)
- Figure 91: Preserved patch of pebble mosaic in the courtyard of House 2 (photo: author)
- Figure 92: Fragment of decorated terracotta cornice (Piraeus Museum Inv. No. 8978) from the courtyard of House 1 (photo: author)
- Figure 93: Reconstructed house block of Classical date from Piraeus (source: Hoepfner and Schwandner 1994)
- Figure 94: Simplified plan of House 3 (late 5th – 6th c. AD) with House 1 in outline (drawn by author, based on plan reproduced in figure 58)
- Figure 95: Floor pavement at W corner of R37 in House 3 (photo: author)
- Figure 96: Enclosure wall of courtyard in House 3 (view from SW (photo: author)
- Figure 97: Re-used headstone block of a well in House 3. View to SE (photo: author)
- Figure 98: Staircase in House 3. View to NE (photo: author)
- Figure 99: Marble column (background left) in House 3, possibly originally from the pool in R31 (photo: author)
- Figure 100: Traces of burning on standing masonry in House 3 (R59). View from N (photo: author)
- Figure 101: Simplified plan of House 2 during the 4th – 6th c. AD (drawn by author, based on plan reproduced in figure 58)
- Figure 102: House 2, R14: Column of the older peristyle encased within limestone slabs of the 4th century AD water tank (photo: author)

- Figure 103: House 2, R4: Partition wall erected in middle of R5; detail of masonry (photo: author)
- Figure 104: House 2, R23: Wall towards R24 showing large boulders with traces of burning (view from NW; photo: author)
- Figure 105: Walled-up entrance from R16 to R14 in House 2. Note the different masonry styles and the blocked threshold stone jutting out. View from SE (photo: author)
- Figure 106: Comparison of surface area of House 2 in the Early-Middle (A) and the Late Roman (B) periods. The calculations are based on measurements as reconstructed on the phase plans in figures 90 & 101 and take account only of the useable floor area of the building in each phase.
- Figure 107: Residential units ('apartments') in House 2 after its subdivision in the 4th c. AD (based on actual state plan, archive of 26th Ephorate of Prehistoric & Classical Antiquities)
- Figure 108: Bracket wall of Late Roman date inside R17 in House 2 (photo: author)
- Figure 109: Tipasa, "House of the Frescoes" with subdivision walls in black-and-white (after Baradez 1961)
- Figure 110: Residential block of the 4th c. AD excavated at Kellis, Egypt (after Alston 2002)
- Figure 111: Units of ownership identified in House 2 after its subdivision in the 4th c. AD
- Figure 112: Threshold blocks with hole for door pivot from R22 in House 2 (photo: author)
- Figure 113: Residential complex at Kôm el-Dikke, Alexandria (5th – 6th c. AD) (after Alston 2002)
- Figure 114: Areas of Houses 1 & 2 covered in the study of domestic artefacts (in grey) (drawn by author, based on plan reproduced in figure 58)
- Figure 115: House 1 in the Late Roman period with rooms discussed in the study of domestic finds (drawn by author, based on plan reproduced in Figure 58)
- Figure 116: House 2 in the Late Roman period with rooms discussed in the study of domestic finds (drawn by author, based on plan reproduced in figure 58)
- Figure 117: Coins (including residual and unidentified finds) from the latest occupation levels of the houses. Totals: House 1: N=55; House 2: N=80; Total: N=135. For the data and short descriptions, see Appendices 6 & 7 (under "Category 2A", where available).
- Figure 118: Parts of pottery recovered by different excavators from the latest occupation levels of House 1 & House 2 by raw counts. Residual pottery is included
- Figure 119: Scores of probability in the recovery of 1) black-glazed, 2) fine and 3) coarse/ plain body sherds from the latest occupation levels of Houses 1 & 2 for each of the four excavators. Scores closest to 1.0 denote a high level of probability
- Figure 120: Marble bowls from latest occupation levels of R25 (drawn by author)
- Figure 121: Round-cut sherds from the latest occupation levels of Houses 1 & 2 (drawn by author)

- Figure 122: Finds of the 'containers' group from the latest occupation levels of House 1. Excluding certainly residual material. For the data, see Appendix 6
- Figure 123: Finds of 'accessories' group from the latest occupation levels of House 1. For the data, see Appendix 6
- Figure 124: Relative quantities of residual and in-phase pottery (based on Category 1A finds) from the latest occupation levels of House 1. For the data, see Appendix 6
- Figure 125: Relative quantities of re-fitted and "orphan" pottery sherds from the latest occupation levels of House 1. Finds from all categories except 1G (Habitat: Lamps) are included
- Figure 126: Finds of the 'containers' group recovered from House 2. Excluding certainly residual material. For the data see Appendix 7
- Figure 127: Finds of the 'accessories' group from House 2. For the data see Appendix 7
- Figure 128: Relative quantities of residual and in-phase pottery (based on Category 1A finds) from the latest occupation levels of House 2. For the data, see Appendix 7
- Figure 129: Relative amounts of re-fitted and "orphan" pottery sherds from the latest occupation levels of House 2. Finds from all categories except 1G (Habitat: Lamps) are included.
- Figure 130: Lamps from the latest occupation levels of R4 (photo: author)
- Figure 131: The occurrence of whole/ restored lamps from the latest occupation levels of Houses 1 & 2. Total = 26 lamps. For the data, see Appendix 6 & 7
- Figure 132: Amphora (1) and lamp (2) from R6 (photos: author)
- Figure 133: Lamps (1 – 4) and fragments of marble statuary (5 – 6) from R48 (photos: author)
- Figure 134: Vessels of Category 1D from R56 (drawn by author)
- Figure 135: Relative quantities of containers of different function types recovered from the latest occupation levels of House 1. Excluding residuals. For the data see Appendix 6
- Figure 136: Relative quantities of accessories of different function types recovered from the latest occupation levels of House 1. For the data see Appendix 6
- Figure 137: Vessels of Category 1E from House 1 (drawn by author)
- Figure 138: Fragments of funnels from R68. Scale 1:3 (drawn by author)
- Figure 139: AWPW (first three from top) and RCW II vessels from House 1 & 2. First and last from top come from R58. Scale 1:3 (drawn by author)
- Figure 140: Brick-and-stone built structure in R57. View to NW (photo: author)
- Figure 141: Vessels of Category 1D (upper table) and 1E (lower table) from R25 (drawn by author)
- Figure 142: Vessels of Category 1C from R68. Scale 1:4 (drawn by author)
- Figure 143: Relative quantities of containers of different function types recovered from the latest occupation levels of House 2, Unit I. Excluding residuals. For the data see Appendix 7

- Figure 144: Relative quantities of accessories of different function types recovered from the latest occupation levels of House 2, Unit I. For the data see Appendix 7
- Figure 145: Fragment of glass lamp from R13 (photo: author)
- Figure 146: A. Rim fragment of a beehive kalathos from R13 (drawn by author), and B. Beehive kalathoi found at Isthmia (after Anderson-Stojanović & Ellis Jones 2002)
- Figure 147: ‘Sprinkler jug’ (Piraeus Museum Inv. No. 8952) from R15 with detail of mouth (photos: author)
- Figure 148: Small jug from R11 (Piraeus Museum Inv. No. 8938; left) and loomweight from R21, similar to the one found in R23 (Piraeus Museum Inv. No. 8985; right) from R23 (photos: author)
- Figure 149: Relative quantities of containers of different function types recovered from the latest occupation levels of House 2, Unit II. Excluding residuals. For the data see Appendix 7
- Figure 150: Relative quantities of different function types recovered from the latest occupation levels of House 2, Unit II. For the data see Appendix 7
- Figure 151: Marble mortar from R19B (drawn by author)
- Figure 152: Clay loom-weight from R21 (photo by author)
- Figure 153: Relative quantities of containers of different function types recovered from the latest occupation levels of House 2, Unit III. Excluding residuals. For the data see Appendix 7
- Figure 154: Relative quantities of accessories of different function types recovered from the latest occupation levels rooms of House 2, Unit III. For the data see Appendix 7
- Figure 155: Relative quantities of containers of different function types recovered from the latest occupation levels of House 2, Unit IV. Excluding residuals. For the data see Appendix 7
- Figure 156: Relative quantities of accessories of different function types recovered from the latest occupation levels of House 2, Unit IV. For the data see Appendix 7
- Figure 157: Marble block in R55. (photo: author)
- Figure 158: Extract from the excavation notebook showing the location of kiln (circular feature to the right) in R55 (Archive of the 26th Ephorate of Prehistoric & Classical Antiquities)
- Figure 159: Relative quantities of containers of different function types recovered from the latest occupation levels of House 2, Unit IV. Excluding residuals. For the data see Appendix 8
- Figure 160: Relative quantities of accessories of different function types recovered from the latest occupation levels of House 2, Unit IV. For the data see Appendix 7
- Figure 161: Recording sheet for pottery data used in the study
- Figure 162: Fragment of kantharos in West Slope decoration with lead clamp. From a post-Sullan context at the Dikastiko Megaro site, Piraeus (photo: author)
- Figure 163: ES A from Piraeus, 1st century BC to early 2nd century AD. Nos. 1 – 2 from site no. 16 (Appendix 1) rest from Dikastiko Megaro site (drawn by author)

- Figure 164: Early – Middle Roman thin-walled wares from Piraeus. Nos. 1 & 6 from Dikastiko Megaro site; nos. 2 – 5 from site no. 17 (Appendix 1) (drawn by author)
- Figure 165: 1st century BC amphorae from Piraeus. All from Dikastiko Megaro site (drawn by author)
- Figure 166: Local/ Athenian red-coated (nos. 1 – 2 & 4 – 5) and sigillata-inspired (no. 3) pottery. All from site no. 16 (Appendix 1), except no. 5 (from Dikastiko Megaro site) (drawn by author)
- Figure 167: ES B from Piraeus, drinking cups. Nos. 1 & 3 from site no. 16 (Appendix 1), no. 2 from Dikastiko Megaro site (drawn by author)
- Figure 168: Arretine and Italian Sigillata from Piraeus. No. 1 from site no. 16 (Appendix 1), rest from Dikastiko Megaro site (drawn by author)
- Figure 169: Early Roman amphorae, 1st – early 2nd century AD. All from Dikastiko Megaro site (drawn by author)
- Figure 170: ES C/ Çandarli from Piraeus. 1st/ 2nd to 4th c. AD forms. All from Dikastiko Megaro site (drawn by author)
- Figure 171: ES B from Piraeus, bowls. All from Dikastiko Megaro site (drawn by author)
- Figure 172: Benghazi MR amphora 2 fragments from Piraeus. All from Dikastiko Megaro site (drawn by author)
- Figure 173: Middle Roman amphorae from Piraeus. All from Dikastiko Megaro site (drawn by author)
- Figure 174: Athenian White Painted Ware from Piraeus. All from Dikastiko Megaro site (drawn by author)
- Figure 175: ARSW from Piraeus. 3rd – 4th century AD forms. All from Dikastiko Megaro site (drawn by author)
- Figure 176: Middle – Late Roman amphorae from Piraeus. All from Dikastiko Megaro site (drawn by author)
- Figure 177: ARSW from Piraeus. 5th & 6th century AD forms. Scale 1:2 (nos. 1 & 2), rest 1:4. All from Dikastiko Megaro site (drawn by author)
- Figure 178: Late Roman amphorae from Piraeus. All from Dikastiko Megaro site. Scale as shown, except for no. 9 (1:8) (drawn by author)
- Figure 179: Phocaean Ware from Piraeus, Dikastiko Megaro site (drawn by author)
- Figure 180: Late Roman fine wares. 1. AWPW handled bowl; 2. AWPW bowl; 3. Red-coated bowl; 4. ‘Coptic Ware’ shallow bowl (drawn by author)
- Figure 181: Nos. 1 – 7: Various Early – Late Roman fine and thin-walled wares from Piraeus; no. 8: Late Roman red-coated gouged ware jug. All finds from Dikastiko Megaro site (photos: author)
- Figure 182: Roman amphorae from Piraeus. All finds from Dikastiko Megaro site, except no. 1 (Shaft at Leosthenous & Kharilaou Trikoupi St.) (photos: author)
- Figure 183: Piraeus, Giannopoulos plot: Late 1st – early 2nd c. AD deposit. Percentages of fine and thin-walled wares based on counts. Total= 42
- Figure 184: Piraeus, deposits of the 2nd c. AD. Percentages of fine and thin-walled wares based on counts. Total= 94 (excluding residual and

- intrusive material). For the deposits included here see Figure 1 and Appendix 1
- Figure 185: Piraeus, deposits of the 3rd c. AD. Percentages of fine and thin-walled wares based on counts. Total= 85 (excluding residual and intrusive material). For the deposits included here see Figure 1 and Appendix 1
- Figure 186: Piraeus, deposits of the late 3rd – mid-4th c. AD. Percentages of fine and thin-walled wares based on counts. Total= 55 (excluding residual and intrusive material). For the deposits included here see Figure 1 and Appendix 1
- Figure 187: Piraeus, deposits of the Later 4th – Mid-5th c. AD. Percentages of fine and thin-walled wares based on counts. Total= 106 (excluding residual and intrusive material).
- Figure 188: Piraeus, deposits of the later 5th – early 6th c. AD. Percentages of fine and thin-walled wares based on counts. Total= 118 (excluding residual and intrusive material).
- Figure 189: Piraeus, deposits of the 2nd c. AD. Percentages of principal amphora fabrics based on counts. Total=172. Sherds of miscellaneous and/or unidentified amphorae are included in the calculation but not represented on the graph.
- Figure 190: Piraeus, deposits of the 3rd c. AD. Percentages of principal amphora fabrics based on counts. Total=1482. Sherds of miscellaneous and/or unidentified amphorae are included in the calculation but not represented on the graph.
- Figure 191: Percentages of principal amphora fabrics based on counts from deposits of the later 3rd – mid-4th c. AD. Total=463. Sherds of miscellaneous and/or unidentified amphorae are included in the calculation but not represented on the graph.
- Figure 192: Percentages of principal amphora fabrics based on counts from deposits of the later 4th – mid-5th c. AD. Total=403. Sherds of miscellaneous and/or unidentified amphorae are included in the calculation but not represented on the graph.
- Figure 193: Percentages of principal amphora fabrics based on counts from deposits of the later 5th – early 6th c. AD. Total=958. Sherds of miscellaneous and/or unidentified amphorae are included in the calculation but not represented on the graph.
- Figure 194: Sites with quantified pottery data mentioned in text. For the sites in the inset, see figure 195. Scale 1: 5000000 (map by author based on Encarta World Atlas)
- Figure 195: The Saronic Gulf and north-eastern Peloponnese. Sites with Roman pottery data mentioned in text. Scale 1:200000 (map by author based on Encarta World Atlas)
- Figure 196: Sources of fine and thin-walled wares in 1st/ 2nd c. AD Piraeus. Percentages based on RBHS counts. For the pottery data, see Figure 183
- Figure 197: Sources of fine and thin-walled wares in 2nd c. AD Piraeus. Percentages based on RBHS counts. For the pottery data, see Figure 184

- Figure 198: Sources of fine and thin-walled wares in 3rd c. AD Piraeus. Percentages based on RBHS counts. For the pottery data, see Figure 185
- Figure 199: Sources of fine and thin-walled wares in the Piraeus in the period between the later 3rd to ca. mid-4th c. AD. Percentages based on RBHS counts. For the pottery data, see Figure 186
- Figure 200: Sources of fine and thin-walled wares in the Piraeus in the period between the later 4th to ca. mid-5th c. AD. Percentages based on RBHS counts. For the pottery data, see Figure 187
- Figure 201: Sources of fine and thin-walled wares in the Piraeus in the period between the later 5th to the early 6th c. AD. Percentages based on RBHS counts. For the pottery data, see Figure 188
- Figure 202: Sources of amphorae in 2nd c. AD Piraeus. Percentages based on RBH counts. For the pottery data, see Figure 189
- Figure 203: Sources of amphorae in 3rd c. AD Piraeus. Percentages based on RBH counts. For the pottery data, see Figure 190
- Figure 204: Sources of amphorae in Piraeus for the period between the later 3rd to ca. mid-4th c. AD. Percentages based on RBH counts. For the pottery data, see Figure 191
- Figure 205: Sources of amphorae in Piraeus for the period between the later 4th to ca. mid-5th c. AD. Percentages based on RBH counts. For the pottery data, see Figure 192
- Figure 206: Sources of amphorae in Piraeus for the period between the later 5th to ca. mid-6th c. AD. Percentages based on RBH counts. For the pottery data, see Figure 193

PART B

Illustrations

PART A

Appendices & Bibliography

Introduction

1. Studying the urban landscapes of Roman Greece

Archaeological work on Roman Greece (the Roman province of Achaia) in the past has highlighted the complex responses of the Greek Achaian population to the Roman conquest. Regional archaeological surveys in particular have made evident some dramatic shifts in the settlement structure, demography and economy of certain areas of central and southern Greece from the 2nd century BC to the 3rd century AD. Compared to both previous and later periods, survey data for this time frame suggest in places a deserted or less populated rural landscape and increased patterns of nucleated settlement in urban centres (Alcock 1993). For the period between the 4th and the 7th century AD, evidence throughout southern Greece seems to suggest the opposite: an expansion of settlement in the countryside with some urban centres experiencing recovery from a period of depression and others continuing in importance (Fowden 1985; Kosso 2003).

If, as implied by the survey data, urban centres acquired additional importance in regional settlement, demography and economy during the Roman period particular attention should be paid to their study when writing the history of settlement of Roman Greece. Surprisingly, however, our knowledge of the urban landscapes of this period is extremely limited. This situation appears odd, given the fact that ancient Greek cities, the most obvious examples being Athens and Corinth, have long been the focus of research and excavation by Classical archaeologists. As Alcock (1993) has pointed out, however, excavation of cities normally does not extend beyond small pockets in the heart of their territory, the civic centre or important buildings and monuments, leaving the greatest part of the area that they occupied unknown to modern research.

With the expansion of surveys in recent years, we have come to a point where we know less about urban centres themselves and increasingly more about their territories and landscape around them. While urban surveys have to some extent redressed this imbalance (cf. Bintliff & Snodgrass 1988; Alcock 1991), such fieldwork can be undertaken only in areas which have been least disturbed by modern development. The fact that many modern Greek cities have developed

on top of ancient ones makes the archaeological investigation of pre-modern occupation levels a particularly burdensome and sometimes impossible task (cf. Kaninia n.d; Michalaki-Kollia n.d.; Raftopoulou n.d.). Other reasons may also include the overwhelming amount of data that archaeologists excavating urban sites are required to handle, analyze and present and the (almost always) insufficient funds, time and human power to do so (cf. Dyson 1995: 43). Meanwhile, despite the upsurge in rescue excavations in the last decades of the 20th century, dissemination and publication of archaeological knowledge and results from such investigations has not been adequate (cf. Hadjisavvas & Karageorghis 2000).

However, this imbalance lies also very much in the nature of questions that have been posed by field survey and excavation. In fact, archaeological survey in Greece arguably developed in part as a reaction to the increased emphasis on data drawn from excavations at urban locations (cf. Osborne 1987a), by concentrating more on questions of long-term economic, demographic and ecological change in a wider region (Snodgrass 1987). In contrast, excavation of ancient Greek cities extended the study of historical topography, as practiced in the 19th century. Historical topography 'was a form of historical background knowledge that provided the external contours of the political course of events. The texts spoke of landscapes, places and monuments but their location and appearance were often unknown' (Andr n 1998: 121). Because of the emphasis on the aesthetic appreciation of archaeological remains, the very first excavations of ancient Greek cities tended also to look for works of artistic merit, which included not just the famous buildings and marble sculptures but also aspects of the evidence, such as town planning, that could be regarded as art products (Rumpf 1953; Andr n 1998: 17-18).

Despite recent developments in Classical archaeology and the continued interest in the urbanism of ancient Greece (Snodgrass 1987; Hoepfner & Schwandner 1994), it may be argued that the way in which urban centres are still studied and conceptualized owes much to the methods, theoretical concerns and agendas of 19th century explorers and archaeologists that pioneered the study. Such studies have been profoundly influenced by the perceived authority of Classical sources, which are regarded as the only valid point of departure for interpreting the archaeological record. Because of the fragmented landscape of

many modern Greek cities and the limited opportunities for detailed excavation, historical topography has ultimately resulted in the formation of a 'canon' about how cities should be studied by archaeologists (Dyson 1995: 35).

This thesis suggests that such an approach is restrictive in scope and has led to a stalemate in the study of ancient Greek urban environments. Historical topography may have had some relevance in the 19th century, when Classical archaeology (and archaeology in general) was still at an emerging stage as an academic discipline and when there was much ground to be covered by preliminary exploration (Andr n 1998: 121). But in the context of rapidly developing techniques, methods and approaches to interpretation in archaeology in the present (Hodder 1991; Morris 1994), it can only serve to perpetuate the image projected by 19th century Classical archaeologists: '...a Greece where noble souls debated great thoughts surrounded by elegant marble structures, rather than the probable Mediterranean reality of crowded streets, noisy shops and vociferous and often unpleasant inhabitants' (Dyson 1995: 35).

2. The example of the Piraeus

The history of archaeological studies of the Piraeus, the port of Athens in Antiquity, presents an interesting example of how these issues have affected the manner in which urban activity and settlement in Classical Antiquity have been studied, interpreted and portrayed. The Piraeus is a small rugged peninsula jutting out into the Saronic Gulf on the north-western coast of Attica and about 11 km to the south-west of Athens (**figs. 1 & 2**). From the later 18th century onwards, with the burgeoning appeal of Classical Greece to Western Europeans (Beard & Henderson 2000), the area, famous for its heritage as the port of Athens, started to attract the interest of enthusiasts and travelers. Among the first explorers, who arrived there on their way to Athens, were J. Stuart & N. Revett, W.M. Leake and E. Dodwell (Eickstedt 1991:7).

In contrast to Athens, where Classical monuments could be easily spotted and contemplated, the Piraeus presented a rather more problematic picture. The coastline had shifted dramatically since Antiquity, resulting in the submergence of ancient features and the blurring of the harbours (Steinhauer 2000: 41). Recent studies of archive material have shown that during the Venetian siege of Athens

in 1687, ancient remains had been extensively displaced and destroyed by the erection of a massive ditch that cut across the central isthmus (Sophou 1973; **fig. 3**). With the exception of segments of the Classical fortification circuit along the Akte and the Zea theatre (Dodwell 1821: 418-19, 429), visible material remains of the Classical town on the terrain were few and difficult to comprehend. It was primarily the Classical texts, which had been re-discovered, edited and studied anew from the Renaissance onwards (Meursius 1686), and their references to the Piraeus that kept the identity of the locality as the port of Classical Athens alive.

The visual discontinuity between the Classical town, with its monuments, buildings, harbours and street grid, described in the textual sources, and the contemporary landscape experienced by modern travelers (cf. Malikouti 2000: 127-28) enabled the emergence of the joint study of terrain and texts. Texts provided the information with which to understand and ‘map’ the ancient onto the contemporary landscape and to put the few visible archaeological remains in context. In the absence of much visible material, attempts concentrated on identifying natural features with place names mentioned in ancient texts, and on the production of maps (**fig. 4**). The pioneer of this method was undoubtedly Leake, who, apart from bringing along a profound knowledge of relevant Classical literature, such as the accounts of Strabo and Pausanias (Wagstaff 2001), also introduced detailed mapping and surveying techniques (**fig. 5**; Thomson de Grummond 1996: 666-667).

In the course of the later 19th century, roughly from the 1840s onwards, historical topography became the dominant method of archaeological study of the locality. New topographic surveys were launched and new text-based identifications of archaeological remains and natural features were proposed by a series of scholars such as Curtius (1841), Ulrichs (1843a; 1843b) and Hanriot (1853). Under the influence of the *Altortumswissenschaft* pioneered by K.O. Müller (Marchand 1996), topographic studies of the Piraeus and Attica in general, which until then focused on cartographic reconnaissance, became more closely related to ancient history and the developing field of Classical archaeology (e.g. Wachsmuth 1874; Hirschfeld 1878). Along with the emphasis on the production of more accurate maps, on which information could be illustrated, extended historical commentaries on the Piraeus were prepared.

This developed approach is exemplified in the launching of the *Karten von Attika* (1881 – 1894). The project, involving terrain reconnaissance and topographic study of the entire Attica region, resulted in the preparation of some new maps of the Piraeus peninsula and a commentary by A. Milchhöfer (1881) (**fig. 6**). Later works followed along the same lines of this developed approach of historical topography (cf. Eickstedt 1991: 10-11). Until the end of the 19th century, a substantial number of such studies had been produced, proposing new identifications for the harbours etc. but essentially reiterating the same evidence (e.g. Aggelopoulos 1898). While new discoveries were occasionally made and surface finds collected and transported to Athens (Meletopoulos 1960: 3), excavations were quite infrequent in the Piraeus until the 1880s, when the area and population of the modern, post-Ottoman town had begun to expand to a dramatic extent (cf. Malikouti 2000: 172 ff.).

The emphasis placed on the study of historical topography meant that when excavations started in the town the results could be accommodated well within the interpretative framework of this approach. It is noteworthy that one of the first abortive excavations in the town led by the Archaeological Society at Athens took place between 1840 and 1841 with the specific aim of finding the sanctuary of Artemis Mounychia, for which ancient testimonies provided rich references (cf. Palaiokrassa 1991). The failure to locate the temple building and ‘more interesting finds’ (Kastorkhis 1879: 23) led to delaying further investigation until the future. While excavations of a salvage nature brought to light material remains which could not be interpreted adequately, such as underground tunnels or scraps of walls, those excavations that could be planned ahead were essentially attempts to retrieve the monuments and finds mentioned by the ancient sources.

This tendency apparently continued well into the later part of the 19th and the early half of the 20th century, as shown by excavations and investigations of a number of sites, such as the ship-sheds of the Athenian fleet at Zea harbour (Dragatsis 1885), the so-called Serangeion (Dragatsis 1897; 1925/26) and the sanctuary of Artemis Mounychia (Threpsiadis 1935). In the second half of the 20th century, however, from the 1950s onwards, rescue excavations started on a massive scale across the town (**fig. 7**). Rebuilding after the Second World War and gradual development of areas that until then had been sparsely populated

provided many opportunities to examine deep stratigraphy. However, the expanding cityscape (**fig. 8**) and the belated arrival of intensive/ systematic excavation procedures made concentrated archaeological investigation a very difficult task (cf. Petrakos, in Eickstedt 1991). In the meantime, the increased pressure placed on few archaeologists to accomplish rescue projects not only in the Piraeus but also in the wider area of maritime and inland Attica resulted in a tendency to excavate, record and store, rather than analyze and publish, archaeological finds¹.

The rescue character of archaeology and the inadequate publication of the results of excavation maintained the vagueness of archaeological knowledge about the Piraeus in Antiquity. Writing in the mid 1980s, Hector Catling, then director of the British School at Athens, summed up the situation in a neat (and almost diplomatic) fashion:

‘Considering the importance of Piraeus to Athens from the time of Themistokles it is strange that it is so much of an archaeological Cinderella. Large numbers of discoveries are made every year but they appear very repetitive [...]. Reports on these excavations are succinct, to say the least.’

(Catling 1985/86: 13)

This situation has perpetuated the lack of any critical historical synthesis for the Piraeus from the earliest human occupation to the present day to which archaeological discoveries may legitimately contribute. Historical studies of the town in Classical Antiquity have tended to be descriptive, drawing primarily on ancient literary and epigraphic evidence rather than the archaeological material, which is used primarily as a medium to illustrate the texts (Panagos 1995; Garland 2001). Despite the wealth of material from the rescue excavations, archaeology’s role has been construed in restricted terms, as tantamount to supplying the public and academic community with finds that can be aesthetically appreciated (Morris 1994: 26), rather than contribute independently

¹ The finds from the 1935 systematic excavation on the site of the sanctuary of Artemis Mounichia were only published in the early 1990s. Cf. Palaiokrassa 1991

to an enhanced understanding of the town's past and its changing fortunes over time².

In recent years, this information has begun to be accorded more attention³. The work of Klaus-Valtin von Eickstedt (1991) deserves particular mention, as it has been the first study to discuss fully the recent discoveries resulting from rescue excavations in the town, and arguably one of the first to do so in the Classical archaeology of Greece. The study, which includes some useful maps of excavated sites and appendices with dating evidence, is a mine of information for anyone wishing to develop an overview of recent and older discoveries in the town. However, the methods and interpretative focus are very much in the tradition of historical topography, the neat description and classification of discoveries and the interpretation of those that make sense through the use of textual and epigraphic evidence.

The way that information is presented and discussed in Eickstedt's study reveals that archaeological evidence from the rescue excavations in the town is implicitly taken to be relevant for questions of a topographic nature only. More than a century after the first topographic studies of the Piraeus, this testifies to the power of historical topography as a research agenda and its continued influence in recent archaeological fieldwork and synthesis. It is no coincidence that, with the exception of monumental sculpture and epigraphy, historical topographic studies of the Piraeus, including that by Eickstedt (1991), do not take account of excavated finds at all, other than in the context of chronology. While historical topography has been thought by some as the only line of investigation of the archaeological record (Judeich 1931: 51), it is not more valid, and arguably less topical, than other archaeological approaches which are oriented towards issues of social, economic and cultural history.

3. Towards an alternative research framework

The continued influence of historical topography has contributed to the restricted scope of research on the urban centres of ancient Greece. As shown by the example of the Piraeus, synthetic studies of this nature have at best provided

² This is most well illustrated by spectacular discoveries, such as the Piraeus bronzes, which have monopolized academic interest in the ancient town. On the Piraeus bronzes, see Chapter 1, 34-35

³ See also Steinhauer 2000 for an overview of more recent discoveries which is also very much in the historical topographic tradition

updates of raw archaeological material, examined, when possible, from the prism of available textual sources, which are primarily concerned with political history. This has created a vicious circle of interpretation within which rescue excavations and the lack of adequate publication of their results are seriously implicated. The fact that the rich archaeological material, especially the less prestigious finds such as pottery, tile, glass etc., from urban areas remains under-researched and under-published presents obvious hindrances for assessing social and cultural change. Unavoidably, recourse is made to literary and epigraphic sources, which are frequently used to answer questions which they are not made to answer.

The problems faced by rescue archaeology in modern Greek towns and the lack of published data are not new, neither are they particular to the Greek context only (Mytum & Waugh 1987; Schofield & Leech 1987). Elsewhere in Europe, however, where techniques, methods and research management of such archaeological investigations were first developed on a broader basis, urban excavation data have long been used, alongside textual or documentary sources, as a legitimate means of reconstructing sequences of urban settlement history (Ottaway 1992; Jones 1984: 144 – 145). The examples of York in Britain (Hall 1978), Marseilles in France (Bonifay 1998; Hermary et al. 1999) and the inner cities of the Netherlands (van Es et al. 1982) are particularly relevant.

Among other issues, excavated finds and finds assemblages have been drawn upon to answer questions of urban production, trade and exchange as well as to illuminate the economic structures and consumption of material culture on a local level. In addition, stratified data compiled from small-scale excavations in a modern town can be examined in relation to functional aspects to illuminate changing land use, social life and economy within such areas over longer periods. Several attempts towards a meaningful retrieval, management and presentation of such information are now being made in the Mediterranean, as witnessed by the launch of projects within modern congested towns such as Carthage and, more recently, Beirut (cf. Cumberpatch 1995-96).

In Greece, partly for the reasons considered earlier, the exploitation of the potential of this rich resource for exploring settlement history and for enhancing historical knowledge about urban society in the past has not been considered seriously. Such material had always been seen as a kind of 'background noise' to

pure ‘research’ excavations (cf. Roskams 2001: 32, fig. 1). There are signs however that research on Greek towns is increasingly drawing upon such datasets and turning towards an approach which is less historical topographical in nature and more oriented towards questions of cultural, social and economic history (Schmid 1999; Zachos 2000; Oikonomou-Laniado 2003). If modern archaeological surveys have provided the evidence for writing the history of the Greek countryside (Snodgrass 1987; Alcock 1993), why cannot rescue excavation data from modern Greek cities provide the material to write the history of the country’s ancient urban centres and populations?

4. Definition of study area and previous research

This thesis attempts to go some way towards providing such an archaeological account of an urban landscape through the detailed and analytical use of archaeological data from rescue excavations. It presents a study of the settlement of the Piraeus peninsula in the Roman and Late Roman periods, between the early 1st century BC and the mid-late 6th century AD. The chronological starting point for the following discussion is provided by a historical date, the sack of the port by the Romans under the general Lucius Cornelius Sulla in 86 BC, an accepted benchmark in the history of Athens (Leslie Shear Jr. 1981; Hoff 1997). The term ‘Roman’ refers to this entire time frame, while ‘Roman imperial’ to the period roughly between the later 1st century BC and the 3rd century AD. In some chapters, when finer distinctions are possible and if necessitated by the nature of the question at hand, the terms ‘Early Roman’ (1st century BC – 3rd century AD) and ‘Late Roman’ (4th – 6th century AD) are used.

The settlement history of the Piraeus in the Roman period is practically unknown territory⁴. Recent reviews of archaeological discoveries (Eickstedt 1991; Steinhauer 1997; 2000) make some short references to the subject, but, in general, few studies have gone beyond the time mark of 86 BC, making the scarcity of any pre-existing scholarship a rather frustrating point to start. The only study approximating an overview of local history in the Roman period is included in John Day’s *An Economic History of Athens under Roman Domination* (1942). The study, based on textual material and, partly,

⁴ For the Classical and Hellenistic Piraeus, see also Garland 2001

archaeological discoveries, was the first to support the view that the Piraeus recovered swiftly from the wars of the 1st century BC and challenged the notion of historians of the 19th century such as Hertzberg (1866-68) and Milchhöfer (1881: 33), who regarded the port in the post-Sullan centuries as an economic and cultural backwater.

While the validity of these claims needs to be further examined in the light of fresh archaeological and other data, negative statements resonate with the broader representation of Roman Greece by ancient sources and early modern studies as a conquered country whose glory lay in the past (Alcock 1993). Archaeological discoveries in the Piraeus during that time shaped and were themselves informed by such biases. The example of the excavation in 1892 at Zea harbour by the Archaeological Society at Athens is a case in point (Dragatsis 1892). The excavation was initiated to recover a Roman mosaic that had been brought to the surface of the plot in the previous year, but, importantly, it took place in the area where in 1885 remains of the ship-sheds of the Athenian navy had been discovered (**figs. 9 & 10**), arguably with the anticipation that further evidence for these structures might be uncovered.

Instead of such evidence, the excavation brought to light the greatest part of a large Roman building, interpreted as a bath-house (**fig. 11**). From the structure of the excavation report and the afterlife of the finds it is easy to understand that what counted as important was the retrieval of the mosaic rather than any comprehensive documentation of the discovery. The mosaic, which is described meticulously in the report, was removed and sent to the National Archaeological Museum at Athens. From the rest of the finds, some were listed briefly on a single page, and, apparently, most were thrown away. More precise information about the dating and function of the building is scarce, but its excavator, commenting on the building's social function, noted:

'The partitions attached to the walls in and beyond rooms X, Ψ, Ω are reminiscent of the built beds of the notorious houses in Pompeii, and they can add to the concept and purpose of the building a further dimension which is closely related to the type of buildings of the aforementioned town. This should hardly be considered perplexing, nor should the combination of a balneum with

another infamous building appear unusual for times of stagnation, decadence and moral depravity.’

(Dragatsis 1892: 26, my translation)

The particular activities envisaged to have taken place in the building are not made explicit but the allusion to Pompeian brothels is quite clear. The discovery of such a building over the remains of the Classical – Hellenistic ship sheds intensified the impression that after the sack by Sulla the population of the Piraeus had relinquished their ancestral values and had given in to decadent pleasures. The building, juxtaposed on the ground with the remains of the ship-sheds, was a blatant manifestation of the decline of old Greece that had set in with the Roman conquest. It created a sense of dystopia that was in place with contemporary representations of the country under Roman rule (cf. Petrakos 1987a: 151) but unthinkable for the age of Hellenic glory on which the modern Greek nation was consciously clinging for moral lessons.

If ‘every excavation and expropriation of land added to the image of Athens as a frozen point of departure for ‘Western civilization’ as it did to creating a sense of the Greek nation’ (Morris 1994: 37), it is not difficult to understand why excavations in the area were not resumed. Despite the excavator’s proposal to the Archaeological Society at Athens to extend the trenches to the nearby properties in the hope of finding ‘another good work of art’, discoveries such as the building at Zea undermined the image of the Piraeus as a town of splendid buildings, urban design and naval facilities, a monument to the glory, spirit and military prowess of Classical Athens. This image had been gradually constructed by historical topography, with its emphasis on repetitious examination of ancient texts, and the selective excavation of the monuments mentioned in them.

Given these earlier preoccupations, Day’s positive discussion of the Roman Piraeus seems rather extraordinary. This study however, written by a North-American academic, is arguably no less influenced by ideological and political considerations, since it focused on a period of European history – the Roman Republic and Empire – the heritage of which had some relevance for American culture and politics at the time (cf. Dyson 2001). In addition, the fact that the study was written during the years of the recession in the US may also in part

illuminate why the main emphasis of the discussion about the Roman Piraeus was on the question of 'recovery' from Sulla's sack (Day 1942: 145). This may have led to an over-optimist assessment, which at the time could not be supported by the flimsy and poorly understood archaeological discoveries. In addition, other types of evidence, such as inscriptions, that Day used extensively to support his arguments, continue to present many problems of dating.

Although ideological overtones may have shifted, comparisons with the pre-Sullan town, especially the 5th and 4th centuries BC, continue to convey a sense of failure, a fall from an age of glory to one of utter misery. In the study by Panagos (1995: 187), the post-Sullan settlement is inhabited by fewer people, in a smaller area than before and in makeshift, squalid houses repaired with clay after the sack. Garland (1987) who focuses on the pre-Sullan period suggests a similarly 'denuded' landscape and a decimation of the port's population in following centuries. Both studies also lay particular stress on the effect of the Roman sack of the town and the fact that the naval yard and installations of the Athenian fleet were destroyed. Since, in the post-Sullan era, evidence for such features is inconclusive, implicit in these remarks is an underrating of functions other than that of a naval base which the town may have developed in the Roman period (cf. Osborne 1987b). In essence, these remarks reproduce the image first constructed by 19th century archaeological and historical accounts.

5. Aims, methodology and summary of chapters

A common point of these studies is a limited use of archaeological material and a (sometimes uncritical) reliance on textual and epigraphic sources. This has affected the type of questions that have been asked about the nature of settlement and society in the port during the Roman period. While considerable emphasis has been placed on the extent of recovery of the port after the sack, this thesis proposes some new directions from which the history of the port in the post-Sullan centuries may be approached.

To begin with, in order to be able to tackle the issue of recovery, it is necessary to have an idea of the extent of damage wrought on the urban fabric by the Roman troops in 86 BC. Furthermore, despite the reiteration of textual sources about the deplorable state of the port, the archaeological evidence for

continuity and change in the landscape and the urban fabric of the settlement remains to be assessed. We are still ill-informed about the economic, social, ethnic and cultural backgrounds of its inhabitants, their lifestyles and perceptions of identity in the different political, cultural and economic environment of the Roman Empire.

In order to achieve a more balanced understanding of how the town developed in the Roman period, this thesis proposes that it is necessary to develop a more rigorous and theoretically informed approach to the available evidence along the lines discussed earlier. In this context, rescue excavation data offer a valuable opportunity to assess these issues in a detailed manner. Most of this material has been briefly published in preliminary reports and the arguments presented in the following discussion utilize the information included there by the individual excavators and site directors. As a result, the discussion of these discoveries is not intended to be either definitive or exhaustive; this is however the first time that such a study has been undertaken with the view of interpreting patterns in the archaeological record and of answering questions that have been posed by previous, text-based research.

In the absence of precise information about the chronology, the nature and number of the finds and the function of investigated plots in the town, this dataset is used firstly in a broad manner to answer questions of continuity and change in the landscape, such as the distribution of sites of different periods and the intensity of settlement of different areas of the peninsula through time. Several elements of information, such as the evidence for the harbours, sacred space and building activity is then examined in more detail to assess patterns of land use and landscape change in the Roman imperial period. Such an approach goes some way towards providing a better overview of the changing face of the area in the period studied.

Much of the discussion that follows is based on the preliminary results of an extensive re-assessment of the archaeological material from the Dikastiko Megaro site, an extensive plot investigated in the early 1980s by the 26th Ephorate of Prehistoric and Classical Antiquities. Study of this unpublished material, including an examination of the excavation archives and documentation of the finds, was undertaken by the author during the preparation of this thesis with the kind permission of the 26th Ephorate of Prehistoric and Classical

Antiquities. This more detailed dataset allows the exploration of questions of continuity and change in the urban fabric, the social use of domestic space and the economy of the town. A thorough examination of the finds assemblages from the latest occupation levels of the site throws light on the termination of settlement of the Piraeus peninsula in the Late Roman period.

The thesis is divided into ten chapters, each of which is accompanied with a short introduction and conclusion, covering issues of theory and methodology and summarizing the results. Chapter 1 presents a re-assessment of the historical event of Sulla's sack using excavation data and other relevant discoveries in the town. Chapter 2 focuses on changes in the settlement patterns and the question of demographic collapse. Chapter 3 takes on the issue of continuity and change in more detail, focusing on the evidence for re-development, land use and building activity in the post-Sullan settlement. Chapter 4 discusses the evidence from the Dikastiko Megaro site and considers the possible functions of this area in the pre-Roman and Early Roman period. Chapter 5 explores the evidence for the water supply of the Piraeus in the Roman period and considers the social and cultural significance of water management.

Chapters 6 and 7 focus upon a discussion of domestic space in the Piraeus in the Early-Middle and Late Roman periods respectively, drawing upon the excavated house remains of the Dikastiko Megaro site and considering the patterns of occupation and social relations inferred from the archaeological record. In Chapter 8, the methodology of analyzing domestic finds assemblages is discussed in detail, while in Chapter 9 this is put into practice to illuminate aspects of the organization of domestic space and activities in the Late Roman period. Chapter 10 discusses the pottery evidence from this and two other sites in order to throw light into long-term trends in the supply and consumption of goods in the town and into the differences in consumer behaviour that set its population apart from other urban audiences in the Aegean region and beyond.

Chapter 1

Enemy at the gates: the siege and sack of the Piraeus in 87/6 BC

1.1 Introduction

The destruction of the Piraeus by the Romans in 86 BC has been regarded by modern scholarship as a negative turning point for the area in Antiquity (Panagos 1995; Palagia 1997; Steinhauer 2000). Amongst others, it is regarded as marking the end of Athenian claims to maritime power and even of the town itself (Habicht 1997). According to Garland (2001: 139) the Sullan sack is ‘the chief obstacle to an accurate reconstruction of the appearance of the ancient harbour in its heyday’. Despite the amount of importance attached to this event and the constant reiteration of its grave consequences, no serious attempt has been made to trace the extent of the physical damage caused by the Roman troops in the town⁵. The purpose of this chapter is to explore the impact of the siege on the urban fabric and to discuss the way that the town and its population might have been affected during this event.

1.2 Sources of evidence

For such an investigation, it is necessary to cross-examine the testimonies of the ancient sources with the available archaeological evidence from the modern and recent rescue excavations, as recently undertaken by Hoff (1997) for Sulla’s siege of Athens. From an archaeological point of view, a matter of central importance is how one identifies traces of this event on the ground. Classical archaeologists have a tendency to assign whatever marked disturbances such as burnt deposits that they encounter in the sequences of the sites they excavate to textually documented events and the agency of particular individuals⁶. The extent of such disturbances across the entire area of a site as well as the accompanying dating evidence are significant factors pointing toward widespread destruction,

⁵ Garland (1987) presents a brief overview. The subject is not pursued at all by Eickstedt (1991), although he seems to implicitly accept that it had a major impact on the topography of the ancient Piraeus, which constitutes his main topic.

⁶ Cf. the comments by Hingley & Unwin 2004 with regard to the archaeological evidence for Boudicca’s revolt in Early Roman Britain.

but this is not always possible to ascertain, let alone to attribute the observed evidence to historically attested individuals.

The fragmentary archaeological record of the Piraeus, known through rescue excavations, makes the attempt to trace Sulla's siege even more difficult. In contrast to other sites where well-preserved or standing remains provide physical evidence for siege episodes and destruction (e.g. Pompeii, see below, p. 22) very few archaeological remains and deposits of the pre-Sullan Piraeus have survived intact as a result of the site's subsequent history. Much information that may have related to this event is likely to have gone unnoticed as a result of limited stratigraphic recording during the early excavations in the town or because it was not considered worthy of any particular note.

In some cases however, it has been possible to observe destruction deposits which can be dated to the period of the Sullan raid with more or less certainty. In others, where direct evidence of Sulla's siege and destruction is lacking, discontinuity of occupation across the town between the late 2nd century BC and the 1st century BC may point to the Sullan destruction. The frequent absence of direct evidence from sites in the town that can be securely related to this event should therefore not deter us from considering the Sullan raid as a likely context for observed abandonment.

An equally cautious approach is required in the treatment of the available documentary evidence. Apart from sporadic references by Strabo and Pausanias to Sulla's capture of the port, two ancient sources, both dating to the early 2nd century AD, provide most of the information about the Roman general's military engagements in the Piraeus. The first and most detailed account is to be found in the *Roman History*, written by the Greek historian Appian (*Mithridatic Wars* 30-41). The second source of written information is a brief mention to the siege by the Greek intellectual Plutarch in his biography of Sulla (*Sulla* 14. 6-7). Plutarch (*ibid.*) mentions that the destruction of the port featured as a topic in Sulla's memoirs and since this work would have conveyed the story from the perspective of the assailant, it is unfortunate that it has not survived.

Although we would expect a certain degree of exaggeration of Sulla's brutalities in general, interestingly, it is the siege of Athens rather than that of the Piraeus that attracts most attention by the two writers (Sherwin-White 1984: 138, n. 22; Garland 1987: 190). The historical milieu in which these works were

composed may help to explain why only a few lines are dedicated to the burning of the Piraeus as opposed to the vivid description of Sulla's brutalities against Athens and its population.

Both works were written by high-profile Greeks more than two hundred years after the event, at a time when the notorious activities of Sulla in Greece probably resonated awkwardly with the incipient revival of Greek high culture among elite society in Rome and the Greek provinces (Woolf 1994)⁷. The position, which Athens, occupied in the intellectual climate of the early 2nd century AD (Bowie 1976), was bound to overshadow that of the Piraeus, thus rendering any particular elaboration on the event of Sulla's siege of its port town less interesting and/or relevant for contemporary audiences⁸.

1.3 An overview of the military operations

The political and military events that led to the siege of Athens and the Piraeus are more or less extensively covered by both ancient sources and modern studies so they will not be reiterated here (Habicht 1997: 297 ff; Hoff 1997: 34). Since the early part of the 2nd century BC, Athens had established an alliance with Rome, from which it resigned in 89 BC. Along with other Greek cities, Athens joined the cause of Mithridates VI, king of Pontus, against Roman hegemony (Habicht 1997). The signal for an uprising cities across the Aegean was given when the allies of the Pontic king stormed Delos and slaughtered all Italians resident on the island. Rome prepared to retaliate and sent general Lucius Cornelius Sulla with troops to Greece for this purpose. After Athens fell to Sulla's besiegers, the Piraeus remained as the last stronghold.

When Sulla arrived in Greece in 87 BC, the Piraeus was under the control of Archelaos, Mithridates' envoy and general. Preparations for withstanding the coming siege began immediately both in Athens and the port town which by the time that Sulla had landed in Attica had no defensive links with the *asty* since the Long Walls had been 'left to fall in ruin' in the previous centuries (Hoff 1997:

⁷ On the revival of Greek elite culture in the Roman Empire, cf. Walker & Spawforth (1985) and Walker & Cameron (1989)

⁸ It is likely that another reason for presenting Sulla's sack of Athens in detail was the unfamiliarity of most of Appian's and Plutarch's audiences with such scenes in the era of *pax Romana*. Cf. in this context, Ziolkowski (1993) 73 on the lengthy description of the siege and sacking of Cremona in AD 69 by Tacitus (*Histories* 3.33.1-3)

35). Physical separation is likely to have made the attempts of the defenders in both places especially difficult because no combined operations could be mounted against Sulla's army, while supplies transported over land could easily fall into the hands of the enemy (Habicht 1997: 305). This circumstance was exploited by the besiegers with the construction of a fortification cordon around both Athens and the Piraeus with the effect that the flow of supplies, people and information between the *asty* and the port was significantly reduced, if not completely prevented.

This situation was probably more immediately felt in the *asty* than in the port, since the former is likely to have relied more heavily on its agricultural hinterland in Attica. Supplies transported overland to Athens were frequently intercepted by the besiegers, whilst during the siege of the *asty*, the population was seriously affected by food shortage and famine (*ibid.* 35-36). Appian (*Mithridatic Wars* 38) and Plutarch (*Sulla* 13.3) both report that during the siege people in Athens had to revert to extreme measures for their subsistence including the consumption of inedible or hallucinatory medicinal herbs, processed leather and even human flesh. On this matter, our sources for the Piraeus are silent. The fact that Sulla had no naval forces with which he could block movement by sea to or from the Piraeus is perhaps significant. The free access to the sea is likely to have made the siege conditions less harsh for the population in the port, given that supplies of food staples from cities allied to Mithridates in the Aegean islands, Asia Minor and the Black Sea could easily reach the port (Garland 1987).

Logistical support from overseas and the fact that the Piraeus offered a prime fortified location made Archelaos and the defenders particularly optimistic for the outcome of the siege (Hoff 1997: 35). The circuit walls of the town had been restored about 150 years earlier and probably stood in excellent shape. Furthermore, despite the limited size of the Athenian fleet at the time (Garland 1987: 54), the port town still boasted some of the most comprehensive naval infrastructure in the Mediterranean. Archelaos' optimism was boosted when the first attempts to breach the Piraeus walls by Sulla's army in the summer of 87 BC were shattered. A silver bracelet inscribed with the phrase 'Archelaos commander of the camp in the Piraeus to the Syrian Apollonius, son of Apollonius' suggests that the event was celebrated with the donation of personal

gifts to the soldiers as awards for outstanding bravery (**fig. 12**; Empereur 1981: 566-568).

Not long after entering Athens in the Calends of March of 86 BC, as Plutarch writes (*Sulla* 14.6), Sulla's troops after repeated attempts managed to undermine the fortification circuit of the Piraeus and enter the town. The existing accounts do not mention any fierce fighting between the opposing troops, perhaps suggesting that, once the Roman troops were inside the town, they did not meet any particular resistance. After the breaching of the circuit walls, Archelaos and his troops first retreated to the stronghold on Mounichia hill and then fled to Boeotia by sea (Appian *Mithridatic Wars* 40). Although Plutarch's vivid description of the widespread massacres enacted by Sulla's troops in Athens has no parallel for the Piraeus (*Sulla* 14. 3-4), the population of the port, now devoid of any military support after the retreat of Archelaos, must have suffered an equally grim fate at the hands of the Roman troops.

While Archelaos was preparing to leave, Sulla, as Appian says, 'burnt the Piraeus, which had given him more trouble than the city of Athens' (*Mithridatic Wars* 41). Sulla's particular rage against the Piraeus has been repeated in recent accounts (inter al. Hoff 1997; Habicht 1997), however it is difficult to say what might have instigated his response. Although interesting as anecdotal material, the sexual insults uttered by the defenders in Athens against Sulla's wife Metella which are frequently cited in this context (Panagos 1995: 180) are likely to have had a limited effect on Sulla's decisions to ransack the Piraeus. Similarly, the claim that Sulla's exceptional rage against the Piraeus and its defenders might have been incited by the presumed 'democratic feelings' of the port population (Garland 1987: 56) would seem to reproduce anachronisms from the Classical period.

While finding a reason for this attitude in the psychological profile of Sulla seems rather precarious, it is important to remember that the Roman general in his post-war memoirs boasted that he had saved the Athenians from annihilation. Sulla's claim may not so much relate to the destructions of properties but to the fact that he saw as his mission to deliver Athens (including the Piraeus) from the bad influence of Mithridates and restore it back to the orbit of Roman interests. In this context, whatever feelings were shared by people in the Piraeus, it was perhaps Sulla's strong convictions about his own duty as a general, expressed

retrospectively in the imperial discourse of Rome's benevolent power, that made him consider the population and defenders of the port as personal opponents and as enemies of the Roman order.

1.4 The evidence of damage to the urban fabric

The available evidence for the destruction of buildings and other properties in the town offered by the few extant literary sources is meagre. Both Plutarch and Appian are selective in what they portray as having been destroyed. This choice is likely to reflect the knowledge and interests of both the authors and their audiences. This selection is not implicit only in the amount of space that they dedicate to the sieges of Athens and the Piraeus respectively. In the case of Sulla's capture of the Piraeus, they both emphasize the destruction of a few conspicuous and monumental buildings, such as the Arsenal of Philo, the ship sheds and the docks, rather than giving a picture of which areas the destruction affected or what kind of damages were inflicted.

Archaeological evidence from rescue excavations allows us to a certain extent to amplify and correct this picture. Up to now, only nine sites in the Piraeus have yielded conclusive evidence for destruction, in the form of thick burnt deposits which can be more or less securely associated with the event of Sulla's siege and capture of the port (**fig. 13**). Although in most cases the deposits in question contain the characteristic Athenian bronze 'star-and-crescent' coins minted shortly before Sulla's attack, the rest of the associated material culture excavated from the majority of these sites remains to be published comprehensively.

As in Athens, these coins may serve to date securely a deposit to the time of Sulla's siege (Rotroff 1997b: 35), especially when found in bulk as hoards. As singular finds, however, they are less reliable indicators, since the mixing of deposits of all periods, as in other urban contexts, is a frequent phenomenon in the Piraeus. In the light of current knowledge and published examples, it would appear that for a substantial number of the listed sites, the deposits attributed to Sulla's siege can be described as primary debris laid down *in situ* in the course of

this event, rather than deposits associated with clean-up activities in later periods⁹.

Although the current state of knowledge limits the definitiveness of the conclusions that we are able to draw, this evidence provides an important part of the available information that we possess for the impact of the siege on the urban fabric. It comprises deposits excavated from domestic as well as public buildings. The reference of the ancient sources to the destruction of Philo's Arsenal, originally built in the 4th century BC (Appian *Mithridatic Wars* 41; Plut. *Sulla* 14.7), in this context has been confirmed by the recent discovery of its remains at the north-western part of the Zea harbour (Steinhauer 1994; 1997). These were found partly covered by a thick burnt layer of soil datable to the early first century BC. A 'destruction layer' similar to the one occupying the remains of Philo's Arsenal has been spotted at other centrally placed buildings, such as the so-called 'House of the Dionysiasts' (fig. 14; Dörpfeld 1888). A neighbouring site that probably formed part of the same building complex of the Hellenistic period, yielded similar evidence along with a hoard of Athenian star-and-crescent and Pontic coins (Oeconomides-Caramessini 1976).

Comparable evidence for a major conflagration that probably occurred as part of the same historical event has also been reported from other areas. A building interpreted as a warehouse at the north-eastern corner of the large harbour, where a cache of bronze and marble statuary was discovered in 1959 (Vanderpool 1960) was covered by a thick deposit which contained a coin of 86 BC. Given the concerns expressed above about formation processes and the lack of any comprehensive publication of the rest of stratified material culture, the destruction of the building can only tentatively be ascribed to the time of Sulla's sack.

More conclusive evidence for damage inflicted in the course of the Sullan attack is provided by a number of domestic buildings excavated in recent years. A house at 161 Alkibiadou St, near the Zea harbour, probably built in the late 4th/ early 3rd century BC was caught up in the conflagration which on the basis of the coin evidence has been dated to this time (Petraikos 1977). The house does not appear to have been reoccupied in the succeeding period. Similar evidence

⁹ For a definition of 'Sullan debris' at Athens, see Rotroff 1997b: 35.

for destruction and cessation of occupation comes from a number of neighbouring Classical/ Early Hellenistic houses excavated at the Industrial School site on the slopes of Mounichia hill (Steinhauer 2000).

Although the literary sources list the ships sheds among the buildings of the port that were burnt by Sulla, clear archaeological evidence for their damage is missing. The excavation report of the ship sheds at Zea harbour (figs. 9 & 10), the main base of the Athenian and allied fleet in the port town during the Sullan raid, does not include any such information (Dragatsis 1885). In the early imperial period these buildings were, in any case, derelict and partly filled up, while some of their extant foundations were re-used *in situ* for the construction of an extensive building complex (Dragatsis 1892).

As explained below (pp. 28-29) we should expect that the ship sheds at Zea along with the naval docks would have counted amongst the primary targets of the assailants in 86 BC (Day 1942: 119). It should be remembered, nevertheless, that the Piraeus experienced a further recapture by Caesar's legate Calenus in the 40s BC (Dio Cassius 42, xiv), for which we possess even less information than for Sulla's sack. In view of this circumstance, no definitive conclusion can be reached about the date of the damage to these installations, except that it is likely to have taken place in the course of any one or both of these operations¹⁰.

Other areas and buildings where the Sullan siege is expected to have left its traces are the town walls and fortifications. Unfortunately, the extant height of the Piraeus fortifications, which are in most cases preserved at the level of foundations or the lower courses of the curtain wall, does not allow the investigation of physical traces of damage such as impact marks of projectiles as in the case of Sulla's siege of Pompeii¹¹. Palaiokrassa (1991: 43), reassessing the evidence from the excavation of the sanctuary of Artemis Mounichia, assumes damages in the course of the Sullan raid to the coastal defensive wall surrounding the small peninsula on which the sanctuary was located. At any case, several decades later, when the Piraeus was captured by Calenus, we are told that the port town lacked any seaward and landward defences (Dio Cassius 42, xvi.1).

¹⁰ The matter is complicated not only by insufficient knowledge of the archaeological context of the site but also by classical sources of the period of the Roman civil wars (e.g. Lucan, *Pharsalia* III, 181 – 183) implying the existence of naval installations in the 60s-50s BC. For this see Day (1942) 144-145

¹¹ Cf. http://www.bradford.ac.uk/acad/archsci/field_proj/anampomp/aapp_urban5.html which gives a preliminary report on these discoveries in Pompeii

The Romans used a range of heavy siege weapons, including rams, projectiles and missiles in their repeated attempts to breach the town walls (Appian *Mithridatic Wars* 40). Recent work on the landward fortifications and the Asty gate at the Gounari St. site has brought to light evidence for the artillery used to assault the walls and the town buildings (Kyriacopoulos 1992). This group of objects consists of large rounded stones with rusticated surfaces of local grey or yellowish limestone and marble, weighing approximately 18 kg on average but with some examples as heavy as 83 kg (*ibid.* 224; **fig. 15**).

Several other such items have been recognised from other sites excavated in the Piraeus during the 19th and 20th centuries, such as the site of the circular gate tower on the segment of the circuit walls enclosing the Eetioneian peninsula in the western part of the large harbour (Lechat 1888). The occurrence of a number of similar items in the area of Kerameikos in contexts dating to the time of Sulla's siege suggests a similar date for the examples from the Piraeus. The bolts found at Gounari St. probably missed their targets but the impact of those that landed on the buildings of the town must have been severe.

1.5 Terror, anxiety and alienation

Rather than exaggerating 'Sulla's rage', it is important to consider the significance of alternative tactics that the Romans may have employed in the siege. Anthropological and sociological work has stressed the multiple and transformative impact that warfare has on individuals and human communities throughout human history (cf. Bramson & Goethals 1968). In Antiquity, episodes of extended siege warfare around the walls of cities and defended settlements were liminal experiences for both the assailant and the besieged. Sieges engendered a massive threat to the territoriality, self-definition and physical existence of communities, but also frequently involved the suspension of cultural values by both parties in their struggle to survive and prevail. The documentary sources and the archaeological record relating to Sulla's siege of the Piraeus may allow some insight into these conditions of psychological stress and anxiety of the besieged population as well as to the strategies of terror and alienation employed by the Roman troops in their effort to reduce their resistance.

Even if free access to the sea probably made conditions for sustaining resistance in the Piraeus less harsh than at Athens, the besieged population was no less exempt from psychological stress and anxiety. An indication for this is provided by the increased hoarding practices among the population just before the Romans captured the town. Old and recent excavations in the Piraeus have produced several coin hoards in the heavily burnt levels of domestic and public buildings in the area of the Mounichia hill and the large harbour, the destruction of which can be securely dated to the time of the Sullan siege. These hoards typically consist of local Athenian and imported Pontic silver and bronze issues (Schwabacher 1939; Kleiner 1973; Oeconomides-Caramessini 1976; Petrakos 1977), which find parallels in similar discoveries made in downtown Athens and the Kerameikos. The bad quality of striking has suggested to specialists that the coins were minted in haste, some of them even in the Piraeus, during the period of Sulla's siege, and circulated only for a brief period until they were deposited in the ground.

The most interesting and arguably least easily explicable example of hoarding is provided by the cache of religious and public statuary discovered in 1959 near the eastern corner of the Kantharos harbour (Vanderpool 1960). Although the context and associated finds remain unclear, the deposition of these artefacts is now generally agreed to have taken place shortly before the Roman troops entered the town. The assemblage, made up of sculptures of diverse dates¹², includes two monumental bronze statues of Athena and Apollo, two further bronze statues of Artemis, a bronze theatre mask, a bronze shield, two marble herms and another marble statue depicting Artemis Kindyas. The sculptures were discovered in the remains of a building, perhaps a warehouse, buried under a thick burnt layer that contained a coin of 86 BC. While at least some of them seem to have been dismantled from their pedestals by force, the placing of most near the edges of the room and so as to avoid material harm to each other seems to indicate that particular care was taken by the people that concealed them (**fig. 16**).

Since the time of their discovery, the provenance and interpretation of the finds have been much disputed. Opinions range from those that see them as

¹² For the ongoing debate about the date of the sculptures cf. Palagia (1997) who assembles the latest information and views.

treasures coming from the plundering of Athens and the Piraeus by Sulla (Vanderpool 1960) to those that consider that the statues came originally from Delos as booty taken by the troops of Mithridates (Dontas 1982; Habicht 1997; Steinhauer 1997). Others see the cache as a desperate measure to finance the defence of the city by selling works of art and antiquities that had been taken from sanctuaries around Attica (Palagia 1997). The last proposition seems appealing given the location of discovery, the composition of the assemblage and the economic situation in Athens under siege, which is likely to have encouraged the commodification of otherwise 'significant' items and properties of the community such as cultural treasures (Appadurai 1986).

The anxiety and stress of the besieged would have been further exacerbated as a result of the growing alienation to which they were exposed by the siege preparations of the Roman army. These preparations, involving the procurement of materials and the raising of siege works, probably resulted in profound physical changes to the surrounding landscape of Athens and the Piraeus. Apart from raising the enceinte mentioned earlier, the Roman troops reverted to destroying monuments in the vicinity of Athens and the Piraeus to construct siege works. Trees were cut from the grove of the Academy and the wood was used to construct siege engines and catapults (Hoff 1997). For the attack on the Piraeus, Sulla famously plundered the derelict fortifications known as Long Walls outside the port town for building stone and earth in order to construct a ramp on which to place his siege engines (**fig. 17**; Appian, *Mithridatic Wars* 30–31).

While the exploitation of local resources for the siege preparations might have been mainly a matter of practical concern for the assailant, this form of alienation of the pre-existing material fabric around Athens and the Piraeus was bound to transmit subtle messages of appropriation (Davies 2001). Even if the Long Walls were in a state of ruins, they were still an imposing and integral element of the inherited landscape between the two prime urban settlements of Attica and might even have recalled to contemporaries memories of the days of Athenian independence in the Classical period (Conwell 1992). The despoliation of the monument could have been easily observed by the defenders behind the Piraeus fortifications, and perhaps this might have counted among the intentions of the Romans when engaging in its demolition and re-use of the stonework as building

material. The negative impact that such alienating acts might have engendered for the morale of the besieged population in the port is therefore likely to have been considerable.

As Davies (2001: 74) remarks, the exploitation of such local resources in the context of a siege episode by the enemy ‘must have engaged the defenders even more directly in the way that their [i.e. the enemy’s] superimposition transformed a familiar, shared landscape’. A similar intention may become evident when considering the evidence for the type of missiles that the assailants used against the city walls and buildings of the port town. A recent study of the material excavated at the site of Gounari St., near the Asty Gate of the Piraeus circuit wall, has demonstrated that a substantial amount of the stone bolts used in Sulla’s siege was made of round-cut and roughly reworked elements that originally belonged to marble and limestone funerary columns of the Hellenistic period¹³ (**fig. 18**; Kyriacopoulos 1992). These objects suggest that Sulla’s army was engaged in systematic despoliation of pre-existing tombs.

Apart from the physical impact that these objects had in damaging the town’s fortifications and buildings, the psychological frustration that they caused should not be underestimated. Some of these bolts still preserve part of the original smoothed surface of the column in the form of a broad band, which in a number of cases permits the reading of the deceased person’s name and name of father and/or the place of origin (**fig. 19**). Although this might be merely incidental, the fact that a considerable number of bolts, with visible remains of the original funerary inscription have been discovered, not only in the Piraeus but also at the Kerameikos in Athens, might suggest that the assailants wanted them to be clearly recognisable. In view of the obvious inability of the besieged to avert vandalism on the monuments of local ancestors, the uninhibited appropriation, fragmentation and re-use of these monuments by the enemy worked towards alienating the defenders further from the shared appreciation of the inherited landscape and its spatial and temporal referents (Davies 2001: 74).

¹³ The funerary columns in Athens (in Greek, *κιονίσκοι*; in Latin, *columellae*) are traditionally dated after the introduction of the sumptuary law on burial in 317 BC by Demetrios of Phaleron, which banned excessive ostentation in funerary rituals and monuments. On this, see Kurtz & Boardman (1971) 162

1.6 Understanding the siege

The extent of Sulla's destruction in the Piraeus can be followed in the types of buildings that were damaged as well as in the spatial distribution of its traces across the town. With respect to the former, the present archaeological evidence, as discussed in the previous paragraphs, suggests that the damage inflicted on the buildings of the town was dire. Not only buildings of a public or civic character but also houses and structures presumably connected with the commercial life in the port suffered serious material harm. In the past, some of this evidence, especially the fact that houses seem to have been particularly damaged, combined with the image portrayed by the literary sources has been drawn upon to show the severity and indiscriminate nature of the way in which Sulla wrought havoc on the population and material fabric of the Piraeus (Day 1942: 118-119; Garland 1987; Eickstedt 1991).

This seems to imply that Sulla in a fit of rage simply laid waste to the Piraeus without taking account of what to destroy and for what reason. Previously (p. 19) it was argued that probably Sulla had a clear idea of what he was doing since he was the military envoy of Rome and would later offer a clear justification for his actions. Although we are not in a position to know exactly how the assailant actually understood his intentions and objectives, the archaeological record for material harm across the Piraeus may bring us closer to identifying a range of possible interpretations.

Comparable evidence for the geography of Sulla's destruction in Athens suggests that, once Sulla's troops were in the city, damage was concentrated in key areas, buildings and monuments, with plundering and arson spilling over to buildings and monuments in their immediate neighbourhood (Hoff 1997: 38-41). The question that reasonably arises is whether a similar pattern of 'choreographed damages' across the town may be discerned in the (admittedly) scarce archaeological evidence for the Piraeus. A close look at the spatial distribution of this evidence may indeed reveal that damages were not inflicted in all areas and at all buildings randomly (**fig. 13**).

Within the town itself, the areas around the large harbour, Zea and the hill of Mounichia appear to have been particularly affected. The area of the waterfront

around the Large Harbour would have been among the first to suffer damages by the troops entering the town from the north. The failure to retrieve the monumental statues buried in the building in that area of the town (Habicht 1997: 310) seems to indicate that the attention of the invading troops, who in comparable circumstances are expected to demonstrate a particular zeal for plunder, was quickly directed towards points and areas which had a strategic importance in securing the foothold of the Roman army in the town.

Given the fact that strategic considerations as well as the unintended consequences of decision-making and action are likely to be of equal importance in the unfolding of the assailant's power during any siege episode, it is important to try to accord attention to both. Sulla was in charge of a substantial number of troops that were subject to his orders but whose actions he could not control or monitor entirely and at all times through the use of his authority, rank or military power. In Athens, for example, although Sulla is reported to have issued strict orders to his troops against the burning of houses (Appian, *Mithridatic Wars* 38), archaeological evidence suggests that the orders may not have been always followed (e.g. Hoff 1997: 41).

At the same time, Sulla was subject to cultural-specific conceptions of his role as a warlord that were shared by his peers and society in Rome and that prescribed the customary permission to plunder the enemy's possessions. In fact, a review of the documentary evidence for the sacking of enemy towns by the Romans during the Republican and early imperial periods suggests that nothing could stop troops engaging freely in plundering, burning and violating, even when no explicit signal was given by their commander to do so (Ziolkowski 1993: 89-90)

Once inside its town walls, Roman troops could be left to plunder and sack the enemy town at will. However, the plunder had first to be made secure by taking precautions and eliminating potential threats, both to their lives and to the capture of the town which was the objective of the assault (*ibid.* 79). Even after the walls of the Piraeus had been breached, the Roman troops were far from having secured control of the town. The port facilities were still intact and ready to be used by the enemy to escape or gather forces, while, most importantly, the acropolis on the hill of Mounichia had been occupied by Archelaos and a substantial number of troops who carried on active resistance to the intruders.

With such key points left unattended by the invaders, none of the range of activities in which Roman troops were keen to engage when sacking a town could take place (Ziolkowski 1993).

If the assumption that the spatial distribution of damage relates to meaningful considerations is correct, the fact that this evidence clusters around the harbour of Zea should cause no surprise. It was there that the bulk of important military and naval infrastructure, docks, ship-sheds and storehouses of naval equipment were concentrated. Although, as in Athens, buildings situated in the civic centre are likely to have suffered considerable damage, little archaeological evidence exists for extensive damage to the few public buildings and sanctuaries, such as the Zea theatre or the sanctuary of Artemis Mounichia, that have been excavated (Philios 1880; Palaiokrassa 1991: 37; cf. Day 1942: 126). The fact that it has been possible to identify damages attributable to Sulla's troops in the remains of houses excavated at the Industrial School site on the slopes of Mounichia does not simply reveal that large-scale destruction reached over the whole of this area. It is significant that these houses would have been on the route by which the Romans ascended to the fortified stronghold of Mounichia.

The documentary and archaeological evidence may thus indicate that, in inflicting damage to the material fabric of the town, Sulla pursued concrete aims that focused primarily on eliminating potential threats to the occupation and control of its territory. A strategic aim of central importance for the outcome of his cause appears to have involved the prevention of future utilization of the military facilities and infrastructure for the launching of operations against Rome or its allies. This possibility is reinforced by the fact that Sulla's army in Greece did not include any naval forces while his enemies could still launch attacks from the sea. The fact that Mithridates was still in a position to have a considerable military and naval force assembled from allied cities in the Aegean, makes the significance of this preventive measure evident (Habicht 1997).

Similarly, damage documented in domestic buildings in the area of the hill of Mounichia, should perhaps be seen in the context of Sulla's pursuit of the enticement and capture of the armed forces and their leader Archelaos, who had withdrawn to the acropolis. The practical importance of this aim cannot be overstated, especially as, in contrast to what happened during the siege of Athens, the defenders do not seem to have demonstrated any particular wish to

surrender. Control of the acropolis, furthermore, would have been an indispensable objective of obvious strategic and symbolic importance that, once attained, would have meant the fall of the enemy town.

Although the possibility of direct reprisals, ordered explicitly by Sulla or his officers, against the population of the Piraeus cannot be excluded, this probably took place after the strategic aims had been achieved and the field was free for sacking to begin. The evidence for charred deposits in town houses, in the central area of the town should perhaps be understood in the context of such collateral damage or as operations by raiding parties with a view to plunder, rather than reflecting the destruction of actual 'strategic targets'.

1.7 Conclusion

The siege and capture of the Piraeus by the Romans in 86 BC was a turning point in the site's history and arguably a telling example of the kind of sanctified terror that the Romans held in stock for their enemies. The available evidence suggests serious damage to the urban fabric but does not support the idea of total destruction proposed by modern scholars (*pace* Palagia 1997: 81; Garland 2001: 139). The archaeological evidence is significant because it helps to resist the formulation of simplistic interpretations based on superficial and impressionistic readings of the ancient sources. It also enables a holistic understanding of the event, including aspects which have not attracted attention and are important for appreciating the impact of the siege in its entirety. The comprehensive publication of more relevant material evidence will arguably enable a more informed and data-grounded understanding.

Chapter 2

Settlement and population in the post-Sullan landscape

2.1 Introduction

This chapter offers a general discussion of the textual and archaeological evidence for the settlement and population of the Roman Piraeus. As in the case of Roman Greece in general (Alcock 1993: 24 ff.), existing accounts about the Piraeus in the Roman imperial period have been heavily influenced by the images of decline of the town in classical works (e.g. Panagos 1995). The backgrounds and underlying assumptions of these works and their authors however are rarely discussed, although these are frequently used as authoritative testimonies that can 'unlock' the archaeological evidence.

The second part deals with the archaeological evidence from urban excavations in the town in a broad manner in an attempt to assess the extent to which the landscape changed as dramatically as ancient sources and some modern scholars have argued. In the third part, the question of the extent of change in the landscape is directed towards the demography of the Piraeus in the Roman period, which has also been thought to have suffered considerable decline (Garland 1987).

The nature of the evidence in both these later parts compels an examination from a broad, long-term and comparative perspective that goes beyond the temporal framework of the Roman period. This comparative approach may be valuable not only in correcting misconceptions which have arisen in the past but also in enabling a better understanding of developments in the settlement of the Piraeus peninsula during the Roman period.

2.2 Roman Piraeus in the ancient sources

The existence of a substantial body of classical literary material on the Roman Piraeus makes a review of these descriptions and representations necessary. The need seems apposite since the literary sources have been taken by previous scholars to be unquestionable and authoritative texts that can speak for themselves and provide straightforward answers about the port town in the

Roman period (e.g. Panagos 1995; Garland 1987 & 2001). Most such texts are the products of individuals writing in different periods, coming from different social and cultural backgrounds and expressing a variety of perspectives. The literary sources of the Roman period that devote space to the Piraeus range in genre from personal letters and geographical treatises to historical works and mythohistorical writings and in date from the mid-1st century BC to the 4th century AD (Table 1). Despite this multiplicity of perspectives, agendas and dates of these works, however, little effort has been made in the past to distinguish between them or to evaluate their power as source material for the history of the Piraeus.

AUTHOR	TEXT	DATE COMPOSED
Cicero	<i>Letters to Atticus</i>	45 BC
	<i>To His Friends</i>	45 BC
Strabo	<i>Geography</i>	Augustan period
Pausanias	<i>Description of Greece</i>	Ca. Mid-2nd century AD
Lucian	<i>The Ship</i>	Ca. Mid-2nd century AD
Dio Cassius	<i>History</i>	Early 3rd century AD
Philostratus	<i>Lives of Sophists</i>	Early 3rd century AD
Synesius of Cyrene	<i>Letters</i>	Late 4th century AD

Table 1: Principal classical sources including information on the Piraeus in the post-Sullan centuries

As with the majority of literary testimonies about cities in Roman Greece, the Piraeus in the post-Sullan decades is portrayed in an entirely negative light. Roman literary travellers and dignitaries passing through the Aegean in the 50s BC emphasize the devastation of many Greek cities as a result of the intense warfare in the earlier part of the 1st century BC. In one of the most widely quoted passages in histories of Roman Greece, a letter sent by Servius Sulpicius Rufus to Cicero in 45 BC, the coastal towns of Attica, Megarid and the Saronic Gulf are described as corpses of once famous cities, in a state of ruins and utter desolation (Cicero, *To His Friends* IV. 5, 4). In a slightly later letter, Rufus reports that he actually stayed in the Piraeus in a tent, holding a vigil for the dead body of a friend who was murdered in a brawl at the port (*ibid.* IV. 12, 2-3). The insubstantial accommodation that Rufus was forced to take in the port and the incident of the brawl and killing reinforce the representation of the Piraeus as an

urban dystopia: a town of scanty material means and services and a place where crime and social misdemeanour lurk in every corner.

Though painting a slightly less disastrous picture, a similar attitude pervades the short description of the Piraeus in the work of the Greek geographer Strabo, writing in the Augustan period (*Geography* 9. 395-6). Strabo laments at the losses that the once important town suffered in the course of the Sullan sack, especially the fact that the town's sturdy walls built in the Classical period had been completely ravaged. He then goes on to describe which important monuments were left: the civic temples, statuary and monumental paintings that adorned the precinct of Zeus Soter and Athena. His overall judgement about the Piraeus is however entirely negative, since the port town had now been reduced to a 'small settlement – *ολίγην κατοικίαν*', around the harbours and the temple of Zeus Soter. Still later in his work, Strabo admits that the Piraeus '...no longer endures' (*ibid.* 14. 654). Despite these inconsistencies Strabo's work has been fundamental in shaping modern attitudes and perceptions of the Piraeus in the Roman imperial period (cf. Steinhauer 1997; 2000).

In the work of Pausanias *Description of Greece*, written in the mid-2nd century AD, explicit negative remarks about the Piraeus are lacking. Instead, they are replaced by an emphasis on narrating the town's former glories, the famous personalities that shaped the history of the locality and, of course, its monuments (*Description of Greece* 1.1.2-1.1.4). As in most other cases of places that he describes, Pausanias primarily makes an effort to trace the antiquity of the locality through its monuments and places of reference and relates them to persons known from history and myth, such as the grave of Themistokles near the large harbour (*ibid.* 1.1.2; cf. Alcock et al. 2001). He takes particular pains to describe whatever 'old' sanctuaries are in the vicinity and the famous works of sculpture and paintings that are displayed in them. Pausanias notes in passing the existence of certain contemporary features and monuments, such as the docks and the two agorae in the harbour and inland. Although no explicit comparisons with the previous period are attempted, his emphasis on the monuments of the past conditions the resulting impression about the contemporary Piraeus, which is overshadowed by the port's glorious history in the pre-Roman era.

What are we to make from such statements? In the past, even the most neutral comments of Greek and Roman authors have been taken to suggest that

human settlement and activity in the Piraeus was on the wane. Lucian's description of the mega-freighter *Isis* sailing into the Piraeus and the excitement that this appears to have caused has led various scholars in the past to believe that the function and importance of the port had declined severely in the Roman imperial period (Lucian, *The Ship* 9; Hertzberg 1866-68: 208). It must be admitted that for much of the early 1st century BC, the Piraeus experienced a series of tumultuous events in a manner similar to Athens and other cities in Greece. Apart from Sulla's sack, the port suffered various depredations in the course of the Roman civil wars (Habicht 1997: 308; cf. Hellenkamper-Sallies et al. 1994). It was at various times captured and recaptured by opposing troops and utilized for military campaigns (cf. Chapter 1, 32). Still, during this period, the limited literary sources and archaeological evidence suggest that the Piraeus was in a state of flux caused and maintained by the political and social instability of the time, rather than in one of utter desolation and ruins.

Many of these negatively charged statements are easy to deconstruct on the basis of internal, external and contextual references, and this has been already done to some extent. Day (1942: 121-125) drew attention to the fact that many of the surviving comments date from the period of the civil wars and pointed out the limited extent of their direct first-hand knowledge.¹⁴ Attention should similarly be drawn to the overall context of these works and the literary agendas that their authors followed. Servius, for example, wrote his letter to Cicero in consolation of a death of a family member, a fact which made Servius use the Piraeus and the cities that he mentions as metaphors of human decay and death. Details or anything that could be meaningfully related to the urban fabric were glossed over by a broad-brush picture of cities in ruins which was intended to help the reader visualize the author's psychological condition.

Along with the concept of the general decline of Greece under Roman domination, idealised stereotypes of what a city should look like are equally likely to have been instrumental in shaping contemporary literary opinions about the Piraeus. Walls, public buildings and water works were important criteria for a locality to qualify as urban in contemporary descriptions. Strabo's particular treatment of the walls of the Piraeus is illustrative of this tendency. The

¹⁴ According to Day (1942) this is probably the case with Strabo's account. On the debate on the extent of Strabo's travels, see Weller (1906) Waddy (1963) and more recently, Dueck (2000)

observation that in his time the city walls are torn down and in disuse compels him to state that the Piraeus no longer exists, despite the fact that earlier in his account he gives some details about the contemporary fabric of the town.

Is it necessary however to infer the vitality of urban life from the existence of fortifications, at a time in which, in the context of the Augustan peace, they were probably not needed? As in other cases of cities in Roman Greece, such representations of the Piraeus are moulded under the influence of perceived and idealised situations of the past or, increasingly in the Roman imperial period, through conscious or unconscious comparisons with contemporary super-cities across the empire (Alcock 1993: 29). To what extent are we allowed to say with certainty that the entire enclosed urban area was inhabited in the pre-Roman period as intensively as implied by Strabo? These representations unavoidably contain misunderstandings and gross generalizations which should be borne in mind when these are used to interpret conditions of life in the Roman Piraeus.

The varied literary agendas and perspectives reflected in these works therefore do not permit a straightforward acceptance of their statements as historical evidence since in most cases this was not the explicit aim of their author, and since modern concepts of history did not exist at this time. Nevertheless, how can we explain the consistency of such negative representations? Alcock (1993) critically followed through some of the literary *topoi* that these tend to reproduce. Depopulation, urban decay followed by moral decline and a yearning for the good old days form coherent devices for the representation, as Alcock notes, of a defeated and inglorious Greece. On the other hand, a sense of 'imperialist nostalgia' (Alcock 2002: 43), as in the example of Servius' letter, of what was lost and cannot be regained, pervades the writings of Romans on Greece. In the case of the literary sources on the Roman Piraeus, it appears that the notion of decline is materialised through the fixation or emphasis of the narrative on the monuments of the past and by making judgemental comparisons between the perceived glory and urban prosperity of the preceding periods and contemporary 'imperial' reality (Petrocheilos 1974).

With regard to later periods, any statements about the contemporary, 'Roman' Piraeus are likely to conceal various other biases and their use as historical facts needs to be scrutinised closely. The tendency of many works, such as that of Pausanias, to focus on the past and ignore the present has been

frequently taken as historical fact. Recent work on Pausanias has stressed the importance of treating such texts as products of their time, in which the Greek past provided a point of continuous reference for literary production, elite culture and identity (Alcock et al. 2001). Other works present a more complex picture, as in the case of Lucian's *The Ship*. The described arrival of *Isis* has been frequently taken to represent a historical fact in the context of the Piraeus, while in view of the vivid description of its construction, it is commonly cited in specialist literature (e.g Casson 1950; Houston 1987: 445).

In this context too it is important to note the significance of structuring principles behind literary production and the intellectual environment of the Second Sophistic in which works such as those of Pausanias and Lucian were moulded (Bowie 1976). As Jones (1986: 158) has noted, Lucian's characters and the setting of *The Ship* in the Piraeus recalls vividly Plato's *Republic* where Socrates takes a stroll from the *asty* to the port. This is not to exclude the possibility that Lucian may have been influenced by a contemporary incident, or for that matter, that such large ships, if they existed, did dock at the Piraeus in the Roman imperial period. The frameworks of reference used in Lucian's work make it likely however that it is an imaginary location rather than the contemporary, Roman Piraeus that is described.

The exposition of some of the interpretive problems posed by the literary sources that deal with the Piraeus in the Roman period does not devalue them in their role as historical documents. Rather than seeing them as defunct rhetorical statements, the commonplace themes should primarily be understood in the context of current discourse by Greek and Roman authors on Greece in a period when the land and its people had been defeated and subjected by an imperial power. Fixation with the past and recourse to the glory of independent Greece, as evident in the example of images of the Piraeus, is not just a common literary *topos* but primarily a strategy for the sustenance of cultural identity (Alcock 2002: 35 ff.).

This realisation should make us aware of the limitations and potential pitfalls in using the ancient sources as authoritative evidence for inferring what they would 'readily' appear to proclaim. Their statements, however uniform and consistent in their negative representations they are, can neither be read at face value nor simply be lumped together to create a single narrative of the decline of

the Piraeus in the Roman period. Ultimately, their strengths and weaknesses should be tested against other types of evidence.

2.3 The nature of the archaeological evidence

By contrast to the authority attributed to the ancient sources, the archaeological evidence from explorations and excavations in the town in the modern era that can shed some light onto the conditions of life in the Piraeus in the period after the sack of the town by Sulla has been discussed only marginally (Day 1942). Certain classes of evidence, such as inscriptions, have attracted closer attention, while spectacular finds of sculpture dredged up from the harbour, such as the famous 2nd century AD Neoattic reliefs (Stephanidou-Tiveriou 1979), have monopolised the interest of previous scholars. The main bulk of finds, especially from the recent controlled excavations in the Piraeus, however has rarely been explored in more than passing notes in existing overviews of archaeological discoveries in the modern town (Eickstedt 1991; Steinhauer 2000). This has created an imbalanced understanding of the history of the port town in the Roman period and has contributed to the image of decline.

Since the late 19th century, and more recently from the 1950s onwards, excavations in and around the Piraeus have revealed substantial evidence for occupation of the area in the Roman imperial period. As already discussed in the introduction, the nature of the evidence has been conditioned by both the rapid growth of the modern town since the post-Ottoman period and the ways in which archaeological information has been collected and disseminated. For a large amount of the available evidence stratigraphic and contextual information is either limited or non-existent, while controlled excavation arrived in many cases too late to salvage what had not been severely disturbed by the renewed and intensive use of the area since the 19th century. Furthermore, the urban nature of exploration has unavoidably led to a series of fragmented sites, many of which have yielded only scrappy remains and very poor and/or undiagnostic finds to aid a meaningful reconstruction of function and chronology. Finally, and perhaps most importantly, the majority of the evidence remains to the present day understudied and largely devoid of post-excavation analysis and final publication.

A survey of the preliminary reports in the *Archaiologikon Deltion* published until 2002, references in the *Archaeological Reports* and overviews in recent works on the archaeology of the Piraeus (Eickstedt 1991; Steinhauer 2000) has yielded 29 urban sites where discoveries dating from the post-Sullan years to the Late Roman period have been made (Appendix 1, Table 2). Urban plots that have produced evidence of Roman date settlement can be roughly divided into three main categories according to excavated features and the function assigned to them during their excavation: building remains, cisterns and their deposits, tombs/ cemeteries. To this one may add a fourth one which includes stray or unstratified finds from areas of the town explored before recorded excavations (Appendix 1, Table 3).

2.4 Urban sites and settlement area in diachronic perspective

The fragmented nature of the evidence and the limitations posed by the insufficient recording and publication of urban sites make a definitive historical reconstruction of the urban fabric of the Piraeus in the Roman, as in earlier periods, particularly difficult. For this reason, the evidence will be discussed initially in the manner of a broad overview. The approach taken to the settlement history in the following paragraphs is based on the assumption that the existing evidence from rescue excavations can be examined and analysed in a manner similar to data from other urban surveys which have focused on the built up areas of cities and their surrounding territories (Bintliff & Snodgrass 1988; Alcock 1991).

The Piraeus did not have a territory *per se*, but constituted part of the territory of Athens and formed the second most important urban district from the Classical period onwards. Although an entirely different methodology of data collection is involved in 'formal' urban surveys (cf. Alcock 1991), with different scales of interpretative power and limitations, data from such surveys are not intrinsically different from the evidence collected from rescue excavations of ancient cities that underlie the urban centres of modern Greece. Excavated urban plots/ sites can thus be examined for their spatial and chronological distribution to reveal changing patterns in the use of the landscape.

In this context, it is fortunate to have published in the work by Eickstedt (1991) the main body of urban plots excavated since the 19th century, and more recently by the 26th Ephorate of Prehistoric and Classical Antiquities, down to 1984. Although his work provided a synthetic overview of the evidence, its topographic focus and emphasis on the pre-Roman phases did not allow much space for a discussion of long-term changes in the urban landscape. Nevertheless, information from archival material and preliminary reports as well as the tabulated data from excavated sites/ plots in Eickstedt's work are invaluable tools for assessing continuity and change in the landscape of the urban area during the Roman imperial period. These rich data may allow us to look at the Roman Piraeus from a broader and diachronic perspective, similar to that enabled by urban surveys initiated in Greece during the 1980s (Snodgrass 1987), and to ask questions about the size of the settlement area, urban growth or contraction and site continuity.

Although offering more promising directions, working with urban excavation data in such a manner does not make up for the deficiencies in the existing evidence. Preliminary reports, on which this study is based, are necessarily very selective in the information they include, frequently mentioning no finds and/or giving limited dating evidence. While this is expected to some extent, in many cases it leaves open questions about the way in which collection and recording took place¹⁵. As a result, such an approach introduces a number of limitations.

The interpretation of urban plots/ sites is not only hindered by the fact that these are very fragmented but perhaps more importantly by formation processes which are particular to the urban context of excavation. Urban assemblages, for example, are likely to contain much residual material that may create false impressions when examining site continuity (Eickstedt 1991: 261 ff.). In the case of the Piraeus, it seems that such issues have not been taken into consideration or at least not discussed explicitly in the available reports. Although the examination of such problems is the responsibility of each individual excavator rather than the purpose of the present study, it is important at least to point out these limitations and be aware of potential interpretive pitfalls.

¹⁵ This is also the case with discoveries made in the 19th century, which are particularly underreported.

The number of plots/ sites explored in the modern Piraeus that have yielded evidence for occupation in the Roman period (1st – 6th century AD) is quite low, even when the limitations of urban excavation, discussed above, are taken into consideration. According to the data from rescue excavations collected by Eickstedt (1991), Classical and Hellenistic sites dominate the archaeological evidence. Eickstedt (1991: 258-9) lists 127 excavations with material subdivided into four categories: 1) building remains, 2) cisterns and water supply features, 3) quarries and 4) cemeteries. The vast majority of excavated urban sites (103 of 127 urban sites) have produced evidence in the form of pottery, coins and other finds that date their occupation between the 4th and the early 1st century BC (*ibid.* 261 ff.).

Thus, a rough comparison of urban site numbers in the Roman period with those at the Classical and Hellenistic periods would appear to suggest that the density of settlement in the Piraeus fell drastically in the substantial period following the town's sack by Sulla. The particularly high number of sites with Late Classical material would seem to conform neatly to the town's period of prosperity and expansion in the 4th century BC as adduced from the richer literary and epigraphic evidence (Garland 1987).

A corollary of such an apparent decline in site numbers is evident in the extent of the settlement area. Archaeological evidence from the urban excavations suggests that in the Classical and Hellenistic periods town houses and other occupation extended over to the eastern part of the Akte peninsula to the S and the western slopes of Mounichia Hill to the North (**fig. 20**). Most excavated urban sites with Roman material, in contrast, demonstrate a specific clustering in the area between the Large Harbour (Kantharos) and the harbour of Zea with few others dispersed in other areas in the town (**fig. 21**).

A comparison between the area enclosed by the circuit walls in the Classical – Hellenistic periods (some 70 ha if the figure given by Hoepfner & Schwandner (1994: 23) is correct) and the extent of the area covered by urban sites with Roman material would also appear to reinforce the impression that large areas of the old town had been abandoned and/or were not reoccupied in the Roman period. The evidence from the distribution and chronological trajectory of urban sites in the Piraeus thus appears to corroborate ancient testimonies, especially

that of Strabo (*Geogr.* 9. 395-6) about the reduction of the Piraeus into a small settlement.

The picture of serious decline emerging from these observations, uniform and self-explanatory as it may seem, needs qualification on a number of grounds. On the present evidence, urban contraction can be easier to visualise than calculate, and using the area enclosed by the circuit walls as an index for the extent and density of settlement may be an obvious way to do so. This correlation however is now increasingly thought to be misleading by researchers of Greek and Roman urbanism since it implies a heavily built and occupied space throughout the fortified area (Duncan-Jones 1982: 261 – 262). As Hopkins (1976: 69-70) remarks, the extent of the walled area can be of use for such questions only when the density of occupation can be established. Even in the supposed period between the mid-5th – late 4th century BC, when private and public building is widely attested in the town, such a correlation does not hold.

This is indicated by the fact that during this period large tracts of land in the Akte peninsula and at the slopes of Mounichia, but also in the isthmus between the Kantharos and the Zea harbours were periodically used as stone quarries (Eickstedt 1991). The pre-Roman Piraeus was probably far from being the congested, heavily built-up town which Strabo implies when describing the port in his day as a 'small settlement' (see p. 33). Attention has already been drawn to the ideals shared by authors of the imperial period when describing contemporary and Classical cities, and such evidence should serve to correct any misconceptions arising from the straightforward reading of the textual sources. More importantly, however, it provides some rough measure of comparison with previous periods, when judging reduction of settlement area during the Roman period.

Another point to be taken into consideration concerns the chronological limitations of the available evidence. Most urban sites with building remains have yielded pottery and finds that date their use between the 2nd century AD and the Late Roman period, down to the 6th century AD but with some material dating earlier in the imperial period (1st century BC/ AD). Although the term 'Roman' as employed in Eickstedt's tabulations can provide a first index for inter-period comparisons, it masks finer distinctions. It is a very vague term for a period which in the case of the Piraeus may be taken to stretch for at least 600

years between Sulla's sack and the 6th century AD. This has serious implications when trying to understand how urban contraction took place, which areas were affected first, and so on. The considerable variation in the available dating should make us aware of the fact that such categorizations are bound to conceal complex chronological aspects of the phenomenon of urban contraction, which can only come out through the refinement of the dating and phasing of the excavated sites.

2.5. Problematising urban contraction

To develop this point further it is necessary to focus briefly on the evidence for tombs and cemeteries of Roman date discovered in and around the Piraeus (**fig. 21**). The fact that tombs dating to the 'Roman period' in general have been found within the old urban area enclosed by the Classical – Hellenistic circuit walls has already been pointed out in the context of the shrinkage of settlement after the Sullan sack (Eickstedt 1991: 139). In this context, further emphasis has been placed on the fact that several of these tombs have been found in close proximity to remains of domestic buildings of the Roman period (Steinhauer 1997; 2000).

Although these are fair points, given the known restrictions about the placing of burials very close to residential space in Classical Antiquity, using this evidence as a proxy for the contraction of the urban area in such a coarse fashion is likely to create misunderstandings. The conclusions about the process of urban contraction are likely to be quite different depending on when exactly these tombs can be dated within the 600-year span termed as the 'Roman period'. It is important to ask at what point within the 'Roman period' burials started to be placed in the area which in the previous era was enclosed by the town walls.

Explicit evidence, as for most other excavated urban sites, for the dating of these tombs is lacking. Nevertheless, a sizeable plot excavated in 1979 at Distomou St. 9 revealed a series of tombs which may be dated to the 1st-2nd century AD (Appendix 1, Tables 1 & 2: no. 18)¹⁶. This site is located outside the Classical – Hellenistic walls and to the present is the only organised cemetery dating to the post-Sullan period excavated in the Piraeus area. In contrast, all the other urban sites inside the Classical – Hellenistic urban area have produced only

¹⁶ This is inferred from the reference in the preliminary report to the discovery of bulbous glass unguentaria in several of the graves. See Spathatou (1988) 62.

isolated graves. Only one of those graves, an underground burial chamber discovered on the Akte peninsula may date to the Early Roman period (*ibid.* no. 21). All other tombs found close to the main area of settlement of the Roman period date from the 4th century AD at the earliest (cf. *ibid.* nos. 19 & 20).

Although intra-mural burial was practiced in Classical Antiquity in some cases (cf. Chapter 3), the location of the burial chamber may suggest that the area of the Akte peninsula was not part of the main settlement area in the Early Roman period. This is supported by the lack of any discoveries dating to this period from this area. However, the argument for contraction cannot be supported on the basis of the Late Roman tombs, which were found close to the main settled area. This evidence seems to correlate well with what is known about this practice from elsewhere in the Roman world, where burials are increasingly placed within urban areas, next to houses and within churches from the 4th century AD onwards (Wataghin 1999). As Ward-Perkins (1999: 248) notes this phenomenon owes much to shifts in the location of urban areas as well as in the new perception of space influenced by the ideology of the Church. These burials then attest not so much to urban contraction as to the processes of transformation of the town in the Late Roman period (Ward-Perkins 1999; Liebeschuetz 2001a: 29 ff.).

For these reasons, urban burials offer little scope for illuminating the question of urban contraction of the town in the post-Sullan period. A better index can perhaps be sought in the evidence for continuity in occupation/ use of excavated sites across the town area based on the chronological range of finds recovered. As with rural surveys, the underlying assumption of such an examination is that a greater number of continuing sites can be taken to indicate some degree of stability, with new sites, i.e. those occupied for the first time in a particular period, indicating emphases or shifts in occupation. In the urban context, such evidence may be taken as a rough means to gauge expansion in the use of the urban area and the levels of dispersal or density of settlement.

Notwithstanding the important problem of pottery residuality, the evidence for 'site continuity', measured against 'new' and 'continuing' sites suggests that the town experienced an intensive phase of occupation and building in the 4th century BC with 77% of the sites with material from this century being new. The picture seems to be completely reversed in the following centuries until the sack

of Sulla, as indicated by a greater level of continuity and thus a lower degree of urban expansion (**fig. 22**).

What is also particularly telling for assessing patterns of expansion/ dispersal and contraction in the urban area is the spatial distribution of the new sites for each century. For heuristic reasons, the intramural area has been divided into four districts, largely arbitrary as are all modern categorizations, but with an attempt to follow natural subdivisions and features as closely as possible. In the 4th century BC, the large number of 'new' sites concentrates in the districts of the Mounichia hill, the Akte peninsula and the northern part of the town (**fig. 23**).

Along with the low number of new sites in the central/ isthmus district this pattern is suggestive of the expansion of urban settlement to the outer reaches of the urban area at that period. Although settlement continued in these areas until Sulla's sack, as indicated by sites continuing from the previous centuries, new sites, already by the 3rd century BC, tend to cluster in the central/ isthmus area. This may point perhaps to an early tendency to move away from the outer reaches of the enclosed area towards the large harbour and Zea, which was to become the main nucleus of settlement in the Roman imperial period.

The available evidence is still very sketchy but it may indicate that the contracted area of the settlement in the Roman imperial period was the product of important reconfigurations and the changing nature of occupation in the course of the preceding centuries. Contraction and loss of settlement area during the early imperial period has been identified by urban survey in a number of cities in Greece, especially in Boeotia, where cities not only declined in size but also seem to have disappeared, as a result of warfare in previous centuries (**fig. 24**; Alcock 1993: 97).

While it is not the aim of this study to expand on the historical parameters of this process other than for the Roman imperial period, it has already been mentioned that since the late 4th century BC Piraeus experienced various waves of political and social instability (Garland 2001). These were inscribed in the material evidence and urban fabric of the town as indicated by the evidence for the changing nature of domestic space in the Hellenistic period, especially in the wake of the liberation of the port from the prolonged Macedonian occupation (Palagia & Tracy 2003). When examined from this long-term perspective, the siege and sack of the port by Sulla in 86 BC appears to have triggered further re-

arrangements in local society and its relation to the inherited urban landscape, rather than ushering cataclysmic changes.

2.6 Continuity and change in the local demography

One of the main implications of the archaeological evidence for contraction in settlement size and nucleation lies in its significance for changes in local demography. In other regions of imperial Greece, although information from urban surveys is inconclusive and has many limitations, this evidence combined with literary accounts may in some cases suggest such that the correlation between the reduction of urban area and subsequent demographic collapse is valid (Alcock 1993: 96 ff.). As studies elsewhere in the Roman world have pointed out, however, there is generally little correlation between population numbers and the extent of settled area (Lloyd 1985: 55).

In the case of the Piraeus, the problem is compounded by the information in the textual sources. As discussed earlier, while neither Strabo nor Pausanias explicitly speak about any demographic collapse in the Piraeus at their time, their statements appear to be negative, or at least ambiguous in their phrasing. For example, how can we interpret Strabo's description of the Piraeus as 'ολίγην κατοικίαν' – 'small settlement'? Does the phrase refer to the small amount of buildings and the space they occupied and/ or to the small population that inhabited the place?

These questions can have no simple answer but they raise important issues in the context of the demography of the Piraeus in the Roman period. To what extent did the population of the port town decline in the Roman imperial period and if so what was responsible for this decline? In fact, the case for a serious demographic decline of the population of the post-Sullan Piraeus has already been made by Garland (1987 & 2001). Before dealing with some of Garland's assertions, it is important to introduce the available evidence that forms the basis of inferences about the variation in population size through time and discuss some of its implications.

2.6.1 Sources of evidence

For Attica, the existence of a large number of tombstones recording various population groups has attracted particular attention as a means of studying the demography of the region since the time of Gomme's work on the population of Classical Athens (Gomme 1933). Tombstones of Athenian citizens and foreigners in which the inscribed names of the deceased are accompanied by the person's demotic or, in the latter case, ethnic origin offer an invaluable tool for tracing patterns of the demographic development of these population groups through time (Hansen et al. 1990)¹⁷. In addition, funerary inscriptions with known contexts of discovery that commemorate Athenian citizens can sometimes – and with caution – be used to help trace the spatial mobility and fluctuations in the size of this group on a diachronic basis (Damsgaard-Madsen 1988; Osborne 1991).

The following discussion focuses on two elements in the epigraphic evidence. Firstly, it draws upon tombstones found in the Piraeus since the 19th century and listed in the specialist literature, mainly in the standard collections of Greek inscriptions *IG II²*, *IG III editio minor* and *SEG*. A survey of these works has yielded about 132 inscriptions dating to the Roman imperial period and indexed as found in or nearby the Piraeus¹⁸. The tombstones are variously and not always accurately dated even within a century, and I have generally kept the grouping endorsed in the collections. **Figure 25** shows the distribution of material in these chronological groupings.

The tombstones have a number of recurring features recorded on them. Most of them carry the name of the individual and his/her demotic or ethnic group, and **figure 26** shows the quantitative distribution of this material according to sex of the commemorated. A second element is provided by the occurrence of tombstones recording one specific group, namely men and women registered in

¹⁷ According to Hansen et al. (1990) n. 43, there are about 4,500 names of Athenians with known demotic recorded on tombstones between the late 5th century BC and the 3rd century AD. The number of names rises up to more than 20,000 according to the same authors (*ibid.* 25), when other types of inscription are taken into account.

¹⁸ This number also includes eight examples that at the time these works were compiled were in the collection of the Piraeus Museum. Although it cannot be ascertained that these were also discovered in Piraeus, the Piraeus Museum did not start to accumulate a large amount of archaeological material from other areas of Attica and the Saronic Gulf until after its rebuilding in 1966 (Steinhauer 1997: 27), a significant time after the epigraphic collections mentioned above were compiled. See also Damsgaard-Madsen (1988) 61

the deme (parish) of the Piraeus and found in different locations throughout and outside Attica (cf. Meyer 1993). For the Roman imperial period, based mainly on the information of the works quoted above there are 33 such inscriptions, mostly commemorations for one individual (fig. 27).

For those epitaphs found in the Piraeus, such recurring features allow us to study some compositional aspects of the population of the port and their development through time: To what extent was the Piraeus populated by foreigners and locals? And to what extent did Athenians migrate from other areas to the Piraeus? Funerary inscriptions recording persons registered in the deme of Peiraieus (“Peiraieis”) can in turn provide some complementary information about the spatial mobility of this group. For example, to what extent did Peiraieis take residence in their home deme or chose to live in other locations/ demes? Such questions are not new, but they are of particular importance in the context of this study, as a way of approaching the problem of urban contraction and its relation to the demography of the Piraeus in the Roman period. Furthermore, the existence of new data on certain aspects of the epigraphic record, especially on the pre-Roman Piraeus, allow us to approach these issues on a diachronic basis and re-view the results of previous research in a new light.

2.6.2 Reconsidering the evidence of epitaphs

Garland drew upon the funerary inscriptions from the 4th century BC to the 3rd century AD recording foreigners and Athenian citizens (both from the Piraeus and other demes) ‘domiciled’ in the Piraeus to examine demographic changes in the composition of the population of the town. Although providing detailed lists of the evidence for foreigners only (total: 182 inscriptions), his discussion also mentions 240 inscriptions that commemorated Athenian citizens buried in the port town¹⁹ (Garland 2001: 60). Based on the decline of the absolute number of inscriptions commemorating both Peiraieis, other Athenians and foreigners in the port, he argued that the port’s population experienced various waves of decline from the 4th century BC onwards, culminating in a sharp drop as a result of the Sullan sack in 86 BC. He complemented this assertion by noting that the Sullan

¹⁹ His total of 240 is most likely to include inscriptions of all periods, however, this is not explicitly stated.

sack resulted in a general slaughter of the population and led most of the survivors to migrate to Athens.

Garland thus raises two points in relation to the demography of the Piraeus in the Roman period; first, decline in overall population numbers in the port and, second, migration. Both issues are to some extent interconnected, as already noted in the context of the mobility of populations from one place to another in Attica. For purposes of clarity, however, it is necessary to deal with them separately and then explore the extent of their link in more detail. Although the historical context for a population decline after the Sullan sack would appear to work well with the patterns demonstrated by the epigraphic record, some of the basic methodological tenets of Garland's approach reveal the dangers inherent in any study of funerary inscriptions in bulk. To what extent can the fact that 110 tombstones commemorating foreigners buried at the Piraeus date to the 4th century BC as opposed to only 39 dating to the Roman imperial period be regarded as a reliable indicator of population decline? As Bodel (2001: 35) has noted, the richness and abundance of such evidence is likely to create the illusion that epitaphs can reveal demographic realities rather than commemorative practices (cf. Meyer 1990).

Excessive reliance on the funerary record is likely to create a bias in favour of periods which are better represented than others, as well as creating misconceptions about the size of population. This reasonably included groups and individuals that were not represented epigraphically at death (cf. Oliver 2000). Indeed, the approach of straight counts of inscriptions used by Garland as a basis for inferring population trends through time has been criticised by Hansen et al. (1990: 27-28). They argued that such an approach fails to take account of the diachronic trends of the epigraphic habit in Attica, namely the fact that information about individuals recorded on Attic tombstones decreases through time (cf. Meyer 1993: fig. 1 & 2). In their work, focusing on the population of the Attic demes, the authors proposed a more refined methodology based on the comparison of percentages between funerary, ephebic and bouleutic inscriptions as internal cross-checks of epigraphic bias in the examination of general demographic trends of Athenian citizen population over time.

Applying the authors' methodology to the evidence for the Roman funerary inscriptions (total: 39; 3% of total number of inscriptions)²⁰ from the Piraeus, shows that the ephebic and bouleutic lists (total: 82 (4%) and 28 (2%) commemorations respectively) of the same period do not reveal any significant deviations in the percentages of recorded Peiraisis²¹ as adduced from the funerary inscriptions. This suggests that although the number of available Roman-period funerary inscriptions from the Piraeus is limited, the epigraphic data can be trusted as an indicator of demographic patterns.

Based on this refined approach, however, the results presented by Hansen et al. (1990) reveal a very different picture for the Piraeus in the Roman period from that espoused by Garland (2001). The authors speculated that only very small demes with a low number of male lines that could provide new citizens became extinct or shrunk considerably in the 600-year period covered in their study (Hansen et al. 1990: 31-32). The Piraeus was certainly not one of them. According to the authors' calculations based on inscriptions with recorded demotics, the Piraeus was among the ten largest demes of Attica in the Roman imperial period and eighth in order in relation to the rest of the 139 demes on account of its citizen population (*ibid.* 29).

It appears that, based on comparison between bouleutic, funerary and ephebic inscriptions, the population of the Piraeus grew considerably in the course of the Roman period for the first time since the 4th century BC. But where did the majority of the citizen population registered in the Piraeus live? Hansen et al. are concerned primarily with broad demographic developments of the demes as clans over time rather than with the size of the citizen population resident in the port. Accordingly, they do not make clear how many of the inscriptions recording Peiraisis that they cite have been found in the Piraeus, Athens or elsewhere in Attica²². In the grouping employed by Hansen et al. the Piraeus is listed with the other 'urban' demes, on account of the fact that it was fortified and connected to

²⁰ This is the number of funerary inscriptions given by the authors. My survey of epitaphs of the Roman imperial period recording persons registered in the deme Piraeus yielded 33 inscriptions, that is 6 inscriptions short because I have not been able to trace two works which were available to them. See below, p. 51 and figures 30-31

²¹ Percentages are calculated by dividing the number of recorded demotics attested for each epigraphic category by the total number of inscriptions of each category of a specific period, i.e. this case Roman. Data according to Hansen et al. (1990)

²² On the correlation between the epitaphs from Attica and the place of residence of the persons recorded on them, see the extensive discussion by Damsgaard-Madsen (1988)

Athens, although, strictly speaking, this applies only for limited and discontinuous periods in the 600 years or so that their evidence covers (Meyer 1993: 103).

Although it is debatable whether this criterion matters, what is really important in the context of this study is that grouping the Piraeus with the other urban demes misses the fact that the port was situated at a greater distance from the civic centre proper than the rest of the so-called 'urban demes'. Thus in terms of its geographical location in relation to the civic centre, the Piraeus stood midway between the proper urban demes and the more distant 'rural' ones. What effect did this distance have on the composition of its population? This is a very important issue since it addresses the fundamental question of the choice of residence, but also has implications about the qualitative composition of the population of the Piraeus in the Roman imperial period. It also brings us to the second issue raised by Garland, the migration of much of the population of the Piraeus to Athens after the sack of the port by the Romans in 86 BC.

Garland (2001: 66) based his conclusion about migration in the Roman imperial period on the fact that '[...] out of 24 sepulchral inscriptions commemorating Peiraieis which date to the Roman era no fewer than 22 came to light outside the Piraeus itself'. By that, he seems to be implying that there was a drastic drop in the local population resident in the port when compared to the previous periods. In that case too, however, Garland apparently commits the same mistake of taking the information of the epitaphs too literally, their apparent drop equating to a reduction in the size of the population.

The drop, however, probably happened because people had less information, including details about their deme of origin, age etc., inscribed on their tombstones from the Roman imperial period onwards. In this context, it is worth asking where tombstones of the Classical and Hellenistic periods commemorating Peiraieis have been found. Recent data collected by Damsgaard-Madsen (1988) suggest that 68% of such inscriptions come from areas outside the Piraeus. In other words, if the correlation between findspot of epitaph and place of residence holds, for inscribed Classical – Early Hellenistic and Roman Peiraieis the tendency was not to reside in the deme in which they were registered but elsewhere, and as the evidence compiled by Damsgaard-Madsen suggests, mainly in Athens itself.

An important question that Garland's conclusion raises, is whether the port, at any period of its history, was populated mainly by persons registered in the local deme. Garland does not offer any such comparative examination but his discussion contains inconsistencies between the information he cites and the conclusion he reaches. For example, it is stated that 'out of 240 inscriptions commemorating [Athenian] citizens who were buried in the Piraeus, a mere eight commemorate Peiraieis' (Garland 2001: 60). Assuming that his number of '240' includes inscriptions of all periods – which is most probably the case – and following Garland's reasoning, it would appear to be the case that throughout the Classical, Hellenistic and Roman periods the great majority of Athenian citizens resident in the Piraeus were persons with origins outside the port town itself.

Even judging by the information that Garland himself cites, the Peiraieis as a group defined by its deme affiliation seem to have made up only a small fraction of the citizen population resident in the port not only in the Roman imperial but also in previous periods. More recent data provided by the study of Damsgaard-Madsen (1988) on Attic epitaphs of the Classical – Early Hellenistic period may help to put this into a clearer perspective. Damsgaard-Madsen used 736 inscriptions recording male Athenians dating between 400 and 200 BC and tabulated their findspots against the demotics recorded to assess the patterns of intra-regional migration. The Piraeus was incorporated with the adjacent area of Phaleron and inscriptions discovered in these areas are listed as found in region Ib. According to his data, indeed the vast majority of tombstones of citizens recovered from the Piraeus and Phaleron record men that came from other areas of Attica with only a small percentage attributable to persons registered at the Piraeus (**fig. 28**; Damsgaard-Madsen 1988: 65).

The epigraphic evidence for the Roman imperial period is less numerous but nonetheless quite telling. Based on the information recorded mainly in *IG II²* and a number of more recent collections²³, there are 42 names of Athenians recorded on tombstones found in the Piraeus dating to the Roman imperial period, of which 18 are women. Even in the Roman imperial period, however, women were not considered citizens, strictly speaking, and if we exclude this population group

²³ I have generally used information collected in the works cited by Hansen et al. (1990) 43, n. 7, with the exception of Peek (1957) and Peek & Stamires (1942), which I have been unable to access.

to be able to compare like with like, the evidence suggests that, again, it is mainly tombstones of citizens of other demes that are found in the Piraeus (fig. 29). A comparison with the available evidence for the Roman imperial period, thus indicates that while the overall number of inscriptions drops, the general trend in the pattern of representation of 'locals' versus Athenians of other demes did not change significantly.

It is important to stress in this context that none of the above information can be taken at face value, i.e. as direct evidence about the extent of migration from the Piraeus to other locations in Attica and Athens or the size of the population in the Piraeus at any particular period. What it may permit is appreciation of some broad patterns or tendencies of the population dynamics of the Piraeus as a deme/clan and as a deme/location over time. It is thus important to focus on these broad patterns rather than the actual fluctuation in the numbers of tombstones, which is likely to contain biases, both ancient and modern (Bodel 1999). In this respect, the tombstone evidence from the Piraeus suggests two things; firstly, that at no time were Peiraieis the dominant group within the territory of their deme of origin. In other words, the port seems to have been populated mainly by other groups, a substantial number of which must have been made up by citizens from other Attic demes. Secondly, the trends reflected in the tombstones suggest that Peiraieis primarily chose to take residence in Athens, not only in the Roman period but also in the previous centuries.

2.6.3 Decline or prosperity?

These observations serve to correct the picture presented by Garland which implies that the population of the Piraeus in the Roman imperial period suffered a grave loss in relation to previous periods. The deme population certainly did not decline in a dramatic fashion, as the study of Hansen et al. (1990) shows. On the contrary, it seems to have flourished in the Roman imperial period, for the first time since the 4th century BC. On the other hand, it cannot be denied that warfare and social instability in the early part of the 1st century BC are likely to have had a serious impact on the population resident in the port.

Still, the low numbers of tombstones of the Roman imperial period commemorating Peiraieis discovered in the Piraeus cannot be taken to show 'the

virulence of the Sullan destruction' (Garland 2001: 66). This is a weak explanation, for a variety of reasons. Firstly, it does not take account of the fact that tombstones of Roman imperial date from the Piraeus span some 400 years, some dating to long after the Sullan destruction had taken place. Secondly, as a comparison with the evidence for previous periods suggests, the population of the Piraeus, even in the Late Classical period, when it is assumed to have been particularly prosperous, included only a small number of persons registered in the local deme.

For these reasons, the epigraphic evidence does not permit a single and straightforward correlation between the Sullan sack and the migration of Peiraieis as proposed by Garland. Migration, if securely adduced from the evidence of Attic epitaphs, has a more complex trajectory in the settlement history of Attica. Recent works show that migratory movements from the countryside demes to the *asty* had started to take place as early as the Late Classical period (Damsgaard-Madsen 1988) and that these intensified in the Hellenistic and Roman imperial periods (Hansen et al. 1990).

Events or extended periods of instability, warfare and unrest are likely to have fostered these movements but we should also consider cultural, social and economic motivations which are likely to have had considerable influence upon the choice of place of residence. In the Roman imperial period, a number of factors made residence in the city more attractive to larger parts of the population, such as better prospects for work, the provision of public services and facilities through civic munificence (Alcock 1993). In the case of Roman Athens, for members of the local elite that came from the demes of the periphery, residence in the city also had the additional advantage of enabling people to live closer to the meeting places of the Athenian assembly and city council (Hansen et al. 1990: 33).

As the evidence considered above suggests, the citizen population registered in the deme of the Piraeus was not exempt from this process of nucleation, despite the fact that the port itself provided a developed satellite centre next to Athens, both in the Classical – Hellenistic and the Roman imperial periods. This created a substantial, if not always stable, influx of population from the other Attic demes, and as it will be shown below, from regions further away. In this context, the fact that the epigraphic evidence from the Piraeus points to the

predominance of citizens of other demes should not cause any surprise. This observation applies to both the Classical – Hellenistic and the Roman imperial periods but for the latter it has a greater historical importance. It serves to demonstrate that demographic losses that the port town may have suffered as a result of warfare and unrest in the course of the 1st century BC were compensated for on a considerable scale in the course of the later centuries under the empire.

On the basis of the available evidence, it would be too ambitious to try to resolve the chronological phases of this process or to determine how this influx took place, whether this was politically instigated, a result of economic forces or other factors. One issue which arises in the context of the citizens registered in the Piraeus in the Roman imperial period is the extent to which the Piraeus as a deme/ clan benefited from the increased grant of Athenian citizenship to foreigners. Naturalization by grant or purchase had increased substantially since the mid-2nd century BC. It developed into one of the major factors that shaped the demography in Athens in the Late Hellenistic and Roman imperial periods (Osborne & Byrne 1996) and it accounted for much of the growth in the size of the urban demes postulated by Hansen et al. (1990).

With respect to where these ‘new citizens’ chose to live, Hansen et al. (1990: 34) remark that ‘it is a reasonable assumption that most [...] took up residence in the urban district within the walls’, while also noting that ‘[...] the naturalised citizens who lived in the city were now inscribed in one of the urban demes’. This would seem to imply that the Piraeus, which lay outside the walls, was less likely to be the chosen place for residence by new citizens who took up residence in Attica, while at the same time potentially serving as a deme for their enrolment. The question cannot be answered with the evidence available but it warrants further research.

Apart from the influx of people from the neighbouring or more remote demes in Attica, and, perhaps more tentatively, of naturalised citizens, the permanent population in the port is also likely to have been boosted by the arrival and settlement of substantial numbers of foreigners. Philostratus in his biography of Proclus (*Lives of the Sophists* 603) mentions that this philosopher from Naucratis in Egypt settled in Athens, bought a house in the Piraeus and started a business of imports from Egypt and beyond. Despite the dismissive slant of this account

towards trading, which ties in with Roman elite perceptions of such activities (Meijer & Van Nijf 1992: 15), this reference is suggestive of the prospects that the port offered as a place to conduct business and as a gateway to a hinterland of potential consumers of considerable size and sophistication. Commercial and economic functions are likely to have been instrumental in attracting foreigners who wanted to engage in profit-oriented activities and settle there more or less permanently.

Epigraphic evidence about foreigners is perhaps more telling. There are 65 tombstones of foreigners dated to the Roman imperial period from the port, making up 48% of the total available evidence. However, the actual size of this group in relation to the total population at any time within this large time-span is very difficult to estimate. Account should also be taken of the fact that at least some of the foreigner population included in the epitaphs were short-term visitors, sailors, merchants etc. who died in the port and were buried in local cemeteries.

This is most likely to have been the case with two tombstones commemorating members of the crew of the imperial fleet based at Misenum and Ravenna in Italy that came from Bessica in Thrace (*CIL* 557 – 558; cf. Day 1942). These two individuals were probably stationed in the port at the time of Trajan's campaigns in Parthia (Oliver 1941). Although the demographic impact of such groups is likely to have been low from a long-term perspective, the periodic presence of such visitors, especially during the sailing season, would have added to the overall size of the population in the port and would have been significant in generating economic activities that sustained a significant part of the permanently resident population.

Other aspects of this evidence however suggest genuine permanent settlement of large numbers of persons of foreign origin in the Piraeus during the Roman imperial period. The data, excluding the two tombstones of the imperial fleet crew members from Bessica, comprise 63 tombstones (**fig. 30**). As in previous periods, foreigners commemorated in the Piraeus seem to have come mainly from the eastern part of the empire, the provinces of Asia, Syria and the Bithynia & Pontus, as well as from other cities within the province of Achaëa (cf. Garland 2001: 64 – 66). In most cases, the cities/ areas from which these individuals came are represented by two or, at most, three inscriptions, with the

exception of the island of Salamis²⁴, which is represented by 10. In striking contrast, there is one coherent group of persons originating from the city of Miletus in the province of Asia in modern western Turkey. These make up no less than 43% of all the tombstones commemorating foreigners with known ethnics discovered in the port and dating to the Roman imperial period.

The high representation of Milesians in the epigraphic record may indicate stronger commemorative habits on part of this inscribing group and thus reflect epigraphic rather than demographic realities. The phenomenon however has been also observed in Athens in the Late Hellenistic and early imperial period. In a recent study T. Vestergaard (2000) has argued convincingly on both epigraphic data and historical grounds that Milesians migrated to Athens and Attica during this period on a considerable scale. According to Vestergaard (90-91) the movement can be charted from about 100 BC until AD 200, but on an increased level in the 1st and 2nd centuries AD, when Milesians comprise 35.3% and 73.36% respectively of all foreigners with ethnic origin inscribed on tombstones from Athens.

In the light of these new arguments and the evidence from the Piraeus, it is reasonable to suggest that Milesians made up a quantitatively significant group of the population resident in the port in the early Roman imperial period. Nevertheless, it is impossible to provide secure quantified estimates of the proportion of this group in relation to the total population and we should always take account of the fact that we are dealing only with part of the population that chose to inscribe itself (and to provide details of its ethnic origin) at death.

The long-term migration of Milesians from their homeland in Asia Minor to Athens in the early imperial period has important implications for understanding the process of the demographic recovery of the Piraeus in the Roman imperial period. When examined together with the influx of people from the rural and peripheral demes of Attica to the port, such a process is likely to have eased demographic pressures created by the unrest of the preceding times and the regionally-specific and diachronic migration of Peiraieis to Athens charted above (p. 50).

²⁴ It is not clear whether the island of Salamis was an Athenian possession in the Roman imperial period. For this reason, inscriptions recording Salaminians are here included in the foreign group. The debate is summarised in Taylor (1997)

To what extent the Roman Piraeus was more or less highly populated than in the preceding centuries is a matter that cannot be explored on the basis of epitaphs alone. In any case, seasonality, especially in the context of a port town, would account for fluctuating numbers of people present in the port, a fact which as Horden and Purcell (2000: 382) suggest ‘makes [it] theoretically impossible to speak about the population of a city’. On the practical side, the above discussion has attempted to show that the Piraeus was not the desolate, depopulated place implicit in the rhetoric of ancient sources.

2.7 Conclusion

Literary sources of the Late Hellenistic and Roman imperial period present a bleak picture of the Piraeus after the sack by Sulla. Despite the literary agendas and diverse backgrounds of these works, the negative overtones have penetrated modern historical accounts of the port town in the Roman imperial period. The increasingly critical assessment of these texts however allow us to see what they appear to be proclaiming ‘readily’ in a new light and to understand their biases, limitations and interpretive pitfalls when using them to support inferences about the conditions of life in the towns and regions of the province of Achaëa (Arafat 1996; Alcock et al. 2001; Dueck 2000).

The arguments developed in the preceding paragraphs may allow modification or at least, for the moment, a balancing of the image of the Piraeus gained from the literary sources as an urban wasteland. The archaeological evidence from the modern urban excavations indeed seems to suggest that the main nucleus of settlement, as described in the famous reference by Strabo, lay between the isthmus between the harbours of Zea and Kantharos, in an area much smaller than in previous periods. It is worth considering, however, that the process of urban contraction is not associated only with the Sullan sack (cf. Garland 1987) since it has a temporal depth that stretched back to at least the 3rd century BC. Furthermore, burials within the old fortified area may not have started on a significant scale until Late Roman times, and the use of such data as proxies of urban contraction should take this important parameter into account.

A similarly cautious approach to the problem of the population of the port town after Sulla suggested that during the Roman imperial period the general

trends in the fluctuation and mobility of the citizen population in the port did not differ very much from those attested for the preceding centuries. The low number of inscriptions of native Peiraieis discovered in the Piraeus says very little about the migration or decline of the population of the port after the Sullan sack. It must be seen in the context of the rest of the epigraphic record and the general trends towards migratory movements and nucleated settlement that had been developing since the Classical period. As revealed by recent studies, the deme population saw some considerable growth in the Roman period but it seems that the port town was populated mainly by people who came from other peripheral demes of Attica, and by foreigners.

Chapter 3

Exploring continuity and change in the urban fabric

3.1 Introduction

In Chapter 2, some general patterns in the settlement history of the Piraeus peninsula in the Roman period were explored. This chapter examines particular aspects of the urban fabric of the port in greater detail. Drawing upon the available archaeological, literary and epigraphic evidence, it explores changes and continuities in the landscape of the town during the centuries following 86 BC. Although in this context a rather descriptive approach to the evidence is adopted, comprehensive coverage of the entire dataset is impossible. Instead, the focus lies on four sets of elements of the urban fabric that are sufficiently studied and documented in either excavated remains and/ or textual sources to provide useful conclusions. First, the harbours and the waterfront are addressed, turning then to baths and other places for leisure and pleasure, before assessing continuity and change in sanctuaries, burial space and the extraction sites for limestone.

In addition to the data from excavations in the town, extensive references are made to a very important inscription which was discovered in Athens in the 19th century (*IG II² 1035*). The inscription records a decree voted by the Athenian assembly to carry out restoration of public and sacred properties, various buildings and sacred precincts in Athens, the Piraeus and Salamis. The dating of the text has long been debated, with assigned dates ranging between the 2nd century BC and the 2nd century AD, but in recent years scholars seem to have narrowed this margin to the time between Augustus and Claudius (Culley 1975; Leslie Shear Jr, 1981).

The importance of the inscription lies not only in that it provides evidence for a wide-scale official project of urban re-development in the early imperial period but also in the many details included about the town's topography in Antiquity. However, the straightforward use of the inscription as a guide to local topography should be resisted. Frequently, monuments and features used as landmarks to guide the reader are directly related to famous personalities and events of the Classical past – at one point a hero of the Peloponnesian War (431–

404 BC) is mentioned in this context, making it difficult to discern whether these features were actually part of the contemporary landscape or reflect an Athenian sense of 'imaginary geography'. While providing information about Athenian social memory and self-perception under the empire, this document requires particular caution when used as proxy evidence for the existence (or not) of certain features in the town.

3.2 The waterfront and the harbours

One of the most dramatic changes resulting from the partial abandonment or desertion of urban space in the Piraeus in the course of the Roman period was the shift of focus of settlement towards the western part of the peninsula. This shift is reflected in the concentration on the Kantharos as the prime harbour (**figs 2 & 31**). During the Classical and Hellenistic periods, the Kantharos harbour was used as an entry point by commercial vessels and its northern and eastern shores formed a distinct area, known as the Emporion, which was segregated from the rest of the town by a high wall. The docks were lined with porticos, storehouses and incorporated display areas and other facilities designed for tasks and activities connected with the everyday life of the harbour.

In some cases, as when preparations for overseas naval operations were in progress during the heyday of the Athenian maritime power in the Classical period, it seems that triremes and auxiliary vessels of the fleet also docked there (Steinhauer 2000: 79 – 80). Excavations however have brought to light the remains of a series of ship-sheds and ancillary buildings, such as Philo's arsenal, in the area of the harbours of Mounichia and Zea on the eastern part of the peninsula (**fig. 2**). It appears that, although the Kantharos accommodated military vessels, the primary naval stations of the Athenian fleet in the Classical and Hellenistic periods were situated in the eastern part of the peninsula.

Documentary sources of the 1st century BC suggest that in the post-Sullan decades Athens still had a few triremes, which were conscripted by the Romans for their war against pirates in the Aegean (Day 1942). In addition, there are indications that the Piraeus was used as a naval station of the imperial fleet during the early 2nd century AD (Oliver 1941). Although comprehensive dating evidence for the construction and use of the majority of the ship-sheds and other

excavated remains of buildings mentioned above has never been published, several of these were apparently destroyed during the sack of the port in 86 BC (see p. 22).

The inscription that relates to the restoration of public lands enacted either during the Augustan or Claudian periods mentions harbour installations (ship-sheds, wharves) at Zea, but it is debatable whether this constitutes reliable evidence for the existence of a formal naval station in this area around the time that the inscription was carved (*pace* Day 1942). Such celebrated installations would have been so familiar to Athenians that they could easily be construed as contemporary monumental features of the town for the purposes of the decree documented in the inscription, even if they were in actual disrepair and/or disuse by this time. Similar doubts also arise about using Pausanias' mention of ship-sheds in the Piraeus as proof for the existence and function of such facilities during his time.

There is currently no archaeological information to indicate that the ship-sheds at Zea had been rebuilt in the post-Sullan and/or Roman imperial periods. In fact, there is some evidence to suggest that parts of the Zea harbour shore, in the area where the naval zone lay in the Classical and Hellenistic period, were levelled and partly re-developed in the post-Sullan centuries with other aims in mind (see p. 66). Furthermore, several buildings in this area that were damaged during the sack of 86 BC, such as Philo's arsenal, were being gradually despoiled of their stone masonry for new construction in subsequent centuries (Steinhauer 1994a), suggesting the existence of patches of barren and unoccupied land.

While definitive evidence for the existence of ship-sheds at Zea that were in use during the Roman imperial period remains to be found, this does not preclude the possibility that the port was used by the imperial fleet. The epigraphic evidence for the utilization of the Piraeus in the context of Trajan's Parthian campaigns (Oliver 1941) suggests that the port is likely to have been used as a provisional naval base whenever a need arose rather than as a formal naval station. It is thus not necessary to assume that the port possessed particular facilities, such as ship-sheds and docking platforms for war-vessels, for this purpose. If formal installations and facilities for the imperial fleet existed at any time during the Roman imperial period, then these are more likely to have been situated in the Kantharos harbour, which, as the largest natural basin in the

Mediterranean, could reasonably accommodate increased numbers of ships, both commercial/ civilian and military.

The archaeological evidence for the shape and form of the Kantharos harbour in Antiquity and during the Roman period in particular is extremely limited. The coastline on the eastern and northern sides has suffered considerable changes since Antiquity as a result of coastal drifts, silting up and, from the later 19th century onwards, continuous refurbishments, drainage works and extensions of concrete piers and breakwaters (cf. **fig. 2**). Although valuable evidence about ancient harbour works are included on old maps and the studies by Curtius (1841) and Milchhöfer (1881), properly recorded archaeological investigations started here long after much of this had been re-developed and only very few data are now available.

Arguably, the most important discovery was made in the 1980s when remains of stone piers and breakwaters were discovered at Akte Miaoule (the eastern coast of ancient Kantharos) (**fig. 31**: no. 11; Steinhauer 1989b: 29). The discovery is particularly significant because it furnishes evidence for the approximate coastline of the eastern waterfront of the Kantharos in Antiquity. The excavation revealed a stratified sequence of construction and repairs on harbour works, identifying remains of two main phases, one in the Late Classical and one in the Roman period. More precise dating for the Roman works is not yet available but the discovery is important as it shows that, in contrast to the Zea and Mounichia harbours, considerable construction activity was taking place at the Kantharos harbour.

Several other features which were important for the unobstructed function of the harbour are likely to have continued to be used from the previous centuries, such as the porticos which are known to have framed the waterfront in the area of the Emporion throughout Antiquity. Older and recent excavations in several places have brought to light remains of several relevant buildings with some substantial evidence of Roman – Late Roman refurbishments. This may have also been the case with the so-called ‘Tomb of Themistokles’, which was situated on a high spur of the Akte peninsula, overlooking the entry to the Kantharos. The feature, which consists essentially of an unfluted composite column set within a walled precinct of Late Hellenistic date, may have been a lighthouse (Steinhauer 2000).

The limited but definitive archaeological evidence for construction activity in the large harbour of the Piraeus during the Roman imperial period finds further circumstantial support in the restoration inscription which mentions a number of repairs that took place in the port in previous times and in the Augustan (or Claudian) period. The inscription mentions, as a means of orientation for the reader, the D(e)igma, a porticoed building used for the display of merchandise in the Emporion, which had been repaired by a certain Magnus, a reference which is now unanimously taken to reflect donations which are known to have been made by Pompey in the 60s BC to the city of Athens (Day 1942; Hoff 1997: 43). Amongst other issues, furthermore, the document sets forth that repairs are to be carried out on the *psyktrai* (identified as 'dry docks') situated in the large harbour that served the caulking and cleaning of ships (Day 1942; Steinhauer 2000: 80).

Although scarce, this evidence places Kantharos, in terms of the scope of its architecture and function in a comparable position to certain contemporary harbours in the Roman Mediterranean. Apart from the obvious expediency of the lighthouse, dry docks would have been used for carrying out maintenance works on the ships stationed at the harbour. Projecting piers and breakwaters would have been indispensable for guiding the ships into safe harbour and for providing the necessary space where these could easily moor (cf. Blackman 1982: 196 f.). In addition, projecting piers are likely to have facilitated the unloading of cargo from the ship on the one side directly to barges or other vessels on the other, and the handling and sorting of mixed cargoes (Rickman 1988: 263).

It is interesting to speculate why building the piers would have been considered expedient. One wonders whether this was done because a continuous quay along the waterfront where ships could dock as in other harbours across the Roman Mediterranean (e.g. Lepcis Magna), did not exist (or perhaps had ceased to exist during this period) or in order to ensure that enough space was available for more ships. The latter scenario should be considered if one accepts the possibility that there was an increase in maritime traffic and the number of vessels that called at the port during the sailing season around the time the piers were re-built.

Although it is difficult to provide a comprehensive explanation with any certainty, a likely context for the re-building of these features may have been the introduction of free grain gifts to the population of Athens by Hadrian (Dio

Cassius LXIX, xvi 2), which are reported to have been re-inaugurated in the early 4th century AD by Constantine (*Julian Panegyric to the Emperor Constantius*, I 8c; Eunapius, *Lives of the Philosophers* 492). These alimentation schemes implied the frequent importation of considerable quantities of grain from overseas and are likely to have placed some particular pressure on the harbour. It seems reasonable to assume that such a systematic practice involved the (perhaps, state-sponsored) building and/or maintenance of further facilities to accommodate the arrival of grain-carriers and the efficient handling of their cargoes.

In general, judging from this epigraphic and archaeological evidence for harbour works and other facilities, there seems to have been an increasing official investment in this area of the Piraeus, at least from as early as the 60s BC, by foreign donors and local magistrates. This helped the Kantharos to develop into a centralised focus of maritime traffic during the Roman period. This conclusion is reinforced by the evidence for artistic and architectural monumentalization in this area. A giant marble lion, taken from the Piraeus during the siege of Athens by the Venetians in 1687 and now displayed in front of the 'Arsenalle' in Venice, was originally set up in the western side of the Akte peninsula near the waterfront, guarding the approach to the harbour. Although little is known about the context, date and circumstances of its display, the sculpture is now generally considered to be Antonine in date (**fig. 32**, Steinhauer 2000).

On the northern shore of the harbour, finds of imperial statuary, such as the portraits of Claudius and Trajan, now in the Piraeus Museum (**fig. 33**), that have been dredged up from the seabed (Milchhöfer 1881: 50-51) suggest that the area of the Kantharos was considered important enough to host imperial images. Several other statues and busts, some of over-life size, such as those of Hadrian and Balbinus were found on land sites on the eastern shore (**figs. 34-35**). While it is possible that several of the portraits found in this area, such as the gigantic busts of Hadrian, were destined for shipment to overseas markets (Steinhauer 1997: 91), several statues are likely to have been originally set up at the porticoes or open spaces along the waterfront. The discovery of the foundation for an Early Roman pedestal at the 70 Philonos St. site, seems to confirm this hypothesis (**fig. 36**; Steinhauer 1989c: 44). The representation of the emperor in this context

should not cause much surprise. The area of the Emporion was the primary entry point for goods and commodities from the entire empire into Athens (and vice versa) and the location where taxes and dues were levied by the civic officials for the imperial procurator (cf. Tuck 1997).

3.3 Recreational facilities

The function of the port and the patterns of human and commodity traffic must have placed particular demands on the town which influenced the type of buildings and facilities that were available. Apart from the people who were permanently resident at the port, the local population included a variety of short-term visitors, traders, crew members and passengers of various ethnic origins. The presence of this diverse population must have been an important incentive for the development of a number of local services and facilities which sought to provide sufficient lodging, food and drink, hygiene, leisure and pleasure. As a result, the Piraeus developed gradually into a 'service town' (cf. Engels 1990: 50 ff.), incorporating a range of secondary services next to the primary function of the port.

The spread of bathing practices in the Roman world has been a matter of considerable scholarly debate in recent years with particular emphasis placed not only on the form and architecture of bathing establishments but also on the social significance of bathing as an index of cultural and social change in the provinces (DeLaine 1999; Fagan 1999). In mainland Greece, bathing had a long history before the Roman conquest but from the 1st century BC onwards new architectural forms and bathing practices also began to spread there (Farrington 1999).

In the Piraeus, there is a bath of Classical/ Hellenistic date and another three buildings of similar function which date in the Roman period, spanning the 1st to the 5th centuries AD. Although the evidence for the Roman period is rather limited and these sites are known primarily from old reports or short notes, a closer examination of the information presents significant evidence for the changing nature and context of bathing and the architectural form of baths in the ancient town. This provides an intriguing insight into the social, economic and cultural forces that shaped the bathing environment through time and helps us to

understand how and to what extent the Roman-period experience of this practice differed from those of the previous periods.

One of the most enigmatic bath buildings in the Piraeus came to light in the course of excavations in the late 19th century in a plot close to the shore of the Zea harbour. The excavation uncovered the substantial part of a large building complex at the junction of Philellinon St. with Akte Moutsopoulou, which continued to the S and W underneath modern neighbouring plots and houses. In absence of any comprehensively published data from this early excavation, the exact chronology of the building remains unresolved, although dates in the Augustan period and the first century AD have been proposed (Day 1942; Eickstedt 1991). In the report however there is some evidence for at least two different architectural phases, while from a few finds reported from the overlying fill, it would seem that the building had probably collapsed by the later 3rd century AD. The plan of the building published originally is presented in **fig. 11**, with a revised plan showing different phases and interior features in **fig. 37**.

The building, which could be traced over an area of over 350 m², comprised 31 rooms of varying dimensions and forms. The generally irregular plan appears to have been dictated by the nature of the terrain and the existence of remains of the Classical ship-sheds in close proximity. This also resulted in the construction of the eastern and western flanks at different levels. The centre was taken up by a large rectangular courtyard with a quasi-apsidal colonnaded area at the centre, enclosed on all sides by a small wall or balustrade, to the E S and W sides of which rooms open.

To the N, this courtyard is connected with another room, which was interpreted as the forecourt/ main entrance of the building and paved with a mosaic depicting a Medusa head (**fig. 38**). The entrance and mosaic are likely to have been later additions, as implied both by coins dated to the 1st century AD found underneath the mosaic and by its rather awkward relationship to the rest of the building. This is also supported by a stylistic assessment of the mosaic, which finds its best parallels in mosaics of the 2nd century AD in other Achaean sites (Waywell 1979: 302).

Although excavation revealed only part of the building, Dragatsis suggested that it was a bathhouse. He based his identification on the division of space, the evidence for round bricks in the SE rooms and the occurrence of well-

constructed drainage channels. More recently, Eickstedt (1991: 151) expressed doubts about this interpretation, since no plunge basins were found among the excavated remains. He furthermore pointed out in this context, that the report does not make explicit whether the round bricks discovered the SE part of the building derive from hypocaust floors.

It should however be remembered that it is rare to find more than one room with a hypocaust-heated floors in baths excavated in southern mainland Greece (Nielsen 1990). It is probable that the building at Zea had a bathing suite which included a single *caldarium* with hypocaust floor. Nielsen (*ibid.*) has furthermore remarked that in some Roman-period bath complexes in Greece it is difficult to distinguish securely between the function of a room as a *caldarium* (hot chamber) or as a *sudatorium* (sweat chamber). The latter were frequently devoid of any constructed pools and this would seem to imply that the absence of a plunge basin should not disqualify a building from being described as a bath.

The site did not produce any evidence for water storage in the form of cisterns and water was probably provided from a distant source. It should be noted in this context that submarine building remains noted during the excavation close to the shore might have been a series of rooms with plunge pools supplied with seawater (Dragatsis 1892: 25). Seawater was highly praised for its medicinal and tonic qualities in the Roman period (Yegül 1992: 93) and was used on an extensive scale in the Roman world either in purpose-built baths on the spot or transported to bathhouses in inland areas, where it was usually mixed with other types of water (Jackson 1999: 113). Pools fed with seawater are known from a number of seaside baths in the Roman world such as the Antonine thermae at Carthage and the Harbour Bath-Gymnasium complex at Ephesos (Yegül 1992: 192; 272). The location of the building near the sea and the widespread attested use of seawater in bathing during the Roman imperial period reinforces the possibility that at least part of the Zea building functioned as a bath.

If bathing activities in the Zea building can be supported by both its location and the scanty reported evidence, the interpretation of other function-related features that were reported from the excavation of the building remains problematic. A number of built features that were discovered along the walls in some rooms were interpreted by Dragatsis as masonry beds used for venal sex. It

must be stressed that very few details are given by the excavator about these features, while from the plan it is difficult to understand how masonry beds are distinguishable in form from similar features such as benches. As discussed earlier, the building at the Piraeus may have incorporated bathing facilities among other service and reception rooms. Contemporary medicinal treatises prescribed to bath-goers of the time a host of after-bathing body treatments such as massage and anointment (Yegül 1992: 354). It is possible to imagine that the masonry 'beds' may have been used in the course of activities that were connected primarily with bathing and which could take place in other rooms of the building²⁵.

Even when such built features occur, they alone cannot serve as secure archaeological proxies for the practice of prostitution. In Pompeii, according to a recent review of the evidence (McGinn 2002), such beds do indeed indicate purpose-built brothels, however other elements, such as the degree of spatial seclusion, are also of importance. This latter element is found in the series of small cubicles in the Sarno baths at Pompeii and may suggest such a function (**fig. 39**; Fagan 1999: 67). Elsewhere in the empire the archaeological evidence is very thin and still open to dispute. The Late Roman bath of Varius/ Scholastikia in Ephesos, which includes similar features, provides an example (Nielsen 1990: 124), while the bath at Ashkelon in Israel, where tens of skeletons of new-borns have been discovered in the building's sewers, has also been interpreted as a place where prostitution was practiced (R. Hingley, pers. comm.).

On the other hand, we must remember that baths in the Roman world provided to their users with a setting for a sensual experience that went beyond the narrow limits of medicinal or everyday bathing. The association of baths and bathing with other leisure activities is well attested in the Roman world, and there is ample literary evidence to suggest that baths counted among the places where venal sex was on offer (e.g. Martial *Epigrams* 3.93.4; cf. Nielsen 1990). In view of this evidence, the possibility that such services were available or indeed were practiced in the building at Zea cannot be excluded²⁶. The provision of such

²⁵ See for example the North Baths and Baths with Frescoes at Banasa in the province of Mauretania Tingitana (western Morocco), where masonry benches are associated with the changing rooms (*apodyteria*) of the bathers (Yegül 1992: 237 f. with figures 282 & 284).

²⁶ Ideological biases that surround the interpretation of such evidence should not be understated. Mc Ginn (2002: 13) notes that perhaps archaeologists in Pompeii have not been looking too

services in the Piraeus should nevertheless cause little surprise and, arguably, it may have resulted in the generation of a considerable income for the owners of the building²⁷.

The number of rooms and the variety of evidence suggests that the building may have been intended to fulfil several functions during the long period that it was in use. This seems to be borne out by the information for the storage of commodities and/or edibles in a number of rooms of the eastern and SE areas (Dragatsis 1892). There is also reported evidence in the form of a series of brick-built hearths which, if interpreted correctly, may point to the preparation of cooked food. The activities discussed so far are not mutually exclusive and are attested or can be envisaged in a number of different architectural settings in the Roman world, ranging from formal baths and *thermae* to hostels and other buildings that were dedicated to providing paid services of food, drink and body pleasures to short-term guests (Kleberg 1957; Nielsen 1990).

The location of the building is particularly important because it provides us with a means of understanding how the area in close proximity to the Zea harbour developed during the Roman period. The fact that the complex was built upon the levelled remains of the ship-sheds suggests that by that time the area had lost its traditional connection with the naval station, having been given over to other functions. Signs of discontinuity with the naval character of the area can be seen already by the mid-2nd century BC, when a theatre was built very close to the Zea harbour (fig. 40; Eickstedt 1991). This theatre possibly continued to be used for performances in the Roman imperial period, although nothing is known about any modifications or changes to the design (Garland 2001: 158).

The restoration inscription mentions an 'old theatre' which has been linked with the one located by modern research on the slopes of Mounichia hill. This area has provided little in the way of archaeological remains of Roman date except for a possible tomb, and this may suggest that the theatre was not in use during this period. In contrast to the Classical period when naval functions were accommodated at Zea, by the Early Roman period at least part of the area had

eagerly for such evidence in the past. On ideological biases in the interpretation of this building cf. above p. 10

²⁷ In the 4th century BC, part of a house in the Piraeus was rented for use as a brothel. For this, see Garland (2001) 143 & 214, who also mentions comparable evidence from Classical Athens.

apparently developed into a neighbourhood associated with the provision of services of pleasure and leisure.

The building at Zea appears to have been abandoned by the later 3rd century AD but bathing establishments continued to be constructed in the Piraeus until the 5th century AD. Two sites have been excavated on Notara St. and 118 Kolokotroni St. Both are located at very short distances from each other and they were both constructed in the 4th century AD, making it probable that they belonged to a single large establishment. The Notara St. site has yielded evidence for a row of bath suites and ancillary buildings, while that at 118 Kolokotroni St. is an extensive well-preserved bath. The latter consisted of the common set of sequentially placed rooms for cold and hot bathing equipped with plunge basins (**fig. 41**). Additional changing rooms and installations for the heating and the water distribution were provided in nearby excavated spaces. The bath appears to have fallen into disrepair and, in the 5th century AD, a number of repairs and changes to the plan were conducted. These included the repair of the old *caldarium*, the subdivision of the older plunge basins and the heating rooms and the construction of a cold plunge (Steinhauer 1988b: 64-65).

Public baths were known in the town from the Late Classical/ Early Hellenistic period, when a subterranean bathing suite was constructed in the Phreattys area, on the eastern shore of the Zea harbour (Ginouvés 1962). The subterranean establishment comprises two areas of individualised hip-baths which were cut as niches in the bedrock (**fig. 42**). The hip-baths were supplied with water from storage cisterns. The small size of the bathing suites suggests that, compared to the more extravagant Roman-period establishments, which had a range of bathing suites using water of varying temperatures, smaller quantities of water were required. It has been proposed that the bath was probably part of a shrine to a local hero (Dragatsis 1925/26).

Despite the limited amount of evidence, the form, function and scale of the bathing establishments reveal that bathing practices underwent significant changes from the pre-Roman period. Although it is unknown whether the hip-baths continued to be used in the post-Sullan centuries, baths and secondary services attached to baths increase, while the social and economic make-up of the users also probably expanded. Bathing in the Classical/ Hellenistic period took place in a ritual context of civic or religious nature. Baths were situated within

palaestras and sport or exercise venues and were generally restricted to males (Yegül 1992). In contrast to the 'hidden' bath suites of the preceding centuries, baths open to the public and situated in conspicuous locations in the town now meant that a greater proportion of the population had access to their services.

Baths in the town now include not only purpose-built constructions but were also situated within 'pleasure domes' constructed to fulfil a range of needs for their customers, as shown by the extensive complex at Zea harbour. Bathing culture in the port appears to continue until the Late Roman period, when substantial bathing establishments are once again constructed. During this period, however, structural changes to the bathing establishments occur, for example the bath at Kolokotroni St. site. It has been proposed (Steinhauer 1988b: 66) that these changes might reveal a stronger need felt to segregate male and female bath users as a result of Christian influences in social life and bathing habits.

3.4 Cults and sanctuaries

Since religion and cult are considered among the most traditional and conservative areas of social practice, changes in this sphere can provide unique insights into the social and cultural transformation of human communities. From an archaeological point of view there are a number of ways in which the exploration of these issues can take place. For mainland Greece in Classical Antiquity, epigraphic evidence is of particular importance because inscriptions have been recorded and studied since the early days of Classical archaeology, while the great temporal span of the epigraphic habit allows long sequences of documents about cult and particular cult places to be studied and compared (cf. Alcock and Osborne 1994).

Furthermore, sanctuaries and sacred space in particular are sensitive markers that can enable the impact of these changes in the landscape to be assessed (cf. Alcock 1993; 1994). Archaeological evidence for shifts in the location of sacred space, changes in ritual and votive practices, as well as evidence for material investment and architectural embellishment enable a detailed examination through time into which cults thrived and which did not. Although not particularly numerous and differentially documented, the available epigraphic,

textual and archaeological evidence for the Roman Piraeus, can be explored in order to provide some insight into these issues.

Inscriptions provide the best group of data to start exploring continuity and change in the realm of sacred space and cult in the Roman Piraeus. Classical and Hellenistic inscriptions collected from the Piraeus from the 19th century onwards reveal a startling variety of cults, deities, religious festivals and cultic enactments taking place in the port during the pre-Sullan centuries. According to the data assembled by Garland (2001: 228, Appendix III), no less than fifty deities and heroes are attested, while another ten or so unidentified cults also occur. The high visibility of cults in the pre-Roman Piraeus contrasts strongly with the available evidence for the post-Sullan centuries, for which only a handful of deities are attested in inscribed dedications and sanctuary documents²⁸.

Asklepios and the Mother of Gods are the only ones which 'continue', while a new goddess from Syria (Euporia Thea Bellela) and the local hero Mounichos are documented for the first time. The vast majority of deities, heroes and other dedications of the previous centuries apparently cease to be documented in any form, while there are also significantly fewer attestations of festivals and clubs of cult followers, a distinctive feature of previous times (Garland 2001: 105 ff.). The only exceptions are the followers (*orgeōnes/ paianistai*) of Thea Bellela and of the Mounichian Asklepios who had clubs at the Piraeus in the 2nd and 3rd centuries AD.

It would be very tempting to equate the lack of such attestations with a decline or severe discontinuity in cultic activity and dedications in the post-Sullan era. Admittedly, during the course of and following the events in 86 BC and also throughout the unstable conditions of the 1st century BC (cf. Alcock 1997), many cult places must have suffered damage, looting and the removal of their votives and ritual accessories, as well as infringement of their precincts and attached land holdings. The discovery of Classical and Hellenistic votive inscriptions from the sanctuaries of Ammon and Paralos on board of the Mahdia wreck (Petzl 1994: 381 ff.), suggests that early in the post-Sullan decades local heritage items and treasures were probably expropriated for export (**fig. 43**).

²⁸ For votive reliefs and dedications from the Piraeus during the Late Hellenistic and Early Roman period see also Schörner (2003)

It is to be expected that, as the specialised knowledge, personnel and the funds required to sustain these activities dwindled, cults and religious clubs that were functioning in the period before the sack were affected. Nevertheless, while warfare may be a reason for the emerging picture of cult decline, this picture is too simplistic and one-sided and further explanations need to be advanced. The relative lack of such attestations is likely to reflect a change in epigraphic habits rather than an actual decrease in the number of cults worshipped throughout the Roman period in the port. In this context, it is instructive to compare the apparent discontinuity in the aspect of the epigraphic record with the evidence for cults and sanctuaries in other epigraphic testimonies, other textual sources and archaeological discoveries.

The restoration inscription is a clear indication of the scale of reaction of the civic authorities of Athens to infringements such as those highlighted above. The text mentions a number of sanctuaries – the existence of four or five can be established from the preserved part of the inscription – which were to have their precincts and lands ritually cleansed and returned to the deity (Culley 1975: 211 ff.). Culley (1977: 290) has argued that the decree originally set forth the restoration of about seventeen such sacred precincts in the Piraeus, which, if correct, would suggest that by the later 1st century AD at the latest a considerable number of traditional cult places of the pre-Sullan era had been refurbished and were functioning again. To these attested cult places one should reasonably add the temple of Athena and Zeus Soter, the prime civic sanctuary in the port, which according to Pausanias (1.1, 3) was still in place in the later 2nd century AD.

Archaeological evidence from the urban excavations in the Piraeus is less useful but can provide some indications that cultic activity did not come to an end. Most of the sanctuaries attested in the epigraphic and textual sources are either destroyed or lie underneath the modern town, and only two of those, the sanctuary of Asklepios (**fig. 44**) and that of Artemis Mounichia (**fig. 45**), have been explored in any systematic fashion (Eickstedt 2001; Palaiokrassa 1991). It is noteworthy that both these sanctuaries have yielded substantial evidence for continuing function into the Roman imperial period. A few building remains discovered in the 19th century were derived from the sanctuary of Asklepios, situated on the south-western slopes of Mounichia hill at the north-eastern side of

the Zea harbour and, from this site come a few inscribed dedications and votive statues which date between the 2nd and the 3rd century AD (**fig. 46**).

The evidence from the sanctuary of Artemis Mounichia is rather more substantial. Excavated architectural remains suggest that repairs were performed to the precinct walls and the temple building which is likely to have suffered damage during the Sullan sack (Palaiokrassa 1991; cf. Chapter 1). Small-finds and votives of Roman imperial date from the excavations suggest some renewed ritual activity (**fig. 47**). The site of the sanctuary of the Mother of Gods, situated in the area now occupied by the Zanneion hospital, on the eastern part of the Akte peninsula, is the place where inscriptions now at the Piraeus Archaeological Museum were probably discovered. Many of these inscriptions are dated to between the post-Sullan 1st century BC and the 2nd century AD, suggesting that votive practices and cult continued there into the Roman period too (cf. Garland 2001: Appendix 3; Schörner 2003: 327).

Despite this evidence for continuity of some cults, it is clear that the cult landscape of the port underwent significant changes in the post-Sullan era. One striking aspect of the epigraphic record is the fact that few non-Attic cults are now attested, compared to the profusion of such gods and deities documented in the previous centuries. This appears odd when one thinks that a considerable proportion of the resident population during the Roman period as before would have been from a non-local and non-Attic background.

Indeed, many of the cults that would have been considered foreign in the Classical or Hellenistic period, such as that of the Phrygian Mother of Gods, are likely to have been 'naturalised' in local cultic repertoire by the Roman period. Importantly, however, the lack of evidence contrasts significantly with the available information for the local and civic cults. The latter are particularly well documented in both inscriptions and other archaeological remains in the Roman imperial period. Should this evidence, then, be taken to represent a greater emphasis on the civic and local cults as opposed to the foreign ones or is the emerging picture merely a matter of visibility and epigraphic bias?

Rather than viewing this evidence as proof of the decline in the number of foreign cults, other reasons should also be explored. Garland (2001: 109) has drawn attention to the fact that most inscriptions relating to the cult of non-Attic deities of the pre-Sullan centuries were discovered in the Akte and Eetioneia

peninsulas. This suggested to him that their shrines are likely to have lain in rather marginal areas of the port. Since most of these cults were set up and presumably attended mainly by foreign traders, merchants and sailors, Garland proposed that the Athenian authorities might have discouraged non-citizens from buying land and establishing shrines in central locations. Sacred precincts located in the harbour, the agoras and other downtown areas would have been extremely prominent landmarks, and civic authorities in the democratic period may have understood the expediency of reserving these areas for state and civic cults. While protecting the economic and other interests of the state by projecting an image of controlled religious toleration, the absence of foreign cults in central locations would have aggrandized the role of state cults and thus civic prestige²⁹.

The Akte and Eetioneia have not furnished evidence for Roman period activity and, if Garland's hypothesis is tentatively accepted, it is possible that, with the concentration of settlement in the central isthmus in the Roman period, such cults came to be accommodated increasingly in this area. In fact, corroborative evidence for a 'drift' of foreign cults towards central locations can be found in the find-spots of inscriptions and votive artefacts dated to the Roman period. This is particularly evident in the discovery of statues and reliefs in honour of the Mother of Gods in houses dating to the Roman period at the 'Dikastiko Megaro' and Terspitheas Sq. sites (cf. Chapter 4; Axioti 2002: 10). At the Terspitheas Sq. site, which dates to the 2nd-3rd century AD, similar archaeological evidence and the proximity of this site to the findspot of the inscription mentioning Thea Bellela suggests that this area may have also been the location of the religious club of this deity (Axioti 2002: 10).

The sites where these discoveries were made lie in the core of the main settled area of the Piraeus peninsula in the Roman period³⁰. On the basis of such evidence, it would appear that by this time foreign cults were becoming much more common in central areas of the town than was the case in the Classical period. There are some indications that this process had already started in the later Hellenistic period. An inscription which honours Mithras and his Greek equivalent Helios, dating to the later 3rd-2nd century BC, was found during

²⁹ For a critique of this argument, see Reden (1995)

³⁰ Steinhauer (1997: 23) mentions a Roman temple discovered at 74 Philonos St., very close to the waterfront on the eastern side of the Kantharos harbour. No evidence about the cult or deity worshipped there is mentioned.

rescue excavations in a house of Hellenistic date, which was destroyed in 86 BC (Oeconomides-Caramessini 1976). The architectural remains appear to belong to the same building complex identified as the 'House of the Dionysiasts' (p. 21), which during this period functioned as a meeting place and shrine for followers of Dionysus. Apart from the epigraphic pairing of a foreign and a Greek deity, it is also noteworthy that this evidence comes from a place where the focus of cult was on a god traditionally linked with Athens and Attica.

Although the evidence is limited – we do not know whether for example foreign cults were represented in the civic centre, the Hippodamean agora, by the Roman period – it raises some obvious questions. Why did the location of these cults change through time and what does their accommodation in downtown areas signify? If foreign cults were being intentionally excluded from the urban centre, the change documented in the Roman period may suggest some relaxation of control of the location of cult places in the town. The lessening of such restrictions is likely to have been generated by internal developments in cultic activity during the Hellenistic period. As shown by the evidence discussed above, syncretism, epigraphic pairing and architectural accommodation of deities of different origins within the same cult space indicate that foreign cults became increasingly more acceptable and began to gain importance during this period.

The restrictions were also gradually invalidated because with the transformation of the *polis* the circumstances that led to their enforcement probably ceased to exist. Since the 2nd century BC Athenian citizenship began to be granted and, increasingly under the Roman empire, to be sold to foreigners (Habicht 1997). By the imperial period, and despite the fact that Athenian citizenship commanded some importance in the local context, this trend would reasonably have functioned in the long-run as a catalyst in moderating differences between Athenians, naturalised foreigners and people of other ethnicities resident in the territory of the city.

3.5 Cemeteries and quarries

The evidence for tombs discovered in the Piraeus peninsula provides a vivid illustration of continuity and change in the urban landscape from the Classical and Hellenistic to the Roman periods. During the pre-Sullan centuries, organised

cemeteries were located in the areas close to the Eetioneian peninsula on the western side of the Kantharos harbour and the northern fringe of the waterfront in the marshy inland area further to the east (Eickstedt 1991; Garland 2001). A few tombstones and tombs dating to the early imperial period discovered in these areas indicate that to some extent these cemeteries were still used as burial grounds during the early Roman period (e.g. Raftopoulou 1989: 30). The discovery of a small organised cemetery comprising rock-cut graves of the early Roman period outside the old fortification wall on the N approach to the town suggests some continuity of feeling with the previous period (Spathatou 1988) (**fig. 48**). While these cemeteries were in use some time after the fortification wall became defunct, their location reflects the mental topography of the old, Classical-Hellenistic than that of the contemporary town.

As discussed in Chapter 2, in the Roman period burials began increasingly to be placed within the old circuit wall. When exactly this practice started is difficult to assess, since the data (architectural, artefactual, mortuary) from excavations of these tombs remain largely unpublished. From the scanty evidence published, the tombs seem to show some typological variation which might provide an initial index for assessing their date. They are either simple rock-cut shafts or larger rectangular chamber-tombs, sometimes with more than two chambers, cut in the slopes of the Mounichia hill and the Akte peninsula (**fig. 49**). Both simple and elaborate tombs of similar types occur throughout the Roman period in Greece and the Aegean but chamber-tombs are particularly common during the 1st and 2nd century AD (e.g. in Crete, Sanders 1982: 40 ff.). It is possible then that such tombs in the Piraeus were constructed during the early Roman period, although they may have continued to be used during later centuries too.

The reasons for placing tombs in former residential areas are difficult to interpret and only speculative interpretations can be offered. Abandonment and desertion of urban areas in the 1st century BC provide a context in which such practices might have come about (cf. Chapter 2) but this does not explain the social and cultural evolution of the practice during the following period. It must be stressed that intramural burial occurred in the Greek world in previous centuries too as an honour bestowed by civic authorities on individuals that were thought to have added to the prestige and power of the *polis*. The monument

described as the ‘tomb of Themistokles’ in the Piraeus, which was set up in the later 4th century BC and is thought to have housed the relics of the Athenian general of the 5th century BC (Wallace 1972) is a powerful example.

In the Roman imperial period, whether voted by the civic authorities for honorary reasons or not, similar considerations may have influenced where burials were placed. At Athens, archaeological evidence suggests that burial plots at the Kerameikos, the burial ground for civic heroes in the Archaic and Classical periods, were eagerly sought after and re-used in Hellenistic and Roman times (Houby-Nielsen 1998). The story of S. Sulpicius Rufus seeking permission of the Athenian authorities to bury his Roman friend Marcellus, who was killed at the Piraeus, in the precinct of the civic agora at Athens is another example that reveals that the location of the tomb inside the urban area was accorded particular importance (Cicero *To His Friends* IV 12, 2-3). In a similar manner, burial within the old urban area in the Piraeus may have been seen as a prime mechanism by leading individuals and their families in the port to promote and advertise their social status and influence.

If the desertion of residential districts may account at least in part for the gradual spread of tombs within the old fortified territory, then we should expect that these largely open/ non-built areas accommodated other activities as well. Reference has been made in previous sections about the quarrying in the Piraeus of a distinctive type of limestone used widely in the Piraeus and other areas in Attica in Antiquity (and in the modern period) for building construction, paving and other related purposes (Wycherley 1978: 96; Osborne 1985: 99)³¹. In recent years an increasing number of limestone quarries has been discovered in Piraeus, mainly in the fortified area and concentrating in the Akte peninsula and the W. and NW slopes of Mounichia hill but also scattered in the Piraeus isthmus between the Kantharos and Zea harbours and the N part of the modern city (fig. 50). In contrast, few quarries are known from areas beyond the fortification circuit of the Classical – Hellenistic period.

³¹ The extent to which this limestone correlates with the *aktites lithos* of the documentary sources is a matter of debate. Wycherley (1978: 59) argued for considerable variation in the quality of extracted Piraeus limestone and saw *aktites* as a kind of better-quality local limestone. Since this has not yet been resolved (nor it is within the limits of this study to do so), reference will be made henceforth in the study generally to the archaeologically distinguishable Piraeus limestone only.

In contrast to the varying responses to burial space in the Piraeus during the Roman and Late Roman period, the evidence reveals considerable gaps in knowledge with regard to the stone quarries. In particular, the inception of quarrying activity and the time-span during which the quarries were used are still poorly understood. From 131 excavated plots with definite evidence for quarrying that Eickstedt lists, only 30 have provided substantial dating evidence, with a further 3 cases where the proposed dating is probable (**fig. 51**; *ibid.* 261 *passim*; 272 *ff.*). The dating of some quarries with no associated finds may still be possible on the basis of extraction methods and cut-marks, but such a study has yet to occur. All datable quarries seem to belong to the pre-Sullan centuries, with no example datable in the Roman imperial period. Eickstedt (1991: 137, n. 535) notes the difficulty in obtaining relative or absolute dating evidence for the use of the quarries in question, since in most cases the fill deposits overlying the quarry surface do not contain any datable material.

Despite the very limited evidence, it is noteworthy that most of the dated quarries can be placed within the 4th century BC. This seems to correlate well with the time of the most intense building activity across the urban area, as evidenced from other types of excavation data and documentary sources (see p. 40). The scale of quarrying operations that took place during this period is reflected in the fact that not only most new quarries were opened around this time but, as the graph in **figure 52** indicates, they were disused in the course of that century too. This seems to support Osborne's argument (1985: 108) that the nature of exploitation of local stone resources in Classical Attica was occasional, subsidiary to other activities and geared towards the supply of specific building projects. Once exhausted, when demand ceased, or when the lease contract ended³², the quarry face could be backfilled and given over to new uses.

Nevertheless, the total absence of evidence for quarrying activity in the Piraeus during the Roman period is likely to be due to post-depositional processes, the 'invisibility' of Roman-period ceramics and other finds as opposed to Classical-Hellenistic ones and, perhaps, even to bias in the collection and/or lack of study of the finds from the excavated features. Dworakowska (1983: 11, n. 41) has also drawn attention to the possibility that finds from the overlying fill

³² A 4th century BC inscription that mentions the leasing of a plot in the Piraeus for limestone exploitation suggests that the contract may have been for only six months (Osborne 1985: 104).

of quarry sites may not provide a good index of the date they were in operation and leaves open the possibility that many of the ancient quarries in the Piraeus discussed above may have been opened in the Roman period.

Circumstantial and substantial evidence supports this conclusion. Strabo mentions quarries in the area on the NW side of the Kantharos harbour (Osborne 1985: 96), while the restoration inscription refers to the existence of *lithotomiai* (quarries) within the old fortified area which probably included open quarry faces either in operation or disused during the Augustan or Claudian period (Culley 1975). The most important indication is the evidence for the use of the finished product. Apart from the wide use of local limestone for construction in the Piraeus itself, local limestone was employed in a number of buildings in Athens and Eleusis from the 1st century BC to the later 2nd century AD (Appendix 2, Table 4). In some constructions, blocks may have been re-used from earlier buildings, as, for example, in the case of the temple of Roma and Augustus on the Athenian Acropolis and the altar of Zeus Agoraios, but the majority appear to have been freshly cut from quarries in the Piraeus.

3.6 Continuity and change: some conclusions

The discussion reveals patterns of continuity and change in the way that areas of the town and the urban fabric developed in the post-Sullan period. In the course of these centuries, settlement shifted to the central isthmus and towards the Kantharos harbour, while certain areas of formerly residential or civic character were abandoned and/or appear to have changed their function completely. The particular concentration on the central areas and the care for facilities that were connected with the function of the harbour and the human and commodity traffic suggests the level of importance attached to the commercial and service-related function of the settlement during the Roman period.

Although the evidence for the Roman period is limited, the shrinkage of the urban area does not seem to have affected radically the ways in which people negotiated their position with the divine. Several of the civic cults and cult places appear to continue but some important re-organization of the cultic landscape seems to have taken place in the post-Sullan period as a result of both internal and external pressures. The evidence for tombs and cemeteries suggests that

people, while still paying respect to the areas traditionally used as burial grounds, were increasingly using other areas within the old town for this purpose, perhaps as a means to negotiate their social status.

Patterns of continuity and change in the urban fabric demonstrate not only the shifting perceptions of the landscape in but also some deep-rooted restructuring of areas of social life and human activity. The Roman period sees an expansion and diversification of bathing habits, as seen in the occurrence of publicly accessible, Roman-style bath-houses. Until then, bathing in the town appears to have been socially restricted and enacted within a religious/ cultic context. In addition to the information for the drift of foreign cults into the central areas of the port, there is also evidence that some civic rituals, while continuing, were undergoing significant changes.

Military training of young citizens in the Classical and early Hellenistic periods, for example, involved sailing and rowing exercises in the port and the sea off the Piraeus. During the early Roman periods, epigraphic evidence suggests that such rituals started to include staged sea battles (*ναυμαχία*) taking place in the Mounichia harbour (*IG II² 2130*). As in early imperial Rome (Coleman 1993), these spectacles may have included enactments of famous sea battles in the history of Athens, like the one fought out against the Persian fleet off Salamis (Gardner 1881). Such spectacles may have been considered appropriate in the context of traditional civic rituals which sought to reinforce the sense of identity of the young cadets.

Chapter 4

The Dikastiko Megaro site: a window into the settlement history of the Piraeus in the Roman period

4.1 Introduction

The most extensive remains of the Roman period in the Piraeus in recent years have come to light in the plot of the Dikastiko Megaro site (henceforth 'DM site') on modern Iroon Polytechneiou Ave./ Philellinon/ Leosthenous and Skouze streets, in the central isthmus area (**fig. 31**: no. 9). The excavations revealed an entire residential block, consisting of two houses and remains of other buildings in use from the 2nd to the 6th century AD (Steinhauer 1988a). The block is located between an ancient main thoroughfare on the SE side, which follows the course of modern Iroon Polytechneiou Ave., and two other minor streets to the NE and SW respectively.

As discussed fully in chapters 6 and 7, these architectural remains provide a unique opportunity to examine the changing use of domestic space in the Roman Piraeus. Excavation in the area also brought to light some important evidence for the function of the area between the Late Classical and Early Hellenistic periods and the time the houses were built in the 2nd century AD. This evidence is important for an appreciation of long-term changes in the function of urban space and complements the discussion of the Roman-period occupation. This chapter aims to explore some of the activity on the site before the two houses were built. The discussion is based on a holistic reappraisal of the excavation record, including notes by the excavators, stratigraphy and finds and complemented by empirical observations by the author on the site.

4.2 Excavation, preservation and study of the site

The plot occupies a modern urban block measuring approximately 1800 sq m. It was planned to be developed for the new building of the Law Court of the town and was investigated thoroughly between 1981 and 1982 by the 26th Ephorate of Prehistoric and Classical Antiquities (**fig. 53**). This was the first time that an extensive plot had become available for monitored excavation in the town and it

was believed that it could furnish much information about a core area of the ancient town the remains of which until then could only be 'probed' through deep soundings in plots of a much smaller size. Apart from the large size of the plot, another factor which created promising prospects for discovering deposits less depleted by post-depositional factors and modern building activity was the fact that it had not been built over since the modern re-foundation of the Piraeus in the 19th century. The two sides of the plot along its NE – SW axis had been occupied respectively by two houses of the late 19th/ early 20th century, leaving the central area free of modern construction.

The degree of preservation of upstanding elements and walls, which at places survive to a height of 1.50 m, is due to the absence of modern building activity in the central part (**fig. 54; fig. 55**). The site however was modified throughout the period it was used and suffered post-depositional disturbances which obscured and destroyed much information. The construction of the two modern houses has wrecked deposits and architectural remains on the short sides of the plot and a number of cisterns and wells have been re-used as sewers in the modern period. Disturbances also occurred during the digging of bunkers in the W corner of the plot, probably during WW II. The limited time and hasty nature of the excavation unfortunately resulted in further disturbances, especially during mechanical stripping, including the destruction of walls and deposits in the outer flank of the main residential block to the SE.

A preliminary report by the site director (Steinhauer 1988a) presented the excavation results in a general manner, focusing mainly on description of the ground plans of the Roman-period houses and the changes that these underwent until the Late Roman period. The report includes a brief mention of some finds, mainly marble statuary and fragments of inscriptions. From the entire site only one find – an inscription, which is discussed later in the chapter, has been published definitively (Steinhauer 1994b), while a short paper by Tsaravopoulos (1996) presents some graffiti from the cisterns underneath the houses. Despite these reports and studies however, until the author's involvement with this material the mass of finds and records from the excavation had not attracted attention.

4.3 Re-constructing the site's history

The architectural remains present a complex web of constructions of different periods which can be disentangled and understood to a limited extent only. The records, including the notebooks of excavators, sketches and plans of excavated features, are an invaluable source of information for this purpose but not always adequate in their coverage. Recording was kept to a minimum coverage of the day's casual excavation tasks without noting for example different masonry construction styles, heights of walls etc. Where information exists in the notebooks and records, this suggests that during excavation, no ancient walls were dismantled to investigate underlying construction fills, while in some cases excavation did not follow deposits down to the bedrock.

Methods of excavation, recording and collection of finds were also not consistent and sometimes this may affect the definitiveness of conclusions (cf. Chapter 8). Frequently, the notebooks have gaps, which in some cases the excavators were able to clarify through their own particular memory or which could be filled in by means of cross-checks on other types of archive (plans, etc.). In general, however, a complete reconstruction of the excavated contexts is nowadays impossible. As a result, relative chronology, to the extent that it can be studied from the stratigraphic record, can furnish information about patches of the site rather than for its entirety. In general, more stratigraphic information exists for the better preserved SW part, while a limited amount of such information is recorded for the NE area. The available information for this area could be enhanced perhaps by future excavation.

The basis for detailed understanding of the architectural phases at present can be provided by a study of the information in the excavation records *in conjunction* with observations on the standing remains. In a twist of luck for the archaeologists, the excavated remains were preserved *in situ* after the rescue excavation, when plans to build the Law Court on the site were abandoned by the authorities. The excavated remains display not only a variety of masonry styles but also features such as blocked doorways, re-used blocks, disused cisterns and wells, which point to chronological variation in the use of space. This applies particularly to House 2 in the SW part, which is better preserved but it can also help us to understand formation processes across the site, such as why the NE

house (House 1) has not been well preserved compared to its counterpart and why the former is better preserved in the NE part. Combined with the information included in the excavation records and a study of the finds from stratigraphically significant contexts, this approach can help towards building a more coherent picture about occupation phases across the site³³.

4.4 Early architectural remains and features

Despite the fact that by the end of the project most areas of the plot had been investigated comprehensively (**fig. 56**), deep excavations reaching the bedrock beneath the Roman – Late Roman levels of the houses failed to reveal any substantial remains dating to the Classical and Hellenistic periods. The NE corner wall of the main residential block shows an ashlar construction which probably is of Hellenistic date (**fig. 57**). The wall on the SE side of House 2 which was repaired in the Late Roman period may also be of Hellenistic date, as it bears similarities to building remains dating to this period excavated elsewhere in the Piraeus (cf. Eickstedt 1991). Below the houses very few walls came to light, the only exception being a group of flimsy walls discovered in R19A-B. On stratigraphic grounds these can be securely dated to the Late Classical or early Hellenistic period at the latest. Another pre-Roman wall, running NW – SE was discovered at the NE side of R10 (**fig. 58**). These walls were not part of the Roman-period construction and might have belonged to Late Classical houses in the area.

Such evidence suggests that the Roman-period houses were built on top of cleared houses of Late Classical/Hellenistic date, in some cases re-using their remains for the interior and exterior walls. Despite these discoveries however no other such early walls were found across the site. Apart from the general absence of early walls, deep excavations in the rooms of the SW house have produced a number of shallow cuttings and pits dug into the bedrock. These have come to light both in the N rooms (R23, R24) and in R16, R53 and R54 in the SE area of House 2 (**fig. 58**).

³³ The following exposition uses the numerical indices of rooms as they were assigned during excavation and entered in the notebooks. The only digression is the pre-facing of each room or area number excavated with the letter 'R'.

These features are certainly not coeval with the Roman-period houses but their exact date and function is difficult to ascertain. One of the excavators initially thought that they might be connected with a previous use of the area as a quarry, based on the occurrence of such evidence in other excavated plots in the Piraeus (cf. Chapter 3). Nevertheless, the form of such cuttings is very different from the traces of ancient quarrying activity, as known from excavated examples elsewhere in the Piraeus (cf. Eickstedt 1991: 97ff. fig 49). In fact the cuttings in R23, no more than 0.20 m deep, seem to be more like receptacles for large storage jars, although this cannot be proven (**fig. 59**).

Extensive cuttings in the bedrock could also be traced in the area across R17, R 53 and R54, underneath the walls that made up the rooms of the Roman – Late Roman House 2 and shops. The shape of the cuttings is irregular but they seem to have formed a single feature extending beneath the later (Roman-period) construction (**fig. 58**). For the date of these features little information exists but two rectangular pits dug into the bedrock found in R53 have produced pottery of the late 3rd century BC in the lower with mixed Hellenistic and possibly early Roman in the upper levels.

According to the notebooks, one of the pits contained much iron slag, iron and bronze nails and iron hammer blades, while the other produced about 50 intact murex shells. Another deposit at the E corner in R17 produced Hellenistic black-glazed ‘salt-cellars’ containing remains of blue, black and red bead-like chunks, suggesting their use in activities related to the extraction and mixing of colours (**fig. 60**). These deposits are most likely to represent dumped debris of manufacturing/ industrial activities that took place in this area in Hellenistic times and continuing until the early Roman period, before the residential occupation of the area from the 2nd to the 6th century AD.

This evidence may then seem to contradict the hypothesis that the 2nd century AD houses were built directly on top of remains of earlier houses and instead suggest that the area had a different function before the houses were built. Manufacturing activities however were not alien to the domestic environment and the sole presence of such evidence cannot rule out the possibility that these took place in a domestic context (cf. Nevett 1999a: 67) the architectural traces of which were obliterated/ concealed by the activity in the Roman – Late Roman period.

Comparable information suggests that such changes in the function of urban space in Antiquity were common. Features such as those described above, containing waste from manufacturing and industrial activity, have been excavated at the agora of Thessalonike and they have been associated with the early activity on the site dating to the Early Hellenistic period (**fig. 61**; Valavanidou 2001). The site of the agora of Thessalonike was initially used for industrial and then for domestic purposes, before it was architecturally monumentalised for public/ civic use in the late 1st to early 2nd century AD (Adam-Veleni 2001: 25). Is it possible then that the area occupied by the houses in the Roman – Late Roman period in the Piraeus had a similar origin as a location with a civic and public role in urban life?

4.5 A commercial agora in the Late Hellenistic/ Early Roman period?

The possibility that the DM site was part of an open-air agora before the houses were built has in fact been put forward by the site director (Steinhauer 1994b) in his discussion of an important inscription discovered during the excavation. The inscription was found re-used in the staircase of a Late Roman house (see **fig. 98**) and details price regulations for different sorts and quantities of meat sold in the taverns of the port (**fig. 62**). It was initially carved on one side of the marble block in the last decades or years preceding the sack of the town, and after this event the text was re-inscribed, either as early as 84 or in the 30s BC by the town's market officers (*agoranomoi*).

In publishing this inscription, Steinhauer (1994b: 58) noted the absence of early walls and pointed out the discovery of two marble tables from the site which were used as standards for measuring the volume of liquids (**fig. 63**). He reinforced this by pointing out the topographical proximity of the site to the area of the commercial docks (the textually attested *emporion*) and also the fact that another inscription of Hadrianic date concerning the sale of fish was found in close distance to the site in the 19th century (Day 1942). This suggestion would appear to place the commercial market of the port slightly further to the SW of the area suggested by the reconstruction provided by Hoepfner and Schwander (1986; 1994; **fig. 64**).

Although this hypothesis needs to be further tested by excavation and by study of the material record from other excavated sites in the Piraeus, several threads of the existing record from the DM site do appear to reinforce these observations. The general absence of early walls, except the exterior walls of the block, is important since it may indicate that a large area remained open until the 2nd century AD. A stronger indication that the area was indeed unroofed during an earlier phase of the site's history is provided by the presence of a cistern in R24 of House 2. Unlike cisterns which remained in use in other areas, this was certainly disused and filled with rubbish by the time House 2 and the shops were occupied³⁴.

The occurrence of cisterns in excavated plots in the Classical – Hellenistic Piraeus has frequently been used to infer the existence of ancient houses where building remains are absent (Eickstedt 1991: 122, n. 517). This may indicate that in this case too, the cisterns were part of the fixed apparatus of pre-existing houses modified in the Roman period (Tsaravopoulos pers. comm.). Analysis of the stratigraphic evidence and the existence of few Late Classical/ Hellenistic walls on the plot, makes it possible that these cisterns were part of pre-existing houses perhaps of the Late Classical period/ Early Hellenistic date. However, these houses, the remains of which do not relate architecturally to the Roman-period construction, had probably been pulled down by the later 3rd century BC and the area was used for other activities.

Mention has already been made of a number of finds from the earliest levels in the SE flank of House 2 and the shops, pointing to industrial/ manufacturing activities in an early phase of the site's history. Other finds are perhaps more illuminating about the function of the area before the houses were built. One of the marble 'standards' mentioned by Steinhauer (1994b) actually comes from R7, on the SW side of House 2, and was found deep above the bedrock along with an array of stone and marble objects, including a set of millstones (**fig. 65**). These finds were in a layer of crushed chalk, probably used as packing material for the early floor of House 2 in this area. Although they were not in their original position, they can be most reasonably understood as debris from areas

³⁴ Appendix 3, p. 265 & 267 (contexts 24.6 & 24.7)

within the limits of the site which was incorporated in the construction of House 2.

Another marble slab, recovered from just above the bedrock in R5, is inscribed with a series of Greek letters and may have been originally used as a counting board on which tallies of the amount or volume of traded commodities were kept (**fig. 66**; cf. Lang 1968: 241 ff.). Marble objects known as “breast-weights” (**fig. 67**) have also been found in a number of other areas on the site but unfortunately with little contextual information, while a small lead square weight, possibly of 2nd century BC date, was found in R17.

Marble tables, standards and counting boards such as these recovered from the bedrock-contact levels of the DM site are known from a number of excavated agora complexes erected on the Aegean island of Delos by guilds of merchants from Greece, Italy and other places in the Mediterranean in the mid-2nd to the 1st century BC (Deonna 1938). Similar finds, although recovered from wells and cisterns and thus representing dumped refuse, are also known from the Athenian Agora (Lang 1968; Vanderpool 1968). In Classical, Hellenistic and Roman Athens, the use of these objects was sanctioned by the *agoranamoi*³⁵, who, as seen from the inscription mentioned above, were active in the Piraeus in the post-Sullan and Roman imperial period.

The presence of these objects at the DM site suggests that official measurement of commodities and inspection of weights was carried out in the area on a systematic basis in the Hellenistic and early Roman imperial periods. In Roman Athens, after the mid-2nd century AD, these functions would have taken place in a building which lies to the E of the Roman Market and has been tentatively interpreted as the ‘agoranomion’ on epigraphic evidence (Walker & Spawforth 1985: 95). The finds from the DM site discussed above recall the inscription from Athens concerning the restoration of public properties by the civic authorities which refers to an area in the Piraeus as a ‘...*hypaiθron* (open-air space)...where weights, standards and measures are kept’ (my translation after Culley 1975; 1977).

The inscription is now generally assumed to date between the late 1st century BC and the mid-1st century AD (*ibid*; Leslie Shear Jr. 1979: 366-367), and this

³⁵ On the functions and social role of the *agoranomoi* in Greek cities see Bresson (2000).

date appears to fit well with the suggestion that until the construction of the two houses, a large part of the Dikastiko Megaro site remained un-built. Although an appealing prospect, it would be too ambitious however to link this reference with the archaeological evidence in a direct manner until further evidence from other sites in the vicinity of the DM site, which are potential candidates for this identification, are studied and published.

4.6 Conclusion

The early history of the site cannot be resolved fully at present and correlating the available epigraphic record with the archaeological evidence poses interpretative problems. From the available evidence it appears that this part of the town experienced some significant shifts in its function in the course of the centuries that it was occupied. If a reconstruction of its early phases can be tentatively attempted, then the existence of the flimsy walls excavated in R19 and R10 may suggest that in the Late Classical period the area had a domestic function. The crucial point of discontinuity seems to have been the 3rd century BC when most evidence for filled up wells and pits along with evidence for manufacturing debris occurs.³⁶ Can this perhaps be related to a re-organisation of civic space after the period of Macedonian domination that ended in 229/28 BC? Market-related activities appear to have continued in the area into the early Roman imperial period, until the plot was occupied by the residential block in the 2nd century AD at the latest. This is indicated by the finds of volumetric tables, marble weights and most eloquently by the inscription which was set up by the local market officials on or near the site. Even after the residential re-development of the plot, however, the market-related function of the site appears to have “lived on” throughout the 2nd to 6th centuries AD in the commercial premises which lined the NW road and the main street to the SE of the two large townhouses.

³⁶ Some of the cuttings in the bedrock may be associated with either these early houses (such as the ones in R23) but others seem to be related to the later use of the area for manufacture purposes.

Chapter 5

Water supply and local identity

5.1 Introduction

Research on the urban and rural societies of the ancient Mediterranean has highlighted the importance of water for their physical and cultural sustenance. For the Roman period, the archaeological and documentary record demonstrates a mobilization of these efforts on a scale unprecedented in previous periods, best demonstrated in the prolific construction of aqueducts that tapped and transferred water from distant sources to urban centres (Hodge 1992)³⁷. Alongside these impressive public constructions, pre-Roman traditions and elements of water supply, in many cases, continued to play an important role in the Roman imperial period at any particular region, especially in the domestic context. Both attest to the centrality of water in common everyday usage and ideology: as Corbier (1991: 222) has remarked, ‘among monuments of material prosperity which made the status of the city visible, those connected with water occupied a special place’ (quoted in Alcock 1993: 126).

The problem of the water supply of the ancient Piraeus was commented upon by ancient sources as early as the Classical period, and has been frequently highlighted by modern and contemporary research (e.g. Judeich 1931; Garland 1987). This was conditioned by the geomorphology and hydrology of the Piraeus peninsula, which makes the latter an arid, generally waterless environment. The limestone cap of the peninsula allowed occasionally for ground water to be extracted from the intermediate clay seam through the digging of wells (cf. Hodge 1992: 71).

Less often, water was retrieved from natural springs that sprang up to the surface, such as the stream known in modern times as ‘Tzirloneri’ on the W side of the Zea harbour (Garland 1987: 145-146). The poor resources of the area meant that to fulfil the needs of urban consumption, rainwater had to be collected and stored locally or transferred from longer distances in Attica. Until the early 1900s, when a central water distribution system began to be installed, residents

³⁷ A recent survey of the material evidence for Roman aqueducts in Greece and the Aegean assembles some 49 known examples, the majority of which were built in the second century AD (Lolos 1997: 303 ff.).

of the port had to rely on such methods of collection and storage of water in private cisterns and reservoirs.

Rescue excavations and watching briefs on building sites during the past 40 years in the Piraeus have yielded a massive array of features used for the collection, storage and drainage of rainwater by the urban population from the Classical period to Late Antiquity. As Eickstedt (1991: 121) remarks, however, a comprehensive study of the various elements of such a system is still lacking. Eickstedt's catalogue lists around 280 sites (up to 1984), including cisterns, wells, water-conduits and drains (Eickstedt 1991: 195 ff.; table 3). In most cases, the urban nature of such archaeological examination has resulted in fragmentary discoveries, while in many cases, several of the parts of this dense network have been disturbed due to construction and/or re-use in recent times.

The following paragraphs discuss the evidence for the water supply of the post-Sullan Piraeus and assess its implications for interpreting and understanding the fabric of the port in the Roman imperial period. Firstly, the types of water-collecting features related to domestic supply and use are presented, based on the evidence excavated at the DM site, and compared with other urban sites in the Piraeus of Roman and pre-Roman date as well as with evidence from Athens. The second part deals with the evidence for water conduits discovered in the past and explores the possibility that a substantial aqueduct carrying water for public use to the port town existed in the Roman imperial period.

5.2 Water supply and management in the domestic context

Cisterns and wells were the prime means for collecting and storing water for domestic use in the Late Classical and Hellenistic Piraeus. These devices were re-used, frequently with major or minor alterations, in the Roman period. Excavations at the DM site revealed seven cisterns and eight wells that had been dug in the limestone, while also producing some limited evidence for water drains (**fig. 68**). Two cisterns (C3 and one not recorded at the NW part of the plot) and one well (W3) were found to have been re-used as sewers in modern times, the latter probably by the occupants of a house that had stood at the SW edge of the plot since the late 19th century; as a result they were recorded hastily.

Rubbish had been dumped or re-deposited in the upper levels of a number of early wells (W4 & W5), during the Roman and Late Roman periods. These features are likely to have been part of an earlier system of water collection and storage in the area, which probably dates back to the Classical and early Hellenistic times. The remainder of the features served the demand on water of an area occupied by two large townhouses with a series of shops fronting the eastern street and two minor roads, which date from the 2nd to the 6th c. AD.

The NE house (House 1) was originally supplied by a network of two bottle-shaped cisterns (**fig. 68**, C4 & C5) dug in the soft limestone which stored run-off rainwater from the sloping roof of the building. C5 had been built underneath a later marble-paved pool of the courtyard of the house, slightly off-centre to the NW. This cistern was connected with C6, another cistern that lay underneath rooms R37 & R38, through a tunnel (T2) that opened to the E for about 6.5 m and then took a slight turn to the SE for 5.5 m. C5 had originally a deep-cut circular well (W6) from which stored water was drawn³⁸. Both C5 and C6, as well as the connecting tunnel were plastered uniformly with a hard pink hydraulic mortar. For the dating of their construction very little information exists, but the latest collected pottery from their interior suggests that they continued to be used until the 5th c. AD (Tsaravopoulos 1996: 497).

This system underwent a number of substantial modifications in the course of the Roman period. The head of C4 was partly blocked when the marble-paved water-collecting tank ('impluvium') was built in R31, and the floor of the courtyard raised, probably in the 3rd century AD (**fig. 69**). A new well (W7) was installed in the impluvium for collection of rainwater, which now partly cut through one side of the older cistern C5, but without being connected to it³⁹. Probably in connection with this modification, another well (W8)⁴⁰ was opened at the bottom of C6. The latter went down to a depth of 8.00 m and then joined a new tunnel (T3), running E – W, approximately 11.5 m long and 1.20 m high and dug about 8.00 m lower than T2. This tunnel, in turn, met the bottom of W7 at the NW, underneath the impluvium of the courtyard (**fig. 70**).

³⁸ No details are recorded about this feature in the excavation notebooks.

³⁹ This is shown by the fact that during excavation a stone slab was found flush with the cistern's mouth

In the SW house (House 2) a similar, though less complex, system of water supply was used, but unfortunately very little information about all these features was recorded during the excavation, and, since these were covered by concrete cement for safety reasons in later years, any further exploration was impossible. This system was based on the existence of a well-shaft (W2), placed in the courtyard and fed by a single bottle-shaped cistern (C2). As in the case of W6 and W7 in House 1, the two features had headstones of grey marble and local limestone. In the early phases of the house, water falling from the roof was collected directly by C2, while W2 was used for drawing the stored water. In a later phase, probably in the mid-4th century AD, the collection of rainwater from the roof was systematized, when a new rectangular tank, 4.3 x 3.3 m, with large vertical limestone slabs rising up to 0.70 m high and a tile-floor was installed in the courtyard (fig. 71). As a result, part of the opening of C2 was covered by the paving slabs of the impluvium/ tank, although the rest was incorporated in its floor and provided the point where the water was actually collected and directed towards the subterranean cistern.

Both houses were provided with drains, traces of which have been excavated in or near their entrance corridors. This indicates that drainage of run-off water was directed to the minor streets flanking the insula on the NE and SW sides, as was the case in most towns in the Roman period and also in the Classical and Hellenistic Piraeus (Hodge 1992; Eickstedt 1991). In House 1, this probably included a terracotta drain pipe (D3) set in the bedrock and lined with mortar and stone slabs (fig. 72). A similar feature (D1) in nearby R45 should be more securely associated with the Late Roman/ early Byzantine re-occupation of the NE part of the old domestic unit (Steinhauer 1988a). In House 2, a drain channel (D2) with run-off to the street was cut in the bedrock and paved with large irregular stone slabs. This underlay the floor of R5 and ran underneath the walls of nearby room R7, serving thus the drainage of the courtyard. Finds recovered from its fill suggest that this was in use only until the 3rd/ 4th c. century AD, and was perhaps rendered defunct after the impluvium was installed (cf. Steinhauer 1988a).

⁴⁰ I have been unable to find any information on this feature in the excavation notebooks, apart from some general comments published by Tsaravopoulos (1996) 499, fig. 1. No finds from this context could be found in the boxes stored at the Piraeus Archaeological Museum.

This shift in the water-collecting mechanism of the two houses, indicated by the construction of tanks and pools, does not appear to have affected the way that water had been collected until then, since most of the pre-existing elements, some of which may have been of Hellenistic date, were retained. There must have been however an increase in the total volume of water that could be stored. Originally, the cisterns in both houses could have stored between 38 and 45 m³ of water each (Tsaravopoulos 1996: 493). While in House 2 the installation of the 'impluvium' did not increase the volume of stored water as such, in House 1 this was probably increased by another 45 m³ maximum as a result of the newly dug tunnel and the two wells⁴¹.

Furthermore, since the installation of the 'impluvium' implied an extension of the roof, the house must have acquired a larger catchment area, enabling the cisterns to fill with rainwater more frequently and rapidly than would have occurred before. It must be remembered that the actual amount of water stored in these subterranean tanks would have varied according to factors such as the amount of seasonal rainfall and the condition of the concrete plaster. These modifications served to ensure that less rainwater than previously was wasted by running off to the courtyard.

What is striking in the case of House 1 and does not seem to conform to the above explanation of the purpose of these modifications is their sheer complexity. If more storage area was needed for water then why not build another cistern instead of making complex interconnections by digging tunnels and vertical well-shafts between existing ones? Building a new cistern may have been thought impractical, economically inefficient or simply impossible, but this explanation evades rather than answers the question. A seemingly bizarre phenomenon which might provide a starting point is the fact that a new well (W8) was dug into the bottom of C6 at the E part of House 1.

The opening of 'fresh' wells at the bottom of existing cisterns has been observed at a number of sites in Athens dating to the Roman period. Robinson (1959: 124 ff.) lists four such examples of 'wells-in-cisterns' excavated in the Athenian Agora⁴². Hodge (1992: 60), commenting on this practice, suggests that

⁴¹ This calculation is based on the figures provided by Tsaravopoulos (1996) 499, fig. 1, which exclude the thickness of the hydraulic plaster.

⁴² Wells E 11:2, G 11:2, N 18:5 and N 20:3

there was a return to the digging of wells during the Roman period in Athens as a result of the rise of ground water level some time in the early 2nd c. BC after a period in which cisterns had been the prime means for covering the domestic needs. Although in Roman Athens, the population continued to use existing cisterns, 'the well had made a come-back, now outnumbering cisterns by a factor of three or four to one' (ibid. 60).

The occurrence of such features at other published sites in the Piraeus may suggest that this fashion also affected the population resident in the port town. At the Terpsistheas Sq (site 10), a well similar to those described above was opened in the floor of a large cistern supplying a courtyard house of the 2nd century AD, while a number of other rock-cut wells, the use of which is assigned to this period have also been found in the area (Axioti 2002: 9). This tendency is also evident at two sites excavated in the 1960s (**fig. 31**: nos. 16 and 17), which produced two cisterns, probably belonging to two houses. These contained dumped fillings of Hellenistic and Roman pottery which suggest that they were disused during the 2nd century AD (Kallipolitis 1966)⁴³. Cisterns in such a waterless area have too obvious an importance to be abandoned and turned into rubbish dumps. Their disuse should be connected with the digging of new wells in order to exploit possible underground water streams.

It is therefore perhaps within this context of increased preference for wells that the sinking of well W8 in the floor of C6 in House 1 should be understood. As explained above, however, this well differs from the examples already quoted since it was not simply sunk in the floor of the cistern but terminated at a tunnel and joined up with the well that was sunk underneath the impluvium at the centre of the courtyard. Similar systems of joining tunnels have been found in other sites in the Piraeus of both Hellenistic and Roman date but always connecting directly two or more cisterns (Eickstedt 1991: fig. 70 & 71; Axioti 2002: 9 – 10).

It is likely that this well had been opened originally in the hope of hitting some underground water stream, as was the fashion in Athens. The particular attempt however clearly failed, and in order to make up for this failure, the residents of House 1 had the 'well' modified into a tunnel that joined up with the well dug underneath the pool, which was fed, as previously, by rainwater. While

⁴³ On the pottery from these deposits cf. Chapter 10

no underground water source could thus be tapped, the tunnels perhaps provided a better mechanism for filtering rainwater as this came down from the roof of the house. The presence of this system also ensured that enough water was stored in lower levels to fall back on in periods of rain shortage (cf. Axioti 2002: 9).

During the period in which the pool was used in House 1, water continued to be fetched from W6 but also from the well opened inside the impluvium, probably by simply sinking buckets or other vessels attached to ropes by hand and pulling them up back to the surface (the 'bucket chain' method, according to Hodge 1992). At times when the water level was low in the cisterns, the residents had to descend to the bottom and follow the tunnels to the deeper levels where water could be retrieved. This must have been made necessary not only in periods of shortage, but increasingly after the original roof of the house had suffered serious damage in the course of time and its catchment area was not adequate to fill the cisterns with rainwater.

The system probably failed when the columns that stood at the corners of the pool were removed and reincorporated as internal supports in the small house that took up the NE part of the larger house in the 6th c. AD. That the people who used the cisterns frequently felt compelled to descend into the cisterns is further reinforced by the discovery of graffiti on the walls of the cisterns and tunnels. The graffiti represent various types of Middle and Late Roman ships (**fig. 73 & 74**) (Tsaravopoulos 1996: 496).

Despite such damage, the entire system had a remarkable longevity, being used with major or minor modifications by the generations of people occupying the two houses over many centuries. On the other hand, we should perhaps ask to what extent the installation of features such as pools were an absolute necessity or a perceived need realised by the owners of the two houses. The evidence from other sites published in the Piraeus suggests that such pools were not always the preferred solution to water supply in Roman-period houses. Excavated houses in Athens frequently also demonstrate a continuous use of existing cisterns and/ or wells without any modifications or additions.

In both houses, these features demonstrate an effort to systematise water collection by eliminating practical problems (e.g. loss of water from run-off). At the same time, they demonstrate a considerable degree of material investment, which cannot be estimated only by the features themselves but also in relation to

the modifications and alterations of pre-existing architectural and water-supplying elements that they entailed. Apart from providing a centrepiece in the household's architectural decoration, the framing of an area of the courtyard by a purpose-built ornamental tank suggests that water and its 'conspicuous management' had perhaps attained a symbolic dimension for the negotiation of identity of the owner(s) and the display of wealth during the Roman period.

5.3 Public cisterns and reservoirs

As the case of the DM site suggests, cisterns were essential features of a house in the Roman Piraeus. They were closely connected in spatial terms with each domestic unit and they served the needs of each individual household. Access to their water stock, upkeep and maintenance were controlled and undertaken by the household. There is evidence however which suggests that rainwater was also collected and stored in cisterns for use in public. At the DM site, a large bottle-shaped cistern (C1) measuring 6.75 m at the bottom and originally sunk about 4.00 m below the surface was found underneath the minor road (R1/ Ω) flanking the domestic insula on the SW side.

In terms of construction and function, C1 does not differ greatly from the rest of the cisterns associated with the two houses. A 1.50 m high, 10.25 m long tunnel linked the cistern with a vertical well-shaft from which water could be drawn placed in the street. Two short brick-built walls were placed in the tunnel, one midway to the cistern and another at its terminal, and used probably for filtering the silt and dregs (**figs. 75 & 76**; Tsaravopoulos, pers. comm.). The cistern was certainly used until the mid-3rd c. AD, when it was filled with domestic refuse, architectural debris and public sculpture, including a marble herm that may originally have been a street-marker at the junction of the minor road with the main thoroughfare.

As was the case in the domestic sphere, the provision of cisterns for public use in the Roman-period town probably drew upon pre-existing local practices, and it may well be the case that several examples were built in the Hellenistic period and simply repaired and/or rigorously maintained in succeeding centuries. Eickstedt (1991: 133) postulates the use of public purpose-built reservoirs in the Hellenistic town, however, both pre-Roman and Roman material is too limited to

be able to talk with any certainty about the extent of the availability of such water-collecting and dispensing devices.

Such features raise a series of important questions, including whether such reservoirs were used on a regular basis by the population in the port or only in times of extreme difficulty and shortage. Other important issues include how they functioned in the social context of the town, whether they were considered as part of neighbouring house plots or whether access to their stored resource was controlled by a civic or other authority. Literary evidence suggests that in the Late Classical-Early Hellenistic period sanctuaries in the town were involved in selling water – arguably rainwater collected and stored in such reservoirs – to fund building projects in their precincts (Garland 1987: 145). This practice may have been reintroduced after land in the town area was restored to a number of sanctuaries in the Augustan period, as documented in the epigraphic record (cf. Chapter 3). Such social institutions may then have formed one of the agents behind the control of water resources for public use during the Roman period.

5.4 The Roman aqueduct and the urban network of water distribution

The presence of an aqueduct to the Piraeus has been so far established from a passage in the work of Vitruvius (*De architectura* 8.6.3) and subterranean rock-cut channels excavated in the town (Eickstedt 1991: 122 – 123; Garland 2001: 144). More recent discoveries of Roman date have brought this issue to the fore and require some comment. Since much of the material is still very little known and under-published, the following discussion can only be provisional. The aim is to provide a discussion and synthesis of the available evidence on the course of the aqueduct, the distribution of water in the town and the problem of the source that it tapped.

Evidence for the approach of the aqueduct to the town has been furnished by a rescue excavation in the 1970s on Piraios St. (**fig. 21**: no.1), in the area of Neon Phaleron (Liangouras & Papachristodoulou 1972). This revealed an 85 m long part of the N segment of the linear fortifications identified as the Long Walls (**fig. 77**). Along the stretch uncovered and directly on top of the lowest extant courses of the limestone masonry of the Classical feature, the excavators noted

the existence of 'remains of later "subsidiary structures" [...] cruciform and rectangular in plan and following in a regular fashion the course of the wall' (**fig. 78**; Liangouras & Papachristodoulou 1972: 344). Although they do not mention the function or date of these features, the excavator excluded the possibility that they were part of a defence system of the Roman period and asked whether this may have been part of an aqueduct. In the published plan, the cruciform features appear to alternate with a series of rectangular ones at intervals of approximately 35 m (**fig. 79**). The regularity and placement of such features points to their function as piers that carried an aqueduct channel to the port (cf. Lolos 1997: 305)⁴⁴.

Another relevant discovery is a stretch of a subterranean aqueduct channel found 5.30 m below the modern level of Kountourioti St (**fig. 80**). The tunnel, which could be traced for 16.50 m running from N/NE to S/SW and lying to the NW of the lower foot of Mounychia Hill, had been constructed in the 'cut and cover principle' (Hodge 1992: 93). The walls of the channel had been dug in the chalk bedrock, lined with hydraulic plaster and covered by a vaulted roof built in poured hydraulic concrete. The tunnel measured 1.51 m high in total and terminated at its bottom in a 'gutter', 0.77 m high and with an internal width of 0.40 m. It was furnished with a rectangular inspection shaft, 0.85 long 0.56 m wide and 1.88 m deep, which had been constructed with small squared stones on the surface and covered with two stone slabs (**fig. 81**; Petritaki 2002b: 75 – 76)⁴⁵.

Although difficult to prove on the basis of such fragmentary evidence, this aqueduct channel, found at a distance of 850 m to the S-SW of the Peiraios St. site mentioned above, appears to be closely related with the Roman-period modifications of the Long Walls and these discoveries point to the crossing of an aqueduct channel across the Phaleron marsh in the outskirts of the town. Both stretches are aligned on the same N/NE – S/SW axis, suggesting that the aqueduct, raised on the piers built on the old Classical fortification, descended

⁴⁴ Built features consisting of rubble and mortar dating to the Roman period and constructed on top of remains of the Long Walls have been also noted at Moskhato – Kallithea (Vanderpool 1959: 280), some 700 m the NE of the Piraios St. site and might point to similar piers or substructures for the same aqueduct.

⁴⁵ The aqueduct channel is described in the preliminary report simply as 'Roman'. For similar rock-cut tunnels used in Roman aqueducts in mainland Greece, cf. the examples opened for the aqueducts of Dion in Greek Macedonia (early 2nd c. AD), Athens, Attica (Hadrianic) and Gytheion in Laconia, Peloponnese (probably 2nd century AD). All these had vaulted roofs built either in brick and/or stone or in poured concrete. Cf. Lolos (1997).

from the NE and then followed the underground tunnel just before entering the town area to the SW (**fig. 26**: no. 29). As in the case of most Roman aqueducts, this change in the height of the water conduit was conditioned by the need to provide an adequate slope or 'head' for the channel which would keep the water running to its discharge outlets in the network (reservoirs, fountains, etc.) without the channel overflowing or running dry (Hodge 1992).

The occurrence of these features outside the area of the town is a clear indication that water was transported across a considerable distance, and one is compelled to ask where the source of this water was located. For the Classical period, some evidence exists that water was diverted from the river of Ilissos, running in the S side of the city near the (later, Hadrianic) Panathenaic Stadium, to the port through a long rock-cut channel that run between the northern and southern segments of the Long Walls (Ziller 1877: 108 – 109, pl. VIII; Garland 1987). Ziller (1877: 110) had suggested that this was probably in contemporary use with the Long Walls, which in turn would indicate that it had probably fallen into disuse by the time the walls had lost its defensive function. This was already the case when the city and the Piraeus were besieged by Sulla in 87/86 BC. Nevertheless, even if we accept that this tunnel was planned in connection with the construction and use of the Long Walls, it should not cause surprise if the same source at Ilissos river and the pre-existing tunnel system continued to be used or were re-utilised in the Roman imperial period⁴⁶.

The possibility that the Roman aqueduct of the Piraeus was fed by a more distant source than the Ilissos river has been recently proposed by Lolos (1997: 305) in his survey of Roman aqueducts in Greece. According to Lolos, the source is placed at a natural spring near the modern town of Varympompi, about 9 km SW of the ancient deme of Acharnai (modern Menidi). Though no further evidence is cited in support of this view, this location appears a likely candidate for the source of the aqueduct. The source lies in a water-rich area at the foot of the Parnes mountain and at a small distance to the S of the source which was tapped by the Hadrianic aqueduct that served Athens. This possibility raises many questions for future research about the relationship between the Roman aqueduct of the Piraeus and the Hadrianic network supplying the city of Athens,



not least about the chronology of the construction, but also about the way that the aqueduct serving the Piraeus was integrated in the system of water supply of the urban territory of Athens at this time.

The course that the aqueduct took after entering the town is very difficult to reconstruct on the basis of the existing evidence. A clue about this is perhaps provided by a stretch of a subterranean rock-cut tunnel running along the main isthmus between the harbours of Kantharos and Zea, excavated in the 19th century (**fig. 82**; Dragatsis 1911). Another stretch with the same alignment had branches to the NW and SE parts of the town and was equipped with possible ventilation shafts at various points. In a number of cases, these branches of the main tunnel are reported to have been connected to cisterns (Dragatsis 1912). Little information exists for the date of the construction of these two features. Judeich (1931: 432) suggested that the conduit along the main isthmus was of 'later' date, probably dating to the Roman imperial period, while the bifurcating tunnels presented an 'early' system which probably went back to Classical times⁴⁷. These discoveries, although providing very little secure contextual and chronological information for their construction or use indicate that the aqueduct followed the main thoroughfare and should perhaps be seen in the context of the evidence for the Roman aqueduct from the sites further to the N of the town.

These discoveries demonstrate that a rather complex network for urban water distribution either built anew or improved and re-utilised, existed in the port town during the Roman imperial period. Although there is no reliable evidence for the way that water was distributed, the system is likely to have involved a number of outlets such as reservoirs and public fountains, as was the case in nearby Athens in the Hadrianic period and in other cities across the Roman world (Hodge 1992: 304 ff.). The possibility that cisterns situated in public spaces or in private properties were also supplied by the aqueduct cannot be excluded but more evidence is needed (cf. Axioti 2002: 9). More conclusive, though no less problematical, evidence for public water supply exists for bath-houses. Both examples excavated in the Piraeus (Dragatsis 1892; Steinhauer 1988b) have

⁴⁶ On the diversion of rivers in conduits in both the Classical Greek and Roman period, see Hodge (1992) 69 *passim*, 79

⁴⁷ Tsaravopoulos (*pers. comm.*) points out the tendency by early excavators in the Piraeus to identify various channels as 'aqueducts', though their actual function still remains very little understood.

produced evidence for terracotta water conduits that were probably fed by the aqueduct.

5.5 The aqueduct in use: necessity, function and symbolism

The main question raised by the existing information is why an aqueduct was necessary in the first place. While catering for water supply in the domestic context (and perhaps also for public use), cisterns fed by rainwater or wells tapping the occasional underground stream are unlikely to have been sufficient for the entire range of activities in which water was used in the town during the Roman period. For certain functions, we should expect that seawater was also used, as, for example, in tasks connected with the maintenance of seafaring vessels and their equipment, which were probably carried out at the docks (cf. *IG* II² 1035; Day 1942: 149).

It must be borne in mind that the requirements for drinking water included not only those of the population resident and/ or working in the port but also those of short-term visitors, the crews of the ships that docked in the Piraeus, and the passenger traffic to and from Athens. These demands must have varied from time to time, accounting for the seasonal increase and decrease in population numbers in the port, and were conditioned by the amount of water stored or brought by the aqueduct. In view of the fragmentary nature of the evidence it is impossible at present to arrive at quantified estimates for the discharge of the aqueduct or consumption rates in the town, however, the presence of a constant, if not steady, demand must have been an important factor in the decision to build the aqueduct.

This demand must have been dictated primarily by the function of baths (Hodge 1992: 265). At least three baths are known to have existed in the port in the Roman period, dated to the 1st and 4th/ 5th c. AD respectively, and the existence of another has also been proposed (Day 1942: 143, n. 135). Although the Piraeus could boast a public suite of hip-baths as early as the 4th c. BC, the amount of water used there must have been considerably less than that required and consumed in the establishments of the Roman and Late Roman period. Meanwhile, the existence of separate bath suites for men and women there will have placed an increased demand on water (Steinhauer 1988b, 64). Unless

supplied by an aqueduct, these recreational facilities would have stressed the scanty local resources in the Piraeus to their limit.

This specific problem is acknowledged by one of the few extant classical sources that discuss water use in any detail. Vitruvius, commenting on the water of Athens, reports in a rather anecdotal manner the existence of aqueducts running to the city and the port and bringing water of a poor quality that was used primarily for bathing and other activities, while the residents drew from local wells for drinking (*De architectura* 8.6.3). Like other writers of the early Roman period, Vitruvius does not make clear whether he is actually referring to the situation in contemporary Athens or to a practice occurring centuries earlier, and it would be too easy to take his statement as proof for the existence of an aqueduct. This comment however is important because it suggests clearly that local needs for water use necessitated the diversification of water supply and its distribution at an increased scale and that these concerns at some point may have led to the provision of the aqueduct.

Perhaps diversification may provide a fruitful explanation for these improvements in the water supply of the town in the Roman imperial period. The fact that an aqueduct of some form, though as yet very little understood, existed in the Classical – Hellenistic periods should perhaps not deter us from considering the impact that the Roman-period improvements had in modifying the local availability and function of water. These improvements and especially the aqueduct should be understood in the context of the provision of a facility that sought to further relieve the pressures of water supply in an urban district of Athens that functioned as a node for the movement of much human traffic and which traditionally had suffered from poor water resources.

Practical reasons, conditioned by these local factors, as well as ideological, political and cultural considerations, such as the cultural significance of bathing and sanitation in the Roman period (Yegül 1992), are likely to have played a role in generating this kind of public munificence. Whether this civic benefaction stemmed from imperial intervention or the efforts of civic dignitaries and local magnates is a matter that requires further elucidation⁴⁸. The important point to

⁴⁸ Alcock (1993: 125) notes that most projects connected with the water supply of cities in Achaia were initiated by imperial intervention, though in the case of the Piraeus, the agency of Athenian magnates in the 2nd century AD, such as Herodes Atticus, should also be taken into account.

stress here is that the Piraeus and the activities taking place in the port was thought important enough to generate this kind of interest.

The impact of this project can also be gauged at yet another level. Decisions taken in the architectural conception and technical execution of the project are likely to have generated new visual experiences of the wider landscape of the port town. Although a number of its constituent parts seem to have been improved or incorporated wholesale from the pre-existing system, the aqueduct appears to have involved a conduit raised above ground that ran for a considerable distance before it entered the main settled area. Even if the aqueduct was less impressive, or followed a shorter course than those of nearby Athens or the provincial capital at Corinth, its course in the surrounding landscape must have been equally visible and no less evocative. Crossing the landscape that conceptually divided the urban centre from its port, the aqueduct functioned as an emphatic re-instatement of the territorial link between the two areas.

Roman aqueducts have been compared with the fortifications of Classical Greece in the context of the different perceptions of the territorial space that they created (cf. Alcock 1993: 124). They are seen as advancing a novel conception of territorial space since in many cases they crossed long distances within a territory or even the boundaries of several *poleis* to reach the urban populations that they were built to serve. In the case of the Piraeus, this sense of territoriality was not new, since the port had been defensively 'tied to' Athens through the Long Walls in the Classical period, but the construction of the aqueduct suggests that the relationship was re-engineered under the empire. This is demonstrated not only by the course that it took and the distance covered but also by the re-use of the standing ruins of the monument as a substructure for the piers carrying the conduit. This contemporary strategy towards the old monument may not be regarded simply as cost-efficient utilisation of existing local materials but as a powerful material statement that sought to re-enact the surrounding landscape of the Classical period. 'New' construction and 'old' monument blended, as did the meanings with which these were invested.

5.6 Conclusion

There are many indications that water supply and management in the Piraeus became important media for the negotiation of status and identity at various levels during the Roman period (cf. Ellis 1997). In the public sphere, the aqueduct and the distribution network that probably existed do not only testify to the domestication of natural resources for use by the town's population but may also have enabled the advancement of a sense of civic pride and belonging, which drew upon associations with the monumental heritage of the Classical period. In the private sphere, water collecting and storage equipment was an integral part of domestic space, property and the life of the household. As demonstrated by the evidence from the DM site, considerable wealth, time and expertise were invested in maintaining and improving the functionality and, in some cases also, the decorative aspect of these features. In the Roman Piraeus, thus, water marked out symbolically the territorial space of the town and of each house individually.

Chapter 6

Domestic space in the Early Roman period

6.1 Introduction

This chapter addresses the evidence for Roman-period housing from the port. The background for the discussion is furnished by the extensive remains dating to the Roman imperial and Late Roman periods that have come to light at the DM site. Initially the architectural remains and the chronological sequence of the buildings are described. The discussion of this complex assemblage draws upon a detailed consultation and re-examination of the excavation records and detailed work on the site finds. With regard to the architecture and phasing of the remains, relevant information is included in Appendix 3. A full, detailed exposition and discussion of the stratigraphic record is reserved for the future.

Recent studies that examine the excavated remains and textual documentation of ancient houses rightly stress that there is no single 'right' way in which domestic space can be studied but 'a plurality of methods produces different readings' (Laurence 1997: 7). The absence of any literary material which might relate to these specific houses excavated in the Piraeus or to domestic space in Roman Greece for example undoubtedly restricts the choice of questions that can be asked of the material record but also removes many of the problems in dealing with such evidence vis-à-vis the archaeological remains. On the other hand, the archaeological record is not without its problems of methodology and interpretation (Alston 2002). Although houses are artefacts with cross-cultural significance to which we as modern observers can relate (Kent 1990), the spatial reality encountered in the archaeological record is not easy to decode. In the case of houses from the Roman empire, we are dealing not only with the remains of such structures but also with the products of a society which in many respects was different from our own.

In attempting to study domestic space, one is evidently restricted by the nature, availability and quality of the information but also the questions that structure the research. Since a major direction in this study is the question of continuity and change in the landscape of the Piraeus during the Roman period, the following paragraphs explore this question by drawing upon relevant

archaeological evidence. In the first part, the discussion focuses on the architectural integration of the houses in the urban fabric. The following parts attempt to examine the excavated remains with respect to their spatial characteristics. The ground plans and various features of interior arrangement (fixed domestic apparatus, floors and wall decoration) that have been preserved and this evidence can offer insights into the spatial organization of the two houses in successive periods and illuminate questions of circulation patterns, cultural influences, and material investment.

6.2 House 1 in the 2nd-later 3rd century AD

House 1 lies on the NE part of the plot between House 2 and the minor NE street (**fig. 83**). The house suffered some serious damage in modern and ancient times and underwent a number of architectural and spatial modifications during the Roman period. These have obscured much of the original layout, which can be reconstructed on the basis of observations of the standing masonry and stratigraphic evidence only to a limited extent. Damage in these areas as well as the frequent re-use of elements such as thresholds makes an accurate reconstruction of access routes impossible in many cases and, inevitably, the suggestions presented below are often informed possibilities.

Most phasing information comes in the form of alterations to the layout of the rooms as gleaned from blocked doorways and the gradual decrease in the size of the courtyard which can be observed in the better-preserved SE part of the house. Stratigraphic contexts, which are of importance for the dating of the construction of the house, include a number of levelling layers below floors. The scarce pottery and coins collected from these provides a range of dates between the mid-1st and the 2nd century AD⁴⁹.

The entrance to the house (R46A-B) lay on the side of the minor street to the NE and consisted of a long corridor which had a double doorway both on the street and at the point of entrance to the courtyard (**fig. 84**). The doorway led to a large courtyard (R31) that opened to a number of rooms, two on the side facing the corridor, and another three or four on the NW side. On the NE side, the courtyard led to a large room (R45), which probably included smaller rooms

⁴⁹ Cf. Appendix 3, p. 262-263 (contexts 44.2 & 46A.1)

such as R43. Alterations in the spatial layout in later phases do not allow a secure reconstruction of its original layout and internal divisions. On the S corner of the yard, lay R25, a long rectangular room, which had a direct access to R31, while a similar room might have existed on the NE side. Finally, the SE part of the house was flanked by a series of at least four square rooms (R 56 – 60) with access from the major road on the SE side of the plot.

Very few details are known regarding the appearance of the house and internal fittings of the rooms. Walls were constructed of large blocks of local Piraeus limestone, which were set in a number of courses in both upright and horizontal positions, and were probably plastered (**fig. 85**). Excavation failed to reveal any other substantial floors belonging to this phase and it is possible that most rooms had floors of beaten earth spread on top of the chalk bedrock. A patch of small sea pebbles encased in a coarse greyish mortar found in R31 close underneath a later feature may suggest that the courtyard posed an exception (**fig. 86**).

During the later 2nd or 3rd century AD, the house underwent a series of modifications, as a result of the installation of a marble-paved impluvium in the courtyard R31 (**fig. 87**)⁵⁰. A series of new small rectangular rooms, including R32 – 33 and R42, were carved out of the SE part of the courtyard, while a similar arrangement should perhaps be postulated on the NW part. A number of access routes, once opening to the courtyard were blocked (**fig. 88**)⁵¹, while access to R25 was no longer possible via the courtyard but took place through R33. The SE part of R25 along with R35 and R34 (and possibly the rooms further to the NE) were now incorporated into the area of the ‘shops’, merging with the pre-existing rooms R56, R57 and R58 to form larger rectangular tenancies with front- and backroom. As a result of these modifications, the area originally occupied by the house shrunk by about 23%, more than 1/5 of its original size.

The pool’s floor was slightly sunken, inclining from SW to NE, and up to the headstone of the well was laid out in white and blue-veined marble and framed by a low wall of thin slabs of white marble (**figs. 89**). The perimeter of its base

⁵⁰ Cf. Appendix 3, context 31.6

⁵¹ The thresholds of R33 and R32 opening to R35 and R34 respectively were blocked by large boulders set on a 0.30 – 0.35 m thick earth fill.

was laid out in large rectangular limestone slabs at the corners of which four unfluted marble columns carried the roof. In a number of rooms, walls were plastered, sometimes with decorative schemes. Preserved patches of painted wall plaster recovered from R32, R26 and R45 include the lowermost parts of painted panels with red stripes, marble-imitating dados and elongated lozenges in green, yellow and blue colours (Steinhauer 1988; A. Tsaravopoulos, pers. comm.).

House 1 seems to have suffered damage within the later part of the 3rd century AD. This is gleaned from a number of finds found sealed underneath a layer of patches of fallen wall-plaster from the walls in room R45 and a coin which dates between AD 244 – 249, providing a likely *terminus post quem* date for the damage⁵². Although we have very little stratified evidence from other areas of the house for this damage, it may appear that several rooms were affected. Especially the core area of the courtyard with the pool may have become uninhabited as early as this period, and as the evidence for alterations during phase 4 suggest (Chapter 7), it appears to have been gradually used as a quarry for building material in the following centuries.

6.3 House 2 in the 2nd-later 3rd century AD

House 2, lay back to back and shared similar dimensions with House 1. 19th century construction along the SW part of the plot had destroyed the outer wall of the house that flanks the minor SW street, while similar disturbances had left few traces of the same wall on the NW side, along rooms R10, R20 and R21. During the clearance works on the plot for the new buildings in 1981, part of the S corner (R9 and R9α) of the house was also destroyed. Apart from these disturbances, the house does not seem to have been robbed of its masonry and internal fittings as extensively as its NE counterpart during Late Antiquity. The better preservation of much of the excavated masonry along with the existence of more stratigraphic information enable a better understanding of the layout and the development of domestic space.

The house was certainly in use from at least the 2nd down to the 6th century AD, although excavations did not furnish any conclusive evidence for the date of

⁵² Cf. Appendix 3, context 45.1

the construction.⁵³ Contexts which are relevant for the date of construction include a series of levelling layers that seem to be associated with the earliest floors of the house. In rooms R7 and R8, the earliest fill levels just above the chalk bedrock, probably also related to a levelling for a floor, have yielded mixed pottery with the latest material ranging between the 1st century BC and the 2nd century AD⁵⁴. A similar bedrock-contact layer of crushed chalk above a floor of packed earth in R55 yielded pottery of exactly similar date, suggesting that both shops and house were part of the same construction.⁵⁵

In its initial phase, probably to be dated in the 2nd century AD, the house was approached from the minor street at the SW via two entrances (R7 and R15). Eight rooms were symmetrically arranged on the NW and SE sides (**fig. 90**). The NW side was furnished with another row of four rooms, accessed via R19a and also, possibly, directly from the street via R4/5/6. Two large rooms with direct access to the courtyard occupied the NE and SW sides respectively. R23 was flanked on the NW side by an oblong room (R22) that stood directly opposite the entrance. As in the case of House 1, the house was flanked on the SE side by a row of rectangular rooms, or 'shops', with direct access from the main street (R53/54/64 and R55/65)⁵⁶. The spatial arrangement gives thus an impression of symmetry, with rooms on the one side of the courtyard mirroring those on the opposite.

The courtyard appears to have incorporated in this early phase a peristyle with four columns of limestone that carried the overhanging roof. The courtyard was paved with sea pebbles set in a pinkish mortar (**fig. 91**) and was furnished with a water storage system (see Chapter 5). Run-off water from the roof of the building was channelled away via a drain which can now be seen as setting-off at the W corner of the peristyle. This drain continued underneath R7 where it broke into two branches, one leading underneath R7 and the other towards R5, both of which terminated to the SW minor road. Both the drain and the peristyle were radically transformed in later periods (see chapter 7).

⁵³ See Chapter 4, p. 85 ff.

⁵⁴ Appendix 3, p. 265 (context 7.3)

⁵⁵ Cf. Appendix 3, pp. 265-266 (contexts 24.6 & 55.1)

⁵⁶ The wall dividing R53 from R54 belongs most probably to a later phase, since it rests on the remains of a slab pavement, which has also been traced on the S corner of R54 (context 54.2).

6.4 The houses and the street grid

The two houses were built at approximately the same time and their ground plans show some remarkable similarities as well as differences. Perhaps the most striking similarity between the two houses is their size. Both buildings including the spaces that had a main entrance from the NE – SW street share exactly the same dimensions, each occupying an area of ca. 480 m². The similar size suggests that their construction took place in a planned fashion in plots which had already been carved out from the available space in the town. The houses in fact appear to conform to a planned street grid, as shown not only by their similar size but also by the similar width of the two minor roads flanking them from NE and SW.

Based on differences in masonry construction between the interior and exterior walls of the buildings and stratigraphic evidence, the hypothesis was put forward in chapter 4 that the Roman-period houses were constructed within the boundaries of a pre-existing urban block, which until ca. the 2nd century AD may have functioned as an open-air market. This is particularly visible in the N corner of the NE exterior wall which forms part of the boundary of House 1 towards the SE street (**fig. 57**).

There has been some debate whether the block of the two houses reflects the land divisions inherited from the Hippodamean plan of the Classical town (Steinhauer 1988; Eickstedt 1991). Nevertheless, it must be pointed out that the size of houses in the Piraeus underwent successive changes from the Classical through the Late Hellenistic periods, and perhaps the house plots reflect property divisions as these had evolved by the Hellenistic period. This is a matter which requires further study through the examination and publication of other Roman building remains in the town. At any rate, the evidence for the maintenance of the street grid in the Roman period poses many questions about continuity, change and the re-fashioning of the urban plan of the old town.

This evidence is important in that it testifies to the existence of a street grid in the Piraeus during the Roman period, which consciously drew upon the pattern inherited from the Classical and Hellenistic era. While further information needs to be studied from other excavated plots to place this discovery in context, existing archaeological evidence from elsewhere in the town suggests that not all

buildings (and not in all areas) were (re-) constructed according to such prescriptions. Although this provides some further evidence about the urban image of the Piraeus during this period, what is particularly relevant in our context is that the builders of the two houses seem to have inherited this earlier pattern in an active manner by adapting their construction.

Reasonably, the civic or municipal authorities in Athens or the Piraeus would have been responsible for urban planning and in this context it may be tempting to associate the decision to build the houses within the pre-existing grid to a wider civic project of urban re-development in the period following the sack. Epigraphic evidence for the restoration of land properties during the Augustan or Claudian period in the Piraeus (see Chapter 3) indicates that such projects were indeed launched by the civic authorities (perhaps with imperial support).

6.5 Circulation patterns

Moving from the architectural relationship of the houses with respect to the house block and the urban fabric to examine their ground plans, further similarities and differences become apparent. The interior layout of the two houses in the 2nd century AD reflect similar conceptions of space. The positioning of the court in the two houses suggests that this was the main organisational space in their design. Nevertheless, this design took shape in the two houses in quite contrasting ways. In House 2, the court was placed in alignment with the entrances and thus it gave greater depth to the rooms opening off this to the NW and SE (**fig. 91**).

The plan shows a symmetrical conception that is furthermore enhanced by the room opposite to one of the entrances which is laid out as a 'false' entrance corridor (R22). In House 1, in contrast, the court is laid out on its NW – SE axis and it originally occupied a larger space (**fig. 84**). This resulted in greater depth being given to the NE part of the house, which perhaps originally included more than one rooms. The result of designing the court on the NE – SW axis of House 2 was the provision of greater space in the NW part for another series of rooms. In House 1, the lack of axial alignment of the court to the entrance necessitated an entrance corridor which was three times longer than the entrance corridors of the SW house.

The difference in the layout and arrangement of this space may appear minor at first sight but it created a significantly different setting for movement and spatial activity in the two houses. Applying Hillier and Hanson's (1984) abstract terminology, in terms of its spatial configuration the court can be seen as a 'distributive' and 'controlling' element in both houses. It is an open space which controls and (re-) distributes movement to other closed rooms and irrespective of its actual positioning or orientation this property remained constant. The positioning of the court in House 2 resulted however in a further series of rooms at the back of the NW rooms which have an entrance from the court. Until the mid-4th century AD, these spaces could be accessed from one another independently from the court. They have a more hierarchical, non-distributed arrangement, in the sense that one controls access to the other in a sequential manner, not affected by the central space.

To assess the implications for circulation patterns of this arrangement we need to put this in the context of other elements of the ground plans. A significant element is the fact that, next to the court, other spaces too seem to have acted as nodes for the distribution of domestic traffic. In House 2, these included the entrance corridors R7 and R15, the former providing access to the series of rooms at the back of the NW flank, the latter into R9. The fact that other rooms could be accessed from these entrance corridors without having to pass through the court suggests that the role of the court as the main carrier and distributive space for circulation in the house was not so pronounced as one would expect.

As a result, this spatial arrangement created multiple paths of movement around the house which were not dependent upon passing through the central space. Circulation patterns seem to have been complicated further by the fact that the house had two entrances. Access from the outside to the inside could thus proceed via three different routes. First, one could enter from R7, proceed into the court and then choose to go into any one of the rooms. The second choice would be to enter from the second entrance (R15) and follow the court into one of the rest of the rooms of the house. Finally, one could enter from R7, proceed via R5/6 into the rooms of the outer NW flank and on to the court via R19, if desired (**fig. 90**).

Circulation patterns in House 1 during its early phase of existence seem to have been less complicated. The single entrance suggests that a single route was followed from the exterior to the interior of the building, although alternative routes may have existed via R48 and R46 and/or R45 into and out of the house. Furthermore, as in the case of House 2, the core of the house had potential access to the main street via another room which gave access to the row of properties to the SE. Nevertheless, in contrast to House 2, the lack of a second main entrance from the outside suggests that the house was less easily penetrable from the street and vice versa.

Although the poor state of the plan does not allow us to infer much about the patterns of circulation, changes in the interior fabric of the house had some effect on the way in which domestic traffic took place. The pool added at a later stage was originally flanked by two pairs of columns of blue-grey marble⁵⁷. This arrangement necessarily set the pool apart from the rest of R31 and led to a reduction of the original space used for domestic traffic and other household activities. On the SW side, the feature lay very close to a pre-existing well which continued to be used. This well and its stone head would have posed a considerable obstacle for anyone wishing to go from the SE rooms to R27. The existence of these features would have made a similar ambulatory movement around the pool necessary. Furthermore, blocked doorways suggest that the insertion of this feature led to some major reorganization of the SE part of the house. It would thus appear that the old court shrunk considerably in size as a result of this addition and affected considerably the routes on which domestic traffic was distributed around the court.

6.6 Experiencing domestic space in House 1

The evidence presented above suggests that the pool was not simply inserted but led to the superposition of a new space into an existing one with attendant impact on patterns of circulation. As a result of these changes in the court, circulation patterns in the house became more hierarchical. The pool acted as a prescriptive element on the physical movement around the court, guiding visitors and residents around certain features and paths. This feature became consequently the

⁵⁷ For the later use of these features, see p. 122

centrepiece of the house for anyone entering from the street. This effect is likely to have been enhanced by the exceptionally long corridor at the entrance.

At the same time with the instalment of the pool in the courtyard, the latter must have been transformed significantly from an open-air to a closed space. This transformation must have given the house a novel appearance, quite dissimilar to both its previous state of existence and to the appearance of the neighbouring House 2. Although we cannot know what other areas remained unroofed and therefore are unable to assess the proportion of unroofed versus roofed space, the house in the 3rd century AD must have become considerably darker. Natural light now became available primarily through a much smaller part of the roof above the old courtyard than was the case in the previous period.

The court must have been important in the context of household activities, as it was the place where the water resources of the house were stored, but the energy and materials invested in reshaping this space suggests that it gained an additional decorative/ symbolic function. This is indicated by the marble paving of the pool with thin marble slabs, some of which was probably imported. A fragment of a terracotta cornice with a frieze of acanthus scrolls (**fig. 92**) was found in the rubble covering the court and it may have been placed originally on top of the columns above the pool. This evidence suggests that some emphasis was placed on the decorative aspect of this space, indicating perhaps a shift towards a more representational than a purely functional role.

That particular importance was placed on this space and the new arrangement with the pool is also indicated by the discovery of a marble statue of Cybele/ Magna Mater. The statue, badly knocked, was found in the 'shallow' room R32, SE of the pool, in a layer which was disturbed in Late Roman times. While it cannot be ascertained whether the findspot reflects its actual place of display, the statue seems to date the period under consideration and it is unlikely to have been moved from afar. The cult of Cybele had a long history in the Piraeus, beginning in the 5th century BC and during the Roman period the sanctuary of the Mother of Gods in the port seems to have experienced some renewed ritual activity (see above, pp. 74-75). The presence of such statuary in proximity to the area of the court is further suggestive of the increased emphasis placed on the representational function of this space.

6.7 House 1: an atrium-house?

Pools similar to the one occupying the middle of R31 in House 1 and often labelled 'impluvia' by reference to Vitruvian terminology have been found in a number of houses of Roman date in Greece, and their presence there has been frequently associated with atrium-style arrangements reflecting Roman influences in domestic architecture. As Nevett (2002) points out however, excavated remains are frequently very fragmentary and much controversy arises especially with respect to the nature and extent of the roof.

The addition of the pool in House 1 would have led to a re-arrangement of the roof as a result of the carving-out of new rooms within part of the old courtyard. Reasonably, this must have increased the roofed space of the house significantly. The columns which flanked the pool should have acted as supports for the superstructure and thus they can be taken to reflect the line of the roof. It is impossible to assess whether the roof itself sloped inwards or not, and one has to rely upon educated guesswork. Given the absence of an aqueduct source for domestic water supply, collection of rainwater was arguably very important and one would think that the inhabitants wanted to take advantage of every possible drop for storage in the cisterns. A roof sloping inwards would have increased the catchment area and it is perhaps a likely solution.

The changes to the court and to the roof of the building indicate that certain similarities may exist between this space and atria as described by textual sources for Roman Italy and known from Pompeii and Herculaneum. To what extent however is it reasonable in this case to speak of an "atrium-house"? The question cannot be answered in a straightforward manner because much confusion exists as to what is meant by atrium and how it can be recognised in the archaeological record. Generally, this implies the existence of a largely roofed space with a central pool, above which there is an opening for rainwater and natural sunlight (Ellis 2002: 26 ff.).

To assess the validity of such an ascription we need to take account of how this space relates to the entire spatial configuration of a house. Atrium-houses in Pompeii and elsewhere in Italy, although of a much earlier period, suggest a common spatial logic which, as Wallace – Hadrill (1997: 238-239) argues, is based on the alternation of closed and open spaces arranged off a central space.

As far as can be seen from the available evidence, something like this does not seem to be the case with House 1. Most of the spaces seem to be closed with the exception perhaps of R27. What we are here confronted with is a selective adaptation of a feature into a pre-existing domestic form but the 'community of language' with houses of Roman Italy is missing (*ibid.* 239).⁵⁸

Despite these differences, do these features betray direct influences coming from the western part of the Empire? It is significant that in the eastern empire atrium-pools make their appearance at a time when they have ceased to be built in Italy and they were also going out of fashion in the western provinces (Ellis 2002: 29-30). In contrast, such features are embraced in urban housing in Roman Greece on an increasing scale in the 1st and 2nd century AD (Papaioannou, *in print*). Atria have been identified not only in areas with strong Italian influences such as the colonies of Corinth and Patras but also in the territories of free cities such as Sparta and Athens (*cf.* Nevett 2002 for examples). This chronological and geographical distribution does not allow us to apply labels such as 'Roman' and 'Greek' to particular elements when it comes to judging the extent of cultural influences on the shaping of domestic space. Although these elements might have been recognised as deriving from a certain cultural tradition, their meanings were being constantly re-shaped within the imperial context. If cultural influences from the West are not accepted, how is it possible to explain the fact that atrium-pools were so popular?

It has been argued that the conservatism evident in some areas of public life was not present in the domestic sphere of Roman Greece, where strong Roman influences are claimed to be identified in circulation patterns and domestic organization (Nevett 2002). It should be stressed however that while the atrium may be seen as a 'modernising' element in the domestic architecture of Roman Greece, it was actually being considered as archaic by the imperial period, the time when peristyles were becoming more fashionable in Italy and the provinces. Conscious efforts to promote the atrium as the primordial Italic form of domestic space and stress its ancient origins were actually being made by Vitruvius in Italy in the Augustan period (Wallace – Hadrill 1997: 219, 240). One wonders in fact whether the spatial – temporal displacement seen in the case of atria and

⁵⁸ Hales (2003: 226-227) reaches a similar conclusion in her discussion of the atrium of Hanghaus I in Ephesos.

associated elements in Roman Greece is more suggestive of a local re-invention of an obsolete material form.

By the time that they were in vogue in Greece, atria and pools may have begun to be considered as cultural relics, invested with a sense of revered antiquity, which created a 'patina – effect' on their pattern of consumption in urban domestic architecture. A comparable phenomenon that illustrates this effect is the tendency for residents in modern European cities to have fireplaces, traditional elements of vernacular architecture in rural and countryside areas, installed in their flats.

One may object that re-inventing the past of a foreign culture in the domestic sphere might sound bizarre. Greek society in the Roman period promoted a conscious archaism in its public life that stressed the indigenous mythical and Classical origins (Woolf 1994). Nevertheless, it is exactly because of this value attached to the past as a structuring principle of social life (Alcock 2001; 2002) that the fabricated antiqueness or reliquary character of the atrium may have appeared particularly appealing amongst part of the social spectrum in Roman Greece.

6.8 Conclusion

The archaeological evidence for housing from the DM site during the 2nd and 3rd centuries AD points to the existence of prosperous households in the town, that invested considerably on the material embellishment of their domestic environments. The ground plans of the houses during this period should be conceived as the result of complex influences on their design and architectural configuration. The houses were incorporated into the street plan of the town, which resulted in them occupying plots of similar size. Nevertheless the way that interior space was structured reveals significant differences, which may be related to decisions of the individual owners.

Changes in the ground plans, the provision of peristyles and pools and the display of statuary suggest that considerable effort was expended in making the courtyard a showcase of the household and its conception of domesticity to the outside world. Furthermore, compared to houses of Classical date excavated in the Piraeus (**fig. 93**), these houses enabled a freer circulation and point to a

relaxation of control on household members, especially women, that is likely to have been dominant in previous periods (Nevett 1999a). Such changes in the ground plans have been observed in other houses of Roman date in Greece and it has been argued that they reflect changes in the domestic relations and the negotiation of privacy (Nevett 1999b; 2002).

It may be instructive to note that a substantial part of these properties appear to have been rented out. The existence of rentable accommodation on the street front would have both separated their tenants from and engaged them in the life of the main household through relations of social obligation. Tenants would be allowed to enter the house in order to pay their rent and, in the case of patron/client relationships, their homage to the owner. This had obviously an effect on how privacy was negotiated in the core household. Arguably, the close residing between tenant and owner must have created the necessity of social rituals. The enhanced decorative role of the court may be related to these broader social developments, which have been discussed in the context of Greece under the Roman Empire (Alcock 1993).

Chapter 7

Domestic space in the Late Roman period

7.1 Introduction

During the Late Roman period, the two houses underwent dramatic changes in their architectural plan. This is most evident in House 2. The old town house was divided up into smaller apartments, incorporating areas of the rooms of the old house and those that originally were part of shops in the previous centuries. Similar changes can also be examined in House 1, part of which developed into a new smaller dwelling along the properties identified as 'shops' on the SE street. The evidence raises many questions about the lifecycle, patterns of residence and property in the buildings and the social function of domestic space in the Late Roman period. This chapter examines the evidence and attempts to place these changes in the context of comparable examples elsewhere in the Roman Mediterranean.

Providing answers to these issues is no straightforward task and in some cases it is only possible to resort to educated guesswork. The fact that such issues have never been raised in a detailed and analytical manner on the basis of excavated material from elsewhere in Roman Greece and the Aegean makes the investigation even more problematic (cf. Sodini 1985). Despite these limitations and with the help of comparative archaeological and documentary evidence from elsewhere in the Roman Mediterranean it may be possible to place the information in its wider social and historical context. It is hoped that a better understanding of the human agency likely to lie behind much of the attested architectural patterns can begin to emerge.

7.2 House 1 in the Late Roman period

After the alterations in the 3rd century AD, the spatial arrangement of House 1 remained more or less unchanged until the late 5th/ early 6th century AD. However it was probably during the 4th century AD that the threshold leading from R25 to R 56 was blocked and the SE part of R25 ceased to function as a backroom to R56 (**fig. 94**). In conjunction with these changes in access routes, R56 and R57 were divided into two compartments by the provision of a low

'bench-wall' built of brick and re-used blocks of limestone in mixed fashion. At the end of the 5th or early 6th century AD, almost the entire NE part of House 1, including two of the properties in the area of the earlier shops (R59 and R60) were taken over by a new multi-room dwelling (House 3). House 3, stretching from NW to SE, had a totally different alignment and spatial arrangement from the pre-existing house.

The house was accessed from R60 via a staircase descending from the minor NE street whose level was about 1.20 m higher than that of the Late Hellenistic/ Early Roman period. It included two large rooms, each divided into two smaller ones (R37 – 38 & R59 – 60). To the NW, the house included R42, an oblong room, which opened to a small square courtyard that included R43 and R44, defined by a low enclosure wall to the NW and SW.

Compared to the few details about the arrangement and internal fittings of House 1 in its early phases, the preservation of many features of House 3 is remarkable. Patches of tile floor with concentric circle motifs (**fig. 95**) have been uncovered in most of the rooms except R43/44 which had a floor of beaten earth. Internal walls had been built of small marble blocks and tile, while the enclosure wall of the courtyard (R43/ R44) was constructed of pisé and rubble (**fig. 96**). The large amount of re-used stone blocks incorporated in the masonry and other features of the house suggests that much of the building material had been plundered from the locality (**fig. 97**).

These amongst others included marble thresholds and an inscription of the 1st century BC that were used for the construction of a staircase (**fig. 98**), but also the columns and part of the marble slabs of the pool in R31 used for internal roof supports and floor paving respectively (**fig. 99**). Systematic spoliation of the building material from the core areas of the 'old' House 1 in Late Antiquity may explain why this has been preserved in such a fragmentary way. House 3, in turn, seems to have been destroyed by fire, judging by the heavy traces of burning that can be observed on the remains of its walls and architectural elements (**fig. 100**).

7.3 House 2 in the Late Roman period

A number of important modifications are attested in House 2 during the 4th century AD (**fig. 101**). The old peristyle was now paved with rectangular floor

tiles and large slabs of local limestone were placed between the four columns at its corners (**fig. 102**), creating a proper water-collecting tank⁵⁹. During this work, the drain leading the run-off water from the courtyard out to the street via R7 and R5 was blocked with household pottery and roof-tile debris⁶⁰. The disuse of the drain should also be associated with the building of a wall made of re-used limestone blocks, overlying courses of brick interspersed with medium sized stones (**fig. 103**), and the division of R4/5/6 into three separate rooms. The discovery of large limestone blocks during the excavation of the fill in R5 suggests that this now probably functioned as a stairway leading to a second storey. Another staircase (R9A), placed along the minor street and very badly preserved, was carved out from a strip of the SW part of R9.

As already suggested by the wall built in R5, during this phase, walls in various parts of the house which had suffered some form of damage previously were repaired with large chunks of limestone, irregularly placed between smaller slabs and tile, and bound with pinkish mortar (**fig. 104**). In the course of these repairs, access routes from the courtyard leading to R16, and from R15 and R23 leading to R9 and R24 respectively, were closed, as indicated by the blocked threshold lintels (**fig. 105**). Similar blockings of entrances to rooms occurred in the NW part of the house, with the result that during this phase, only five rooms had access to the courtyard (R11, R22, R23 and also probably R8 and R17) as opposed to six in the previous phase.

The rooms that were blocked off from the courtyard were merged with the neighbouring rooms to the SE and NW, respectively, creating thus a number of independent residential units. The units that incorporated the SE rooms of the old house were accessed from the main street as previously (Units 4, 5, 6 & 7). The old shops of phase 1 were now subdivided and the front rooms provided with a low wall, running from NE to SW, which probably functioned as a bench. The entrances to the units on the NW side (Units 2 & 3) lay probably further to the W, since the latter seem to have incorporated parts of other pre-existing properties in that area, which at the time of the excavation could not be investigated. The existence of a staircase at the SW side of R9 suggests that this led to further rooms situated on the first floor just above R9, R16, R17 and R24,

⁵⁹ See Chapter 5

while the staircase in R5 suggests that upper floor accommodation existed on the NW side too, just above R11, R19 α and R19 β .

The changes are particularly evident when one compares the surface area of the entire house block in phase 1 and phase 2 (**fig. 106**). While in phase 1 the core rooms of the house formed a single unit which makes up 81% of the total surface area, with the rest being taken over by the series of shops in the SE street front, the Late Roman picture is much more complex with at least six units covering the greatest amount of the ground floor of the building (**fig. 107**), including the old “shops” (62%). It is also evident that with a number of internal changes that took place in the 4th century AD onwards, i.e. the walling-up of the peristyle, the construction of walls dividing or sub-dividing existent rooms (e.g. R5, R17), the total usable ground floor area of the house was considerably reduced. The actual figure of surface area covered by the core rooms of the house until the mid 4th century AD may have been even greater, if one accounts for the fact that the house originally probably had access to some of the “shops” (e.g. R53 through R17).

The separate residential units which evolved after the modifications in the 4th century AD were apparently retained until the latest occupation of the house in the 6th century AD and appear to echo the transformations that took place in House 1 at the NE part of the block during this period. Some minor alterations, which are difficult to date, are possibly to be associated with later changes. These included the subdivision of room R17 by a bracket wall built of small stones and topped by some larger dressed blocks (**fig. 108**). A similar wall was built on the SE side of the courtyard and at a tangent to the walls of the water tank, inhibiting thus the free circulation around the pool.

Based on the latest datable pottery found in some of the rooms, the house seems to have ceased to be occupied within the first half of the 6th century AD⁶¹. Masses of roof tile and stone rubble from derelict walls encountered in a number of rooms are mentioned in the notebooks and they can be reasonably brought in association with the destruction of the house. Moreover, metal fittings, such as nails and large iron bolts, collected from the excavated deposits were probably used for the fixture of wooden beams carrying the roof and/or upper storey,

⁶⁰ Cf. Appendix 3, pp. 270-271

testifying to the structural collapse of the building⁶². The available excavation records are not sufficiently detailed to say with any certainty what caused the collapse. Traces of burning have been noted on the walls in a number of rooms but the fact that no blanket destruction seems to have been traced across the excavated part of the house may suggest that the building collapsed gradually, perhaps at a time that most of the rooms of the building had already been abandoned.

7.4 Architectural subdivision in context

The situation attested for House 2 (and to some extent for House 1) from the 4th century AD onwards can be set against what Ellis (1988; 2002) has described as the phenomenon of “subdivision” of buildings and building complexes of early Roman date in the Late Roman period. According to Ellis, subdivision did not involve ‘...simple adaptations or additions to pre-existing buildings. Subdivision in this context is a process whereby walls or small rooms were built inside earlier buildings, turning them into collections, or communities of small apartments’ (Ellis 1988: 567). In this context, Ellis is able to identify subdivision archaeologically on a range of buildings of different primary functions in towns between the 4th and the 7th century AD, including houses (especially of the peristyle type) bath-houses, street porticoes, amphitheatres and even market buildings. Although most of the known examples come from the eastern Mediterranean and North Africa, subdivision appears to occur in towns of the western empire too, suggesting that this was a widespread phenomenon, especially in the 5th and 6th century AD (Lewit 2003: 264, n. 24).

In the case of older peristyle houses, the process is typified by the blocking of older peristyles and their colonnades, the erection of walls blocking views and accesses while shorter walls, composed primarily of re-used building material, are found transecting rooms with mosaic floors, or those which are situated on the street fronts (Ellis 1988: 567; Lewit 2003: 264). One of the most telling examples of such a process is the so-called “House of Frescoes”, built in the 2nd century AD at Tipasa in Africa Caesariensis (modern Algeria) (**fig. 109**). Ellis

⁶¹ Cf. Appendix 6, Tables 2 & 3

⁶² Especially in R19A, R24 and R17

(1988: 568; 2002: 111) identifies four Late Roman apartments plus one shop unit in the fabric of the old large peristyle house, separated by the existing walls but also through a more recent masonry constructions which block off access to and from them and the rest of the building. The main entranceway was furthermore divided in two halves in order to facilitate access to different apartments within the core of the house. In addition, the peristyle was blocked between the colonnades and the remaining court turned, in effect, into a passageway distributing traffic to these areas.

The example from Tipasa furnishes one of the best parallels of the breaking up of a house into several residential units. From a formal perspective, it provides both similarities and differences to the late phases of the Piraeus houses. Short walls placed strategically to divide up the court, transect rooms or to block the line of view are attested in House 2 in the Piraeus⁶³ but there are substantial differences in their masonry styles which might point to different dates of their construction, with some being of mid-4th and others of 5th or later date. In the North African example, moreover the units are distinct yet some appear to be loosely connected with each other. This does not seem to be the case in House 2 in the Piraeus but it is potentially traceable in House 1 in those rooms the thresholds of which have been blocked by large oblique-placed boulders⁶⁴. The “House of the Frescoes” was excavated in the 1960s and its latest occupation dated on coin evidence to the late 5th – early 6th century AD (Baradez 1961). The evidence for subdivisions from House 1 seems to be formally and chronologically closer to that of the House of Frescoes but it is in House 2 that we can see an extensive pattern of modification which is similar to the Algerian example.

Given these differences, is it then justified to speak of subdivision in the case of House 2 in the manner suggested by Ellis? Part of the problem lies in the poorly understood chronology of the House of Frescoes, and especially of the attested changes. These are placed by Ellis (2002: 111) in the 5th century AD but since very little relevant data are given in the report, the chronology still remains a problem. Ellis does not appear to take this into account which results in him

⁶³ Walls dividing up earlier rooms: R5 towards R4; walls transecting rooms: contiguous NE-SW wall from R8 to R15 (final phase plan); walls blocking view: R17, gamma-shaped wall.

⁶⁴ For example in the case of the threshold between R25 and R56.

treating the evidence as reflecting a single event in the history of the building. The example from the Piraeus suggests that the old house was firstly subdivided extensively in the 4th century AD and then later in time various rooms received further subdivision. On the other hand, the difficulty in speaking about formal subdivision in our case stems from the rather straightforward currently dominant interpretation of the practice and it is to the examination of this that the discussion will now turn.

7.5 Subdivision and “poor households”: A critique of the paradigm

In emphasizing the spatial logic behind these architectural developments, Ellis (*ibid.*) acknowledges that such modifications point to permanent settlement rather than the provisional accommodation of people in times of need in the existing ruins of older large townhouses. In this, he distances himself from older accounts which have used such evidence as proxies for the rapid degradation of urban life in the Late Roman period (see reviews in Lewit 2001; Liebeschuetz 2001b). This attitude however is not without negative echoes since the process of subdivision is taken to show ‘[...] how spacious buildings of the earlier Roman period became densely packed, enclosed communities of poorer people’ (Ellis 1988: 568). In effect, Ellis’ approach to interpretation inadvertently takes him back to the “decline-and-fall” paradigm that he tried to avoid.

In this formulation Ellis seems to be avoiding confrontation with a number of theoretical and methodological questions which relate directly to his subject matter and which potentially have an immense impact on the understanding of the social implications of the practice. A specific problem relates to how the archaeological record of houses with evidence for architectural subdivisions has been studied and what sort of data have been drawn upon to substantiate the argument that subdivided houses were occupied by ‘poorer people’ during the Late Roman period. In the case of the House of Frescoes at Tipasa, Ellis is interested primarily in the architecture and discusses finds from the latest occupation only in passing. He points out that finds from within such rooms are quite infrequent and perhaps re-deposited from earlier periods (Ellis 1988: 569). This is a bold claim to make in the absence of any detailed study of the finds

assemblages from the rooms of the building. Such an artefact-based study would provide some indications about the lifecycle of the building and elicit information about the composition and origin of the assemblage.

An implicit misunderstanding arising from this partial utilization and reading of the evidence is that the excavated (and published) material reflects past domestic 'reality' in a straightforward fashion, as if the house was caught-up in Pompeii-like terminal event which enshrined all artefacts and furnishings at the places where they were used (Schiffer 1985). Although the mode of abandonment of the building is hardly analysed or taken into account, the reported absence of material culture would appear in this context to be taken to indicate (together with the limited surface area) the low economic means of the individuals or households that inhabited the apartments of this building. If we reasonably assume that part of the wealth of the occupants of each apartment was invested in the furnishings and portable material culture of the house, including personal or communal implements, household accessories etc., then it becomes clear that the argument is supported by part only of the spectrum of material culture associated with the house.

This "argument from silence" does not account for the (very high) likelihood that on abandonment the apartments were cleared and people took whatever they considered valuable, transportable, irreplaceable or in any sense inalienable with them, leaving archaeologists with a much altered and, in terms of its inferential value, complex fraction of the "original" material culture associated with the domestic occupation (Allison 1999; Schiffer 1985; 1997). Apart from this, recent ethnographic and archaeological studies have drawn attention to the complexity of human and natural agency that can be related to events of abandonment (see various papers in Cameron & Tomka 1992). Clearly, the occupants of excavated houses cannot be dubbed "poor" or "rich" so easily until at least their actions, the impact of other human agents and natural processes which affect what we excavate and study are singled out, taken into account and analysed with as much detail as possible.

Related to these issues, a general question raised is the extent to which the wealth and economic resources of a household can be correlated to or read off material culture, in this case the size of a house or the surface area presumably under occupation. To a large extent, this may seem to be a post-industrial,

modern construct of Western societies, largely confined to and informed by city-based upper-class perceptions of wealth and expenditure. Anthropological studies of modern Western and non-Western societies suggest that such a link may exist but does not exclude other ways of wealth display. In other words, the negotiation and display of wealth need not always be mediated through such architectural means and even in such cases it is also likely to be centred on architectural elements other than the size of the surface area occupied by the residence (cf. Martins 2002).

Other artefacts and/ or practices of a more occasional, periodic and/or transient nature (e.g. “rituals” such as meals, feasting, gift exchange, dowries etc.) have equally important roles in this context, as shown by both anthropological and archaeological examples (Appadurai 1986; cf. Hingley 1989: 159 ff.; Fincham 2000: 33). Moreover, possessions in the wider sense of the word, including animals, household slaves, tenants and the free human workforce of household members, are equally likely to have formed areas around which notions of wealth were constructed in past societies (Bradley 1984; cf. Kopytoff 1986: 64 – 65). It is interesting in this respect that some apartments of subdivided houses, such as at the so-called “House of Stuccoes” at Djemila (modern Algeria), have interior short walls topped with stone basins, suggesting that animals and horses were kept there (Ellis 1988: 567). These elements might point to the existence of households of substantial means, quite remote from the image of communities that were materially impoverished.

As argued in a previous section (pp. 53-54), choice of residence in both the ancient and modern worlds should be understood as a social construct, influenced by economic, social and ideological forces. Economic robustness reflected in the size of residential buildings may be a relevant factor but prestige attached to specific built environments is also significant. In some cases, in fact, there seems to be a complete reversal of the commonly held equation that the size of residence or the floor space occupied reflects material wealth. One needs simply to think of the variation commonly observed in the choice of boarding schools or university accommodation in the contemporary West.

Particular establishments of this kind with residential facilities are thought to be much better than others and this is not because they offer the largest and/or best-furnished rooms. The prospect of living in a 20 m² poorly lit room of an

Oxbridge college originally built 400 or 500 years ago evidently does not deter people from wealthy backgrounds to opt for such establishments and thus re-assert their “better-ness”. This example may seem to offer a crude comparison to Late Roman reality but it serves to highlight a point: Prestige, “antiquity”, fashion and trends in society, popular perceptions of appropriateness of a particular environment appear to be among the factors that arguably play a major role in such residential choices (cf. Martins 2002).

The discussion of these issues highlights the complex nature of the evidence and the caution with which inferences about the wealth, status or other social markers of the occupants of the houses should be approached. To return to the Late Roman period, the evidence is arguably too weak to support in itself the notion that subdivided houses accommodated impoverished households not only on internal grounds but also judged in historical perspective. As T. Lewit (2003: 266) has recently pointed out, subdivision of grand houses in a number of towns of Late Roman Spain and Gaul occurs in periods of considerable prosperity which saw a great deal of new construction of public buildings.

The apartments themselves, frequently incorporating shops, industrial installations, and evidence for manufacture and, as discussed earlier, the stabling of cart-drawn animals, attest to some vigorous commercial and economic activities which sustained urban life. Rather than reflecting reduction in the wealth of the urban population, Lewit (*ibid.*) and others (Ward Perkins 1999; Liebeschuetz 2001) see this development in residential space as a component part of the change in urban style and aesthetics which swept through towns of the empire in the Late Roman period.

One cannot exclude the possibility that people of limited means lived in some of the excavated examples but it is necessary to investigate multiple scenarios behind the archaeological record in order to appreciate its social implications in a more informed and nuanced manner. I feel that the problem with Ellis’ view on subdivision lies as much in his unquestioned assumptions about the impoverished lifestyle of occupants of such premises as well as in the lack of an analytical distinction between residential and public buildings of previous periods which were subdivided later on. Public buildings and monuments were the concern of the state or civic authorities of Late Roman towns and whether they were

maintained, restored or not lay within the political agenda, economic means and ideology of the ruling authority (Ward Perkins 1999; Liebeschuetz 2001).

Ellis (1988: 567) points out in this context that civic and central authorities may have been particularly apt to encourage or tolerate the re-occupation of such premises in order to counteract their eventual degradation and collapse. Although some limited literary testimonies exist for this type of re-organization of space in public buildings (Ellis 1988: *ibid.*), large town houses and buildings of residential function in earlier periods are likely to have been a very different matter. While some may have been thought of as part of the “Classical heritage” worthy of “preservation” by civic authorities, one should question whether the latter were in a legal position to alienate private property as easily. It is perhaps no coincidence that in the *Codex Theodosianus* (compiled in the early 5th century AD) the laws preventing the demolition, spoliation and re-use of stonework from derelict buildings make a clear distinction between public and private buildings with most attention and care accorded to the public monuments (Alchermes 1994: 175).

For example, in one of the relevant stipulations of the section concerning *private* buildings, it is specified, among other issues, that spoliation of building material from a house to be used in construction at another house would be permissible so long as both belonged to the *same* person (*ibid.* 176, with n. 36). To me this suggests that property rights of houses, even if the latter lay in a state of ruins, lay firmly with the owner (and perhaps also with the rightful heirs). The state or civic authorities could not bypass the laws governing ownership and usufruct to effect changes to private building(s) at will. The hypothesis for state encouragement of subdivision of old houses is therefore not plausible in all cases. This point brings up a series of questions, but a matter which needs particular examination is whether all archaeological cases of re-occupation and subdivision of domestic buildings are to be connected with episodes of severe discontinuity in property and residence as implied by Ellis (1988: 567 – 569; cf. 2002: 111).

7.6 Why were houses subdivided?

According to the line of argument developed by Ellis, subdivided houses represent the transformed grand residences of previous times in towns of the Late Roman period which on abandonment were occupied by smaller communities that broke them up into distinct apartments. Although it is not made clear in any of the works by Ellis cited above, this could be taken to imply that the occupants of the house had changed or that the previous occupants of the house had abstained from their right to claim their property. Ellis thus paints a picture of a major disruption in property and residence patterns as a result of the subdivision and goes on to associate the phenomenon of subdivided grand houses with the “flight of the councillors” from the towns from the 4th century AD onwards (Ellis 2002: 112). On what evidence is this argument constructed? Are there signs of abandonment of the buildings in question or of destruction or “decline” of the town(s) in which they were situated? And if there are, how much time did lapse before a house was split up and re-organized into apartments?

Although such issues do not seem to have been considered by Ellis (1988; 2002), it is very important to take them into account, whenever they can be more thoroughly examined using the available evidence. In the case of the houses in the Piraeus, subdivision took place in the course of a period of extensive repairs to the fabric of the houses. This is particularly the case in House 2 but similar evidence from House 1 suggests that the development of subdivided space into distinct residential units was paralleled there also by repairs, including the addition of new walls etc. With respect to House 2, the most dramatic change of the ground plan of the old house and the repairs could be generally assigned to the early and mid-4th century AD. This was also probably the time when the two staircases were built, turning the house into a two-storey building.

Based on the finds recovered from a number of important contexts (cf. Appendix 3) and the evidence for repairs, it has been proposed that both houses are likely to have suffered some sort of damage during the later half of the 3rd century AD. The historical context most reasonably associated with this damage is the raid of Athens by the Heruli in AD 267. In this context, it should be noted that associating damage to the houses with the historically attested event is *not* the same as attributing these to the Heruli or as seeing in this damage the effects of a “Herulian sack of the Piraeus”. Other scenarios (which are rarely recorded in

literary sources and are difficult to distinguish in all archaeological contexts) are equally likely to have contributed to the observable patterns⁶⁵.

Available documentary sources suggest that the assault on Athens was not unexpected and it is likely that, on hearing news about the approach of the Heruli (who came also by sea), some residents in the port might have chosen to leave the Piraeus and concentrate in Athens or in mountainous locations (cf. Fowden 1988: 50-51). It is not unreasonable then to assume that some of the damages may have been effected in the context of the abandonment of the building by the occupants prior to the sack of Athens, either through natural collapse, looting, or even in the course of household clearance and divestment.

With the help of this chronological framework, it is then possible to say that some time lapsed before the House 2 was repaired and subdivided. However, we are not in a position to say that, following the damage it suffered, the house would have been *completely* abandoned, until it was repaired and subdivided around the mid-4th century AD at the latest. The finds collected from the main cistern underneath the court included pottery and household artefacts of the early 4th century AD which, albeit re-deposited in the mid-to-late 4th century AD, represent part of the household wares that are most likely to have been in use at the house. This evidence suggests that the house was being used in the time that lapsed between the damage and its subsequent subdivision, blocking of peristyle etc.

It should be stressed that the phasing does not reflect absolute dates but simply the relative sequence and thus several of the repairs might be slightly earlier than assigned in the phasing discussed above (p. 122), a bias resulting from the lack of comprehensive stratigraphic data. Otherwise, there is no apparent sign of disruption that can be reasonably inferred from the archaeological record. In other words, subdivision can be seen in this example as an organic development of the building's space rather than as a discontinuity with the design of the building in previous times⁶⁶.

⁶⁵ In the case of House 2, all evidence which can be associated with the circumstances of the event comes from dumped debris of clean-up operations or from construction fills deposited at a later time. From House 1 there is a primary deposit which can be related to structural collapse as a result of damages associated with the sack by the Heruli. See Appendix 3, p. 268

⁶⁶ It is striking that it is mainly the areas which originally seem to have been less accessible such as the NE wing behind the court and the shops that were turned to independent apartments rather than the core of the house.

The 4th century AD is generally considered to be a time of moderate prosperity in the Piraeus (Hoepfner & Schwandner 1994: 38 ff; Steinhauer 2000).⁶⁷ In this context a prolonged abandonment would perhaps be more difficult to understand. To be fair, this might be the case with House 1, some areas of which, especially the court, do seem to have been abandoned and were subdivided perhaps later in the 4th century AD and certainly in the 5th/ 6th century AD. More importantly, however, it seems difficult to imagine that the previous occupants, other family members or heirs simply abandoned their property rights, when conditions of stability returned in the years following the events of AD 267. Unless some important change in the household took place – death, dispersal of its members, lack of heirs, or permanent settlement in a different location (or all three) – these people are most likely to have claimed the house back. This might have depended also on whether the building was in a good/ repairable state and, in turn, on the alternatives the rightful inheritors or claimants had for residence.

These points emphasize the need to resist the tendency to lump all examples of subdivision of the Late Roman period into simplistic interpretative frameworks such as the one provided by the notion of the “flight of the councillors” (Ellis 2002: 112). In cases when, as for House 2 in the Piraeus, there is little evidence for a lengthy temporal gap between damage, abandonment and re-occupation, respectively, of a building, subdivision is likely to reveal information of a different kind. Given the very limited scope for interpretation of subdivision in social rather than in purely architectural terms (Ellis 1988: 567), it is perhaps unsurprising that such evidence has never so far been examined in relation to questions of inheritance and occupancy.

In most societies of the Mediterranean, including those of Classical Athens (Lacey 1968: 125 ff.), Republican and Imperial Rome (Dixon 1992: 41; 142), Roman Egypt (Alston 2002: 67) and for many regions in Mediterranean North Africa during the Roman and Late Roman periods (cf. Shaw 1987), the system of partible inheritance was the norm. Although differences did occur in how this system was actually enacted, upon the death of the head of the household, the

⁶⁷ For the post-Herulian period as a time of prosperity for Athens and Attica, see Castrén 1994. Castrén 1999 and Sironen 1994

property and all possessions of the deceased, including people and objects were split between the rightful heirs in equal shares.

Our knowledge for inheritance patterns outside Rome and Italy and beyond the upper classes is patchy. Even in these cases, most references concentrate on the complex hereditary relationships that operated within the family structure and the justification of legal rights to inheritance of the parties involved (cf. Dixon 1992: 36 ff.). Relatively little is said about how properties were being treated by the heirs. For Greece in the Roman period (as for most of the Roman provinces) little can be said about how property was viewed and what legal or customary practices were in operation. References to squabbles between heirs for the division of property are known, hinting at the existence of explicit legal frameworks for the definition of hereditary rights (Plutarch, *Aemilius Paulus* 5) but generally the evidence appears to be thin and remains to be studied.

Despite these limitations, it seems reasonable to assume that some elements of hereditary practices and family organization of the pre-Roman period are likely to have continued to provide useful frameworks of reference after the conquest in most regions of the Greek Aegean. At Athens, a “free city” under the empire, the Classical concept of the *oikos* (‘house’) as a social unit that accommodated issues of hereditary transfer of property may have remained valid. Inheritance in Classical Athens was geared towards maintaining the integrity of the property and prestige of the *oikos*. Rightful heirs included all male descendants except those who had been disinherited or set up their own *oikos* by marriage (Lacey 1968: 125), or in the case of no male heirs, a woman of the house who could claim the property for her future sons by marrying the closest relative (ibid. 125; Nevett 1999: 15). In cases of multiple heirs, property was split, although it is unknown whether this also involved the division of the house into parts. Textual sources allude to the possibility that land property was also physically divided (Lacey 1968: 126-127).

Given the expansion of social ties, economic and demographic changes during the Roman period, such practices are likely to have incorporated elements that originated in Roman law or in customs of other neighbouring regions (e.g. Asia Minor, Egypt and Italy). In Egypt for example, property was divided up among members of the extended family (including women members) while documentary evidence from Italy (Dixon 1992: 41; 48 – 49) and Egypt (Alston

2002: 93 – 94) suggests that free women members of a household could sign legal contracts and wills, manage their dowries, transfer property and also constitute in legal terms rightful heirs.

Women in Greece during the Roman period are generally thought to have enjoyed a greater degree of independence and public prominence than previously (Van Bremen 1996). Although these changes might have affected only part of the female population, they would have undoubtedly placed them in a much more privileged position than their predecessors of the Classical period. In this context, it may be postulated that women members of the household were accorded a greater degree of mobility in issues of inheritance than previously. This last stipulation is of particular importance since as an obvious result of this change, women in Roman Greece would have had the right to a share in the family's property, a domain of social activity which in previous times was monopolised by men.

7.7 The example of Roman Egypt

If such a rough model of extended/ relaxed hereditary rights based on a mixture of pre-Roman custom with post-conquest developments can be postulated for Roman Greece, then partible inheritance is likely to have taken new forms and expanded to include novel ways of sharing the available property between heirs. In this context, and depending on the circumstances and the size of each property to be split, buildings included in the will of the owner could have been subject to formal division between the heirs. The phenomenon is well attested in papyri from Roman-period Egyptian towns and villages which record statements (*homologiai*) of rights to inherited property (Alston 2002: 67). Division could take place either by lot or agreed upon in common by the involved parties (either directly or through representatives), which included members of the extended family (Ellis 2002: 175).

Although the custom in Roman and Late Roman Egypt was to share the house without effecting any material divisions (Alston 2002: 69), examples of the division of a once-single house property between heirs that most probably entailed architectural modifications are known from a series of papyri (e.g. SB X 10572; SB XVI 12391; P. Abinn. 62). In a document dated to AD 84, which

records a division of a house by lot in the village of Bacchias, each of the parties retains the right to 'build up' or 'tear down' walls and other fixtures of the house as they please (P.Mich. X 584). In other cases, such as a statement from Kellis dated to AD 335, the decisive element that indicates that a house mentioned in such a contract was divided not only in notional but also in physical terms is the provision made for space in the same house to be held '[in]...common and undivided' by the involved parties (P.Kell 13).

The examples quoted above demonstrate that in Roman Egypt property division and inheritance are closely related to the issue of co-habitation of different households in the same building. Co-habitation is a very important facet for understanding the subdivision of domestic space as a social phenomenon of the Late Roman period. It has been pointed out however that since partible inheritance involved members of the extended family as heirs, Egyptian documents do not reflect the actual occupancy of the houses, which were supposed to be rather small, by the kin-relative shareholders but rather their rights of ownership (Ellis 2002: 175).

In any case, the point is perhaps of limited general relevance since the documents themselves suggest that the new owners would have a variety of alternatives to select from in order to dispose of or exploit their share for economic or personal purposes. Depending on their general economic and/ or social standing and the terms of the agreement, each of the new owners could either occupy the inherited part of a house, rent it out to tenants, or even sell it for cash or in exchange of other property to a kin-member or other non-relatives (cf. P.Mich. X 584; P.Corn. 12).

7.8 Patterns of occupancy in House 2

In view of these observations, it appears reasonable to assume that the breaking-up and re-configuring of rooms in House 2 is related to similar strategies to the disposal of inherited property. This can be further reinforced by the fact that there is little evidence for a major disruption in occupation extending for a period long enough to have made the house impossible to reclaim by surviving rightful heirs. From the archaeological record alone, it is very difficult to distinguish whether members of the same kin-group occupied the apartments that developed

from the old house, since the composition of residents would have depended upon the strategy of disposal of the property share taken up by each heir. While all apartments could theoretically have been occupied at least initially by kin-members, as the Egyptian evidence suggests they could also be sold or rented out, with the result that the composition of households and the relationships between them changed through time.

The subdivision of the house into apartments with distinct entrances from the street is one important index that several of the new apartments were rented out. This applies mostly to the rooms flanking the SE part of the courtyard with the (now blocked peristyle) but was also potentially the case with unit III. Another important index is the provision of two staircases which led to a second storey. In the preliminary report, the site director expressed the view that the main residential quarters of the core unit in House 2 were located on the upper storey with the ground floor apartments used for storage purposes (Steinhauer 1988a), since storage pithoi (jars) were found embedded in the floors of a number of ground floor rooms (R16, R19A). The rooms to which he refers however were not part of the core unit (Unit I; cf. **fig. 107**) and furthermore the fact that the staircases opened directly to the streets makes it unlikely that they were used other than to provide access to rented accommodation. The second storey expanding over Units IV – V was also probably part of rented property but since no evidence of its configuration exists, its relationship with the ground units cannot be established.

Apart from identifying the independence of rentable units, a matter which arises in this context is ownership. To some extent, a number of possibilities that could apply to House 2 have been considered above in the context of property inheritance but archaeological information may allow a greater degree of refinement. In Pompeii, where relevant research has taken place, it has been suggested that the following factors may provide indicators that a rented apartment belongs to a unitary complex of ownership: identical alignments, joint building techniques and/or walled-up passages (Pirsson 1997: 173). Blocked passages between Unit I and Units IV, V, VI suggest that the latter belonged to Unit I and were possibly rented out by the core unit's occupants. Several other elements reinforce this suggestion. Dividing R54 (of Unit I) and R53 (of Unit V) from R69 and R64 respectively is a single low wall which sits on a floor that

continues in both outer series of rooms of the units, indicating that Unit V was administered by the occupants of Unit I. The entire area occupied by what we have termed “shops” in the previous era is then very likely to have formed part of the property of the residents of the core apartment (Unit I).

Another potential clue to this line of argument is furnished by the discovery of a short stretch of wall in the underground tunnel that connected the two large bell-shaped cisterns below the court (R14) and in R9 respectively (**fig. 68**). The wall built of brick and rubble lay almost halfway through the tunnel’s length blocking the flow of rainwater towards the cistern in R9 (Tsaravopoulos, pers. comm.). There must have been obviously very serious reasons for disconnecting the two cisterns since this would have ultimately led to a severe reduction in the storage area for water resources in the household.

Since contact between the core apartment and the neighbouring R9, where the other cistern was located, had been blocked by the mid-4th century AD, this cannot be understood other than in the context of the re-shaping of domestic space that was taking place above ground in the old house. This provides another indication that the architectural modifications were accompanied, or generated, by changes in patterns of habitation and occupancy. During the same period, R9 and the (now destroyed space to the SE) formed another distinct apartment (Unit VI). In this context, disrupting the water supply can be thus conceived as a form of household divestment, an action both practical and symbolic that underscored the new relationship between landlord and tenant.

With respect to the rooms that lay on the NW flank (Units II & III) the evidence on this matter is less clear. Unit III possibly continued towards the NW where part of a courtyard with three wells has been excavated. This area would have been part of another house, arguably of early Roman date, and this creates several questions. Does this indicate that the owner of the core Unit I had also acquired part of the neighbouring house, or is this an indication of the transfer of space to the latter?

One possible index that the latter version is more plausible is that during excavation of the wells no connecting tunnel was discovered between any of these and those in Unit I suggesting that perhaps at the time the apartments were created the house ‘lost’ some space to the neighbouring property. Although similar difficulties arise with the damaged Unit II, it would seem that this also

came into being after the merging of part of House 2 with part of the neighbouring property to the NW. Expansion of this sort is amply attested in the excavated residential block at Egyptian Kellis, dating to the 4th century AD (**fig. 110**), while papyrological finds retrieved from the houses point to very close social relationships between the occupants of neighbouring houses (Alston 2002: 106-107).

The picture gained from the evidence discussed above is that a fairly complex pattern of occupation and ownership existed in the apartments that made up House 2 during the 4th century AD (**fig. 111**). If the reconstruction attempted above is correct, the biggest share both in terms of rooms and surface area was apparently held by the owner(s) of Unit I who, apart from the core apartment, were likely also to have controlled the lease of the multi-room “shops” on the SE street front and presumably also the accommodation on the second storey over them. The flank on the NW, behind the rooms of the NW side of the court, had been apparently transferred to the neighbouring property and formed a distinct unit of ownership.

Retaining part of the house while giving up another to a neighbouring property was not uncommon even in the Hellenistic period and two papyri, one from Fayum dated AD 129 (P. Fay. *Towns* 31) and another from Antinoopolis dated to AD 282/ 283 (P. Corn. 12; cf. Alston 2002: 68) attest to such transfers. Just why this happened is difficult to account for – lack of resources to maintain the whole property or perhaps a decision to draw capital for reinvestment into something else might be conjectured in this context. The argument for this pattern of ownership of course cannot be pressed too far. Although the apartments created by subdivision did not change in the succeeding period, ownership patterns may well have done so through the transfer of property as the comparable evidence from Egyptian papyri suggests. The picture described above cannot be taken as anything other than a crude reconstruction of what would have been presumably a much more fluid and complex reality.

This point is also worth stressing in the context of patterns of residence and the population that lived in the building. If the correspondence between archaeologically visible distinct residential units and different households occupying these apartments is valid, then it follows that in the Late Roman period more households occupied less space in the building than in previous

periods. The multi-room character of most apartments of House 2, especially those that were products of merging with the NW neighbouring house, suggests that they were occupied by larger households. Perhaps this was the case for those that opened towards the SE street front too, although the possibility that they provided only temporary lodging for the shop-keepers should also be contemplated. Although one cannot be certain that the surface area really reflects the number of residents, by and large the situation is potentially indicative of a general increase in the number of the resident population. This need not however entail a real increase in the number of occupants of the house block per se for the period in question since this obviously depended on the composition and the stage of life-cycle of each of the households (cf. Nevett 1999: 13).

Issues of the mode of tenancy and perhaps also of seasonal demand of rentable accommodation are also of importance in this context. Households could move in or out according to their economic situation, but most importantly, if we give credence to Late Roman testimonies (Shaw 1987: 15-16), tenants could be evicted any time as the owner saw fit. Reality might of course have been even more complex. Households based on the nuclear or extended family tended to have guests, visitors and lodgers, and while the former would have made an insignificant contribution towards the population of the house block, the latter are likely to have had a prolonged stay.

The proposition that special provision was made for lodgers has been put forward in Late Roman apartments at Ostia based on the evidence for single rooms with doors that could lock (Ellis 2002: 177). In House 2, such a room is indicated by a threshold block with a pivot, in Unit I (R22), apparently inherited without change from the previous phase of the building (**fig. 112**). The room is very small and it may have functioned as a “bedsit” for accommodating visitors who stayed overnight or for longer periods with the family that occupied the core apartment.

7.9 Towards an enhanced understanding of “subdivision”

The key to understand subdivision *as a social phenomenon* of the Late Roman period perhaps lies not so much in the reduced surface area of the newly developed apartments in relation to the previous building, some of which seem to

have been quite spacious, incorporating more than two rooms (see **fig. 118**), but in the sense of co-habitation and spatial contiguity between the apartments. This sense underscores most examples of attested subdivided houses, including the ones from the Piraeus and Tipasa, and would have been among the most prominent aspects for any individual experiencing these residential complexes from a close distance as a visitor, passer-by or tenant. Co-habitation could entail sharing facilities or the space of the entire building either subdivided into spatially distinct apartments or not. If we accept the proposition that patterns of residence are socially constructed, then the emphasis shifts to understanding why different households opted to share the same building with others, with or without subdivision.

It has been suggested that in certain parts of the empire, including Greece, this tradition of close residence of kin relatives and members of extended families was not new (cf. Hingley 1989: 6-8; Ellis 2002: 180; Nevett 1999a: 13). However, it is particularly in the urban societies of the Late Roman Mediterranean that one finds a distinct trend towards forms of communal residence of households that need not in all cases have incorporated close or distant relatives. Several residential scenarios, gleaned from both comparable archaeological evidence and the rich documentary testimonies for the division, transfer and sale of properties from the papyri found in Egyptian towns of the Roman and Late Roman period, have been considered above (pp. 136-137).

The evidence hints at the complexity of the ways in which a single house was treated both in legal and physical terms as the result of partible inheritance and differential nature of its use by the claimants. As a result, people sharing residence in the same building could be related on different levels. To name but a few and most clearly recognisable, several of the spaces might have been taken up by kin relatives who owned them, others by non-relatives who either owned the property they lived in or not, while still others may have been occupied by kin-relatives who paid rent to their kin-relative owners, or entirely by people who had tenancy agreement links only.

While all such relationships could eventually change, the co-habitation or sharing of the same building remained a constant parameter that defined residence pattern. This element could be facilitated in the spatial pattern of the building in different ways without necessarily assuming the same exterior or

interior form. For Late Roman Egypt, in particular, a blurring of the distinctions between military housing, monastic and domestic architecture has been observed, suggestive of a cross-fertilization and reproduction of a common logic of community space which could be adapted to the particular situations (Alston 2002: 121 – 122).

The example of the extensive residential complex at Kôm el-Dikke in Alexandria is a case in point (**fig. 121**). The large multi-cellular building excavated in the 1970s was built and occupied successively from the 4th to the 7th century AD and included a series of apartments with shared facilities (a latrine, a court etc.) as well as individual apartments (Rodziewicz 1984). The excavators initially thought that the building represents the remains of a monastery or some similar institutional establishment but the nature and quantity of finds, related to ore smelting and jewellery production in several of the apartments made them revert to a general interpretation as a communal residence with wider functions.

This example demonstrates that the trend towards denser occupation of single buildings goes beyond the subdivision and/or re-occupation of older large houses to the building of new domestic establishments according to a similar logic of residential organization. The interpretation of spatial organization from the fragmentary archaeological record, however, may not relate entirely to the realities of residence and domestic practice in the past. However the geographical extent of the examples of similar or comparable residential patterns provide strong indications that people throughout the Mediterranean region were increasingly living in numerically greater and closer concentrations in the Late Roman period.

The reasons behind this archaeologically attested trend are arguably multiple and not necessarily applicable to all known examples. As argued in the previous chapter, living in close proximity entailed a larger degree of social interaction with neighbours. People may have turned to this mode of residence because it may have provided a more pronounced feeling of security and mutual dependence, either real or perceived. In some cases, furthermore, as the Kôm el-Dikke complex illustrates, large-scale religious institutions may have played a key role in the design and communal pattern of residence.

In the context of institutional involvement, it has also been proposed that the imperial authorities, in encouraging the preservation of a “Classical” urban façade, allowed the re-settlement and subdivision of abandoned buildings by communities (Ellis 1988). As it has been pointed out, the authorities could not necessarily exert property rights over all such buildings, and all such buildings were not abandoned when subdivision and apartments started to develop. Moreover, economic speculation by builders and property owners (cf. Ellis 2002), better prospects of living on rent, as well as, in cases where evidence for formal subdivision exists, the structural condition of particular older buildings may have provided a pretext but do not necessarily furnish an integrated answer for the observed trend towards denser occupation. People could, at least theoretically, choose to accommodate their households in larger premises with as little spatial proximity as possible.

To approach the question of choice in this matter we need to delve into the greyer, more speculative territory of ideology. In other words, we are more likely to understand the specific pattern by establishing correlations with similar phenomena within the spatial and temporal framework in question and by understanding how this pattern might have fitted within the process of social reproduction in the Late Roman period. This is neither to claim that this is the only valid approach to the question nor that it provides definitive reasons behind the organisation of domestic space and the residential pattern explored above.

The form and pattern of residence may be illuminated in a more integrated manner within the context of wider transformations in society and ideology across the Late Roman world. In particular, living together and sharing goods and facilities in mutual benefaction were concepts advocated by the religious scriptures and apologists of early Christianity in the 2nd and 3rd century AD, while they also progressively formed one of the foundations of monasticism from the later 4th century AD onwards (Brown 1971). Communal comportment impinged on many aspects of social practice, including production, consumption and domestic life.

Factories producing African Red Slip Ware pottery (ARSW) in North Africa for example turned increasingly from the 3rd century AD onwards to the manufacture of a small set of vessels, mainly dishes and bowls which were appreciably larger than forms produced before (Carandini 1981). The limiting of

the vessel repertoire to a number of larger vessels can be understood as reflecting a change in food serving and consumption which made the smaller and more individualised forms of earlier ARSW redundant. In a stimulating article, J. Hawthorne (1997) has attempted to associate this shift in production and consumption of ARSW with the early Christian ethics of commensalism, food and dining behaviour, as glimpsed from a variety of Late Roman literary testimonies.

According to Hawthorne (1997: 33 – 35), this development was in line with and also symbolically materialised Christian values of simplicity, abstinence and withdrawal from material wealth, and stressed the communal dimension of meals, where food, drink and other resources were distributed among fellow brothers bonded by ideological conviction. Just as eating together from a small range of shared vessels, living in the space of a building shared among different households seems to have been embedded within a broader encompassing *mentalité* of communal being that influenced the performance of activities and the reproduction of social relations.

The limited space in these dwellings may be equally brought into association with ideas of frugality and simplicity according to which the earthly home was increasingly seen more as a domicile for a passing existence and thus as a place of relative unimportance compared to the “eternal” heavenly home (Reece 1999: 12, quoting Augustine *De Civitate Dei*). While we cannot be certain that people who chose to live in such spaces that enabled a greater spatial proximity would share the same convictions, that they followed verbatim rules and prescriptions set out by the intellectual elite of the times, or that they were necessarily Christian, choosing this type of residence seems to have made sense as an *ethos* or lifestyle and as a mode of being and acting in the world.

Although it is not the purpose of this chapter to undertake the task of explaining the rise and unfolding of this *mentalité*, it should be pointed out that being or acting in a communal manner may be related to a more profound ideological and existential turn in society. In Christian circles, material manifestations of communal being may have been considered as an active form of embodiment of a role-model, partly powered by processes of social memory (Halbwachs 1992; cf. Alcock 2002: 25) and a conscious motivation to emulate

the “ancestral” lifestyle of early Christian communities and the martyrs of faith of the persecution era.

In the wider society of the Late Roman period, traces of this shift in the form and content of self-perception point to a re-configuration of personhood and individuality, whereby the identity of a person as an individual was increasingly constructed with reference to (and gained importance by being placed within) a wider community (cf. Gardner 2001 for archaeological examples). In this context, spatial relations and the patterns of shared residence are not simply reflecting but can be understood as a constituent and legitimating part of social relations in the Late Roman period.

7.10 Conclusion

Rather than seeking explanations in the impoverishment of the urban populations or the “flight of the councillors”, interpreting subdivision involves an understanding of decisions behind the choice of residence, in our case, why people chose to accommodate themselves within denser built areas than in the past. While a variety of reasons and/ or pretexts can be furnished for providing an explanation, a consideration of how this residential pattern relates to the wider cultural history and the ideological frameworks of reference of the period in which they can be traced may provide a more nuanced approach to the question. In the towns of the Late Roman Mediterranean, residence in shared premises made sense by being situated within a mentality of communal comportment and frugality.

From this viewpoint, establishing dichotomies on the basis of “poorer” or “wealthier” households that were accommodated within the spaces of older and grander subdivided houses becomes to a certain extent a limited enterprise. This should not however be taken to mean that such divisions did not exist in the past or that we should not for that matter attempt to study them. While shared residence and co-habitation may have been influenced by Christian-related ideals, it does not follow that spatial organization remained outside the power asymmetries that were ingrained in the economics of residence and property investment. In this context, the influence of communal comportment may appear to stand at odds with some of the realities identified at House 2 in the Piraeus.

In particular, the somewhat centralised pattern of ownership of the apartments in the house block would have made the owner of the core apartment a rather powerful figure, with an inalienable right to kick out any tenants or lodgers at any time it was considered expedient. Tacit messages of this asymmetrical relation between landlord and tenant were displayed by manipulating the facilities for the supply of neighbouring apartments with rainwater. Inequalities arising from this situation seem to be rather less of a discrepancy for some Christian thinkers of the period. Augustine assuming the literary role of a *dominus* (head of the household/ landlord) who is speaking to his *inquilinus* (lodger/ tenant) reminds the latter of his existential position: “Here on Earth you are an *inquilinus*, but in Heaven you will be an owner (*possessor*)” (Shaw 1987: 16, n. 42).

Chapter 8

Analysing domestic finds: From Pompeii to the Piraeus

8.1 Introduction

In the previous chapter, it was argued that to make inferences about domestic life, wealth and social status from excavated houses, it is also important to look beyond the architecture into the small things and the debris of everyday life. The massive quantity of finds collected during the excavation of the houses at the DM site offer a complementary source of evidence which may provide fruitful insights into the organisation of domestic space in the Late Roman period. Before turning to this type of study, it is important to set out the theory, methodology and techniques that are involved in such analyses of domestic finds. This chapter offers an introduction to these issues and an overview of the methodology, techniques and limitations of the study that follows in chapter 9.

Comprehensive study of domestic artefact assemblages has become popular in recent years among archaeologists working on the ancient Mediterranean, and the first part of this chapter provides an introduction to some key issues that have been addressed. As it will become clear from the discussion, the artefactual evidence recovered from excavated houses is varied in quantity and quality, and in studying it one has to take approaches that will do justice to the evidence without overestimating its value for drawing meaningful conclusions. The historiography and theory of dealing with finds from excavated houses can be set against the dataset of finds from the DM site. The second part provides an overview of the finds recovered from a variety of contexts relating to the centuries-long use of the houses and discusses methods, techniques and approaches applied to their sampling, analysis and interpretation.

8.2 Classical archaeology and domestic finds

Despite the many excavation reports, specialist studies and grander syntheses of the organization and consumption of domestic space in Classical Antiquity, the number of works either dedicated to or incorporating an assessment of the finds recovered from such archaeological contexts remains rather small. Two recent

reviews of archaeological research on houses in Classical Greece (Ault & Nevett 1999) and the Roman world (Allison 2001) point this out. In the case of Classical Greece, in only a few cases have finds been studied and published in any detail to allow further examination of patterns of domestic activity (Ault & Nevett 1999: 44-46). Conversely, much research on domestic space in the Roman world has focused on the spectacular finds from Pompeii and/ or has focused upon different functions of particular classes of household finds and decoration, such as sculpture (Dwyer 1980; Gazda 1991) and lighting equipment (Ellis 2002; cf. Allison 2001).

Many reasons account for the imbalance in the documentation and utilization of this type of archaeological evidence and these may be related to the nature of archaeological investigations and research agendas that have dominated Classical archaeology since the 19th century. Among these, the acceptance that social issues and domestic life can be examined and interpreted comprehensively on the basis of texts is particularly salient. Finds, in contrast, have been given little or no attention, while discussed separately in reports and large publications that focus primarily on issues of typology, dating and details of production (Allison 1997).

Archaeologists working on the Roman world, nevertheless, have been generally more exposed to and become more likely to engage with finds from domestic contexts than those working on Classical Greece, arguably as a result of the impact of the re-discovery and continuous study of the buried Campanian cities of Pompeii and Herculaneum (Allison 1999; Pucci 2001: 138). Research agendas within Greek archaeology, in contrast, focused increasingly from the 19th century onwards on setting out the wider topography of ancient Greek cities and their monuments. This involved primarily an emphasis on the discovery and excavation of the civic centres and sanctuaries (Dyson 1995; Andr n 1998). In the course of the 20th century, while houses were excavated, comprehensive or even rudimentary publication of their finds (in the manner described above) rarely occurred, with the exception of sites such as the island of Delos in the Aegean and the Late Classical houses from Olynthos in Greek Macedonia (Ault & Nevett 1999).

Other, more general, factors that are related to methodological and epistemological questions in archaeology also help to account for this situation.

An important issue is posed by the circumstances of formation of the archaeological deposits recovered from domestic buildings. The examples of Pompeii and its Greek 'counterpart' at Olynthos, which is known from textual evidence to have been destroyed and abandoned in 338 BC, show just how much the exceptional nature of such sites have structured research on domestic assemblages which were formed after some catastrophic event and the rapid abandonment of the buildings by their occupants (cf. Ault & Nevett 1999: 44 – 46 for further examples).

This research attitude is not random but relies heavily on what has been called the 'Pompeii premise' (Schiffer 1985; Allison 1999). According to this methodological paradigm, rapid abandonment of domestic buildings as a result of a catastrophic event is more likely to yield fuller domestic assemblages. Assemblages, which have been formed under these conditions, are then taken to reflect a one-to-one relationship between recovered material culture and past behaviour and enable direct inferences to be made about the function of domestic space and domestic reality in the past (Schiffer 1985; Schiffer & La Motta 1999: 25).

Recent re-examination of domestic assemblages in Pompeii itself, based on a study of assemblage composition, preservation and distribution of artefacts, has begun to demonstrate that even in cases when such events are documented or can be adduced from the archaeological record, domestic equipment is very unlikely to have been abandoned in places where it was normally used. In the case of Pompeii, domestic finds assemblages are now increasingly being thought to represent different episodes of caching, cleaning and dumping activities during the abandonment and post-abandonment phases (Allison 1999: 14). Furthermore, the depleted nature of much of the assemblages from some Pompeian houses suggests that the occupants or others removed many portable items that were considered of value in the course of house clearance or even looting.

In other cases, it has been proposed that several houses had been abandoned even years before the events of AD 79 (Allison 1999; *contra* Berry 1997). More recently, archaeological and documentary evidence has been combined to show that property reclamation was taking place in the town on an important scale in the period following the eruption, and this, in turn, very probably affected the composition and nature of the assemblages (Cooley 2003). These advances

demonstrate that rather than searching for geo-archaeological fossils which can presumably answer directly all our questions about domestic life in the past, it is more fruitful to acknowledge that each site has its particular character and to analyse the complex human and natural agencies that have left their signature on the archaeological record.

8.3 Analyzing domestic finds: two case studies

Recent research on Pompeii is thus beginning to treat this site in its own right but at the same time to correct the misconception of 'exceptionality' that has underscored its study since the 18th century. Arguably, there is much to be gained from these advances for the study of less spectacularly preserved remains of houses. Although archaeologists have been much more inclined to study domestic sites exhibiting such rich and restorable assemblages of artefacts, it should be pointed out that this occasion is very rarely available compared to situations in which sites have been affected by successive phases of occupation and re-occupation as well as various post-depositional disturbances.

This is particularly the case with the finds recovered from pre-modern houses excavated in modern Mediterranean cities with rich buried deposits and features stretching back in time for thousands of years. In urban environments, re-deposited/ dumped, fragmented and variously worn objects are very frequent and this situation normally discourages any examination of this material with regard to issues of domestic activities and consumption. Another problem which relates to the urban context of investigation is the rescue nature of much excavation that frequently results in working conditions for archaeologists which are below the accepted standards and do not always allow rigorous spatial and contextual control of the material. Such situations obviously create serious difficulties for archaeologists working on domestic space but do they really require us to acknowledge defeat and abstain from exploring the interpretative potential of these rich datasets?

8.3.1 Halieis, Greece

A study by Ault and Nevett (1999) focused on domestic assemblages recovered from the town of Halieis in southern Greece. Ault and Nevett (1999: 45) note the frustration that Classical archaeologists have felt in the past when confronted with masses of indistinct, 'modest' and 'repetitive' finds from excavated domestic buildings and the difficulty in recognising their potential for interpretation. The study was based upon a very detailed excavation record, and the nature of the site, which was apparently abandoned in the 3rd century BC, created nearly optimal conditions for post-excavation study. However its value lies in stressing how an integrated approach to the material residues may help provide novel interpretations of how domestic buildings were used. Their approach combines quantitative estimates of 'repetitive' finds such as plain, coarse and fine pottery with observations of the architectural fabric of the houses from which these were recovered. Their aim was to assess the formation of the artefact assemblages and to explore different interpretative scenarios for the function of the rooms of the houses under study.

While Ault and Nevett's short study lays stress on formation processes as a tool to uncover the limitations of archaeological inferences as well as to explore the function(s) of different spaces, rather less attention is paid to the active role of material culture in the domestic context. 'Repetitive' finds are thus examined mainly with respect to answering questions about the deposits in which they were found rather than about the relation between the artefacts themselves and activities that took place in the houses. Although a study of formation processes is essential for a better appreciation of the artefactual evidence from houses, relying primarily on such an approach fails to bridge the gap with the social use of space and consumption in the domestic context. Investigating the composition of the assemblages in both qualitative and quantitative terms and comparing them with those recovered in other rooms of the same building or those from other houses may be a way forward (cf. Berry 1997).

At the same time, the finds themselves can be studied with respect to their shape, form and fabric, in the context of their spatial distribution in order to assess whether particular artefacts can be associated with particular spaces or architectural features (cf. Nevett 1999). A study of the spatial distribution of

imported versus local wares between different houses may throw additional light onto the economic conditions and consumption patterns of the households. Analysis of such issues may benefit also from the integration of other types of relevant evidence, wherever available, as demonstrated by the study of Early Roman households in Britain by Meadows (1999), which incorporates faunal and palaeoenvironmental data.

8.3.2 Karanis, Egypt

Depending on the nature and quality of the data, there are arguably many alternative ways in which such questions may be approached in order to move from an assessment of formation processes to a more social- and cultural-oriented interpretation. Notions of ‘unique’ and ‘repetitive’ finds which are constructs of modern archaeological categorisations (cf. Lucas 2001: 65 ff.), may be more easily overcome by adopting a holistic approach to the artefactual record. This has been attempted to some extent in a preliminary study of the Roman and Late Roman houses in the town of Karanis in Egypt (Van Minnen 1994). Unlike Halieis, the study of house contents from Karanis presents many problems of documentation since the site was effectively ‘cleared’ in the 1930s in search for papyrus documents with limited recording and problematic stratigraphic control. Nevertheless, it appeared possible to explore House B17 along these lines through a re-assembly and re-examination of available records.

Van Minnen (*ibid.*) treated what previous researchers on Karanis thought as ‘unique’ finds of papyri from the house as both texts and artefacts, drawing information from their contents as well as from their physical occurrence in the house and comparing them with other artefacts recovered. This allowed him to identify the individual who may have owned the house – a certain Socrates, whose name was recorded in the numerous papyri discovered there and who was active as a tax collector – and relate ‘repetitive’ artefacts such as blank papyri and writing implements to individuals inhabiting this space and their professions. To a limited degree, the combination of texts and artefacts could also throw complementary light on issues of literacy, gender relations, and provide insights into the activities of women and children. Despite the problems inherent in the interpretation of the material (Alston 2002: 47 – 48), this study engaged in a

more serious and theoretically informed way with the artefactual and the textual evidence particular to this site than has been done before.

8.4 Methodology and limitations of this study

These first comments on the historiography, methodology and theory of artefact-based studies of domestic space in the ancient world provide the backdrop against which to set the study of the artefactual assemblages from the houses excavated in the Piraeus. Before exploring the finds in more detail however, it is necessary to introduce the dataset from the Dikastiko Megaro site by discussing some important parameters of the sampling and recording strategy adopted in this study. Over a period of two and a half years, the author recorded approximately 22,500 ceramic objects from the site, which are now stored in the local archaeological museum. The number refers to artefacts before mending and does not include the enormous amounts of ceramic building material (CBM), including brick and tile, terracotta linings of drains etc. Apart from the pottery finds, about 300 fragments of vessel glass and ca. 280 metal objects (including coins, nails but excluding slag) were also recorded, while about 100 stone finds, mainly of marble, are currently in the storage rooms of the museum. The finds derive from various contexts (well and cistern fills, room fills and floor levels, packing layers etc.) ranging in date between the 3rd century BC and the 6th century AD and reflecting the major periods of occupation.

8.4.1 Sampling the collection

The examination of this material was undertaken with a number of aims in mind, including the provision of absolute dating from a number of significant contexts for the various phases of occupation and activity on the site and the examination of the spatial distribution of artefacts within the architectural remains discovered in the centre of the excavated plot. In order to meet the second aim, the examination focused upon the material recovered from the *latest occupation levels* of the two houses. The basic theoretical premise was that an examination of the distribution of these finds, the similarities and differences of assemblages of finds by rooms from which these were recovered, and the associations of

different categories of finds may produce interesting results about how space was used.

The rationale for sampling the finds assemblage was based firstly on a consultation of the excavation notebooks which provided the main source of evidence for re-constructing the stratigraphy. Thus, only contexts which are associated with the stratigraphy of the rooms in the two houses were singled out for this type of study. Finds from cistern and well fills as well as any material with a vague or uncertain provenance from the site have been recorded for other purposes but are excluded from the dataset used in this type of study.

Based on the relevant information recorded in the excavation notebooks, it has been possible to single out 60 lots of finds from the rooms of the two houses, including the 'shops' (25 from House 1 and 35 from House 2). These lots derive from the spits of earth fill cleared during the excavation of the rooms and correspond to 42 contexts (18 in rooms and areas of House 1 and 24 in rooms of House 2) which can be securely attributed to the latest occupation levels of the rooms of the two houses. The extent of coverage of the sample is graphically illustrated in **Fig. 114**. While it is possible to examine most rooms of the two houses and shops in terms of the artefacts recovered from them, gaps in the recording and documentation, lack of finds stored in the museum, or a combination of the two, make an assessment of the finds from all the rooms and areas of the houses impossible.

8.4.2 Spatial control of the assemblages

The majority of the finds included in the sample were recovered from proper rooms of the two houses and other architecturally bounded spaces (e.g. the water tank (R13), the square structure in R56) of the two buildings after the topsoil had been cleared and the outline of the neighbouring walls was revealed. These spaces constituted basins of deposition with successive strata accumulating one on top of the other. A few assemblages which can be associated with the latest occupation phases of the buildings were also recovered from more open areas close to the edges of the insula to the SE (e.g. R64, R65, R68) and in the more badly preserved NW part of House 1 (e.g. area R31C).

Finds assemblages from these contexts cannot be considered to have been as 'bounded' as the finds deriving from proper rooms and may include material that has been re-deposited from nearby areas (the SE street, the neighbouring rooms or elsewhere). For comparative purposes, however, they have been included in the examination in order to provide a much more complete picture of artefact distribution and in order to assess formation processes with respect to the other, more 'bounded' spaces. All spaces are here referenced by means of a standard letter-number code, e.g. R6, R7. In cases where assemblages were recovered from particular areas of rooms, as in the case of R31 in House 1, this code will be followed by another letter to distinguish between them (cf. **figs. 115 & 116**).

During excavation, no coherent grid system was imposed on the site for the spatial control of excavated material, partly perhaps due to the limited time, resources and the external pressures exercised on the excavators to finish the project as soon as possible. Each of the four archaeologists involved in excavation of the fill of each room used some rudimentary form of three-dimensional recording of finds but this was not consistent and only some finds were recorded in this way (most frequently for complete lamps, coins, and sometimes large fragments of wall plaster). The provenance of artefacts in general was referenced by the general space in which they were found.

This approach obviously did not allow a detailed spatial record to be produced with the result that finds can be tied down only rarely to specific loci within an excavated spit. This means that exact locations of artefacts that might enable the establishment of finer contextual associations, are not always available. Although this type of information is obviously important and will be used in the following sections whenever available, its utility depends on the level of analysis. In the context of an examination of artefact distribution across the various rooms of the buildings, exact locational data are not necessary so long as all finds recovered are at least referenced to the individual room or space from which they were retrieved.

8.4.3 Stratigraphic control of the assemblages

A problem arising from the investigation of the records is the stratigraphic position of the finds from these lots in the fill. The 60 find lots discussed in this

study derive from levels recorded generally at a depth of 0.20 – 0.40 m below the level of the highest surviving wall of each room. In some bounded spaces of House 2, where walls have been preserved to a greater height, they were retrieved from deeper levels (e.g. in R24, R13, R16). The extent to which these finds were in direct floor contact is uncertain for all recorded lots, since in most cases the vertical position of the finds in the fill was not recorded.

Lots from definite floor-contact levels include those from R31A-D, R57 and R58 in House 1 and R6, R11, R13 in House 2. The only available data for the rest are provided by the depths of the levels (spits) that were excavated. The thickness of the (re-constructed) soil matrix of the contexts in which these artefacts were embedded varies from 20 to 40 cm. Although this may be an error of the proposed context re-construction, an analysis of the excavated levels recorded in the field notes suggests that floor-contact levels were not always easy to distinguish in the field with the result that, in some cases, finds from floor levels and upper levels of the fill (including debris from structural collapse of the buildings) are likely to have been mixed.

While deficiencies in the way that the artefact lots were documented in the field cannot be amended, it may be possible to explore whether finds are likely to have been part of floor-contact contexts. This can be done in cases where finds derive from more than one spit taken during excavation of the fill. In order to test this hypothesis (and also as an additional check to the validity of the stratigraphic re-construction), a pilot study focusing on such an uncertain example was undertaken, in which pottery finds from the two spits created during the excavation of R56 were examined for cross-fits.

The study showed that 47% of the vessel fragments in the second (lower) level of the fill excavated in R56 could be re-fitted with those from the first (upper) level. Further sherds which showed similarities in shape, form and fabric could also be spotted between the respective assemblages of the two levels. The high occurrence of cross-fits may suggest that these two levels originally corresponded to a single context approximately 35 cm in thickness which was in contact with the floor of the room. It has not been possible to perform this type of study on all of the lots but it is to be expected that future study of similar, insufficiently recorded assemblages, may benefit from such approaches.

8.4.4 The dating of the sampled contexts

The distinguishing features that aided identifying the find lots as deriving from contexts of the latest occupation of the buildings were, firstly, their stratigraphic relationship with overlying and underlying contexts as mentioned in the notebooks and, secondly, the chronological range of the (diagnostic) artefacts in their assemblages. These include coins, imported and local fine wares and lamps. Because of the generally poor preservation of the legends on coins, it has been possible to provide bracket dates only for most of this material, a quantified graph of which is presented in **figure 117**. Most identifiable coins recovered from these contexts in both buildings could be dated between late 4th – mid 5th century AD (Theodosius and successors). As can be seen from the graph, the assemblages contain a fair number of earlier coins minted in the course of the 4th century AD (issues attributed to the 'House of Constantine', Julian and Valens), which appear to be residual. Earlier coins are generally scarce from these levels, with the exception of some local (Athenian) issues dating to the Hadrianic – Antonine period, which are certainly residual.

The coin evidence appears to suggest that the deposits in question date between the end of the 4th century AD and the mid-5th century AD or perhaps later in the 5th century AD. The relatively large proportion of coins datable to the second and third quarters of the 4th century AD in these levels is possibly suggestive of the use of these rooms during that time (cf. chapter 5) but it may also reflect the prolific minting of coinage during the period of the reign of Constantine and his successors (Papamichelakis, pers. comm.). Furthermore, it has been argued that 4th century AD bronze coins generally made up the bulk of small change in the 5th and 6th century AD (Reece 1984: 205). The occurrence of such a high number of 4th century AD coins in contexts generally datable to the 5th and 6th century AD may thus be less surprising. The evidence from the Piraeus can be paralleled by a similar pattern observed in other Mediterranean sites, such as Iol Caesarea (Cherchel, Algeria) (Potter 1995: 36, 39), Carthage in Tunisia (Hurst & Roskams 1984) and Sabratha (Libya) (Kenrick 1986).

The dating suggested by the coins appears to correlate to some extent with the evidence provided by the pottery and lamps. The data are presented in

Appendix 4. Most of the latest occupation levels contained the typical assemblage of Late Roman fine wares that are commonly found on Mediterranean sites of this date. Imported fine wares included African Red Slip Ware (ARSW) and Phocian Ware (PhW), while few solitary sherds of Macedonian Grey Ware and other fabrics of possibly Aegean origin also occurred. The highest proportion of African Red Slip Ware (ARSW) retrieved from these contexts of the rooms include forms that according to Hayes (1972; 1980)⁶⁸ were produced from the late decades of the 4th to the mid-5th century AD (ARS HF 53, 62B, 65.1, 67, 68, 70var.).

The latest datable forms however seem to place these assemblages well into the second half of the 5th century AD. This is the case at least for the late occupation levels in most rooms of House 2, the only exception being the assemblage from R19B, R54 and R4 which have yielded examples of HF 105, HF 99 and HF 88, respectively which can be dated to the early decades of the 6th century AD. The dates provided by ARSW in general would appear to correlate with the presence of PhW form 3 bowls in some of the rooms of the house which can be dated between the mid-5th and early 6th century AD. Early 6th century AD ARSW and PhW forms are attested in the shops of House 1 (R56, R57) and in some areas of the core house (R31A).

The pottery evidence presents us with a complicated picture for the closing date of the contexts in question. For some rooms in House 2 this seems to be within the first half of the 5th century AD, e.g. (R16) while for most it may be placed within the later part of the century. For still others, such as most rooms in House 1 and R19B in House 2, formation of the contexts in question appear to be placed firmly in the later 5th or even early 6th century AD. Architectural phasing of the site discussed in a previous chapter suggested that the NE part of House 1 was substantially modified in the early 6th century AD which would explain the date of these latest occupation contexts. Nevertheless, finds securely derived from latest occupation levels from this area come only from two rooms, R37 and R38. The remainder of comparable contexts in other areas of the house have produced a range of pottery which dates generally from the late 3rd to the later 5th/ 6th century AD. The assemblages also contained small quantities of earlier

⁶⁸ Henceforth Hayes' type forms of ARSW and PhW will be abbreviated to ARS/ PhW HF

(Hellenistic and Early Roman) fine wares, mainly Athenian black-glazed and Eastern Sigillata A, B and C which are certainly residual.

8.4.5 Collection strategies and sources of bias

Related to the problem of stratigraphic recording which may be amended to some extent by combining various techniques on both the (preserved) site and the finds from these levels, is the way that the finds from these contexts were collected in the field. As the previous notes made evident, understanding the material culture retrieved from the two houses is unavoidably conditioned by a series of decisions on the process of excavation that were taken by the four archaeologists that worked (cf. Lucas 2001). Any flaws in the retrieval and collection of finds in the field during an excavation that took place more than 20 years ago cannot be rectified but only pointed out with the aim to understand how the assemblage which was stored in the Museum prior to the present study was formed at the time of its excavation. It is only by bearing in mind some of these limitations that we may then begin to treat the assemblages in question in more analytical ways and to make well-grounded, plausible inferences about quantitative and qualitative aspects of the data.

During recording of the stored finds in the museum, it soon became obvious, for example, that what are normally called 'small finds' were rather infrequent among the assemblages – coins and nails of bronze and iron were an exception. Only a handful of bronze and bone pins, one bone button, a couple of knuckle bones and few other fragmentary 'small finds' could be located. Initially, this seemed very peculiar, given both the extent of the excavated area and since sites with rich domestic deposits and of comparable date with the Piraeus houses in the Aegean and Mediterranean, such as Karanis (cf. Van Minnen 1994), the shops at Sardis (Crawford 1990) and the Byzantine fortress at Emporio in Chios (Ballance et al. 1989) have yielded considerable quantities of such finds.

Although post-depositional processes may have contributed to this general dearth of such finds, the soil fill of the site does not seem to have been sufficiently acidic, which might have caused bone, including polished artefacts, to decay. Other reasons connected to the deposition of these artefacts and related to the mode of abandonment of the various rooms of the two houses may

partially account for (cf. Chapter 9) but do not fully explain the pattern. The limited number of small finds seems to be more reasonably explained by the fact that, due to the haste of the project, excavated soil was not dry-sieved (Tsaravopoulos, pers. comm.) with the result that whatever artefacts of small dimensions existed in the deposits were not retrieved. It should also be noted that several finds with uncertain provenance noted in the Museum may have originally come from such contexts but since this is impossible to check, only securely provenanced finds have been included in this study.

While such a pattern seems to have been primarily generated by limitations in the methodology and technique of excavation that prevented a greater degree of visibility and recovery of finds, conscious and unconscious decisions about what to retrieve and what to exclude from the material record were arguably also instrumental. Unfortunately, the strategy employed to collect finds in the field is rarely mentioned in the field notes compiled by the four excavators (henceforth Excavators A – D) of the contexts under study, suggesting that there were very few reasons to explain the approach adopted. After studying the field notes for the first time, my general impression was that all excavators collected all finds, but a preliminary check on some of the material in store at the museum proved this not to be the case. To cite an extreme case, animal bones were virtually absent from contexts of latest occupation excavated by Excavator A, but were more frequent in the ones excavated by the others. Although an examination of this type of material is not included in this study, any future discussion of animal bones from these contexts will need to take into account the approach to collection of this type of material.

Some patterns in the composition of the assemblages that form the main focus of the following enquiry may thus not be reducible to differences in function, depositional and post-depositional processes but seem to result from uneven collection and documentation, which reflects different degrees of bias in finds recovery. The field notes included a variety of detail in the documentation of particular classes of finds which raised the suspicion that the excavators had been variously selective in their collection strategy. The notes by Excavator A for instance mention lamps, coins, fragments of marble and in some cases black-glazed pottery in greater detail than any other classes/ categories of finds. During work at the Museum, it was possible to test the extent of recovery bias across a

number of variables for each of the four excavators working on clearing the latest occupation levels of the houses. For the purposes of this study, I will concentrate on examining bias in the retrieval of different classes of pottery and different anatomic elements of pottery vessels (rims, bases, handles, body sherds).

Apart from the hints included in the notebooks, what became obvious during the study and mending of the finds, is that the pottery from some late occupation contexts contained a mixture of primarily large sherds, mainly rims and bases, while body sherds and to a lesser extent handles, apart from large fragments, were notable by their absence. The fact that the extant stored sherds showed signs of recent break suggested that some of the originally joining fragments may have been discarded on site or at the Museum or never retrieved during the excavation, while collection in the field seems to have focused on what were considered to be diagnostics.

A plotting of the data compiled for the pottery retrieved from the latest occupation contexts recorded by the four excavators suggests a fairly coherent pattern. Excavators B – D seem to have collected in decreasing quantities, body sherds, rims, bases and handles (**Fig. 118**). The data for Excavator A however show a contrasting pattern with rims outnumbering body sherds and other parts of vessels. This may suggest that with respect to vessel parts, Excavator A was more prone to retrieving sherds of diagnostic value, while Excavators B – D were less keen to distinguish between diagnostic parts and the mass of body sherds.

For many of the late occupation contexts recorded by Excavator A, work at the Museum fine ware pottery demonstrated a greater amount of re-fits than sherds of the plain and coarse categories. While a host of reasons may be brought to account for this (greater fragmentation of large coarse versus smaller fine ware vessels, inability during work at the museum to trace all sherd re-fits etc.), the pattern was too coherent to be random, especially in relation to body sherds. Another aspect of the pottery recovery data which is worth commenting on is the approach to the retrieval of body sherds of different fabrics, fine, plain and coarse ware by the different excavators.

Rather than dealing with coarse counts of pottery collected as in the study above, however, to arrive at a sound appreciation of this it has been considered important to show what the probability was for each excavator to pick up fine ware sherds as opposed to coarse or plain ones. For this the measure of

probability for a past outcome – in this case the recovery of a body sherd of a particular type of pottery by one of the four excavators or P (recovery) – and a corresponding formula were used (cf. Fletcher and Lock 1994: 52 – 53).

The body sherds were divided into three general fabric groups, black-glazed (BG), other fine and coarse plain wares and the results of the probability test are presented in **Figure 119**. The results can be read on two levels, first all scores for each excavator and, second, the scores of each fabric group may be compared across the four excavators. On the first level of analysis, it soon becomes apparent that for excavators B, C, D coarse/ plain sherds were more likely to have been recovered than BG and other fine sherds. Excavator A has a higher score in fine wares which suggests that with respect to the total sherds collected by this person there existed a higher chance of recovering such sherds as opposed to coarse/ plain and, to a lesser extent, BG.

Conversely, Excavator B seems to have had a greater chance of recovering BG than other fine sherds but not as high as that demonstrated by the score for coarse/ plain within the total assemblage collected by this excavator. The scores for different fabric groups for excavators C and D show a convergence of BG and fine ware towards very low levels of probability. This indicates that retrieval of sherds of such wares was less likely than for plain/ coarse sherds, which, in turn, demonstrate a very great likelihood of having been recovered.

Comparing the trajectories of probability in the recovery of different fabric groups between the four excavators, gives a broader insight into potential biases in the retrieval of pottery. With regard to plain/ coarse sherds, excavators B, C, D demonstrate some very high likelihood of retrieving these as opposed to Excavator A. The scores for BG present some contrasting results, with Excavator A and B showing a greater propensity to collect these sherds rather than the rest. Excavator B however was less likely to have recovered such sherds than A. With respect to fine wares, excavators B, C, D show very low likelihood of recovering these sherds as opposed to Excavator A. These results appear to suggest that Excavator A was more biased than the rest of the excavators in the sense of both showing a greater propensity towards collection of BG and fine ware sherds and of apparently collecting proportionately less coarse/ plain sherds than the rest of the group.

Collection strategies and patterns of differential recovery of the finds from the latest occupation level have left us with assemblages which are likely to reflect both past patterns and the decisions and biases of the excavators. Acknowledging this aspect of the record is important for understanding and interpreting these assemblages. For those contexts that have little restorable pottery, for example, we should always consider the possibility that there were gaps in the recovery of sherd material in the field. This is particularly the case for those finds recovered in rooms excavated by Excavator A⁶⁹.

Also, we should expect that in several assemblages the fine wares, including residual material such as black-glazed pottery, may be comparatively more frequent because of preferential retrieval of these types of highly visible and diagnostic sherds and parts of vessels. Certain gaps in the record, on the other hand, such as the limited number of small finds, may be explained by the lack of rudimentary techniques for the retrieval of finds during the excavation. These considerations will be taken into account when assessing the formation processes of the assemblages and the composition and distribution of artefacts across the various rooms of the two houses.

8.4.6 The finds and typology

The assemblages from the latest occupation levels of the two houses comprise a range of artefacts, including pottery, glass, iron and bronze coins and artefacts in a variety of stone. Granted the large number of finds, their 'repetitive' character, and in order to be able to make meaningful generalisations about the distribution of these artefacts in the spaces of the two houses, a working typology was devised which could articulate the basic qualities of different classes of the finds. In recent years, archaeological typologies have come under close scrutiny for the ways they are constructed (cf. Lucas 2001). Importantly, it has been argued that any typological framework should try to integrate the various finds not only on the basis of the material(s) or (in the case of pottery) fabric(s) in which they are made but also on their different forms and functional characteristics within the assemblage as a whole.

⁶⁹ These rooms include: R31D and R32 in House 1 and R4, R7, R10, R11, R20, R21, R22, R23 in House 2

From a theoretical and methodological perspective, both fabric and function-based typologies are important for a study of domestic finds since statistical manipulation of finds data on the basis of both aspects can yield interesting and complementary results. Adopting a typological framework based on form and/or function for assemblages of finds from the various rooms of a house may for example provide insights into variation in the use of space, as different activities will generate assemblages of artefacts of different functions clustered in certain rooms.

On the other hand, although it would depend on the subject and context of study as to whether it would be useful to compare the occurrence of glass with ceramic vessels within a certain site, it cannot be denied that, in the case of pottery at least, distinction of the different fabrics in contemporary use at a site and an examination of their spatial occurrence allows further meaningful patterns to be established (cf. Orton et al. 1993: 168). For Roman-period sites in the Mediterranean that demonstrate a plethora of pottery wares and fabrics of various origins in particular, such patterning in space may prove a fruitful opportunity to investigate variations in the economy and the consumption choices of the households under study.

Bearing these remarks in mind, the finds were divided into two broad groups that were considered to best describe the general functions of the finds: 1) ‘containers’ and 2) ‘accessories’. ‘Containers’ include all finds of vessels that originally held (or were made to hold) a substance (even lamps are included in this group), while the ‘accessories’ group comprises finds that in other cases would be categorised in groups as diverse as sculpture, terracottas, pottery and “small finds”.

These groups were constructed irrespective of material – ‘containers’ may include ceramic as well as glass and stone vessels, while ‘accessories’ include any object made of stone (e.g. sculpture), clay (e.g. terracottas, round-cut sherds, vessel lids), metal (coins, nails) etc. Each group was then subdivided into more specific categories, each indicated here by a letter (A – G). The label specifications of these categories are either purely descriptive (e.g. 1E, 2C), indicative of the function of a particular group of finds (e.g. 1C, 1D) or both (e.g. 2G) (Table 2).

Group	Functional category	Description and notes
CONTAINERS	1A	<i>Foodstuffs: Serving & Consumption</i> (open shapes)
	1B	<i>Foodstuffs: Decanting & Pouring</i> (closed shapes)
	1C	<i>Foodstuffs: Transport & Storage</i> (amphorae)
	1D	<i>Foodstuffs: Preparation</i> (food-processing vessels)
	1E	<i>Household: Utilities & Storage</i> (utilitarian vessels)
	1F	<i>Household: Other</i> (vessels of other or unknown function)
	1G	<i>Habitat: lamps</i>
ACCESSORIES	2A	<i>Coins</i>
	2B	<i>Figurative items</i> (terracottas, sculpture etc.)
	2C	<i>Round-cut sherds</i>
	2D	<i>Tools & Fittings</i> (nails, small metal finds etc.)
	2E	<i>Loomweights</i>
	2F	<i>Dress items</i> (incl. toilet implements etc.)
	2G	<i>Lids</i>

Table 2: *Functional typology used for the finds analysis*

Function is a difficult attribute to be assigned to any archaeological find without adequate reflection. While the ways artefacts are used are to a great extent conditioned by inherent characteristics of their form, shape, manufacture and technology, their function may not be reducible to only one domain of social performance or activity (cf. Miller 1985). Marble mortar bowls (**fig. 120**) for example have been grouped under ‘1G: Foodstuffs: Preparation’ based on the likely usage of such vessels for this purpose as gleaned from textual sources and the absence of ceramic forms of mortaria from the assemblage. Strictly speaking, however, such vessels may have been used in a variety of ways not necessarily connected with the preparation of food, for example for the crushing and temporary storage of minerals used for dyeing and painting (cf. Crawford 1990: 61, 71).

The typological divisions and their labels proposed here are of heuristic value and should be regarded as providing a very general idea of the possible function of an object. This can be re-cast, modified or abandoned when further data are examined. For this study, not only the formal characteristics but also aspects of the biography of the object itself, the archaeological and architectural context of

the object's deposition and its association with other artefacts in the same assemblage are of importance. It is unfortunate, in this context, that most recovered pottery and other containers did not provide any indication of their last contents. For certain types of objects with rather obscure functions, such as round-cut sherds (**fig. 121**), however their deposition and spatial distribution may give us a clearer idea about the range of functions they served.

8.4.7 Recording and quantification

Pottery and lamps make up the bulk of the finds both in simple counts and in terms of the volume stored in the museum, and because of the varying levels of fragmentation, the approach to recording and quantification will be treated below in more detail. Only small quantities of vessel glass were retrieved and glass sherds could be restored in a handful of cases only, yielding some larger fragments but in no case near-complete or complete vessels. All glass fragments from these contexts were counted after mending but only diagnostic parts of vessels (rims, bases, handles, stems) were recorded in greater detail since little could be deduced from solitary body sherds about the form and function of the vessels that they derive from. As a result, body sherds of glass vessels have been excluded from the examination and minimum numbers of glass vessels occurring in the assemblages under study have been estimated based on diagnostic pieces only. For the remaining categories of finds (including ceramic objects other than pottery), recorded characteristics varied by each category but, in general, the main aspects to be documented were their occurrence and quantity (by counts) in the contexts under study.

Recording of the pottery and lamps was done by using a standard recording form sheet for finds from each room and lot which documented counts of ceramic objects by fabric type, form and part represented (rims, bases, handles, sherds). Sherds were counted both before and after mending. With the exception of lamps, complete and/ or unbroken vessels from these contexts are rare but re-fitting undertaken at the museum when the finds were studied produced some near-complete vessels. Nevertheless, these were very limited and if we were to rely only on these for an examination of the activities registered in the floor assemblages of the houses, we would get very dubious and biased results.

Clearly, some form of meaningful quantitative control of the mass of fragmentary pottery needed to be established in order to be able to assess with greater precision the assemblages recovered from the rooms of the two houses.

In the last decades, quantification has been used increasingly as a method for the recording and statistical interrogation of large assemblages of pottery in Classical archaeology (cf. Chapter 9). Various measures exist, such as sherd counts, weights, EVEs etc. (cf. Orton et al. 1993; Rice 1987), creating obvious dilemmas to the uninitiated about which one to choose. It should be pointed out here that most pottery studies have used quantitative methods mainly to assess relative proportions of fabrics (imported versus local, fine versus coarse etc.), and, as a result, the techniques and measures which have been advanced reflect this research aim. In contrast, for the purposes of this study what really matters are the relative proportions of vessels of specific form and function occurring in the assemblages from the rooms of the two houses. Measures such as sherd count and weight seemed irrelevant since they can contribute little of value to an estimate of the original vessel population in the assemblages under study.

With this aim in mind, it was decided to calculate minimum numbers of vessels (MNVs), based on sherd totals after mending. In the past, this type of measure has been applied in a variety of ways. Millett (1979: 77) has outlined two methods, the first relying heavily on the presence of rims, while the second takes account of the entire assemblage, including body sherds. More recently, Ault and Nevett (1999) have used MNVs, based on a combination of rims and bases to interrogate functional aspects of the assemblages from Late Classical houses in Halieis. For this study, it seemed expedient to arrive at a compromise between these approaches. Not only rims and bases but also handles, for example, were taken into account since in some cases they were the only preserved diagnostic parts of some very common categories of vessels (e.g. transport amphorae, cooking ware frying pans, plain and cooking ware jugs) represented in the assemblage.

During the mending process the pottery was re-examined in an attempt to isolate “sherd families” (cf. Orton et al. 1993), groups of sherds that did not mend but appeared on the basis of fabric, surface treatment, finish and/ or other characteristics to belong to single vessels (Millett 1979: 77). Sherd families were then cross-checked for mends and/or for similarity against pots that had been

already mended. The assemblage of resulting vessels represented was then counted once more and these were taken to represent minimum numbers of vessels. Although this approach is subjective (different pottery recorders would not necessarily create the same sherd families) and less likely to be repeated in the future (Orton 1989: 94; Rice 1987), it does provide a middle ground between the research aims of this study and the need to take as many sherds in the assemblages into account as possible.

Although this approach took account of body sherds, it was felt that from a theoretical point of view some of its results would be of limited value. Given the emphasis on functional aspects of the assemblages, sherd families that could not be related to any diagnostic parts of vessels would provide limited information. In some cases, the general function could be established even when diagnostic parts were not represented within a sherd family, using measures such as sherd thickness and fabric, especially in relation to fine wares, lamps and cooking wares, but in others, diagnostic parts of vessels were of crucial importance⁷⁰. Since there was no way of distinguishing with certainty which body sherds belong to which vessel form, it was decided in the end to exclude lone 'families' of body sherds or solitary body sherds from the calculation of MNVs. In the following discussion, thus, MNVs account only for those sherd families that could be related to similar-looking diagnostic parts of vessels.

For the identifications of different fabrics and forms of coarse pottery and fine wares (ceramic 'containers' of Group 1), rather than following a fabric-based approach (cf. Orton et al. 1993), I relied on the visual documentation and textual descriptions of comprehensively published material from a range of excavated sites in the Aegean and east-central Mediterranean, as well as wider syntheses of the pottery of the period (Hayes 1972; 1980; Keay 1984; Peacock & Williams 1986)⁷¹. This is because the greatest amount of the pottery (including plain and coarse wares) from these contexts could be cross-referenced with greater or lesser certainty with finds discussed in these works. As a result, the

⁷⁰ This was particularly the case for a form of jug with a trefoil rim and a flat base in cooking fabric the body sherds of which look very similar to sherds of large cooking pots.

⁷¹ Sites which have furnished the best comparative material for the pottery finds include Athens/ Agora (Robinson 1959), Athens/ Kerameikos (Böttger 1996), Kenchreai (Adamschek 1979), Knossos (Sackett 1992), Benghazi/ Sidi Khrebish (Riley 1979), Emporio (Ballance et al. 1989) and Saraçhane/ Istanbul (Hayes 1992). Identification was also aided by personal consultation of the sherd reference collection at the Museum of Classical Archaeology, University of Cambridge.

task of creating a new site-specific type or form series did not appear necessary. A summary of the basic characteristics of these fabrics along with further references is presented in Appendix 5.

Chapter 9

A neighbourhood in motion: space, people and things in the Late Roman shops and houses

9.1 Introduction

This chapter turns from the architecture of the two excavated houses to the finds recovered from their associated rooms and seeks to understand domestic life in the Late Roman Piraeus from the residue of domestic activity. The focus is upon the distribution of finds, mainly ceramics, on an intra-site level (in this case, the rooms of the two main buildings in the Late Roman period), and the exploration of emerging patterns in the context of the social use of domestic space. The aims of the study are primarily to investigate how finds relate to the various rooms they were recovered from and what they can tell us about the ways that different areas of the houses were used.

An important prerequisite for this type of exploration is a consideration of the extent to which finds have been affected by depositional and post-depositional factors, or formation processes. Based on the variability in the formation of the contexts under study, we may be able to distinguish different types of contexts and suggest ways in which the finds ended up at their final place of deposition prior to discovery. At the same time, the finds show some interesting patterns which might help us understand aspects of the abandonment of the rooms in which they were found, including the nature and temporal scale of the event. This type of analysis is not important solely as a methodological tool but may contribute to broader historical questions relating to the disruption of settlement patterns in the landscape of the town during the Late Roman period.

This examination provides a first step towards recognising what the artefacts found in the latest occupation levels of the houses represent. The aim of the following section is to assess whether they have anything to do with the nature of activities that took place in these areas during occupation. Based on the methodology explored in the previous chapter and utilizing a purpose-built function-oriented type series for grouping the finds, relative quantities of artefacts found in the rooms of the two houses are compared for each house and then analysed with respect to their functional composition. Other data – e.g. the architectural context of discovery, other fixed features – that may be of particular

value for placing these finds in their social context of use is then also taken into account. In the case of excavated houses, then, artefacts and space stand in a dialectic relationship in the interpretive process of understanding domestic life in the past.

9.2 Identifying formation processes

Discussion in chapter 8 has touched upon an aspect of formation processes in the context of recovery bias as a factor influencing the assemblages under study. In addition, formation processes include the effects of both cultural and natural factors on the archaeological record (Schiffer 1985). For the purposes of this study, the focus will be not so much on their identification but on investigating the extent to which the assemblages have been affected and on developing and applying some rudimentary techniques to assess this impact.

Ethnographic studies of Western and non-Western societies suggest that a host of processes may account for the formation of assemblages of finds on the floors of houses (Joyce & Johanessen 1992). When a house is occupied, most of the household equipment is kept generally in storage locations and activity areas are relatively frequently cleaned. Domestic waste is generally deposited outside the house rather than on floors but objects may be brushed aside towards the corners of a room, deliberately deposited or stored at certain places.

During the abandonment phase, occupants may alter the location of the domestic equipment around the house in preparation for leaving the premises, they may abandon some of the equipment and personal belongings and deposit or dispose of others. In the post-abandonment phase, the house may be temporarily re-occupied for domestic purposes or become a focus for rubbish tipping by neighbouring households. In both the latter cases, already existent assemblages of artefacts on its floors may be further depleted, for example through scavenging or stealth, or enriched, most usually by becoming a rubbish dump (Schiffer and La Motta 1999).

While some of these scenarios will be discussed in more detail below, two aspects that are of particular value initially and can be examined on the basis of the finds are the amount of residual material and the completeness of ceramic vessels in the assemblage from the rooms of the house. Taking residuality first,

pottery finds from a certain context may be generally described as residual when their date of production and time of circulation is earlier than the formation of the context in which they occur (cf. Ault & Nevett 1999; Peña 1998). Residual material may be of use in investigating of formation processes since its relative frequency in any given context may provide an initial index of how the latter has been formed. This is particularly the case in urban contexts such as the Piraeus, where residual material is always present in some form or another within pottery assemblages and differences in the amounts between contexts may be illustrative of the context's formation (cf. Crummy and Terry 1979: 52 ff.).

Residuality, in turn, is closely related to fragmentation, which brings us to the second depositional aspect of the assemblages to be reviewed here, namely vessel completeness. Pottery characterised as residual is distinguished by smaller average completeness of sherds. This results from the fact that such artefacts have experienced more than one depositional events in their life history as opposed to artefacts that can be termed as being 'in-phase' or coeval with the context's formation (Orton et al. 1993: 168). Thus, on a first level, a study of fragmentation may help to distinguish residual from in-phase material, since the latter will generally be more complete.

A study of vessel completeness of in-phase material from different contexts may allow us to check formation processes of their respective assemblages. A high amount of complete or near complete vessels within an assemblage will generally suggest either a '*de facto*' deposit or 'primary' refuse, while a highly fragmented assemblage with few restorable vessels or sherd re-fits may suggest that the finds were introduced in the deposit from another, either close or distant area ('secondary refuse'). While, depending on the kind of data at hand, finer approaches combining more aspects of the assemblages may be used for this purpose, this approach was adopted because on the basis of the available record it may provide us with some quick and fairly reliable results.

9.3 Formation processes of the assemblages from House 1

The sample from House 1 includes finds from 21 rooms and spaces around the E and SE part of the building (Appendix 7). As already discussed, the house was constructed in the late 1st – early 2nd century AD and reached its present form

through a number of alterations and repairs to its rooms in the 3rd to 6th century AD. In the latest phase of construction, its NE corner was re-modelled into a small rectangular house (House 3) with a small courtyard (R45), carved out from a larger room of the old house. The first question to be asked on the basis of the finds would be how the remainder of the old house was used, whether its rooms had been abandoned, if they were still used and for what purposes, at the time that its NE corner was re-occupied. The results of this study may then complement our perception of the state in which the house was at this latest stage as gleaned from the architectural evidence and the deposits related to this repairing activity (cf. above chapter 5).

Figures 122 and 123 show all finds from each of these rooms. Pottery and household vessels of other materials make up the most common finds but even from a cursory examination it becomes evident that rooms have yielded variable quantities of finds. Most strikingly, the highest number of finds of the ‘containers’ group from House 1 come from three particular spaces: R56, R58 and R31A, while most finds of the ‘accessories’ group were recovered from R68. The finds from locus R31A derive from the large courtyard and they should be considered together with those from the three other loci (R31B-D) from this large space (cf. **fig. 115**). If we calculate percentages, it becomes clear that more than half the volume of finds in Group 1: Containers from House 1 come from only those three areas (R56, R58 and R31A-D).

The same pattern of differential quantitative distribution can be seen from examination of the ‘accessories’ group. Only a handful of rooms have any finds of this group while almost half the total number of finds are clustered in R58 and R68. This is somewhat surprising given the fact that these spaces do not take up the greatest amount of the surface area of the house. It must be remembered that finds from relatively few areas of this house are considered here, while biases in the recovery of finds even from these areas that might affect these results have been noted. However, these factors are not likely to provide the only reasons for such considerable variations in the quantitative distribution of the finds and other explanations should be sought for this pattern.

The large quantity of finds concentrated in only three areas of the house, the courtyard and the two ‘shop’ spaces may suggest that in all three cases we are dealing with dumps of material accumulated either rapidly or over longer periods

of time⁷². Nevertheless, if we look at the quantities of residual and in-phase pottery contained in each of the rooms of the houses it becomes evident that the assemblages from R56 and R58 contain less residual material and thus seem more homogenous than that from R31A (and to some extent than those from R31B-D) (**fig. 124**). Further to these results, there exists some strong variation in the degree of vessel completeness between the assemblages from these spaces, as examined with respect to pottery vessels of both Group 1A only and the other functional groups.

Although a number of measures can be applied for calculating completeness (such as percentages of rim diameters, cf. Orton et al. 1993), here a more holistic approach is adopted with numbers of 'orphan' and re-fitted sherds (including all anatomic parts of vessels) in each of the assemblages. Again, as can be seen from the charts and the percentage of re-fitted sherds in the respective assemblages, R56 and R58 show greater amounts of refits as opposed to R31A and the rest of the loci making up the space of the house's courtyard (**fig. 125**).

Although it should be remembered that the assemblage in R31A is likely to have been affected by recovery bias during the excavation (cf. p. 164), the data just considered suggest that different reasons than those considered for the assemblages of R56 and R58 may be brought to account for the formation of this assemblage. The high amount of residual sherds and the low levels of completeness of pottery vessels suggest that this assemblage contains a fair amount of secondary refuse, possibly brought in from other areas of the house or even outside its architectural boundaries. The finds suggest that the function of the courtyard had by that time been substantially modified and this space was perhaps used for dumping household rubbish. While we can only speculate where this household waste was derived from, the most likely candidates would seem to be the occupants of House 3 that could have access to the courtyard of the old house, or other neighbouring households situated beyond its architectural boundaries.

⁷² The limited quality of recorded data from the DM site at the Piraeus, especially the lack of any systematic recording of upper and topsoil layers, do not allow a full application of finer temporal distinctions to the material. For a more detailed discussion of such issues (and residuality in urban contexts, in general) applied to a Late Roman context on the Palatine Hill in Rome, see Peña 1998 and 2000.

As noted earlier the assemblage from R31A is only part of the finds recovered from the latest occupation level of the house's courtyard; it was recovered from the area to the SW of the 'impluvium'. Finds were also recovered from three further loci, from the middle area of the impluvium itself (R31C) and the areas to the NE (R31B) and NW of it (R31D). Although these assemblages were apparently recovered from a similar soil matrix which spread over the courtyard, they display some interesting variation in the amount of refitted and residual pottery. The assemblage from locus R31B spread over the NE area of the court, next to R45, contained one restorable pot, while R31C has provided the highest number of refitted sherds from all four loci. It appears then that the deposit across the area of the courtyard included items of variable origin, including both secondary and primary refuse, the latter perhaps introduced from other areas of the house or the court itself.

In contrast to the assemblage from R31A-D, R56 and R58 show some remarkably (by the standards of the available record) low levels of residual material, while also containing large amounts of sherd refits (**figs. 124 & 125**). In addition, the assemblages from both these rooms have yielded the largest number of restorable pots and, furthermore, larger and better-preserved fragments than any of the other spaces of House 1. Despite this, however, the fact that a large number were still difficult to restore fully and/or partly suggests that these assemblages are likely to represent primary refuse, artefacts broken and discarded near the place they were used for the last time, whereby some portions of artefacts were lost during cleaning and maintenance activities, rather than '*de facto*' deposits (cf. Ault & Nevett 1999: 49-50).

This seems to be a logical explanation since both rooms were excavated fairly comprehensively and pottery sherds from them seem to have been least affected by recovery bias, as discussed earlier (p. 164, n. 69). It is possible that the assemblage recovered from R25, an oblong room to the NW of R56, may represent another case of primary refuse as it is characterised by similar traits. Nevertheless, R58 contained the largest number of complete lamps of any room in the house, which may suggest that this assemblage could even include some artefacts deliberately left there after the performance of certain activities in these spaces ('*de facto* refuse').

The remainder of the rooms provided lower amounts of finds with varying degrees of residual and re-fitted material. With the exception of a couple of cases such as R45 and R46, for which the two measures employed here cannot give any clear results regarding the nature of the assemblage, most of the remaining assemblages may be considered as secondary refuse. To such a group belong the assemblages from R27, R28 and R32, which demonstrate low levels of re-fitted pottery and high numbers of residual material. R32 included a marble statue (cf. above, p. 116). The presence of such a heavy item implies a rather depleted floor assemblage in this room, while the small quantity and high fragmentation of the associated sherds suggests perhaps that the latter represent the residues of cleaning and maintenance of the area, whereby already broken small artefacts from nearby areas (mainly the courtyard) may have been swept into the room.

In sum, most assemblages from House 1 represent the result of deposition of secondary refuse on the floors of the rooms. Furthermore, there are two clear cases of primary refuse in R56 and R58, while a substantial amount of finds from R45 and R25 may have been introduced as primary refuse. Conspicuous '*de facto*' deposits, that is, assemblages of material culture enshrined at its place of use in the house, are lacking. Such interpretations however should be taken with a degree of caution, since, as shown earlier, many of these assemblages contained some fairly restorable or complete vessels which might reflect some other kind of depositional process.

Although this might seem odd, floor assemblages are generally most likely to contain a mixture of variably deposited artefacts, resulting from the different activities performed by the household(s) inhabiting the rooms of the house through time. As a result, the assemblages from most of the rooms are very likely to represent the remains of a range of activities of households with a greater temporal depth than simply those of the last occupants of the rooms (cf. Rothschild 1992: 136). The range of artefactual material recovered from the latest levels of House 1 brings us then closer to the concept of 'household series' than to any single-phase household reflected in the archaeological record (Smith 1992; Allison 1999).

9.4 Formation processes of the assemblages from House 2

Similar processes to the ones described for House 1 are likely to have affected the assemblages in House 2, although here too it is crucial to explore issues of pottery fragmentation and the relative proportions of residual material in order to understand how the quantities of finds distributed within the building and its periphery were generated. As in the case of House 1, the volume of finds tends to vary between the assemblages as a result of recovery bias in some cases and the formation of the assemblages. In particular, finds tend to concentrate in three rooms: R53, R65 and R19B in descending order, while most other rooms have produced limited quantities of material. In general, however, the quantity of finds of both ‘containers’ and ‘accessories’ groups recovered from the latest occupation levels of House 2 is much lower than that of House 1 (figs. 126 & 127). This may or may not suggest different modes of abandonment of the building and uses in the post-abandonment stage as it will be discussed later on.

Following the approach adopted and explained for House 1, we may begin grasping some of the ways in which the assemblages were formed by firstly looking at their composition and chronological range of artefacts. **Figure 128** shows amounts of in phase and residual pottery based on function type 1A minimum numbers of vessels (MNVs). Although in-phase material is dominant in most rooms, residual MNVs are slightly less than the former (for example in R23), while in others, as for example in R10, R16 and, most evocatively, R53, they even outnumber in-phase material. R65 has provided rather little residual material, although it must be stressed that residual pottery in this assemblage, as in the case of R53, probably includes vessel fragments of other function types, especially amphorae (function type 1C), which for reasons of economy and statistical homogeneity are not included in the graph. The same low levels of residual material are attested for the assemblage from R19B, although here too the figure might be slightly but not significantly skewed as a result of concentrating only on the finds of vessels of function type 1A.

When examining these results against the evidence for sherd refits (measured on the basis of all finds of ceramic containers, excluding lamps), it becomes apparent that “orphan” sherds tend to be very frequent in the assemblages from most rooms but in the case of R53, R65 and R19B, particularly, their frequency

is exceptionally high (**fig. 129**). R65 has a slightly higher figure of refits both with respect to these rooms and as a percentage of the entire assemblage, but it is debatable whether this very small difference has any significance for interpreting the formation of the assemblage in a different light from that of R53. The low numbers of refits attested for these three rooms suggest some heavily fragmented assemblages, with possibly much rubbish from other areas of the house or, for the rooms on the SE side, the nearby road.

The same may well be the case for the other areas in this part of the house, including R55 which lies to the NW of R65, and R54 and R64, which lie to the SW. Nevertheless, some of these assemblages contain less fragmented material which probably constitute primary refuse, presumably discarded close to the area that it was used. A similar pattern might be posited for R8 and R4, which were close to the side-road running SE – NW on the SW side of the house. Both assemblages have a fair proportion of residual artefacts and limited numbers of refits which suggest the presence of much secondary rubbish. However, they have also yielded some complete lamps (**fig. 130**) which are very likely to have been part of their ‘living’ inventory in the latest phase of occupation.

In contrast to these assemblages, those from R6, R7 and to some extent R11 appear to owe their formation to rather different processes. The assemblage from R11 is a rare case for which we have some evidence about the exact location of artefacts at the time of the excavation and since this has some direct relevance for understanding the abandonment of the house, it will be discussed later on. Low residual material and relatively high frequency of restorable pottery from R7 suggests that this assemblage includes mainly material of primary or ‘*de facto*’ refuse. This is further reinforced by the fact that this room has produced 5 complete lamps or 18% of the total assemblage of such complete artefacts from the latest occupation levels of the two houses (**fig. 131**). Much closer to ‘*de facto*’ refuse is the assemblage from R6 which includes two Late Roman ‘spatheion’ amphorae, which are preserved by about 50 to 90% of their original dimensions, and a complete ceramic lamp (**fig. 132**).

To conclude, the evidence discussed so far suggests that we are faced with a variety of differentially fragmented and mixed assemblages, reflecting varying modes of rubbish disposal and deposition practices in the rooms of the house. Although it is difficult to provide more than a very brief outline of how these

assemblages were formed, it is clear that the rooms situated in the inside of the house have produced evidence which differentiates them from those on the periphery of the building block. This evidence then provides an initial strong indication that the house experienced multiple ends in its occupation, whereby its rooms were abandoned at different times and in different ways, some becoming the focus for rubbish disposal while others still retaining part of the material culture that would have been used during their final phase.

9.5 Artefacts, deposition and the abandonment of the houses

Although some of the interpretative problems behind the formation of these assemblages have been discussed, it remains to be seen what in the lifecycle of the two houses and the people that occupied them occasioned the deposition of this material in the rooms. Is the material recovered related to the occupation, abandonment or post-abandonment stage of the houses? The question is significant since the stage at which these assemblages were formed will affect the type of questions that may be asked from them.

Generally, it has been argued that during the life history of buildings the amount of material culture deposited deliberately within them is restricted and does not account for the large amounts of finds produced when such sites are excavated. In contrast, house-floor assemblages commonly excavated are likely to have been generated during the abandonment and post-abandonment stage of the life cycle of a particular building (La Motta & Schiffer 1999: 24). Based on an examination of certain physical and compositional characteristics of such assemblages, recent studies have shown that it may be possible to investigate how people abandoned domestic areas, whether this was planned/ slow or unplanned/ rapid and whether they were aiming to return or not (Joyce and Johannessen 1992).

It is instructive to assess how the assemblages have been affected by formation processes particular to the event of abandonment of domestic buildings. During the time immediately before abandonment, households and their contents tend to be in a state of increased flux. People may be caching artefacts and valuables in specific places, moving them around to temporary storage locations, while refraining from regular cleaning and maintenance of

activity areas. Meanwhile, items not considered worthy of transfer may be sold, given away, donated to friends, relatives or others or simply discarded (Allison 1992; cf. Marcoux 2001: 78).

This re-organization and gradual divestment of domestic material culture during this stage is very likely to result in either large concentrations of artefacts in certain areas, most likely removed from their use-context, or to considerably deplete 'systemic' assemblages as a result of transferring part of them to other users outside the house or to the new location of the household. It is with respect to what types of items were depleted that an examination of the assemblages can shed light into how a house or domestic area was abandoned (Schiffer 1985).

Without disregarding the effects of potential recovery bias for at least some of the assemblages under study here, we may first examine what sort of material culture the inventory of a household of the period under study would be likely to include. The notion of a 'typical' household inventory is of course a gross generalisation; what material culture one adopts and uses 'at home' will vary according to supply, projected or perceived status, economic means, lifestyle ideology, cultural choices, profession to name but the obvious, all factors creating an infinite range of potential interpretations of the archaeological record.

Nevertheless, finds assemblages from the floor levels of domestic buildings occupied during the same period are likely to bear many similarities to each other in outlook if not in their actual composition, since urban households, especially in the pre-industrial period, are likely to have been involved in a similar range of productive and consumptive activities. If we could then find comparable sites of the same date with comprehensively published material, it might be possible to see whether and to what extent the Late Roman houses from the Piraeus and their associated assemblages digress from patterns in the finds assemblages from these sites.

The site chosen for such comparative purposes are the Late Roman/ Early Byzantine shops at Sardis (Turkey) that lined the N side of the bath-gymnasium complex of the town in the Roman-Late Roman period. The shops had a long history going back to the early 1st century AD and continuing in use throughout the Roman Imperial and Late Roman period until the early 7th century AD, when they were destroyed by fire (Crawford 1990: 2). Absence of post-depositional disturbances and the lack of re-occupation of the premises allowed the

preservation of a massive array of domestic equipment, including considerable numbers of items of value. From the amount and nature of the finds, the excavators were able to suggest that the destruction was sudden and the shops were abandoned rapidly (*ibid.* 2). With the provisos noted earlier in mind, this nearly contemporary site where preservation and formation processes have allowed a greater quantity of finds to be recovered is expected to provide a fairly representative picture of the range of domestic artefacts in use during that time on sites of similar function.

A range of compositional traits and presence/ absence criteria may then be applied to assess the level of depletion of the assemblages under study. In turn, these elements are likely to provide insight into the relation of an assemblage to the mode of abandonment of the space in which it was found. These include, for example, the presence or absence of redundant or still-usable artefacts, bulky and heavy versus easily transportable items and the occurrence of 'caches' or concentrations of artefacts. Assemblages containing predominantly heavier and bulky items and large amounts of redundant/ non-usable objects may suggest that the room contents have been much depleted of transportable or valuable objects. In contrast, assemblages rich in artefacts which could still be used and/or could otherwise be easily transported to the new location (essentially '*de facto*' refuse items) are likely to suggest that the area in which they were deposited was abandoned rapidly. In such a scenario, the occupants while potentially taking away some objects remove and transport great quantities of the domestic equipment to another location.

9.5.1 Abandoning House 1

With the possible exception of some artefacts found in R58, R48 and possibly R56, it has been argued above that complete or whole artefacts from the rooms of the House 1 that could be considered as '*de facto*' refuse are lacking. To such potential cases should be added R37 and R38, where two complete clay lamps were found. Lamps in general display the highest degree of completeness among all ceramic finds from both houses at the DM site suggesting that many were still usable when abandoned (cf. **fig. 131**). Apart from these finds however, these two rooms of House 3 did not yield anything else, and since no post-depositional

disturbances were noted at this part of the site, this may indicate that the rooms had been systematically cleared prior to their abandonment in the 6th century AD.

A similar pattern can be seen in R48 to the NE, where a floor level has yielded four lamps and a number of fragments of marble statuary (**fig. 133**). It is not known whether the latter were found scattered or grouped together, although their presence may suggest some caching activity that might or might not relate to the abandonment or the function of this room in the latest phase. In all these cases, the abandonment appears to have been slow and perhaps planned, allowing enough time to clear the areas of anything considered of value or to be transported to the new location of the occupant's household.

The assemblages from R56 and R58 pose more problems for understanding the mode of the abandonment of these rooms. As already noted, R56 provided the most material from any other area of the house and its assemblage included an array of cooking pots and other coarse pottery which seem to have been deposited there *en masse* (**fig. 134**). Whether this represents a 'cache' or not, the relatively good state of preservation of the cooking pots suggests that they were possibly still usable at the time they were left there. The same seems to be the case for the large number of pottery, mainly of function type 1A, found in R58.

Unfortunately, the exact position of much of the material from these rooms was not recorded with the result that greater detail in assessing how these artefacts had accumulated on the floor (whether they had fallen from existing shelves or had hung from pegs attached to the walls or were simply placed on the floor) cannot be achieved. Two possible explanations can be considered for this pattern: either the abandonment of these rooms was fairly rapid with the occupants leaving many usable artefacts behind or that the artefacts left behind had little intrinsic value and the occupants abandoned them because they envisaged that these could be replaced easily.

Although the evidence cited so far might suggest conditions of rapid abandonment for R56 and R58, it should be emphasised that the assemblages mainly include items of great redundancy, such as pottery, which would have been easy to obtain and difficult to mend or put to secondary use. Some classes of vessels, such as amphorae (function type 1C), which are very common in the assemblages, would have encouraged even greater redundancy, since it was the

contents rather than the containers that were of primary value. Metal and glass finds, in contrast, are scarce, consisting mainly of coins, pins and other implements which might have been in use in these spaces, and nails, which are likely to have reached the floors as a result of the structural collapse of various fittings and the roofs of the buildings.

The apparent absence of coin hoards suggests that if these existed they were removed during the abandonment or post-abandonment stage. A cursory comparison with the Late Roman shops at Sardis shows the differences from the Piraeus in the amount, preservation and composition of the finds. Shop contents in Sardis included quantities of substantial metal artefacts, amongst them lamps and lamp stands, bronze censers and large fragments of glass vessels (Crawford 1990: figs. 393 – 413; 566 – 567; 584), which in our case are completely missing.

That most of the other assemblages around the house were substantially depleted during the abandonment (and perhaps also the post-abandonment stage) is shown by the occurrence of fragmented material with little remnant use life and by the occurrence in many rooms of large and bulky items, mainly of stone. We have seen earlier that the latest levels of most rooms contained very small amounts of restorable pottery and complete vessels, which suggested that most of these assemblages reflect secondary refuse deposition. In addition, few metal and glass objects were recovered from these areas.

The lack of metal finds and glass may point to the collection of such items for lateral circulation and/or re-cycling. R32 contained a damaged marble statue of Cybele/ Magna Mater, while the latest occupation floors of other rooms (including the SE shops, R56, R57 and R58) included items such as re-used marble structural components, for example, column drums in R58, a quern in R57 and mortar bowls in R25 (cf. Appendix 7). The presence of heavy/ bulky items with little reusability on the floors suggests that whatever easily transportable equipment lay there had been removed.

The composition and physical aspects of the assemblages from House 1 appear to suggest that the building was abandoned in a rather planned fashion, allowing enough time for the occupants (or others) to clear whatever was thought to be of intrinsic value and/or easily transportable. Nevertheless, we may be able to distinguish some variation in the mode of abandonment of the rooms. Thus,

R37 and R38 appear to have been more systematically abandoned than R56, R57 and R58, which still retained a large part of their useable equipment, even if this included items perhaps thought to be easily replaceable. Similarly, R37, R38 and R48 differ from the inner rooms of the building, in that they included items of domestic equipment that could still be used. The inner rooms, especially R26, R27 and R28, in contrast, appear to have been heavily depleted of their 'systemic' inventory, leaving behind few artefacts and being interspersed with refuse which originated in other areas of the house.

If most of the shops along with R48 and R37 – R38 contained primary refuse and perhaps '*de facto*' artefacts that were still usable, this might suggest that these areas were among the last in the building to have been abandoned by their occupants. This is further reinforced when one examines the chronology of these deposits in more detail. R56 has produced pottery of mainly early-to-mid 6th century AD date, including several forms of ARSW and PhW, while the two lamps from R37 and R38 can be placed within the first half of the 6th century AD. The lamps from R48 are all to be placed into the late 5th – early 6th century AD, while for R58 a similar *terminus post quem* (after the second-half of the 5th century AD) seems reasonable. While the outer rooms appear to have been abandoned late, the inner ones have provided a range of variably fragmented artefacts dating from the mid-3rd to the early 6th century AD.

9.5.2 Abandoning House 2

Patterns of rubbish disposal examined previously suggest that as in the case of House 1, the rooms of House 2 had diverse 'fates' at the end of their occupation, giving rise to a variety of artefactual remains on their floors. As already discussed during the event of abandonment, the occupants would carry away some part of the material culture of the household, while leaving some part of it behind. In order then to understand how the areas were abandoned we need to look more closely into some of the compositional aspects of the assemblages recovered from its rooms and examine the extent to which they were depleted. As outlined above, we can do this by looking specifically into the sort of artefacts represented in the assemblage and ask questions such as: Do these artefacts show signs of wear or are they broken, or are they intact/ restorable?

Are they light, heavy small or bulky? Would they be easy to replace or did they have some particular economic, intrinsic, symbolic or other value?

From the previous discussion of formation processes, it can be surmised that, contrary to the situation for some rooms in House 1, the deposits in House 2 generally contain small amounts of material and an even smaller proportion of artefacts that had a remnant use life at the time they were deposited. Except for the occasional complete ceramic container, artefacts comprise mainly finds such as coins, occasional tools and fittings, round-cut sherds and to some extent container lids. Still usable artefacts can be encountered across the rooms of the house but their occurrence is possibly associated with the fact that some were easily replaceable (tools and fittings), small (coins) or they encouraged greater redundancy (lids), or all three (round-cut sherds).

The occurrence of such 'repetitive' finds leads one to conclude that the vast majority of the assemblages recovered in the rooms are depleted of the largest proportion of artefacts and equipment that was still useable (there or elsewhere in the house) during the last stage of occupation. In a similar manner, then, to some rooms in House 1, the last occupants do not appear to have left much material behind in the sense of artefacts that could still be used, while abandoning artefacts that they probably considered insignificant or easy to replace.

In this context, as in House 1, the absence of substantial finds of other categories is evocative. Glass finds are exceptionally rare and whenever they occur they are extremely fragmentary, while metal finds are of small sizes (coins, metal fittings and tools) and they were probably introduced in the assemblages as a result of structural collapse and accidental loss, respectively. The absence of more substantial artefacts manufactured in such materials, which otherwise would survive depositional processes in the ground, as in the case of the shops at Sardis, may suggest that on abandonment such artefacts were systematically curated for recycling.

From the evidence considered above, it follows that most rooms of House 2 were abandoned in a planned fashion, allowing enough time for a large part of their contents to be emptied. Nevertheless, as in the case of House 1, the finds may allow us to distinguish between different scales in the abandonment of residential space. Thus, R6, a small alcove next to the corridor R7 that led to the street appears to have been less depleted than its neighbouring larger room R11

which seems to have been systematically cleared, save for a ceramic jug and a few other artefacts (cf. Appendix 8). The latter included some 4th and 5th century AD coins which were found in a loose concentration towards the W corner of the room.

Although this might represent some caching activity, the small number of coins present and their location towards the edge of the room may indicate that they were swept to the corner during the occupation and were never retrieved when the building was abandoned. A similar scenario of systematic clearance might be envisaged for R24 where few artefacts and some coins were found. This situation may be contrasted with areas such as R22, R23, R19B or R55, to name but a few, which contained relatively more (in overall quantity) but significantly less complete (and thus defunct) artefacts. Although it is possible that much of this material may have been introduced to the floors after the abandonment of the building, immediately prior to this the occupants may have eased their standards of cleaning and placed defunct items in 'provisional discard' (La Motta & Schiffer 1999), which might explain how part of the assemblages in these rooms were formed.

These examples suggest that the last occupants took pains to 'clear' some areas of the house more thoroughly than others. One can only speculate why this was the case: if the volume of finds in a room assemblage is greater than in another, does this indicate that these rooms were abandoned at different times? This is one possible scenario if one assumes that rooms with much material were less depleted and thus among the last to have been abandoned while those that have yielded less were subject to more episodes of depletion and therefore were among the earliest.

In discussing abandonment patterns in excavated Pueblo settlements in the US, Schiffer (1985: 37) points out that in order to get an initial estimate of the temporal scale of abandonment, assemblages should be compared on the basis only of '*de facto*' refuse (i.e. complete/ intact artefacts) rather than the entire volume of finds they contain. On this basis, owing to the fact that such material seems more ample there, it could be argued that some rooms of House 1 were abandoned later than others. If we follow this line of enquiry for House 2, however, it becomes apparent that in this case, rooms which appear to have been thoroughly cleared, such as R11, have yielded restorable or complete artefacts,

while the opposite is the case with find-rich assemblages such as R19B, R23, R53 and R65 (**figs. 126 & 129**).

Consequently, in the context of House 2, this theory does not appear probable and other explanations should be sought behind the observed pattern. Perhaps the fact that has greater importance is the spatial dimension of this pattern. A particularly striking feature is that the volume of finds (and estimated numbers of artefacts represented in the assemblages) increases in those rooms which are situated at the periphery rather than the core of the building (**fig. 116**). Thus, areas such as R14, R15, R18 and R13 as well as R17, R16 and R24 have produced significantly fewer artefacts, compared to areas such as R53 & R55, or even R20–R21 and R4 (**figs. 126, 127**).

The SE side of the house, comprising three parallel series of rooms is a case in point. It is striking that the rooms on the innermost series (towards the court) have yielded significantly less material than the rooms “in front” of them, which were found filled with much refuse. The fact that some of these rooms were very close or opened directly on the street might have made them an easy dumping ground for rubbish, but why were not those behind them equally profuse with finds?

Although this might seem accidental, the scale of clearance on abandonment may not be entirely unrelated to the social use of these spaces during the time they were occupied. From the mid-4th century AD onwards, the house had been subdivided into six different residential units, consisting of the old ‘core’ house centred around the courtyard and a number of other ‘apartments’ at the SE and NW sides of the building (see chapters 6 and 7). The SE side of the building, in particular, comprised three apartments (Units IV, V and VI), while R17, R54 and R64 were most probably incorporated in the core house (Unit I) (**cf. fig. 107**).

Although it has been posited earlier that these units were possibly rented out and are likely to have had a commercial function, it is possible that the backrooms (R16, R17 and R24) were used for residential purposes by the shopkeepers and their families in a similar manner to what has been posited for rented accommodation in Pompeii in the early imperial period. The scarce finds from these rooms are suggestive of this kind of use but they also illustrate that these rooms were much more systematically cleared than the ones to the SE of them.

If the prime social function of these rooms during the Late Roman period was to provide shelter for tenant 'shopkeepers' and their families, then it is reasonable to imagine why they were cleared in such a thorough manner. Unlike the rooms in the front which most probably served activities of a commercial, professional or 'business' nature, the rooms at the back would have been the places where valuables and personal items of the family (and of each individual household member) would have been kept and stored.

It is then logical to assume that when the households were preparing to abandon their residences, it was these rooms that became the focus of intense collection, provisional storing and 'packing' of the household's material culture, with the result that when the household finally moved, their inventories became depleted. In the post-abandonment stage, knowledge that such rooms had been used for such purposes by contemporaries might have encouraged scavenging, leading to further depletion of any artefactual remains left behind by the household(s) during abandonment.

9.6 Artefactual variability and the use of space

Having examined the ways in which the assemblages relating to the latest occupation levels were formed, we now turn to investigate what they can tell us about the use of space and the activities that took place in the house. We have seen that the assemblages have been variably depleted (as a result of abandonment, post-abandonment and post-depositional processes, including recovery bias) and as a result they are far removed from conditions of optimal preservation ('Pompeii-premise'). Given this, the obvious question at this point is whether we are justified to ask questions relating to the use and function of space using such 'low-resolution' and diverse material.

Ethnoarchaeological studies have shown that settlements abandoned in a planned and slow manner show generally little correlation of material recovered from their floors with the activities that took place during occupation (Joyce & Johannessen 1992: 139). Because events of rapid abandonment are relatively infrequent in the archaeological record, excavated houses rarely provide the opportunity to relate artefacts to the spatial context of use but normally present a mosaic of artefacts which reflect successive remains of activities relating to the

various stages of the lifecycle of the domestic building. Nevertheless, even in cases when '*de facto*' refuse is scarce and primary or secondary refuse relating to the abandonment or post-abandonment stages blurs the picture, it has been argued that the finds recovered may not be totally unstructured by the activities that took place in a building or area before its abandonment (La Motta & Schiffer 1999: 25).

Granted that different types of activities performed in a domestic building (cooking, storage, household chores etc.) will produce different material traces, one obvious way of investigating the potential function(s) of space is to compare the composition of the assemblages of the different rooms in that building. Although we may not be able to investigate function in great detail except in a few cases, there are some stark differences in the distribution of finds by function type which may allow us to suggest spatial zones of activity within the building. Furthermore, these results may be related to excavated fixed architectural elements as well as the locational components of a room that might be instructive about the use of the space – for example, whether it has access from the street or to other rooms of the house.

9.6.1 Finds and the use of space in House 1

Looking at the data for House 1 for the 'containers' group first, it becomes apparent that there are also differences in the relative proportions of particular function types within the assemblages (**fig. 135**). Thus, function-type 1C containers make up the greatest part of the assemblage in R57, R68, R25, R45, R28 and R31A-C. They constitute the second highest group in R56, taking up 23% of the recovered finds from that room. In contrast, R26, R27 and R46 have produced greater quantities of containers of function-type 1E. Such finds have been recovered from most assemblages in the house but not in the same amount proportionately to the total assemblage as in the latter rooms. 1E containers include plain vessels generally referred to as basins and 'kalathoi' (baskets) which were associated with household chores (washing) or with the storage of household equipment (**fig. 136**).

Following these results, there is a marked predominance of amphorae in the assemblages that came from rooms on the SE side of the building. Although

amphorae were potentially stored, their contents emptied and decanted in a variety of areas of the house, it is mainly in the SE part that the greatest quantity of finds of this function type tend to concentrate. This in turn indicates that activities of this type were perhaps more related to the part of the block close to the SE street. Assemblages from inner areas of the house such as the courtyard and a number of rooms, such R28 and R32, display a similar pattern.

The differing patterns of residuality and completeness discussed earlier suggest that in those cases a low correlation exists between this material and the area where it was originally used. It may be presumed that by the 6th century AD the courtyard, in particular may have developed as a convenient area for dumping redundant amphorae brought in, stored and decanted on the SE front of the house. The quantitatively different 'artefactual signature' of the assemblages R26 and R27, which are dominated by containers related to the performance of household utilities indicate that this area of the house had a 'domestic', rather than commercial function.

This pattern seems to reinforce the impression based on the architecture of the excavated house block that the SE area was given over to shops and commercial installations. Large amounts of amphorae deposited in these rooms indicate that considerable quantities of foodstuffs were transported, stored and decanted in this area. Interestingly, pottery finds from this area (R56, R68 and R57) also include specialised equipment, such as funnels (**fig. 137**), which would have been used to decant liquid contents from amphorae. Such artefacts, which have been found sporadically in other areas of the house (e.g. R31A, 1 example), tend to concentrate in the SE area, indicating that this part of the block was a hub for handling and storing amphora-borne commodities.

The distribution of some function types in the accessories group appears particularly consistent with this interpretation (**fig. 138**). Coins (category 2A) are extremely rare in the inner areas of the house (only 5 examples) as opposed to the rooms on the SE façade (R56: 2 coins; R57: 1 coin; R58: 12 coins; R68: 26 coins). Despite these raw numbers, it should not be implied that all coins were recovered from areas in which they were originally used or even deposited (some are likely to include coins brought in to the rooms after their abandonment, such as in the assemblage of the less architecturally bounded room R68).

The correlation of high numbers of coin finds with high quantities of amphorae and specialised equipment for their decanting in the same area strongly indicates that particular activities were being performed in the rooms of the SE part of the house. Even seen as the scattered remains of caches never retrieved or money tossed by accident on the floor from the pouches of people frequenting the place, the profuse coin finds, in particular, are likely to reflect something of the intense transactions and exchange that took place in the shops during the later phase of their life.

Two rooms, R56 and R58, appear to slightly divert from this pattern, in so far as they have yielded greater amounts of containers of other function types than function type 1C. The assemblage of containers from R58 is made up primarily of vessels connected with the consumption of foodstuffs (function-types 1A and 1B). This room has yielded more complete lamps than any other area of the house. Although large quantities of finds of these function types are not unusual across the various rooms in the house, the overall greater proportion of 1A in R58 containers is perhaps suggestive of part of the shop's function just before it was abandoned. Ceramic containers of this function type include common imported ARSW and PhW bowls but the majority belong to wares manufactured at Athens such as AWPW handled bowls and RCW 2 bowls and drinking cups (**fig. 139**). Fixed elements excavated in this room included only a (probably re-used) column drum whose purpose is rather obscure and does not help to unravel the function of the space.

While many rooms have yielded finds of these local table wares, the quantity found in R58 is quite exceptional compared with the remainder of the site. This pattern may arguably reflect a particular preference towards these wares by the users/ occupants of the shop but explaining this further poses problems. Are we faced with pottery that was actually used in the shop or does the greater quantity represent the remains of a consignment of table wares from Athenian pottery workshops destined to be marketed in the Piraeus?

The occurrence of other types of containers, including amphorae and cooking pots, suggests that during the last stage, the shop was a place where food and drink were on sale and that this was served, amongst others, in AWPW and RCW 2 dishes. Interpreting this shop as a restaurant also accounts for the high occurrence of lamps, all of which bear traces of burning on their nozzles,

suggesting that they were used rather than displayed for sale. On the other hand, although the shop might have been a place where food and drink was on sale, pottery may have been stored there without being part of the shop's equipment. At Sardis, several of the shops included groups of finds which do not seem to have been in use in the shop but may have been simply stored provisionally by the shopkeepers for their owners (Crawford 1990).

As opposed to R58, the assemblage of containers in R56 is made up predominantly of vessels of Category 1D. This is the only case from all latest occupation levels in both House 1 and House 2 in which 1D represents the largest group. We have also seen that R56 has provided the largest number of finds and restorable pottery, much of which comprises vessels of the same function type. The assemblage, in particular, included a large number of globular cooking pots (40 MNVs were calculated) many of which came in large fragments or could be almost fully restored.

Such a large proportion of cooking pots, many in usable state at the time of their deposition, may indicate the existence of a kitchen in this room. R56, however, is small and apparently devoid of kitchen facilities. Although cooking may not necessarily need a special or even fixed location to be performed (cf. Ellis 1999), the function of this room as a kitchen is rather difficult to support solely on the basis of the relative proportions of cooking versus other vessels only.

If this was not the place where the cooking pots were used, then their occurrence might suggest storage or even dumping practices from elsewhere. Nevertheless, their fairly good state of preservation and high restorability would suggest that their intended place of use was not distant from this room. A very likely area for this is R57 which lies on the NE side of R56, has independent access from the street and it is separated from R56 by a low stone-brick-and-rubble wall. At the W corner of the room and abutting this wall, there is a low square feature consisting of two walls built in the same masonry technique (**fig. 140**).

The feature bears some superficial similarity with structures found in some of the Byzantine shops at Sardis, especially a low and compact brick-built 'bench' with flue holes possibly used in metalworking (Crawford 1990: fig. 344), basins associated with dye workshops (*ibid.* figs. 110, 540) or benches/ counters

associated with restaurants (*ibid.* fig. 160). My initial thought was that this was a counter of some sort, though its dimensions and rather awkward location at the back rather than the front of the room created problems with this interpretation (A. MacMahon, pers. comm.).

While these examples provide useful comparisons, they do not help to illuminate the intended function of this feature, which seems to have been rather different. The earth that was removed from inside and around it may provide a clue to this problem. In the excavation record, the soil matrix is described as having a strong 'greyish-black' colour, suggesting the presence of concentrations of charred remains and decomposed organic waste. This evidence may indicate the existence of a hearth or cooking area, a plausible location at which the cooking pots were destined to be used.

In this context, it may be of significance that very few cooking pots have been found in R57, while the greatest mass has been recovered from R56. This may indicate that during this time, R56 was used for storing and decanting liquids and preparing foodstuffs which were then passed on to be cooked in the vicinity of the square feature in R57. Cooking could presumably be done either by placing the circular-bottomed cooking pots on hot embers inside the feature or on grills which could be supported on the latter's walls.

If this interpretation is correct, R56 and R57 formed a single property which possibly also included the 'open' space R68 to the SE towards the road. This interpretation is borne out by the fact that R56 and R57 have a common low wall on their SE side that might have at some stage functioned as a bench. R25, a long room to the NW of R56 and next to R34, is also very likely to have been part of this property too. This room had its access to R56 blocked by the late 5th/ 6th century AD but could be entered via R34. The assemblage from this room consists mainly of storage vessels and cooking pots of the same fabric and types found in R56 (**fig. 141**), which may suggest another area of general storage of kitchen utensils and foodstuffs for the shop.

R68 produced mainly amphorae and serving and consumption vessels but also containers connected with household use and storage, such as basins and storage jars (**fig. 142**). The quantity of small metal finds from this room is remarkable. Apart from numerous nails, and other fittings of the area, the assemblage included hooks, a chain, pins, and an object with pointed edge that

might have been a writing instrument. Although much of the material recovered from this area is very possibly secondary rubbish swept in from the road or dumped from nearby, it is likely that some were part of its 'living assemblage' during the latest phase.

It is not unreasonable to imagine that storage jars and amphorae were lined up in the front or placed towards the corners of the room, just as in the case of some shops at Sardis (Crawford 1990). Hooks may have been used either for hanging meat or other products or to perform some outdoor activity related to the function of the shop (e.g. fishing), while the chain is very likely to have come from some metal attachment or a steelyard weight, as seen on such artefacts recovered from sites of comparable date-range (cf. Sardis: Crawford 1990: figs. 235-36, 476; Corinth: Davidson 1952: no. 1455).

9.6.2 Finds and the use of space in House 2

The fact that House 2 had been extensively cleared of its domestic inventory during the abandonment and post-abandonment stage provides us with little substantial evidence directly relevant for assessing how domestic space was used. Rather than expressing certainties, therefore, it is only possible to explore different scenarios and possibilities. It may prove fruitful to compare the finds recovered from the various rooms to trace whether variations in the relative quantities of particular, recurring function types produce meaningful patterns. Furthermore, the context of these artefacts and associations between them may assist with discussion. It is important to note at this point that these data are best discussed in association with the architectural evidence, which may provide further indication about the intended use of space.

An important aspect of the evidence that must be taken into account before analysing the data is the fact that from the mid-4th century AD onwards the house had a multiple pattern of occupancy, with at least six different apartments developed from the building of the Early-Middle Roman period (see above, Chapter 7). Although this was perhaps also the case in House 1, in House 2 the archaeological evidence is less ambiguous. Since we are dealing with the remains of discrete households or 'household series' that occupied the building's space *after* these rearrangements took place, the examination of the social use of space

through floor assemblage data needs to take account of the modified nature of living patterns in the building during the Late Roman period. As a result, with the exception of Unit VI, from which no finds were retrieved, the discussion will focus on the assemblages from the five well-documented units (I – V).

a) Unit I: The 'core apartment'

Unit I, comprising most of the rooms of the old core house and three areas towards the SE part (tentatively identified as 'shops'), has provided depleted assemblages. The only possible exception is furnished by the assemblage from R6. The small size of this room and the nature of the finds (1 lamp, 2 Benghazi LR 8 amphorae) suggests that this area was likely to have been used for storage purposes. The lamp was perhaps placed on a shelf or a niche in one of the walls to provide sufficient light, while amphorae, like the ones present, would be piled against the wall. Just why amphorae were placed there, however, it is difficult to establish. Was this perhaps related to the supposed function of R7 or some neighbouring area? R7 has yielded a very puzzling assemblage of containers in which lamps are the most numerous function type, along an assortment of finds from most function types of the 'accessories' group (**fig. 143 & fig. 144**), including fragments of a marble column and a relief panel of Hellenistic date⁷³.

In the Early – Middle Roman period this room probably served a function as one of the two entrances to the house. Unless this material represents 'abandonment refuse' (La Motta and Schiffer 1999) collected there from one or various areas of the house when the last occupants were abandoning the building, it is hard to imagine that it continued to be used in the same manner during the later periods. Alternatively, the presence of so many lamps and marble items combined with the fact that this room had an entrance from the side street is reminiscent of the situation for R48 and R58 in House 1 and may suggest that during the latest phase of occupation of the house R7 functioned as a 'shop'. If this was the case, it appears that apart from renting out a section of the old house to tenants, as argued in Chapter 7, the owners and, possibly at the same time,

⁷³ Further finds which might relate to the latest occupation level of this room are some sherds of a plain ware jug, a fragment of a marble basin and that of another column. These finds are indexed as OM 7 Περ. M1 – 2 and OM 7 Περ. Π11 in the notebooks but they have not been included in this study as they come from a spurious context.

main residents of Unit I were *directly* involved in commercial and/or retail activities.

R17, R53 and R64 were accessed in a row from the courtyard and they belong to an area of Unit I which might also have been similarly used for business/ commercial activities by the latest households. R17 has provided only few finds, mainly amphorae (category 1C), some plain ware basins (1E) and a lamp. The assemblages from R54 and R64 are in contrast more numerous and dominated by vessels associated with the serving and consumption of foodstuffs, while containing smaller quantities of vessels of categories 1B, 1D and 1E. The distribution and nature of the finds from these connected rooms may suggest that while the rooms to the front were functioning as part of a restaurant, R17 was a general storage area, possibly also serving some residential purposes. Food may have been cooked in some provisional or makeshift structure in R54 and then served on to the customers in R64.

This impression seems to be reinforced when one takes into account the existence of a bracket wall that intersects the room (**fig. 116**). Significantly, this wall is placed in front of the door threshold from R54 to R17, thus blocking the view into the core of the house from the street. The area behind the wall could easily be used for lodging. Such a measure would have ensured some privacy for activities taking place in the court, while also serving to demarcate the space behind the wall in R17 as belonging to a different domain of the life of the household.

Distributions of artefacts in the court, the water tank and the corridors flanking the latter provide us with some puzzling but complementary insights into the nature of activities that were taking place there. The corridors R18 and R15 have produced few finds. In the case of R18, due to their small size, fragmentation and abrasion most finds are likely to represent rubbish which was omnipresent on the floor surface and repeatedly trodden. However, the presence of amphorae sherds (mainly of Peacock-Williams Class 43) suggests that some such vessels might have been placed towards the corners or lined up against the outer walls of the rooms flanking the court, possibly to be used for obtaining water from the cisterns. Admittedly, it is hard to imagine that when the house was inhabited the water-tank had a function other than what it was designed for, i.e. to collect rainwater and re-direct it to the cisterns underneath. The finds from

this context are most probably to be connected with rubbish that was either tossed in when the tank was in use or after its disuse and the abandonment of the house.

Despite their fragmentation, finds from this context are not dissimilar to other types of finds recovered from domestic contexts in the rest of the house. They include round-cut sherds, fragments of drinking and serving pottery and a glass lamp (**fig. 145**) and are more likely to have been 'originally' in use in the house than brought in from somewhere else. Other finds are rather more unusual and seem to be connected with particular strategies of production and maintenance in the household. From the same context comes a rim sherd of a plain ware vessel with dense horizontal and sparse vertical combing which can be securely identified as a "beehive kalathos" (**fig. 146A**).

The find is similar to vessels discovered at the rural settlement site of Rachi near the sanctuary of Poseidon at Isthmia in Corinthia which belong to the horizontal type that dates to the 6th century AD (**fig. 146B**; Type 1: Anderson-Stojanovic & Jones 2002: 348 ff.). Although one fragment does not necessarily suggest that bees were kept and exploited on a systematic level, its occurrence suggests that members of the household were involved in this activity as an additional strategy of subsistence. Beekeeping has a long history in Attica, going back to at least the Classical period (Lüdorf 1999). Since this activity had to take place outdoors and at particular times of the year, this find might indicate some seasonal contribution towards the resources and supplies of the household.

To the SW of the water tank, at the S corner of R14 and next to the well of the court, lay a large jar or pithos with its base sunk in the floor. This room also produced an almost complete ARSW bowl. While the storage jar appears to suggest that part of this area of the court was used rather permanently to store foodstuffs, or other supplies of the household, the position of the bowl does not provide any particular hint as to how it might have been used. Such vessels could have been easily moved around to perform certain activities at certain times of the day. The evidence from this area, nevertheless, combined with the finds recovered from the nearby areas suggests in general that this area of the house accommodated household chores and storage. R15, the corridor leading to the main entrance of the house, has provided an assemblage of finds which is equally difficult to interpret.

Apart from two lamps, the most unusual item is a fully restored vessel paralleled in the deposits from the Athenian Agora and tentatively called a 'sprinkler jug' in local Athenian White Painted Ware decoration and fabric (**fig. 147**; Robinson 1959: 104: no. M217, pl. 27). While the modern title for this form draws upon its characteristic multi-perforated, strainer-like base, it is not known whether it was used for this purpose. If this label indeed reflects its intended use, what (or who) was the target of sprinkling and what sort of substance (water, scents or some other liquid, or a powdery substance) was used? The discovery of this vessel in the middle of the corridor which was probably a high-traffic spot in the house suggests that it was removed from the context of its use when it was deposited, perhaps placed or dropped there on abandonment of the building.

The two largest rooms of the house, R11 and R23 have produced dramatically different quantities of finds. As mentioned above R11 seems to have been systematically cleared during the abandonment of the building. The only finds consist of a handful of function category 1A residual sherds, two jug MNVs (**fig. 148**), coins and a lead weight. The area has produced the second largest amount of coins from the entire Unit I. Was this part of a coin hoard or were these coins simply lost there?

It is possible that during the last stage of the use of this room money was handled or stored here in some quantity. The occurrence of an item of specialised equipment like the lead weight might be associated with this or some other activity. From the size of this room, the rather unusual and (by the standards of the rest of the building's architecture) well appointed tile-floor, and the level of the clearance it was subjected to during abandonment, it also seems reasonable to suggest that it had some more general residential purpose, serving as living quarters or as an area for lodging for members of the household.

In contrast, the assemblage from R23, is larger and it is made up of greater amounts of drinking and consumption vessels, amphorae and few accessories, amongst them a probably residual Late Classical/ Early Hellenistic conical loom-weight, (**fig. 148**). The percentage of containers connected with the serving and storage of foodstuffs suggests that primarily food was being stored and also consumed there. It is interesting that this assemblage contains the lowest quantity of containers connected with food preparation suggesting that this was taking place away from the room.

This room has also produced the largest quantity of lamp MNVs from the entire house. However, many of these were reconstructed from solitary and fragmented sherds, suggesting that the lamps may have been simply dumped. Nevertheless, the occurrence of so many lamps may not be totally random, given the fact that the room had a south orientation and therefore would receive less light from the court during the day. In addition, reception of sunlight in the room would have been hampered by the narrow entrance, making the employment of artificial lighting in this room particularly important.

b) Unit II and Unit III: The apartments on the NW side

The finds from Unit II, consisting of the assemblages recovered from R19A-B and R20-R21, are of varying quantity and quality. By far the largest proportion of finds comes from R19B, while the remaining rooms have produced significantly lower quantities (**figs. 149 & 150**). Some of the finds from this room come from the very start of the excavation and their vertical position in the fill was not recorded with the result that these might not belong to the latest occupation levels. In addition, Unit II probably extended towards the NW, occupying part of the neighbouring building block in the Late Roman period. Since this part lies outside the excavation area, we may only have a fraction of its contents in the final phase.

Apart from the large number of containers connected with the serving, storage and decanting of foodstuffs, utility vessels (1E) are also quite prominent in the assemblage of R19B. While some material arguably originated from dumping processes, it appears from the percentage of different function types recovered that both R19A and R19B were probably used as storage areas of both foodstuffs and other household utensils during this last phase. R19A has a storage jar (pithos) at its W corner which would be consistent with this interpretation.

The assemblages from the rooms R20 and R21 are not so large (partly because they have been affected by recovery bias), however, they differentiate themselves in terms of composition from those that derive from R19A-B. R20 did not yield significantly large numbers of finds of any function type, but did yield relatively more amphora MNVs compared to other function types in the

total containers assemblage and more cooking pot MNVs compared to the other rooms. R21, in contrast, produced more function type 1A containers associated with serving and consumption and lamps.

This suggests some variability in the ways these spaces were used, with storage functions concentrated in the rooms towards the court, cooking and food preparation done mainly in R20, and consumption of food taking place in R21. Evidence related to the subsistence activities of the household(s) that occupied this apartment during its last phase is scarce. From R19A there are two marble mortar bowl fragments (**fig. 151**) used for grinding either food or other substances, and a hook, alluding to some outdoor activity like fishing. The exact use of a metal plate from R19B cannot be easily interpreted. Comparisons are known from the shops at Sardis while similar artefacts are seen on an Early Roman relief from Rome being used as attachments for the suspension of cloths (cf. Crawford 1990: figs. 39 & 54), although it is possible that in this context this artefact served some other function.

A discoidal ceramic loom-weight recovered from R20 (**fig. 152**), similar to the one found at R7 in Unit I presents some problems. In Greece and other areas of the eastern Mediterranean, loom-weights were widely used in the Classical and Hellenistic period in association with the vertical loom, but the latter was replaced in the Roman period by the so-called warp-weighted or horizontal type that made the use of such objects unnecessary (Crowfoot 1937). From a typological point of view, this find dates to the Late Hellenistic/ Early Roman period (Riley 1979: 316, 'Loom Weight B') and therefore it is likely to be a residual item or a 'heirloom' from previous occupation.

Other artefacts frequently brought in association with the operation of looms in domestic contexts during the Roman and Late Roman periods such as spindle whorls have not been recovered from this area. On the basis of this negative evidence and since this is a much older artefact, there is nothing to suggest that spinning or cloth production was taking place in this apartment during the Late Roman period. The loom weight is very likely to have been used for a different purpose from that for which it was originally manufactured.

The finds from Unit III, consisting of the assemblages recovered from R4 and R10, give us a rather different picture (**figs. 153 & 154**). The highest quantity of container MNVs calculated from R10 are of function types 1C (mainly cooking

pots) and 1G (lamps). The assemblage from this room is very fragmented (especially lamps, which are represented merely by handles), while some of the cooking pots may be residual from the Hellenistic or Early Roman period, suggesting that some of the material has perhaps been introduced there as secondary refuse after the abandonment.

R4, in contrast, has yielded more substantially restorable pottery, including complete or near-complete lamps in great numbers. Small finds are rare but R4 has a slightly higher occurrence of coins than R10, while the latter has also produced a few round-cut sherds and a conical loom weight, which is of Hellenistic date and thus certainly residual. When compared to the assemblages from R7 from Unit I and R48 and R58 from House 1, the assemblage from R4 shows many affinities. The high proportion of lamp and serving/ consumption container MNVs may suggest that this room functioned as a commercial installation during the 5th century AD, perhaps with R10 as a residential area.

c) Unit IV and Unit V: The apartments on the SE side

During the Late Roman period R24, R55 and R65 formed a single property, Unit IV. As already argued above, moving from NW to SE, these rooms have yielded decreasing quantities of finds, a pattern which is particularly evocative of the mode of abandonment. The assemblages from these rooms also help examining how these rooms were used by the last generations of occupants. R24 has yielded the least MNVs of containers, the majority consisting of vessels associated with the serving and consumption (1A) and the preparation of foodstuffs 1D (**fig. 155 and 156**). Function type 1A forms the highest proportion in the assemblage of containers from R55, while R65 has yielded almost equally high amounts of 1A and 1C containers. R24 is the only room of the three that has produced coins. The high occurrence of coins combined with the generally mixed nature of the assemblage, comprising near-equal amounts of containers of various functions, suggest, as in the similar case of R11, that this room was primarily used as a residence.

In contrast, the much more numerous material from R65 and R55, which in the former case was made up mostly of serving/ consumption pottery and amphorae, suggests that these areas may have been associated with commercial/ retail activities. As to the nature of activities, the finds suggest that this room was

used as a restaurant during the last phase. At the S corner of R55 lay a marble altar possibly of Late Hellenistic or Early Roman date (**fig. 157**) which may have been re-used either as a bench or a working board. Judging from the discoveries in the remainder of House 2 and House 1, the finds seem consistent with this interpretation.

However, at the E corner of the room, excavation uncovered a circular 'oven' on the floor which from the available evidence and its apparent affinities to structures excavated at the NE side of the plot looks like a furnace used for small-scale heating and ore smelting (**fig. 158**). Quantities of iron slag, carbon and iron tools mentioned in this context in the excavation notebooks suggest that blacksmithing or smelting occurred in this room. This evidence encourages speculation, since it seems difficult to explain how it would have been feasible to accommodate two activities as different as selling cooked food and drinks and working iron. Even when performed on a small scale, ore processing creates obnoxious smells and fumes, and in Classical Antiquity such manufacturing activities were therefore frequently located in the outskirts of urban areas.

While one might question whether such prescriptions were applicable everywhere in the eastern Roman empire in the late 5th/ 6th century AD, it is still difficult to accept that activities of such contrasting nature could easily co-exist within the same architecturally bounded space. An explanation to this problem is that the excavated house-floor assemblages are the products of activities performed by successive households over a period of time. Following this line, it seems that at some early stage R55 was used as a workshop associated with ironsmithing (perhaps in the context of hardware repairs?) but sometime in the course of the Late Roman period, the shop turned to the retail of drink and comestibles.

Changes in the social and economic function of space of this sort are not uncommon (A. MacMahon, pers. comm.). At Sardis, shops became residences and vice-versa, while it is frequent to find shops shifting their focus from providing one set of services to another. By the time it was abandoned, Shop W3, for example, had changed from being a dye workshop into a restaurant (Crawford 1990: 34). When such a change occurred, domestic equipment left by the previous household became defunct, was discarded/ abandoned or put to new uses. It is unfortunate that the 'oven' was cleared shortly after excavation and

contextual information about the state in which it was found during excavation is too sparse to assess whether and how it was used and abandoned during the later stages of the operation of the shop.

The picture that we get from Unit V, consisting of R16 and R53 (and possibly another space to the SE) is not dissimilar to the one described for Unit IV. Although potential changes of function cannot be examined, here too the low numbers of refits and absence of complete vessels suggests that the assemblage has been variously affected by post-abandonment processes. R16 has provided a lower overall quantity of finds than R53, more or less equally spread amongst the various function types used here (fig. 159 & 160). This low quantity and the highly mixed nature of the finds is reminiscent of the assemblage of R24 and R17 in the neighbouring units and suggest that during its last stage this room had general residential functions. Given the nature of the finds, and in a similar way to the neighbouring units, R53 is most likely to have belonged to a shop, most probably, judging by the amount of amphorae (1C) and serving and consumption containers (1A) one that was connected with the retail of food and drink.

9.7 Conclusion

The distribution of different types of artefacts across the rooms of the two houses reveals some strong patterns in the organisation and use of space. The concentration of specialised equipment reflective of particular activities in the rooms situated at the periphery of the two houses has prompted the interpretation of these spaces as shops. While most of these spaces had such a commercial function during the last stage of occupation, some of the rooms appended at one end, away from the street, were most probably used for residential purposes. Artefacts or assemblages from those rooms situated towards the inner areas of the two excavated buildings have a rather more 'residential' or 'domestic' signature.

From a historical point of view, this information is important because it suggests that commercial activities, retail and the provision of services were important elements of the character of urban life and economy in the Piraeus as late as the 5th/ 6th century AD. In particular, it may well be that this neighbourhood was a hub of taverns and inns specialising in the retail of food

and drink. This coincidence is remarkable if one thinks that the inscription found reused as a threshold in the staircase of House 3 records the prices of different varieties of meat sold in the town in the later 1st century BC.

While exploring issues of spatial organization and the use of domestic space can be achieved by reference to the artefactual record only to a limited extent, the finds recovered from the rooms of the two houses can be used fairly reliably to examine how the houses and shops were abandoned. An analysis of compositional aspects of the finds assemblages and their comparison with other sites of the Late Roman period has suggested that the two houses were abandoned in a rather planned and organised fashion, whereby most usable, valuable or other items of domestic equipment were removed by the last occupants.

Despite this however, there seems to have been a substantial variation in the scale and time that this took place. It is interesting to note for example that residential areas (including the backrooms of the shops) were cleared more thoroughly than the areas of the shops *per se*, which produced numerous finds, some still usable at the time they were deposited. Also, while House 1 seems to have been largely abandoned and become a rubbish dump by the later 5th century AD, the shops in front were still functioning and were apparently the last premises in the neighbourhood to be abandoned.

The planned mode of abandonment suggested by this evidence raises questions about the 'end' of settlement and contraction of the port in the 6th century AD. Textual sources speak of a troublesome time for southern Greece and Attica at the time after the supposed invasion of Alaric in the late 4th century AD, but for Athens, archaeological evidence suggests some moderate prosperity (Castrén 1999: 214 ff.). The city, having been affected by a number of raids by Goths in the late 5th century AD, had repaired its walls, while across the Saronic Gulf, at a later date in the 6th century AD, strong fortifications were built above the ancient sanctuary of Poseidon at Isthmia (Gregory 1993). Athens, in the end, was reportedly overrun by the Slavs in the later part of the 6th century AD (Castrén 1999: 222).

In the Piraeus, definitive signs of destruction are lacking, although this issue will benefit from further comprehensive study and publication of other excavations in the town. If invasions and military unrest are postulated as the

sole reason for abandoning the port, the population either was not directly affected or was in a position to prepare much in advance and depart, either for the city, the nearby Saronic islands and the Peloponnese, or further away. It is striking however that the shops were left containing much of their usable equipment, a fact that suggests that their occupants or managers may have been planning to return and retrieve this. Whether people at the time thought that abandoning their homes was a temporary measure or not, the absence of any evidence after the mid-6th century AD on the site suggests that this was the final phase of occupation in this part of the town.

Chapter 10

Urban economy and consumption: the evidence of pottery

10.1 Introduction

The purpose of this chapter is to explore the urban economy through a study of trends in consumption. A consideration of the entire body of evidence and issues related to trade and the economic life of the Piraeus in the Roman period lies beyond the scope of this study. While some relevant material has already been studied (Day 1942 *passim*), it is now possible to consider additional information. By drawing on pottery data from excavated sites and examining their formal and quantitative characteristics, it is possible to develop an understanding of what sort of goods were entering the Piraeus and were consumed in the town on a diachronic basis.

The first part discusses some of the limitations in the use of pottery to address questions of trade and consumption. The following section outlines the approach taken in this study. Because of the nature of the evidence, the discussion is structured chronologically and is split into three parts covering the Early Roman (1st century BC – Late 1st/ Early 2nd century AD), Middle Roman (2nd – ca. Mid-3rd century AD) and Late Roman periods (Late 3rd – ca. Mid-6th century AD). The discussion explores what types of fine and coarse wares were particularly popular in the town, what changes occurred in their distribution through time and which markets loomed large in the supply of the Piraeus during this long period. The final section compares the trends attested for the Piraeus with information from a number of neighbouring or more distant sites and landscapes in the Aegean and the Mediterranean. By discussing the pottery evidence in this context, we can then begin to place the Piraeus back into the wider world of the Mediterranean.

10.2 Pottery as a source of evidence for economy and consumption

In recent decades, works that address pottery in the Mediterranean have been adopting an increasingly wider variety of approaches. One of the major

breakthroughs is the application of detailed statistical and quantitative techniques and methods of petrographic analysis (e.g. Peacock 1977; 1982b; Orton 1989; Orton et al. 1993). In a number of cases, the classic examples being Ostia (Panella 1974), Carthage (Riley 1976) and Benghazi (Riley 1979), it has been possible to identify the origins of a number of wares and show through quantification how much each contributed to the total assemblage of pottery found in a deposit or group of deposits of a particular date. By comparing the trends for different periods, such studies have started to build up a picture of the relative volume of different types of pottery consumed and discarded.

However, controversy surrounds the type of conclusions to be drawn from this type of evidence for the volume and extent of trade in the Roman Empire. One area where this is particularly manifested relates to the dichotomous treatment and interpretation of fine and coarse pottery. Ancient historians generally accept the historical value of the quantified study of coarse wares, especially amphorae, for examining trade because these were not exchanged in their own right (cf. Fulford 1987). Their distribution and exchange appears to have been connected not only to their manufacture but also to the production of their contents, thus reflecting a continuous chain of economic relations between the maker of the container and the producer of the content (Pucci 1983: 109).

Ancient historians appear less willing to accept that table wares can give reliable information about trade. Fine pottery and other wares for table use do not figure prominently in the textual sources of the Roman period as traded items, while the evidence for their direct trade, including inscriptions mentioning traders in pottery (cf. Pucci 1983: 117; Greene 1990: 166 ff.), is limited and circumstantial. According to this argument, the wide distribution of particular wares documented in the archaeological record is likely to have been generated by marketing mechanisms which primarily involved the exchange of other goods, especially staples and foodstuffs. Fine wares are of limited value for economic questions and may even lead to serious distortions of the scale and nature of economic activity.

Archaeologists have frequently furnished evidence to support this view (cf. Parker 1992: 20; fig. 7), but some discoveries seem to suggest otherwise. Cargo deposits from excavated shipwrecks, for example, include small quantities of table wares destined for marketing, confirming the model of lateral transport of

these wares along other, economically more 'substantial' commodities (Pucci 1983: 111). However, there are also the occasional discoveries of shipwrecks, the greatest part of the cargo of which has been found to contain fine or even plain table and cooking pottery (*ibid.*).

It may be extreme to suggest that table wares were considered a luxury item, incurring a high price on the market and therefore traded widely. At the same time, such evidence suggests that, from the point of view of profit, pottery was not insignificant. The fact that certain classes of fine pottery occur in such numbers in places hundreds of miles away from where they were manufactured makes it difficult to maintain the 'minimalist approach' (cf. Greene 1990; Mattingly & Salmon 2001: 3) without some revision. If table pottery had little scope for profit, one is compelled to ask why it was traded on such a scale (Pucci 1983: 111; *contra* Fulford 1987: 60-61).

Although much work has focused on the mechanisms of its production and exchange (Peacock 1982b), pottery, including those wares which appear to be reliable indicators of trade, can be very deceptive as a means of inferring direct trading contacts. Commodities, including amphora-borne goods, for example, were frequently shipped first to a central location, a sort of 'clearing house', for re-distribution, even in cases when the distance between areas of production and those of consumption would perhaps make this seem unnecessary⁷⁴.

Moreover, shipwreck evidence (Parker 1992: 408; cf. 21), suggests that it was not infrequent for ships sailing in the Mediterranean during the Roman period to have acquired their merchandise after hopping between a series of ports. Furthermore, amphorae, contrary to the view that they enable a strong correlation between container and content, may have been shipped *empty* miles away from where they were manufactured, to serve as containers for local products (cf. Riley 1979: 123). In consequence, rather than reflecting direct trading contacts between two areas, distributions of fine and coarse pottery may be more likely to suggest the networks of supply within the exchange system of a particular region.

In contrast to its production and exchange, there has been little study of the consumption of pottery in the Roman world. Among the key issues are the

⁷⁴ For the possible role of Piraeus as a centre for re-distribution of artworks, such as the Neoattic reliefs (Stephanidou-Tiveriou 1979), in the 2nd c. AD, cf. Day (1942) 206

integrity of archaeological contexts from which pottery derives and the ever-present problem of residual material (Fulford 1987). A serious difficulty is posed by the fact that the end date of a pottery type or form cannot be calculated with the same level of accuracy for all wares (Peña 1998: 7). Certain wares may have been deposited years or even decades before the contexts in which they have been found were closed.

Relying on contexts from other sites seems to be the best solution. Ideally, to do this, it must be assumed that the sites from which this type of information is extrapolated functioned within a similar transport regime and conditions of supply. Refining the pottery sequences on a site-to-site basis is perhaps the way forward, but even when this is done, the problem of distinguishing what exactly is documented by the patterns in the archaeological record still remains. If the distribution of a ware drops off around a date in the sequence and never appears again, does this mean that it stopped being produced and marketed around then or should this date be considered as reflecting the base level of the ware's popularity?

The distribution of pottery is still sometimes taken merely to illuminate the question of surpluses transferred between one area and another (Hopkins 1983: 84 *passim*; cf. summary in Greene 1990: 14). Provided that enough data exist, it is possible to examine pottery in terms of both its marketing or distribution from the source and its consumption at a certain place over a period of time. The most dramatic exposition of this is the study of the official state-run supply of olive oil to the city of Rome (cf. Mattingly 1988; Aldrete & Mattingly 1999). While this is an exceptional case, one may argue that shifting the focus to consumption is a matter of looking at pottery in a different manner and asking questions such as:

- Why are certain classes of pottery found in certain sites and in greater quantities than in others?
- What factors account for the variability in their distribution through space and time?
- Is there any marked preference for particular types of pottery on a specific site and how can this be explained?

- What proportions of the pottery assemblage recovered from a site are made up by different categories (imported/ local, fine, plain, coarse etc.) and what do fluctuations in their numbers over time signify?

These questions are not new; pottery marketing and consumption in the Roman world has been examined for decades, for instance, through the use of mathematical models (Hodder 1974). The approaches have changed, as more data have become available. By focusing on quantified data from a site or landscape and comparing these with those from other areas, it may be possible to arrive at an informed appreciation of the ‘consumer signature’ of a site, both synchronically (with respect to other sites) and diachronically (focusing on a single site or landscape through time).

10.3 The Piraeus sample and the approach to the study

This study is based on the examination of pottery from 40 contexts deriving from three sites excavated during urban re-development in recent decades. The largest quantity of pottery comes from the excavation of the DM site, and includes material from several types of contexts relating to the use of the area in Antiquity: construction fills, floor-contact levels, floor make-up layers, cistern and well fillings and general fills. These deposits derive from the amalgamation (or grouping) of a number of pottery lots which reflect the excavated spits. The remaining contexts come from two ancient cisterns excavated in the 1960s (sites 16 & 17 in **Fig. 31**).

The process of studying the pottery finds from the DM site has been discussed with respect to the finds from the latest occupation layers of House 1 and 2, so only technical details relevant for this study will be presented here. My work on the assemblages took place between 2002 and 2004 with the aim of documenting the wares and recording their quantities. The pottery had already been divided into fine and coarse wares and tile, and quantities of tile and pottery were discarded in years following the excavations. Identification of the wares is based on the published local series from the Athenian Agora and on a wide range of material from sites around the Mediterranean. After the main classes of wares were identified, a pro-forma sheet was used for recording quantities of wares and

types by each pottery lot, while other information about forms, function, decoration, dimensions etc. was noted separately (**Fig. 161**).

The date of the sampled contexts ranges between the 1st century BC/ AD and the early 6th century AD, providing therefore the basis for a detailed examination of the consumption of pottery across this period. To ensure consistency in the presentation of the data, the contexts were amalgamated into seven broad date-groups. This division is based on the information obtained from the excavation notebooks and after reconstructing the site stratigraphy and phasing. The chronological groupings given here draw upon dating evidence provided by diagnostic finds, such as fine pottery, lamps and coins. The amalgamated deposits are presented in summary form in Appendix 8. The data presented there include pottery vessels and lids but not other common artefacts made of baked clay, such as lamps, round-cut sherds, terracottas, loom-weights, and CBM.

The quantification of the assemblages rests on counts of diagnostic and non-diagnostic sherds, considered either separately (as rims, bases and handles, henceforth RBH) or together with body sherds (henceforth, RBHS). Although sherd counts may be regarded as a biased measure (Orton 1989), the decision to use this measure was conditioned by the experimental nature of this exercise and the time limits. Since no detailed petrographic study could take place to establish the wares for all the sherds represented in the assemblage, it was decided that using weights as a check would add little to what already could be deduced from the counts. Finally since the mending of vessels is still in progress, counts before mending were used. In order to achieve some consistency, vessels or parts of vessels that had been mended before my work at the museum are considered by the number of rim, base, handle, or sherd fragments.

From the data, it is obvious that certain period-groups are better represented than others. There is more evidence for the period from the 3rd to the 6th century AD than for the earlier centuries, with the exception of the early Hellenistic period (late 4th – late 3rd century BC). Notwithstanding problems relating to the nature of rescue excavation, there are probably two main reasons for this situation at the DM site. The extent of Late Roman activity and, to a lesser extent, post-antique disturbances were such that in most cases the stratified evidence for the early Roman period was virtually obliterated. Material of the 1st and 2nd century AD was frequently found to have been re-deposited in Late

Roman times, whereas only a few pockets of earth underneath floors and other features could be shown to have been 'genuinely' formed in the early Roman period.

While re-deposition of material is a frequent phenomenon in urban areas which in the case of the Dikastiko Megaro site might account for the lack of good Early Roman deposits (cf. Hayes 1996: 8; Crummy & Terry 1981 *passim*), another possible explanation is a change in the manner of rubbish disposal from the Hellenistic to the Roman periods. In contrast to the invisibility of Early Roman material, early Hellenistic material is extremely well preserved and represented in primary deposits. This comes mainly from 'closed' deposits, i.e. the fillings of cisterns, pits and wells that were in use during the centuries of occupation of the site. Such features provided a sheltered area for the deposition of rubbish and thus may contribute to the higher visibility of this period.

Given the scarcity of early Roman material from such contexts, one is inclined to assume that either these were frequently cleared or that areas for the disposal of rubbish in this period lay at some distance from the site, in an area unexplored so far by excavation. The nature and formation of archaeological deposits in such a heavily utilised environment in modern times, together with the relatively random coverage of the town by urban excavations are thus important factors that need to be taken into account. The following paragraphs focus on the deposits presented above but, in cases where, as for much of the Early Roman period, these are problematic or provide little information, I will draw upon relevant finds discovered in later contexts, or even unstratified and disturbed deposits, to fill in the picture.

Reasons of economy of space necessitate restricting the focus of this study mainly to fine wares and amphorae⁷⁵. Disregarding plain and cooking wares may appear problematic since for certain periods they amount up to a considerable proportion of the total pottery assemblage (sometimes up to 60%) but this compromise appears reasonable in the context of the present study and the current limited knowledge about the production and provenance of such wares across the Mediterranean (Hayes 1996; cf. Riley 1979; Fulford 1987 for other areas in the Mediterranean). A comprehensive publication of the entire pottery

⁷⁵ Presentation and discussion of the numerous lamp finds is also reserved for the future.

dataset from the DM site, examined against information from other excavations in the Piraeus, is a future aim. Fine wares and amphorae of the Roman period, in contrast, have been intensively studied and thus can provide much more information about the questions that are central to this study.

10.4 The Early Roman period (1st century BC – Late 1st/ Early 2nd century AD)

For the period between the 1st century BC and the late 1st/ early 2nd century AD information about the types of pottery available in the town is extremely scarce. From the Dikastiko Megaro site five deposits could be assigned to the 1st century BC/ AD, while four others could be dated generally between the 2nd and the 1st century BC (cf. Appendix 9). Many deposits were however re-deposited in later periods and/or contain finds too fragmented to provide more precise chronological information. Indeed, fine pottery found in these contexts, such as a range of local/ Athenian black-glazed table wares and Eastern Sigillata A, can be dated anywhere between ca. 150 BC and the 1st century AD.

A similar situation has been encountered during the excavation of the Athenian Agora, where such contexts are frequently referred to as ‘Sullan debris’ (Rotroff 1997b: 35). This is defined as material from the clean-up after the sack of 86 BC which included household debris or other artefacts of later, post-Sullan date, stretching even into the 2nd century AD. This situation makes it particularly difficult at this stage to distinguish pre-Sullan and Early Roman material very accurately, and creates difficulties for finer chronological distinctions within the Early Roman period. As a result, until better-dated deposits become available, trends in the consumption of ceramics of this period cannot be examined in any great detail, but within this restricted framework, it is possible to discuss some broad aspects of the types of pottery in use.

10.4.1 The 1st century BC

Among the fine wares, the mass of finds from these contexts is made up by local black-glazed pottery including cups, fish-plates, saucers and mould-made bowls. Although this pottery is generally thought to be of pre-Sullan date but deposited

in the post-Sullan period, contexts of the later 1st century BC and AD at the Athenian Agora, contained reasonable quantities of similar pottery, some in West Slope decoration typical of the 3rd and 2nd century BC (Rotroff 1997a: 102). The quantity involved suggests that such tablewares were still in use for considerable time after the Sullan sack. In the early period following the sack, when supply may have been difficult, it is possible that individual households in the city and the port re-used some of the old pottery after performing repairs. An example of such re-use is provided by a late West-Slope decorated fragment of a kantharos cup, mended with clamps in Antiquity, from a Late Hellenistic/ post-Sullan context (**fig. 162**).

The potters' workshops in the Kerameikos appear to have suffered serious damage during the Sullan sack (Hoff 1997; Rotroff 1997a: 102), and this might contradict the evidence for continuity. The occurrence of large amounts of local fine wares manufactured in the Hellenistic tradition in these early post-Sullan and Roman assemblages noted at Athens and possibly at the Piraeus suggests, however, that the local pottery production and supply was not discontinued. Local table pottery was probably still produced at a significant scale, utilising different decorative and technological elements such as mottled decoration and the increasing preference for red gloss (Rotroff 1997a: 103).

While residents of the post-Sullan 1st century BC/ AD Piraeus were apparently tapping the local market for a substantial part of their pottery for the table, they were also drawing upon overseas sources. The most important imported table ware was Eastern Sigillata A (ES A), originating somewhere in Syria and imported to Athens from the mid-2nd century BC (Rotroff 1997a: 105). During the later 1st century BC and AD, ES A became one of the standard imported table wares on sites in the Greek mainland, while at Athens it appears to have been particularly popular after ca. 25 BC (Lapp 1961: 84).

The most popular forms represented among the scant early assemblages from the DM site are non-decorated platters with incurved rims, small plates and hemispherical cups (**fig. 163**), which occur at Athens in both later 1st century BC and early 1st century AD contexts (Robinson 1959: 11, no. F1; 24, no. G9). Among Middle and Late Roman groups from the Piraeus, ES A is the second largest group of residual fine wares, after the local black-glazed. Although the higher residuality of ES A might be partly due to the robustness of its fabric, its

occurrence does perhaps reflect the popularity of the ware in its original period of use. Other fine table wares include the characteristic stemmed cups with loop handles, probably produced in Knidos, in Asia Minor (**fig. 164:2**; cf. Robinson 1959; Hayes 1996).

With regard to coarse wares, these early deposits have produced mostly masses of body sherds, which without petrographic analysis can rarely be identified with known amphora types. As a result, little can be said in the form of a quantified presentation, and the discussion will focus on some identified types. Knidian amphorae, which are known to have been very popular at Athens in the pre-Sullan period occur among the stratified sample, perhaps as residual finds. Most of the amphorae however seem to have double-barrelled handles, occurring in a variety of fabrics in the late Hellenistic/ early Roman period (1st century BC/ AD; cf. Riley 1979: 171 ff.). In these contexts, there are also occasional examples of Dressel 1 amphorae, both of the 1a and 1b varieties, which date respectively to 130 BC – ca. 50 BC and the first quarter to late 1st century BC (**fig. 165**) (Peacock & Williams 1986: 87; 90).

Such amphorae most probably carried wine from Italy and the occurrence of both varieties suggests that such imports had started in the pre-Sullan period and continued during the 1st century BC. Finally, from 1st century BC/ AD contexts, there are three fragments of an amphora with a distinctive triangular rim, which are reminiscent of a type known as Graeco-Italic (Peacock & Williams 1986: 84), made in a fabric visually similar to published examples (cf. Riley 1979: 135, no. 47 ff.). The amphora, which is thought to have been a wine container, comes from a source in Western Mediterranean, possibly Sicily (Peacock & Williams 1986: 85), and in the Piraeus may be residual.

10.4.2 The 1st century AD

A better idea for the variety of the pottery available in the town during the early Roman period is provided by the deposit from site no. 16. The deposit represents the upper filling of a cistern, the lowest part of which contained mainly Late Classical and Early Hellenistic material (Kallipolitis 1966: 67). The suggested date for the deposit is the 2nd century AD (*ibid.* 68), but on the basis of the latest

lamps⁷⁶ the bracket may be further narrowed down to the late 1st – early 2nd century AD. The pottery however ranges from Late Hellenistic and 1st century AD wares to those that can be placed towards the beginning of the 2nd century AD. The material, then, can hardly reflect a synchronic assemblage at the time of the closing of the deposit but, instead, appears to give a broad idea about consumption in the town for the 1st century AD as a whole.

Fine and thin-walled wares make up 38-39% of the total. The largest group of these (33-38% of the fine and thin-walled assemblage) includes ES A plates, hemispherical cups, and jugs (**fig. 163**), followed by local black-glazed, some of which might be residual from the pre-Sullan period (**fig. 183**). Also of early date, either of the very late 1st century BC or early 1st century AD, are two cups of local/ Athenian manufacture (**fig. 166: 1 & 2**). Among the new, 1st century AD, wares represented are Eastern Sigillata B (ES B), from the Meander Valley and Çandarli Ware (= ES C, henceforth 'Çandarli') from the Pergamon area, both in the province of Asia (cf. Kenrick 1985: 245; 257 ff.; Hayes 1972). ES B forms from this deposit comprise small drinking cups and carinated bowls (**fig. 167**), while Çandarli is represented mainly by plates and dishes. Knidian cups are represented by 4 examples (10 – 11% of the fine and thin-walled assemblage), while a similar proportion is taken up by another class of thin-walled pottery, comprising one-handled cups, from the Aegean (probably from Asia Minor or Thrace; Hayes 1996: 10).

In contrast to the eastern and Aegean pottery that dominate the assemblage of fine and thin-walled wares, Italian Sigillata is represented only by a single find. The near-absence of Italian Sigillata from this deposit can be compared to the scarcity of this ware from the DM site, where a handful of sherds have been found, only one in a primary context dating to the early 2nd century AD (**fig. 168: no. 4**). While this strongly indicates a limited consumption of Italian red-gloss table wares in the port, most of these sherds belong to the so-called *tardo-italica* variety, exported from Italy in the second half of the 1st century AD and well into the 2nd century AD (Kenrick 1985).

We still have little information about the presence of Arretine and early Italian sigillata (**fig. 168: 1 & 2**), and any conclusions about its occurrence in the

⁷⁶ For some of the latest lamps, cf. Perlzweig 1961: no. 208 (late 1st century AD); no. 161 (second 1/2 of 1st to early 2nd century AD)

Piraeus (in contrast to Athens: Robinson 1959) should await further study. However, a similarly low occurrence of late Italian Sigillata has been documented at the Athenian Agora in the later part of the 1st and early 2nd century AD (Hayes 1996: 10), suggesting that, if our dating of the Giannopoulos deposit is correct, trends in the consumption of this ware in the Piraeus aligned themselves with those predominant at Athens.

Only a handful of amphora fragments occurred in the deposit and these cannot provide a reliable index of trade and consumption in the town. Most seem to be residual from first century BC contexts, although a couple belong to amphorae with double-barrelled handles which became particularly common in the east during the 1st century AD and continued into the second. The amphorae most possibly carried wine, but they seem to have been produced in a number of places both in the west as well as the eastern Mediterranean (Riley 1979: 171 ff.).

Among the extant fragments, some look similar to the so-called pseudo-Koan variety (**fig. 169: 2-3**; cf. Böttger 1992: no. 46, pl. 99:3) and have similar fabric to a rim fragment recovered from a shaft about 100 m. to the SW of the Dikastiko Megaro site, now at the Piraeus museum (**fig. 182: 1**). The other identified amphora find from the Giannopoulos deposit belongs to the type known as 'micaceous water jar' (**fig. 169: 1**; Lang 1954; cf. Riley 1979: 183, Benghazi MR amphora 3). Such amphorae were common in Athens from the later 1st century BC and were most probably imported from western Asia Minor, perhaps the region of the Meander Valley (Peacock & Williams 1984: 188).

10.5 The Middle Roman period (2nd – ca. Mid-3rd century AD)

In contrast to the Early Roman period, the evidence between the 2nd and the late 3rd century AD is more substantial and superior in terms of both preservation of the pottery and availability of deposits, enabling a more detailed and quantified approach. From the Dikastiko Megaro site, three pottery deposits can be placed in the 2nd century AD and four in the early part of the 3rd century AD (Appendix 9). The 2nd century AD deposits include pottery from a levelling layer and two general fills, the latter excavated in the secondary streets framing the urban insula in which House 1 and House 2 were built.

One of these fills from the SW road, containing Deposit 1.1, was found underneath the pavement of the court of a late 19th-early 20th century house, with some modern pottery and tile and may have been re-deposited from outside the site in post-antique times. Despite this the deposit is included because, compared to other contexts, its pottery is well preserved and, in chronological terms, relatively homogenous. The formation of this deposit can be placed around the middle of the second century AD⁷⁷, while the remaining deposits can be placed within the 2nd century AD in general⁷⁸. In addition to the evidence from the Dikastiko Megaro site, the sample includes a group, dated within the second half of the 2nd century AD, from site 17 (Kallipolitis 1964: 69).

10.5.1 The 2nd century AD

Deposits of the 2nd century AD show continuities as well as new elements in the types of pottery they include and the relative quantities of these in the assemblage (**fig. 184**). In particular, the predominance of eastern fine and thin-walled wares identified for the previous period seems to carry on in this period too. As in the 1st century AD, there are only a few pieces of Italian sigillata, making up 1-2% of the assemblage, and a couple of fragments of Italian thin-walled 'aco-beakers' (included in the 'OTHER TWW' group in **fig. 184**), which might even be residual from the later 1st century AD (**fig. 164: 3**; cf. Hayes 1973). Notwithstanding the apparent general preference for eastern Mediterranean sources, there are some remarkable changes in the representation of wares from this part of the empire in the period under study.

Thus, ES A seems to drop dramatically from the previous period (cf. **fig. 183**) and now forms only 11% of the fine and thin-walled ware assemblage. From Deposit 1.1 there is a plate which has the standard, cream-white hard fabric of ES A but is covered by a blotted matt 'glaze', similar to pieces found in other 2nd

⁷⁷ On the basis of lamps: plain lamp from Corinth or Patras with ovolo rim pattern and young male bust (cf. Perlzweig 1961: no. 231-234 and 238, 2nd century AD). ES B and Çandarlı forms can be paralleled to those found in a Traianic (T1) and a Hadrianic deposit (D1) at the Unexplored Mansion in Knossos, cf. Sackett 1992: pl. 169, nos. 8-9 (Çandarlı); pl. 172, nos. 3-4 (ES B).

⁷⁸ Precise dating is complicated by the lack of independent dating evidence (e.g. coins and lamps) and adequate and/or easily identifiable fine wares: for deposit 8.4, the latest available find seems to be an ES A bowl fragment, dated in Athens in the first half of the 2nd century AD (cf. Robinson 1959: 47, no. H1, pl. 8 & 57); for 39.1, a Çandarlı carinated cup dated at Knossos to the Hadrianic period (cf. Sackett 1992: pl. 173, no. 2).

century AD contexts (e.g. Deposit 8.4 and those from the Athenian Agora, cf. Robinson 1959: Deposit H, no. 1) but quite different from that encountered on finds dated to the 1st century BC or AD (cf. **fig. 163: 5**). Although this should not necessarily be considered as a drop in the quality of the pottery itself, AD ES A decreases in quantity in many Mediterranean sites in the course of the 2nd century AD, a fact which may be related to its reduced marketability and to competition by other suppliers.

In contrast to the apparent diminished role of ES A, the consumption of ES B and Çandarlı, the other two chief eastern red-gloss wares from the central western Asia Minor, seem to stabilise and expand in the Piraeus during the second century AD. For Çandarlı, which now reaches 26–27%, this is to be expected, since the later 2nd and 3rd century AD appear to be the time of the ware's greatest expansion into Mediterranean markets (Hayes 1972: 317). Among the most common forms of Çandarlı in the Piraeus at this time are small, flanged cups and bowls with steep-sided walls (**fig. 170: 1**). Although it was previously thought that ES B ceased to be imported to Athens in the course of the 2nd century AD, supply of the type, in its more mass-produced variety (ES B2; cf. Hayes 1973: 452 ff.), is now thought to have continued until quite late in this century (Hayes 1996: 8).

This proposition seems to be supported by the evidence from the Piraeus. While occurring in small numbers in the 2nd century AD (**fig. 184: 9-11%** of the assemblage), the share of ES B in the local market does not appear to have diminished considerably from the previous period (cf. **fig. 183**). In fact, its continued occurrence is paralleled by an expansion in the vessel repertoire. While in the previous period the range of ES B available in the Piraeus appears to have comprised mainly drinking cups and small shallow bowls, the 2nd century AD deposits show, next to these forms, a range of sloping-walled and carinated bowls (**fig. 171: nos. 2-4**).

The greatest expansion however is shown by the grey thin-walled ware, identified as deriving from a source in the Aegean (Aegean TWW). In the 1st century AD, Aegean TWW appears to have been present but not particularly popular in the Piraeus (**fig. 183: 10-11%** of the assemblage), whereas now it occupies more than one third of the assemblage (**fig. 184**). As in the previous period, in the contexts under study from the Piraeus, this ware comprises mainly

a series of collar-rim beakers or mugs (**fig. 164: 4; fig. 187: 7**). Because of their high level of breakability compared to other pottery types, it could be argued that the high representation of vessels of this ware in the Piraeus might be reflecting this taphonomic aspect rather than the actual rate of consumption of the ware. More deposits are needed for testing these possibilities, but the fact that this ware has produced not only more RBHS but also more diagnostic RBH than any other ware from the deposits under consideration suggests that the high proportion does represent popularity. An additional support for this idea is provided by the scarcity of sherd re-fits during work on these finds at the Piraeus Archaeological Museum.

The deposits have yielded relatively large amounts of amphorae compared to the previous period, although care is required when using this as an index of increased imports of amphora-borne commodities during the 2nd century AD. As already noted, 1st century BC/ AD material is very poorly known, since the largest part of the amphora assemblage is made up of fragments which during work at the Museum could not easily be identified with known types. For the 2nd century AD deposits, this material (termed here 'miscellaneous amphorae') makes up as much as 70% (RBHS) and 50% (RBH) of the total amphorae assemblage (this is very likely to include residual material). As a result, it is only possible at this stage to discuss the remaining, identifiable material, and draw some limited conclusions.

Some of the patterns traced for the fine and thin-walled wares however can also be seen in the amphorae. While in previous periods amphorae from western, mainly Italian, sources occur, few now seem to be coming into the Piraeus. In contrast, the pseudo-Koan and related amphorae with double-barrelled (sometimes horned) handles (also known as Dressel 4-5) which are known from the previous period from Aegean and eastern sources⁷⁹ continue during this period (**fig. 182: 2**). Similarly, at Athens, they first occur in Flavian and later 1st century AD contexts and continue into the second century AD (Böttger 1992: 333 ff.; cf. Robinson 1959: no. G198, pl. 8).

Amphorae of this form are widely represented by a variety of shapes and fabrics in the Piraeus, suggesting that their contents (possibly cheap wine from

⁷⁹ For a recent discovery of possible kiln sites of such amphorae, see Rauh & Slane 2000, especially 327.

across the Aegean and/or Eastern Asia Minor; cf. Riley 1979) must have enjoyed a certain popularity. They now constitute 13-14% of the assemblage although, due to the absence of quantified data for the previous century, it is impossible to know whether this figure signifies an increase or decrease in their presence. The same is true for the so-called Benghazi MR amphora 3, which continued to be imported during the 2nd century AD and now takes about 8-9% of the assemblage (**fig. 189**).

Among the new amphora types appearing in the deposits of the 2nd century AD are a series of rather small baggy containers with angular handles and short necks, commonly referred to as Benghazi MR amphora 2 (cf. Riley 1979). Amphorae of this type are known to have been produced in various locations in western, central and southern Crete, where kilns have been recently excavated (cf. Marangou-Lerat 1995), but other production centres located in the Aegean, including Attica (Hayes 1973) and the Peloponnese have also been put forward (Slane 2003).

The examples from the Piraeus show a degree of variability in the form of the rims and angularity of the body (**fig. 172**), while there are at least three different fabrics (one occurring in later, 3rd century AD contexts), suggesting that amphorae of this type in the Piraeus were coming from a range of sources. Taken together, they occupy 6% by RBHS and 16% by RBH but this wide margin is most probably to be explained by the fact that body sherds of this amphora type are not so easy to identify macroscopically. With 16% by RBH, they are the highest group among identifiable amphorae types for the 2nd century AD.

Few finds (7% of the assemblage) of Tripolitanian amphorae (**fig. 173: 3-4**) suggest that African products, most probably olive oil which began to make an impact in Mediterranean markets during this period (Mattingly 1988), were making some incursion during this time in the Piraeus, though, apparently, not to the same level as those from areas of the Aegean and western Asia Minor.

10.5.2 First half of the 3rd century AD

Four deposits can be studied to provide an insight into the consumption of pottery and pottery-borne products at this time. Two come from floor make-up layers and another two from Cistern 1, which lies at the SW part of the DM site.

As with most of the 2nd century AD contexts, some of the deposits assigned here to the 3rd century AD, such as the one from Cistern 1, were not closed and appear to have received pottery for a considerable period of time, in some cases containing much later 2nd century AD material. My initial impression was that these contexts were formed during the clean-up following the Herulian sack of AD 267.

Nevertheless, the latest benchmark for their dating is given by the presence of ARSW forms, such as Hayes Form 48, as well as lamps of Athenian manufacture dated to between the early and middle part of the century, and the absence of pottery or lamps which occur in the Herulian destruction debris (the latter including material of early 4th century AD date) at the Athenian Agora (cf. Robinson 1959: Groups L:I and L:II, p. 73 ff.). Since the presence of post-Herulian material cannot be completely excluded, the deposits may be generally reflective of pottery used, discarded and accumulated over the greatest part of the century. These deposits might overlap in part with those in the next period group which includes material spanning the later 3rd to mid-4th century AD.

During the 3rd century AD, fine and thin-walled wares from western Asia Minor continued to be quite popular. ES A and ES B occur in small numbers and are perhaps to be considered as residual in these contexts, although as we saw earlier ES B may have been imported into Athens as late as the end of the 2nd century AD (**fig. 185**). From Cistern 1, there are a few bowls which might have been among the very late imports of this ware (**fig. 171: 1-2**). Few specimens of a new type of thin-walled mould-made bowl might be of Eastern Aegean/Western Asia Minor origin (**fig. 164: 6**), but the beakers or mugs of Aegean TWW show the highest percentage among the assemblage of fine and thin-walled wares. Although some of this material might be residual, the evidence suggests a continued, marked preference by the local population for drinking cups from this region. In contrast, the popularity enjoyed by Çandarlı in the 2nd century AD drops significantly by more than half of its share in the previous century to 8-11% of the assemblage (**fig. 185**).

Eastern fine wares are now being challenged by two sources. The first is local and includes red-coated ware (**fig. 166**), already attested as early as the 1st century AD, and Athenian White Painted Ware (AWPW), the latter distinguished by its decoration of painted spirals, floral sprouts and convivial mottoes. Both

types of pottery were produced at Athens in the Kerameikos area, although recent excavations have brought to light new manufacture centres located elsewhere in the city (Hayes 1996: 11; cf. Zachariadou & Kyriakou 1993: 27 – 28). Common forms include carinated bowls, drinking cups and occasionally jugs (**fig. 174**). Local red-coated and AWPW now take up together between 20 and 27% of the assemblage of the fine and thin-walled wares. Although local/Athenian plain and undecorated vessels for table or general household use have presumably always formed the majority, this is the first time that local decorated table pottery becomes particularly popular.

The second source is located overseas and it is represented by African Red Slip Ware (ARSW). Produced mainly in Tunisia since the 1st century AD, and after expanding into the markets of the western coastal Mediterranean, ARSW began to be imported in some quantity in eastern mainland Greece from the middle of the 3rd century AD (Hayes 1972: 417). At the Piraeus, a few scraps of bowl and dish forms 9 and 10, discovered in contexts of the later 4th-5th century AD, suggest that ARSW was entering the local market from the early to middle 2nd century AD, and this is confirmed by evidence from the Athenian Agora (Hayes 1972: 35 ff.; cf. Hayes 1996: 10). In the 3rd century AD, the ware is represented by forms 40, 48 and (mainly later in the century) 50 and comprises a range of undecorated bowls and small plates (**fig. 175: 1-3**). At this time, ARSW takes up 11% of the fine and thin-walled ware assemblage, a roughly similar share to that of Çandarlı (**fig. 185**).

While African tablewares appear to penetrate the local fine ware market in some quantity, the same cannot be said for agricultural amphora-borne products from the North African provinces (**fig. 190**). African amphorae, represented by a few finds of Tripolitanian 'con grandino' series and Benghazi MR amphora 17 (**fig. 173: 3**), remain low in the assemblage of the 3rd century AD, reflecting thus in general their 2nd century AD distribution (2% by RBHS of the total assemblage). In this period too, the greatest part of the identifiable assemblage is made up by the various fabrics described as Benghazi MR amphora 2 (10-16% of the total assemblage) (**fig. 172**). In general, Aegean sources for amphora-borne commodities appear particularly well-represented, comprising apart from the numerous Benghazi MR amphora 2, the micaceous jars (**fig. 173: 2**) already known in the Piraeus since the previous centuries (= Benghazi MR amphora 3;

14-25% of total assemblage) and the so-called hollow foot amphora (=Benghazi MR amphora 7; cf. Riley 1979: 189 ff.) (**fig. 173: 6; fig. 182: 5**).

The domination of the Aegean area in the local supply of amphorae is supplemented by few finds of Benghazi MR amphora 4 and 5 which apparently came from outside this region. The first is an Eastern Mediterranean type and possibly a container for wine, which was made in SW Cyprus (cf. Williams 1989: 91 – 95) and in western coastal Cilicia (**fig. 176: 1; 24: 3**), as indicated by the recent discovery of kiln sites with manufacture debris in this region (Rauh & Slane 2000: esp. 328). The origin of the other type, Benghazi MR 5, is still unclear – the Northern Aegean and Black Sea area have been proposed (**fig. 176: 2-3; Riley 1979**). While with 2-3% the occurrence of Benghazi MR amphora 4 should perhaps be considered rather limited in the Piraeus during the 3rd century AD, Benghazi MR 5 occurs in substantial quantities. Although more research on other deposits in the town and more detailed analysis of body sherd material are necessary, the present data suggest that the latter amphora type is likely to have been quite frequent during this period in the Piraeus, although not as popular as the other Aegean types just discussed.

10.6 The Late Roman period (Late 3rd – ca. Mid-6th century AD)

The last period to be investigated in terms of pottery consumption is placed between the late 3rd to the early half of the 6th century AD. The evidence derives exclusively from the DM site and includes pottery from a wide range of deposits, including the latest occupation levels of Houses 1 and 2 and the fills of wells and cisterns. The deposits can be split chronologically into three groups. Six can be placed roughly between the later part of the 3rd and the middle of the 4th century AD. One comes from the filling of Cistern 2 in House 2, which was closed some time after the AD 320s, while the rest come from underneath the latest floors of some of the rooms of the same house, which were remodelled around the middle of the 4th century AD.

Fifteen pottery lots belonging to eleven deposits can be assigned to the period between the later part of the fourth and the early 5th century AD. All derive from the general floor-contact fills from some rooms of the two houses, except for two

deposits, the first from Cistern 5 in the courtyard of House 1 and the other (74.2) from the extension trench excavated on Leosthenous St., to the NW of the principal excavated architectural remains (**fig. 53**). The final group covers the later 5th and the mid-6th century AD and it is made up by six deposits. These were amalgamated from thirteen pottery lots which derive from the latest occupation levels of some rooms in the two main houses and shops (cf. Chapter 8). The dating for all these lots and deposits is given primarily by the latest identifiable coins and finds of fine wares (Appendix 5).

10.6.1 Later 3rd – ca. Mid-4th century AD

The shifting pattern of consumption of fine table wares in the Piraeus attested for the earlier part of the 3rd century AD is documented dramatically for the period now under consideration (**fig. 186**). This shift is vividly portrayed by the reversal in the relative quantities of Çandarlı and ARSW, the former retaining a similar share to that it had in the previous period (9-10%; compare **fig. 185**), but at the same time losing ground with respect to other wares with which it now competes. Although found in very small numbers, among the new wares available in the town during this period is a hard grey slipped ware (known as ‘Macedonian T.S. Grise’) which probably came from the Northern Aegean (cf. Hayes 1972: 405 ff.). In contrast, accounting for more than half of the assemblage, imported ARSW is now evidently the prime fine ware class of pottery in the town (**fig. 175**). Local/ Athenian red-coated pottery occurs in such small numbers that, in order to be statistically represented, it had to be subsumed under the ‘Miscellaneous red-slipped/ unidentified’ group. This may (or, given the relative small size of the sample, may not) suggest that the ware had started to lose the already weak position that it had in the market during the early part of the 3rd century AD.

The same cannot be said with certainty for AWPW (**fig. 174**), the other class of local ‘fine’ table ware whose share of the assemblage (15-17%) does not seem to have tailed off dramatically from the previous period, when the ware took up 14-19%. AWPW and the previously mentioned local red-coated ware were possibly both made in the same workshops which were damaged during the Herulian raid. Nevertheless, the fact that quantities of AWPW stay roughly on

similar levels both before and after the sack, while those of local red painted ware drop significantly suggests that the painted series was now becoming more popular and perhaps more easy to acquire at the port.

Although publication of the kiln data from Athens in the future will throw more light onto this, it is also possible that Athenian potters were now laying more emphasis on the decorated series than before, perhaps for marketing reasons. AWPW was one of the few local wares to be exported in small numbers to other regional markets, especially the Peloponnese and the Aegean islands (Hayes 1972: 408; 413, n. 1; 1996: 10-11). The fact that the pottery workshops were re-established shortly after the Herulian sack (cf. Kübler 1931) indicates the existence of a steady supply from early on in the period we are considering here, which would cater for demand in Athens, the port at the Piraeus and (more restrictedly) the export market.

While ARSW had the lion's share of the Piraeus market, it did not completely oust the consumption of table wares produced at Athens. In fact, local/ Athenian pottery seems to have thrived in the port's market and, interestingly, it seems that this was at the expense of eastern products. To cite an extreme example, the grey ware thin-walled Aegean mugs now seem to be massively reduced to a mere 5% of the assemblage by RBHS. The fact that only body sherds of this ware were recovered from contexts of the period under study strongly suggests that by this time they had become residual. It is not known whether they stopped being imported because the supply was discontinued or because production had stopped.

By the mid-4th century AD, however, plain or partially coated beakers and small jugs, sometimes with gouged decoration (**fig. 181: 8**), were being produced in increasing numbers by local/ Athenian manufacturers and during the course of the later part of the century appear to have made up a substantial part of drinking vessel repertoire. It is possible then that this demand, previously covered by imports, was now filled by local products, some of which may even have been produced in the same workshops as the other series of 'fine' table wares, such as AWPW.

With regard to amphorae, this period sees a continuation of the pattern of Aegean dominance outlined for the early part of the third century AD. Some amphorae identified for the previous period are also present now, however their

relative quantitative representation among the assemblage has changed (**fig. 191**). Thus, Benghazi MR 2 amphorae, represented by some late examples of a fabric of possible Aegean origin (**fig. 182: 7**), have now dropped by 10% in the assemblage by RBH. In contrast, Benghazi MR 7 (**fig. 182: 5**) has risen to double its share compared to the previous period and now appears to hold a considerable share in the town. Micaceous water jars (=Benghazi MR amphora 3 = Peacock & Williams Class 45: cf. Peacock & Williams 1986) continue to be imported from Asia Minor, their share remaining relatively unchanged from the previous period (**figs. 190 & 191**).

Non-Aegean amphorae, such as Benghazi MR 4 occur in even smaller numbers than previously but while this might be expected given their low numbers in the previous period, the total lack of African amphorae is quite startling, given both the picture gained from the table pottery and, more importantly, the continued export of African foodstuffs to other places of the empire during this period (cf. Peña 1999). Although the apparent absence of such finds in the contexts under study may be partly due to inability to identify them among the mass of amphora sherds, African fabrics are sufficiently well-known and easily recognisable to suggest that their absence cannot be explained away in these terms. Some unstratified finds dated on typological grounds to the 4th c. AD (**fig. 176: 4, 7-8**) may suggest that African products were coming through to the port, but perhaps in limited quantities.

Among the new amphora types occurring in this period in small numbers is the baggy Carthage/ Benghazi LR amphora 2 (**fig. 176: 9**). The type, which is represented in a range of fabrics, is mostly known from contexts dated to the fifth and sixth century AD in the Mediterranean but in Athens it occurs as early as the fourth century AD, with some examples perhaps reaching as back as the mid-3rd century AD (Robinson 1959: nos. M175, M272). Unless the finds from the Piraeus are intrusive from later periods (which cannot be excluded), this type seems to be present in the port (as at Athens) from the fourth century AD. This last possibility is in keeping with the chronological distribution of this amphora from other Aegean sites, which is starkly different from that in the central and western Mediterranean (cf. Karagiorgou 2001: 129 ff.).

This pattern of chronological distribution and typological similarities with types of Aegean amphorae of previous periods (e.g. such as the Benghazi MR 2)

has suggested that such amphorae were being produced in the Aegean, while it has recently been proposed that the contents consisted primarily of olive oil (*ibid.* 147). If this is the case, the occurrence of this amphora type ties in well with the absence of African olive-oil carrying amphorae noted above and adds to the emerging impression that, during this period, the Piraeus was importing foodstuffs from regional and Aegean sources rather than from more distant sources.

10.6.2 Later 4th – ca. Mid-5th century AD

For the period between the later part of the 4th and the early 5th century AD, the picture of pottery consumption remains in general unchanged. ARSW, now represented mainly by a range of large bowls, dishes and dish/bowls of Hayes' forms 61, 63, 67 and 70 (**fig. 177: 5-6**), is still the main imported fine ware at the Piraeus, while local AWPW follows (**fig. 187**). Nevertheless, the share of ARSW appears reduced significantly in contrast to AWPW and Local Red-Coated which after the mid 4th century AD makes a strong reappearance in the port's market.

The increase in the representation of local table wares is likely to be related to the continuous function of the Athenian industry. It is to be expected that by the later part of the 4th century AD local industry had recovered significantly from any economic or physical setback suffered following the damage to the town during the third quarter of the 3rd century AD, thus allowing for a greater output, which as we have seen may have also covered the limited demand for exports. Although little information exists for the fate of the local table pottery in the 5th century AD (Hayes 1996: 10) and while Athens may have suffered another raid in AD 395 by the Goths, the potters' quarters were not affected significantly, and both AWPW and other local red pottery may continue well into the 5th century AD.

ARSW now competes not only with the local industry but also with some new products from overseas. Small amounts of Phocaean Ware (PhW), a new type of table pottery comprising a set of bowls from the north-western Asia Minor, seems to be entering the port in this period. PhW is considered to have superseded the other fine ware known to have been produced in the same region, Çandarlı (cf. Hayes 1972: 369). The latter, which by this time at the Piraeus

occurs in small numbers should thus be regarded as residual. PhW is here represented by 12-10% of the assemblage, interestingly, similar to the percentage that ARSW occupied in the early part of the 3rd century AD (cf. **fig. 185**). Nearly all identified rims belong to bowls of Hayes form 3B and C which are generally datable around the middle of the 5th century AD or even slightly earlier (Hayes 1972: 337).

The exact emergence of the form however is still under scrutiny since new finds from other Mediterranean sites have moved the date back further into the early part of the century (Hayes 1980: 526). Given this state of knowledge about this (and the poor associated finds from these contexts), it is impossible to tell at this stage precisely when PhW started to be imported to the Piraeus. No other forms have been noticed in the deposits under study, but at Athens PhW is represented by examples of earlier forms which occurred in late 4th century AD deposits (Hayes 1972: 417). Although further material needs to be studied from the port to assess whether this was the case in the Piraeus, for the time being the early occurrence of this ware in Athens and the new evidence about dating cited above may suggest a date in the very late 4th rather than the early 5th century AD.

The distribution of amphorae during this period shows some remarkable shifts in the supply of the site. While in previous periods, the amphora known as P/W Class 45 (also known as Benghazi MR amphora 3/ LR amphora 10) was present but not particularly numerous, its share has now risen to 22-27% of the assemblage (**fig. 192**). The type, which by now may have included examples of the double-handled variety (**fig. 178: 7-8, 10-11**; cf. Peacock & Williams 1986: 188 ff.), appears to have dominated or even to have caused a grave decline in the importation of other Aegean types, which developed in the 3rd and earlier 4th century AD, such as Benghazi LR 2 and Benghazi MR 7 respectively.

While Benghazi MR 7 evidently declined during this period, Benghazi LR 2 (**fig. 176: 9**) seems to continue hold a stable share. Despite the common regional origin of these types, the fact that both seem to flourish during this period may suggest that P/W Class 45 and Benghazi LR 2, and the products that these carried, were not competing with each other in the local market. If the principal traded content of P/W Class 45 was wine, as has been argued (Abadie-Reynal 1989A: 148) this hypothesis may appear reasonable, emphasizing the increased

importance of the Aegean region as a whole for the procurement of a range of foodstuffs.

With 5 – 10% of the total assemblage, the second most numerous identified type is Benghazi LR amphora 1, which makes its appearance during this period for the first time (**fig. 178: 1-2**). The type is now thought to be of south-west Asian Minor or North Syrian origin, and if the latter is correct, its content which has been thought to be wine, may actually have been Syrian olive oil, which is known to have been exported from the Antioch region during the 5th century AD (Peacock & Williams 1986: 187). Along the Benghazi LR 2, Benghazi LR1 appears then to have been among the principal olive oil carriers to the Piraeus.

Other possible olive oil containers include the Benghazi LR amphora 8 (**fig. 178: 5; 188: 6**), which may be of African origin (Riley 1979: 228). In the Piraeus, it is represented only by 1-2% in the assemblage from contexts of the late 4th-mid 5th century AD, suggesting a rather circumstantial occurrence. Similarly low numbers are shown by two other 'new' amphorae for this period, Benghazi LR 3 and 4, which were most probably produced in Palestine. For Benghazi LR 3 (**fig. 178: 3-4**), a variety of contents have been proposed, including wine and pickled fish, while Benghazi LR 4 is generally thought to have been a container of Palestinian wine (Riley 1979: 221 f.; 223). Irrespective of their contents, these two amphora types were not particularly popular and do not seem to have been in a position to compete with the Aegean products at the port's market.

10.6.3 Later 5th – ca. Mid-6th century AD

The period between the second half of the 5th and the second half of the 6th century AD is characterised by further important changes in the supply of pottery. After the mid-5th century AD, PhW apparently becomes the prime fine ware in the town (**fig. 188**). This ware, represented almost exclusively by bowls of forms 3D-F (**fig. 179**) now accounts for 53-54% of the total assemblage of fine wares, while ARSW, the main competitor of PhW, has dropped to 23-21%. The decline of ARSW during the early part of the period is paralleled by evidence from other Mediterranean sites and should in part be seen in the context

of a reduced supply and/or trading connections as a result of the conquest of the principal area of its production by the Vandals in the early 5th century AD.

Nevertheless, the share of ARSW in the fine ware assemblage from the Piraeus, while reduced from the previous period, is not insignificant, a fact which suggests that, despite potential problems of supply, a considerable range of forms were available. Forms of ARSW now include mainly forms 83, 84, 91, with a couple of later bowls and dish/ bowls datable to the early-mid-6th century AD (Hayes 1972: Forms 99 and 104). Consequently, the 'decline' of ARSW in the Piraeus may not only be explained by a change in the supply pattern as a result of the Vandal conquest, but may also reflect changes in the marketing of the ware and/or the consumption choice of its target market, which now turned more and more towards the East.

In this context, it is surprising to find that the radical increase in the consumption of PhW creates a unique pattern among the Late Roman period groups. For the first time during this period the local pottery suffers a dramatic drop in its share of the fine ware assemblage. In contrast to the previous period, when local/ Athenian fine pottery (**fig. 180: 1-3**) took up approximately one third of the assemblage (cf. **fig. 187**), during the later 5th to 6th century AD it does not account for more than one tenth (**fig. 188**). It is perhaps no coincidence that this happens at about the time that PhW starts to be imported in greater quantities, leading to its near-domination of the local market. While in the previous two period groups ARSW had the largest share of the local market, this did not prevent the consumption of considerable quantities of local fine pottery (cf. **figs. 186 & 187**). This may suggest that PhW was traded at a premium (arguably, along other products and commodities from western Asia Minor) or under a different marketing regime in the Aegean than ARSW, which made it cheaper or more easily available and therefore well-positioned to compete with local/ Athenian wares, causing their near-extinction.

The amphorae finds of this period show some comparable patterns (**fig. 193**). Firstly, in general, amphorae from the Aegean (including P/W Class 45 and Benghazi LR amphora 2) are still dominant, but the eastern Mediterranean types of LR1, 3 and 4 are now making a greater impact in the local market (**fig. 178: 1-4**). While P/W Class 45 amphorae (**fig. 178: 7-8, 10-11**) have furnished about 15% of the assemblage, their total percent has dropped off significantly from the

previous period. Other amphora types, such as Benghazi LR 3 and LR 4 seem to remain stable compared to the previous period.

In contrast, Benghazi LR amphora 1 sees a significant rise from the previous period (**fig. 193**) and is now the most numerous type among the identified assemblage, occupying about 12-15%. A slight rise is also attested for the possibly African 'spatheion'-type Benghazi LR 8, while the Aegean Benghazi LR 2 seems to be rather stable with respect to the previous period. A few finds of Benghazi MR 17 from Africa also occur (**fig. 178: 6 & 9**), although, as in previous periods, their popularity does not show any major changes (**figs. 192 & 193**).

It is perhaps noteworthy that most of the amphorae just mentioned (except P/W Class 45, the contents of which are not known, and Benghazi LR 3 and 4, which carried wine or other foodstuffs) are believed to have contained principally olive oil from Syria, Africa and the Aegean regions. Taken together, these amphorae account for almost 30% of the assemblage. Such a range of olive oil containers occurring in quantity in an area where olive oil would logically have been available from local sources is striking.

A breakdown in olive oil production in Attica during this period may account for this pattern, although little evidence can be furnished to support this claim. The pattern sketched out by the pottery evidence coincides with a period of expansion in rural settlement as documented by excavations and regional surveys in Greece (cf. Kosso 2003). Excavations have revealed sites with olive pressing equipment dated to the Late Roman period in several places in Attica (e.g. French 1982: 8; Thompson 1959: 69), suggesting that production did not cease but may in fact have expanded.

On the other hand, it has been argued that Attic olive oil during the Roman period was exported in small quantities only, and since the Hadrianic period, imperial rescripts were set up to administer its export (cf. Day 1942). This intervention, although preventive in nature, presumably had the effect of making the greatest part of Attic olive oil available within the Attic market, mainly at Athens and the Piraeus. While it is unknown whether the rescript was still in action as late as the 5th and 6th centuries, there is nothing to suggest that export patterns of Attic oil changed dramatically.

At this point, it should be pointed out that locally produced olive oil, especially if destined for the local market, is likely to have been carried to its retail or redistribution outlets mainly in lighter containers, such as skin bags, which rarely survive in the archaeological record. As a result, it is impossible to be certain about the extent of consumption of local as opposed to imported olive oil (which may equally have been carried to the Piraeus in similar containers, at least in part) and thus make broader economic inferences.

Accounting only for the amphorae evidence, what is striking is the shift in the emphasis of supply. In contrast to the supply of olive oil from regional sources, reflected in the levels of Benghazi LR 2, which remains stable, distant suppliers seem to take a greater share of the port's market than before. Given the continuity in supply and the availability of local and regional suppliers of this foodstuff, the increase in the oil-carrying amphorae from the eastern Mediterranean and perhaps, to a lesser extent, Africa may reflect a growing preference for olive oil from these areas.

10.7 The regional context

Although snippets of information about the marketing and occurrence of several pottery types presented above have been already cited, it is necessary to place the trends described for the Piraeus within their historical and geographical context. There are many ways to do this but this study will concentrate on comparing the evidence from the Piraeus with the results from other areas. This will help to tease out similarities and differences between patterns in the supply and consumption of pottery between the Piraeus and a range of other Roman-period sites. This may also enable a better appreciation of the extent of local integration within regional or interregional markets and consumption regimes, and of their shifting importance through time. The study starts by sketching out the broad trends of pottery supply and consumption in the Piraeus during the Roman period against the evidence from Athens and then moves on to compare these with available data from a number of sites and landscapes in the Saronic, Aegean and the Mediterranean.

In selecting comparative material, the study focused primarily upon excavated sites for which published pottery reports, preferably with quantified

data for the types of pottery discovered at them, are available. Unfortunately, however, while analysis of Roman pottery in southern Greece has taken place for decades, publication of dated assemblages or finds from sites in comprehensive form is still lagging behind. Analytical techniques have been adopted quite late and not without doubts by excavators and pottery specialists. This means that from those sites for which pottery reports exist a large number still lack quantified data and that work on creating the long-term deposit sequences is under way (for Athens: Hayes 1996; for Corinth: Slane 2003).

Meanwhile, there is some controversy about methodological issues (quantification techniques and sample size being the most popular themes) and a lack of standardisation, which, in cases where quantified data exist, make attempts to comparing assemblages a rather difficult task. To this one should add the different classification and grouping principles that studies of quantified pottery use in order to acquire meaningful results. In the case of the material from the Piraeus for example, thin-walled wares are considered to be part of the fine ware assemblage, although the same principle has not been used for Knossos or Corinth (cf. Sackett 1992; Slane 2003). Similarly, micaceous water jars have been classified here under coarse amphorae in contrast to Athens (Hayes 1996: 12, Appendix tabulation of Group F), where they have been tabulated along with other table pottery.

As a result, there is much variation both in terms of quality and quantity of reported information which is reflected in the sites selected here for discussion, and in the light of this, it is possible to discuss only general patterns. Apart from Athens, the sites to be discussed include Kenchreai and Methana in the Saronic Gulf, Corinth and Argos in the Peloponnese, Knossos on Crete and Benghazi (Berenice) in Cyrenaica (modern Libya). One set of data discussed in the next paragraphs comes from a landscape survey project which was conducted on the Methana peninsula in north-eastern coastal Peloponnese (**figs. 194-195**).

Although this dataset has been generated using different techniques and collection methodology and reflects pottery consumed over a wider landscape, it has been included for comparative purposes and also since Methana lies at a short distance from the Piraeus and the two sites may have functioned within a similar regime of transport and exchange. The remainder sites, although not representative – for example, pottery data for islands in the Aegean are absent –

may provide a good cross-section of trends in the pottery supply of towns in Achaia during the Roman period, while Knossos and Benghazi, in the joint province of Crete and Cyrenaica and at the crossroads of the Aegean and Mediterranean seas, provide additional comparisons.

10.7.1 The Piraeus and Athens

As the closest urban centre by land to the Piraeus and because of the administrative, economic and cultural ties between the two settlements, Athens seems to be a reasonable place to begin to place the patterns of pottery consumption explored for the Piraeus in their regional and wider context. Despite the profusion of rescue excavations and discovery of Roman-period sites over the decades⁸⁰, however, few quantified pottery datasets of any period have been published. Available evidence comes exclusively from the Athenian Agora excavations by the American School and it is illustrative mainly for the consumption of fine wares during the early Roman period. Nevertheless, based on this limited information, some preliminary long-term trends in the pottery supply discussed recently (cf. Hayes 1996) may provide useful points of departure.

Among the trends that Hayes (1996: 10) has highlighted for pottery consumption in Roman Athens is an increasing influence of local pottery among the assemblage, beginning from the 2nd AD and continuing until the very early 5th century AD. Although Hayes (*ibid.*) takes account of plain pottery shapes (such as cups, jugs, decanters etc.), his grouping also includes the various classes of red-coated drinking, serving and consumption vessels, which during the 3rd century AD came to include painted wares such as AWPW and other wares of similar function produced locally at Kerameikos and other areas in the town. Based on this dataset, Hayes has argued for a drastic reduction of tableware imports to Athens during the mid-later 2nd century AD, which in the later 1st century BC made up ca. 50%. After this date, Athens becomes again self-sufficient in tableware pottery for the first time since the Classical period.

⁸⁰ For such discoveries, see the relevant entries in the 'Archaeology in Greece' section of the *Archaeological Reports* (published since 1956).

The evidence discussed in the previous paragraphs suggests a similar trajectory of steady increase in the consumption of local/ Athenian pottery in the port. There seem however to be some important differences which set the Piraeus apart from Athens. Although we remain under-informed about early Roman period pottery consumption in the town, local fine wares appear to have started making a sizable impact again in the 3rd century AD, reaching their highest proportion within the fine and thin-walled ware assemblage only in the later 4th century AD (cf. **figs. 196 – 200**). Until then, the local market seems to have been dominated by imports from various sources, initially the Eastern Mediterranean and then Asia Minor, a source which in the 2nd century AD accounts for no less than 74% of the fine wares present in the sample (**fig. 197**).

Apparently, even in periods when local table pottery appear to have been very popular in the Piraeus, as in the 3rd and 4th centuries, imported table wares, mainly from northern Africa, were the norm. This suggests that local consumer choice looked more towards the wider Mediterranean market, rather than the urban centre, for covering its needs in table pottery. Furthermore, although much of the rest of table pottery in plain fabrics used in the Piraeus throughout the Roman period was local/ Athenian, a good deal is also likely to be of regional manufacture, imported from the Aegean islands, the Peloponnese or elsewhere.

A similar conclusion may be reached on examining the range of local table pottery available at the port, especially in the post-Herulian (post-AD 267) period. In particular, while AWPW and the undecorated red-coated vessels were quite common, this does not seem to be the case with the local/ Athenian stamped ware, which imitated ARSW. The latter (known as 'Athenian Ware': Hayes 1972: 407-9) was found in great quantities in the Kerameikos (where the kilns were located; Kübler 1931) and in fewer numbers in the Athenian Agora (Waagé 1933: 307 & fig. 6).

Although better figures from Athens and more material from the Piraeus are needed, the scarcity of this ware at the DM site, where only a handful of fragments (all from unstratified contexts) were noted, may serve as a rough index for the level of popularity of this ware in the port. Contrary to Athens, and perhaps also other inland sites in Attica, where this ware may have found some appeal, the Piraeus appears to have been a less successful market. If local stamped vessels were manufactured in imitation of ARSW, then their scarcity at

the Piraeus may be explained by the fact that the site was particularly well-placed as a port to receive large quantities of the 'real' thing. The fact that the Piraeus was a port made the site more exposed to the regional and Mediterranean suppliers than other inland locations, resulting in a more diverse and in terms of its sources, 'cosmopolitan', pottery assemblage.

10.7.2 Kenchreai and Corinth

In order to explore these patterns further, it is instructive to look at two other sites in vicinity of the Piraeus, Corinth and Kenchreai, where detailed quantities of local versus imported pottery have been calculated. Corinth, located in north-western Peloponnese was capital of the province of Achaia and the largest city in Greece during the Roman period (cf. Alcock 1993). In Antiquity, the city was served by two ports, Lechaion in the Corinthian Gulf in the north and Kenchreai in the Saronic Gulf in the south. Although in operation since the Archaic period, port facilities at Kenchreai were refurbished considerably after the re-foundation of Corinth as a Roman colony, when piers and breakwaters were erected in the harbour creating an artificial anchorage. The site was in use throughout the Roman period and a modest settlement grew around the harbour which remained in use until the 6th century AD (Scranton et al. 1978).

In Corinth, a contrasting pattern in the consumption of pottery to the one outlined above for the Piraeus, and more similar to the situation in Athens since the 2nd century AD can be seen. During the period between the later 1st century BC to the end of the 3rd century AD, local pottery makes up almost consistently about 60% of the fine ware assemblage, with imports accounting for as low as ca. 25% in certain periods (e.g. in the Augustan period; Slane 2003: 330, figure 19.6). Only in the 4th century is the trend reversed and imported fine wares, including pottery from Athens, ARSW and Çandarli, become dominant in the local market (ibid. 331).

At Kenchreai, such detailed data are not available due to the lack of many good deposits (especially for the 2nd and 3rd century AD) but from the snippets of information included in the pottery report, it would appear that local fine wares were never so dominant as they were in Corinth. In the so-called 'underwater deposit' from the South harbour mole, dated to the first half of the

1st century AD, all fine wares are imports, while no sigillata imitations, which by that time would have been produced in Corinth (cf. Slane 2003: 330), are reported (Adamschek 1979: 44-45). With the exception of some Corinthian mould-made bowl fragments from a post-AD 267 context (ibid. 83 ff.), no other local fine pottery is reported for the subsequent centuries, in contrast to moderate amounts of imports from various sources (ibid. 92 ff.).

Although no hard figures for this evidence exist, the general pattern of fine pottery consumption at Corinth's eastern port appears markedly different from that at the main urban centre, a pattern which is strongly reminiscent of the case of the Piraeus. This difference can be followed also in the types of fine wares present at the two sites, especially in the early Roman period for which good deposits at Kenchreai have been excavated. Whereas at Corinth the first century AD is characterised by large imports of Italian sigillata (Slane 2003: 331), all Western imports (including thin-walled wares) from Kenchreai account for only ca. 25% of the total fine pottery. ES A is here the most numerous, followed by smaller amounts of early ES B (Adamschek 1981: 44-45; 62).

At Kenchreai, Çandarlı does not seem to have been particularly popular (only 8 fragments are reported: ibid. 92), as opposed to Corinth where, along with ES B, it is considered as important throughout the second and third centuries AD (Slane 1989: 224; Slane 2003: 331). Only from the 4th century AD onwards, when ARSW and to a lesser extent AWPW and other wares seem to be represented in similar proportions on both sites, does Kenchreai appear to align itself to pottery consumption patterns that were predominant in Corinth (cf. Slane 2003: 330, n. 49). At Kenchreai, ARSW is quite common, especially in the later 4th century AD, but later seems to be outweighed by PhW.

10.7.3 Methana peninsula

Across the Saronic Gulf, on the north-eastern coast of Argolid in the Peloponnese and a short distance from the Piraeus, lies Methana, a small rocky peninsula about 50 km² large, separated from the mainland by a narrow isthmus (fig. 195). A landscape survey of the peninsula in the 1980s revealed that during the early Roman period settlement retracted both in rural areas as well as in the main urban centre, concentrating now more in the west than the east (Bowden &

Gill 1997 A: 77). During the Middle Roman period, there is some modest rural growth, while settlement started to expand back into the eastern part in the Late Roman period (Bowden & Gill 1997 B: 86, fig. 8.1). The pottery record for the Roman and Late Roman period suggests some interesting similarities and differences from the sites that have already been discussed. Unfortunately, no particular discussion is included in the report with regard to local as opposed to imported pottery, but the information included is enough to warrant some useful comparisons.

For the Early Roman period (100 BC – 100 AD), as in the case of the Piraeus and Kenchreai, ES A appears to be the most common fine ware found on the Roman sites explored, in contrast to ES B which was imported in very small quantities and only from the late 1st century AD onwards. Also in a similar manner to these sites, Italian Sigillata is also rather uncommon on Methana (Bowden & Gill 1997 A: 77). Middle Roman fabrics, in turn, are dominated by Çandarlı, in a manner comparable to the Piraeus and Corinth but not Kenchreai (although this may owe much to the lack of deposits of this period there), while as in the case of Kenchreai, Athenian pottery is not particularly numerous (ibid. 81). For the Late Roman period, ARS and PhW are the chief wares, but ARSW seems to be the most popular throughout the 5th and 6th centuries AD (Bowden and Gill 1997 B: 84 – 86), in contrast to Athens and the Piraeus, where PhW gains dramatically in importance from the middle of the 5th century AD.

10.7.4 Argos

Argos in the eastern Peloponnese was a major settlement from the early historic period onward and an important urban centre during the Roman period (Piérart 1996). The pottery evidence from the site includes quantified results from a series of closely dated deposits resulting from excavations in the town led by the French School at Athens, and is generally useful for a discussion of the city's pottery supply for the period between the later 3rd and the 7th century AD (Abadie-Reynal 1989a; 1989b). During this period, imports make up the largest proportion of fine pottery at Argos. Local pottery takes up only a tiny fraction in the successive period groups, in the second half of the 4th century no more than 5% (Abadie-Reynal 1989a). Such a low percentage appears perhaps striking

compared to the Piraeus, where local/ Athenian pottery reached its peak of popularity during that time. In general, however, Argos seems to behave in a similar manner to the Piraeus in the consumption of fine pottery, since imports significantly outnumber local products.

Looking at the patterns of fine wares in more detail, more similarities and differences emerge. Çandarlı seems to be of primary importance at Argos (50% of the assemblage) even in the early 4th century AD, with ARSW taking up approximately 30 to 40% of the fine ware assemblage (cf. Abadie Reynal 1989a: 144). At the Piraeus, in contrast, Çandarlı drops substantially in the same period and ARSW becomes the dominant imported and consumed fine ware. In the later 4th century AD, ARSW is the dominant fine ware, with PhW taking over supremacy in the second half of the 5th century AD (*ibid.* 15 ff.). There are some remarkable similarities in this with the Piraeus, although local/ Athenian pottery seems to have been an important component of the fine assemblage in the port until well into the 5th century AD.

Similarities also occur in the types and relative quantities of amphorae between the two sites. Thus, Bughazi MR 7 accounts for 30 – 45% of the amphorae found at Argos in the later 3rd and early 4th century AD, while at the Piraeus this amphora reaches its highest share of the assemblage in the same period. Both sites exhibit a preference for Aegean products during the same period and during the later 4th century AD especially for P/W Class 45 amphorae from Asia Minor. On both sites this type takes up no less than 30 to 50% percent during the later 4th century AD, while dropping substantially in the 5th and early 6th (**figs. 192 & 193**; cf. Abadie-Reynal 1989a: 148, 151). In contrast, African types do not seem to be particularly popular on both sites throughout the Late Roman period, while eastern Mediterranean amphorae, especially the Bughazi/ Carthage LR 1, on the whole, seem to gain importance in the later 5th and early 6th century (cf. Abadie – Reynal 1989a: 148, 151 ff.).

10.7.5 Knossos

At the Roman colony of Knossos in northern-central Crete, quantified data exist for fine wares in the period between the late 1st century BC to the early 3rd century AD from the site of the Unexplored Mansion (Sackett 1992). The data do

not include thin-walled wares (as in the case of the Piraeus) but include figures for table pottery manufactured locally, including imitations of imported sigillata forms. While until the mid-1st century AD local pottery seems to be particularly common – at times reaching no less than 46% - its share in the following century drops significantly, at the end of the second century AD representing a mere 13% of all fine pottery (ibid. 163, fig. 2). For fine wares Knossians tend to look to overseas markets, initially the Levantine coast and eastern Mediterranean, around the first half of the 1st century AD towards Italy and from the later part of the 1st century AD until the Severan period to Asia Minor (ibid.).

Compared with the Piraeus, the evidence from Knossos shows a reverse trend in the consumption of local table pottery, the occurrence of which at the Athenian port seems to increase gradually as time progresses. At the same time however, Knossos appears firmly attached to overseas suppliers, similarly to the Piraeus during the Early and Middle Roman period. Interestingly, just like in the case of the Piraeus, it is predominantly eastern sources (chiefly from Asia Minor) rather than Italian ones which cater for the bulk of local supply. This happens for most of the late 1st century BC and the 1st century AD, a period when another Roman colony, Corinth, is importing large quantities of Arretine and other Italian sigillata, a pattern which does not change significantly until well into the second century AD (Slane 1989: 224).

10.7.6 Benghazi (Berenice)

The dataset from Benghazi, ancient Berenice, on the Libyan coast, includes information about the consumption of coarse wares, especially amphorae (Riley 1979). Although the quantified results included in the published report are of excellent standard, the problem is the lack of chronological overlap between Benghazi and the Piraeus for a substantial period reflected in the pottery sequence due to the absence of 4th and 5th century deposits from the former site. However, even for the period which is documented on both sites, the evidence of amphorae suggests some interesting similarities. Thus, most types of amphorae which occur in the Piraeus from the second to the sixth centuries AD are also known from Benghazi (such as Benghazi MR 3, 4, 5 and 16-17, LR 1, 2, 3 and 4), while some, such as Benghazi MR 2 and 7 seem to have been imported in

significant quantities at both places at about the same time. During the mid-3rd century AD, the former makes up ca. 8%, while the latter about 15% of the total amphora assemblage by RBH (*ibid.* 181, fig 28; 190, fig. 34).

Many of these types are of Aegean origin and their occurrence in both places suggests that during this long period both the Piraeus and Benghazi belonged to a common trading network which included the Aegean and Crete, extending to the Libyan coast. However, while the Piraeus seems to have received large amounts of amphorae from Aegean sources throughout this period, Benghazi apparently maintained a balance of amphorae imports from both the western and eastern Mediterranean, with some significant increase in imports from North African regions in the 2nd and 3rd centuries AD (Riley 1979: 412 ff.).

This apparently lasted until the 6th century AD, when eastern Mediterranean amphorae, especially the LR amphora 1, flooded the local market taking up no less than ca. 45% by RBH and over 60% by RBHS of all amphorae found in contexts of that date (Riley 1979: 213: 41). Containers from the Aegean have a rather limited share of the local assemblage. While LR 1 goes up markedly in the Piraeus too during this period, it did not oust other Aegean containers which were particularly popular in previous periods, such as P/W Class 45. Interestingly, this type of containers which appear to have been among the most widely used types at the Piraeus and Athens during the Late Roman period, were very rare at Benghazi.

10.8 Conclusion

The existing evidence may be used to assess broadly the changing nature and scale of the supply and consumption of pottery in the port during the Roman period. A first conclusion concerns the direction of trade. Some evidence exists for Italian imports as early as the late 2nd century BC and in the 1st century BC but more material is needed to examine their quantitative relation to other classes that were imported and consumed in roughly the same period. For fine pottery, at least, Levantine sources seem to be of particular importance throughout the early Roman period, with apparently very small quantities of western material (**fig. 202**). Although we are still badly informed about the 1st century BC and AD, the existing evidence suggests that by the early 2nd century AD the Piraeus was

looking firmly to eastern sources and particularly Asia Minor for much of its fine pottery and amphora-borne foodstuffs (**figs. 197 & 202**).

The dominance of Aegean sources and Western Asia Minor in the Piraeus seems to have lasted throughout the 2nd and early part of the 3rd centuries AD until the early 6th century AD in the case of fine wares with an interlude in the 4th century AD, when ARSW flooded the local market (**figs. 196-201**). The same conclusion can be drawn for amphora-borne products too, which until the later 5th century AD came primarily from these sources. Amphorae of possible Cretan origin seem to have gained in importance during the 3rd century AD (**fig. 203**), while from this period onwards other possible sources including the Black Sea, Cilicia and Northern Africa had a small share of the market (**figs. 204 & 205**). Only in the later 5th century and early 6th century AD did Eastern Mediterranean amphora-borne products start to make an impact in the Piraeus (**fig. 206**).

A comparison with other sites suggests that the Piraeus during the Roman period was integrated within the regional trading networks. The rise and wane of various pottery types in the assemblages assessed here may be examined in some cases in the context of shifts in the supply as a result of the changing volume of manufacture, trade and the availability of certain wares on the market through time. Both the Piraeus and Kenchreai, for example, show remarkably low numbers of western imports during the Early Roman period. For the Middle and Late Roman period, imports of fine wares in the Piraeus seem to reflect not only the trends highlighted for Athens, but also those for Argos in the Peloponnese, while mirroring to some extent those at Knossos and Benghazi.

This comparison has also highlighted some patterns which appear to set the Piraeus apart from sites and landscapes even in its close vicinity. For example, the evidence for the consumption of fine wares during the Late Roman period seems to contradict that from Methana peninsula, which indicates a steady importation of ARSW throughout the 5th century AD when this ware was 'in decline' at the Piraeus. Also, whereas generally following Athens in the rising consumption of locally manufactured table pottery during the Roman period, consumers in the Piraeus opted for overseas products, while selecting carefully from the range of available local/ Athenian table pottery. These results suggest that, while integrated within these wider networks of exchange, the Piraeus had

its own distinctive signature in the consumption of pottery and pottery-borne products.

The wealth of information highlights the importance of further work, such as that which has been undertaken in this study. We remain ill-informed not only about the Early Roman period, but also the Classical and Hellenistic periods, a study of which could serve to provide a background for the evidence considered here and help to illuminate the changing volume of trade and long-term shifts in pottery consumption. It is to be hoped that the integration of more data from better-dated deposits in the town, the inclusion of other pottery categories, such as plain and cooking pottery, and the application of detailed recording and quantification techniques will enable a more comprehensive understanding in the future.

Conclusion

1. Re-assessing the Roman Piraeus

The archaeological evidence considered in the previous chapters enables us to re-assess the history of the Piraeus in the Roman imperial period from a new vantage point, detached from the biases and misunderstandings that have resulted from an excessive concentration on the textual sources. Archaeological information however is not without its biases and care should be exercised when conclusions and correlations are established. Contrary to explanations offered by previous researchers, this thesis has attempted to take these into account when considering patterns in the archaeological record and their correlation with information gathered from other sources. Despite the limited number of excavations and the level of publication of archaeological discoveries in the town, this thesis has demonstrated that a wealth of information can be gained when older and more recent archaeological data are carefully examined.

Traditional emphasis on textual testimonies and the use of archaeological discoveries merely as 'illustrative material' of Classical texts has not only created misunderstandings, it has also deterred the formulation of questions that can contribute to an enhanced understanding of issues of social and landscape change of the area after the sack by Sulla. Although the task of writing, or re-writing the history of the peninsula in the Roman and Late Roman periods is better left to future historians, when more and better research will have been done, the existing information may now be used to address some important questions of a broader, historical nature.

What do the changes in the landscape reviewed earlier signify? What was the settlement status of the Piraeus during the Roman period and where did it lie in the regional settlement scale? Why, furthermore, despite the warfare and turmoil of the 1st century BC, did the Piraeus endure, while other areas of Roman Greece failed? These questions are not easy to answer nor can it be claimed that comprehensive and definitive answers are possible. It is the purpose of this conclusion to highlight some of the complexity of these issues. To do so, the evidence examined in the previous chapters will be utilized in parallel with

literary and epigraphic sources and comparisons with relevant examples from other imperial situations that may illuminate the discussion.

2. Settlement and landscape change

While the few textual sources that relate to the post-Sullan and Early Roman Piraeus suggest dramatic changes in the landscape of the town, the evidence from the rescue excavations allows the causes and effects of these changes in the settled area to be framed and understood in a more coherent and detailed way. Observed patterns of settlement displacement in the archaeological record suggest that the abandonment of certain, previously inhabited, areas within the old town had started to occur from the Late Classical – Early Hellenistic period. This tendency appears to have continued or even intensified during the 1st century BC, and by the Roman imperial period it seems that the main settled area had concentrated around the large harbour.

The most dramatic change implicit in the classical sources and uncritically accepted by modern research is a demographic collapse after the sack of 86 BC. The evidence of epitaphs used to substantiate this claim has been shown to be particularly disorientating when used in a coarse fashion. When a finer approach is adopted and a wider spectrum of the epigraphic record is assessed, results do not seem to substantiate this picture. While a decline in population numbers may be envisaged in the short to medium term in the unsettled conditions following the town's sack, it is difficult to accept that the local resident population was on the wane *throughout* the Roman and Late Roman periods.

Unfortunately, the nature of the data is such that providing even simple orders of magnitude about population numbers is impossible. However, in general, the Piraeus appears to have been demographically vibrant in the long-term and to have made up significantly whatever losses it suffered as a result of war and social unrest in the 1st century BC. A variety of reasons may be offered for this pattern, but limiting ourselves for now to the ones which relate directly to demography, the most important was arguably migration, both from within as well as from outside the settlement's region. Patterns of intra-regional and interregional immigration into the Piraeus and Athens are documented from the

later Classical period, and it seems that in the Late Hellenistic and the Roman imperial period the phenomenon was intensified.

Changes reflected in the analysis of the epigraphic and archaeological records for the town should not therefore be considered as only the effect of the Sullan sack, as they appear to have a temporal depth that extends both before and after the event itself. An example to illustrate such long-term processes is the nucleation of foreign cults in the main settled area, rather than on the margins of the town, which may be brought into association with the increasing toleration towards the settlement and visibility of foreigners in the port from the Hellenistic period (Chapter 3). Some changes, such as the apparent discontinuity in the naval areas and the clustering of settlement towards the Kantharos harbour, reflect significant shifts in the perception of the landscape, the social and economic structures of the settlement and its position within the regional administrative structure in the wake of the Roman conquest of southern Greece and its political integration in the Roman Empire.

Despite this, it is important not to underestimate the evidence for continuity. Some sanctuaries and cults, for example, appear to have flourished after the sack of 86 BC, amongst others those that from the previous period had been experiencing some revival (Chapter 3). Certain parts of the town, such as the area of the DM site, seem to have continued to function in the same way as before the sack, undergoing changes and re-development until late in the Roman imperial period (Chapter 4). Moreover, the location of Early Roman cemeteries and burials outside the disused fortification wall suggests that for the local population (or at least some part of it) the fortified area of the old town counted still as 'urban', even if it was not extensively settled (Chapter 2). As evident from the restoration inscription (Chapter 4), the memory of the landscape and monuments of the old town was actively celebrated and it provided a practical and ideological basis for re-building the town in the post-Sullan era.

The spread of tombs in the previously fortified area poses problems of interpretation and more data, especially regarding the chronology of such features, are needed before it is possible to reach definitive conclusions. What is certain however is that such evidence cannot substantiate the argument for the shrinkage of the old urban area because this is based on false premises. According to the latest evidence, most of these tombs are of Late Roman date,

when urban burial had become more generalised than before. As studies from elsewhere in the empire, including southern Greece, have argued, urban burial resonates with the transformation and re-invention of Classical urban space in Late Antiquity. Rather than regarding this phenomenon as evidence for settlement contraction and, by implication, decline from the Classical period, it may then seem more productive to stress the cultural and social significance of this practice in the Late Roman period (cf. Gregory 1984: 273).

3. Urban character and function

Such long-term changes in the landscape of the peninsula raise a central question: to what extent did the Piraeus remain an 'urban' settlement? Epigraphic evidence suggests that during the Roman period, the Piraeus was still considered as an integral part of the Athenian *polis* in administrative terms, being characterized as a deme with its own registers and organization as in previous periods (Traill 1975: 111). Civic officers such as the *agoranomoi* (market officers: Steinhauer 1994) and an *epimeletes*, or curator of the port, appointed by the Athenian authorities were active in the Piraeus (*IG* II² 3268; Geagan 1967: 23; 120). Meanwhile it is reasonable to envisage that several other epigraphically attested posts, such as that of the curator of the grain supply, involved, either fully or in part, official activities of the civic administration in the locality.

Similarly, Pausanias' mention of two *agorae* and the local civic temple suggests that the urban character of the locality 'lingered on' during the Roman imperial period. In addition, if we concur with the view of Corbier (1991) that aqueducts in the Roman period made the status of a city particularly visible, then the water supply network and the aqueduct of the Piraeus, along with other material manifestations, such as the street grid (cf. Chapter 4), point in the same direction. Yet is it justifiable to speak about the Piraeus as an urban settlement only on the basis of such evidence (cf. Alcock 1993: 101)?

In this thesis, general terms such as 'town', 'place' and 'locality' have been interchangeably used, demonstrating something of the lack of clarity of the status of the Piraeus in the Roman period. Interestingly, the question appears to have concerned Roman and Greek authors to some extent, as is evident from the negative slant of Strabo's statement that the Piraeus had been reduced to 'a small

settlement' (cf. Chapter 2). Cicero explaining his choice of words in a previous letter to his friend Atticus takes another approach:

'Coming to the form "Piraeaa", I am more to be blamed for writing thus and not "Piraeum" in Latin, as all our people do, than I am for adding the preposition "in". I used "in" as before a word signifying a place and not a town. After all, Dionysius and Nicias of Cos, who is with me, do not consider that the Piraeus is a town. I will look into the question.'

(Letters to Atticus, 7.3, translated by E.O. Winstedt)

Although Cicero is primarily concerned with grammar and language rather than geography, this passage reveals the inability of finding a meaningful expression for the Piraeus within current Roman perceptions of spatial organization. Despite this, however, notions of what qualifies as a 'city' or 'town' were current among authors of the Roman period, suggesting that criteria, albeit of debatable validity, for this type of assessment existed. Comparisons were frequently made with big centres of the empire or with famous cities of the past, which, especially in Greece, were still the foci of human settlement. In this context, continuity of urban life in the same locality presented in many cases a backdrop that enabled such literary comparisons between Classical past and Roman present (cf. Chapter 2).

Inevitably, since such works viewed the city in cultural (as the epitome of civilized life) rather than in strictly geographical and social terms, comparisons were bound to be flawed and in many cases would result in negative formulations, such as the one by Strabo. In the past decades, however, with the influence of geographical studies upon archaeology, it has become possible to examine spatial organization and settlement dynamics from a functional perspective. Rather than resting only on the information drawn from Classical textual sources, for example, ancient cities are now increasingly defined in economic and functional terms and in the context of the interaction of settlement types of varying rank and power within a region.

From a functional point of view, as with all port towns, the ancient Piraeus may be described as a 'gateway city', one which lies at the interface of 'areas of differing intensities and types of production' (Burghardt 1971: 270).

Geographical models for the development of such settlement types in modern times outline two main impacts that 'gateway cities' can have on the settlement structure of a region (*ibidem*: 272-273). After its foundation, a gateway city may enjoy some initial prosperity from the wealth accruing into its hinterland through interregional exchange, trade etc. Depending on how large and productive the tributary area (or hinterland) of these settlements becomes, gateway cities may:

- 1) Become stagnant through competition from other evolving central places developed to serve an expanding hinterland, while retaining their transport nodality, or
- 2) Gain dominance over such competing centres and/or evolve in the long term into central places themselves, especially in the case when their hinterland experiences economic decline (*ibid.*).

The Piraeus had enjoyed special status in the Classical period but it is difficult to suggest that in the Roman period the town developed into an autonomous urban centre in itself, separated from Athens (*pace* Shipley 1989). During the Roman period, the Piraeus was still the primary point of entry for people and commodities to the hinterland of the Athenian *polis*, while remaining the main outlet for the re-distribution of Athenian exports (Day 1942: 202 ff.). Other smaller ports existed in Attica, such as the one at Porto Raphti on the NE coast (Vermeule 1962) and also (possibly) at Eleusis, but the evidence for architectural monumentalisation, repairs on the harbour works and cargo finds suggests that the Piraeus retained its prime transport nodality within the regional network. Meanwhile, the epigraphic attestation of Athenian civic posts related to the port's function are evocative of the town's links to main urban centre of the *polis*. Almost nothing is known about the status of the Piraeus from the later 4th century AD and more evidence is needed to explore whether and to what extent these links had been severed.

Based on the existing evidence, and given the rather limited hinterland of Attica, it seems surprising that the Piraeus did not evolve into a separate centre. No clear reasons for this pattern may be proposed but a comparison with the city of Apollonia in Cyrenaica may be illustrative. Apollonia was originally the port of Cyrene and appears to have become a separate city in the 60s BC (Ward-Perkins & Goodchild 2003: 35). Its territory was carved out of that of Cyrene, which seems to have dwindled after the 3rd century BC as a result of natural

silting of the local river and the relocation of the main settlement to the site of Benghazi/ Berenice (Jones 1985: 27). Such responses were apparently unnecessary in the case of the Piraeus, which, despite the destruction of Sulla, under the empire continued to provide an excellent location for shipping and interregional contacts.

As discussed above, changes were limited to the landscape of the town, which should be seen as the result of developments of both pre-Sullan and post-Sullan date, and the re-configuration of local power as a result of conquest by Rome. Such developments may not only be seen in the nucleation and abandonment of previously settled urban space, but also in the changes in function of some areas in the town, such as those occupied by the naval yard in the Classical and Hellenistic period. Similarly, in the sphere of administration, civic institutions inherited from the previous periods continued, others may have dwindled, while still others may have been relocated to Athens or homogenized into single offices under new titles.

While too much emphasis may be placed on the issue of independence and political organization, fundamental among contemporary geographical notions of what may be defined as a city is that urban centres provide services and accommodate 'central institutions' such as governments, markets and chieftainships (Gregory 1984: 268; Blanton 1976). In the context of the eastern part of the Roman empire, with its rich pre-Roman history of urbanization, it has been observed that during the Roman imperial period the distribution of such services and the localities which catered for their provision became more hierarchical. As Woolf (1997: 8-9) points out, higher-order services, those that were needed less often and cost more, tended to cluster in primary urban centres rather than second-tier ones, which accommodated services that were less expensive and were needed more often.

Viewed from this perspective, there is ample evidence to suggest that the Piraeus continued to function as an urban centre with an extensive role in regional settlement and communication. Within the regional structure, the Piraeus may be seen as a second-tier urban centre/ town, lying in the middle of the scale between rural demes and other settlements of a special purpose, such as the sanctuary of Demeter and Kore at Eleusis, and the main centre at Athens. The importance of the settlement as an urban centre offering amenities and services to

different audiences from the nearby regions and beyond is underscored by the high proportion of non-local residents in its permanent population (Chapter 2).

Various strands of evidence suggest that the most important of these services were articulated through the port. The literary and epigraphic evidence abounds with references to people of different social and ethnic profiles in transit through the Piraeus, including military and administrative personnel on campaign in the eastern provinces, pilgrims to Eleusis, tourists, and, especially in the 4th century AD, university students and teachers going to Athens to study at the philosophical schools. Residents of the Piraeus and other demes in Attica and Athens would use the ferry services at the town for transport to near-by destinations in the Saronic and the Aegean (cf. Lucian, *The Ship* 15). Meanwhile, the market and retail outlets in the town, as demonstrated by the evidence from the DM site and other excavated plots, may have attracted people residing in the countryside. Citizens of Athens from the Piraeus or nearby rural demes could, in addition, have their cases discussed at the law court which appears to have functioned in the town on a periodic basis (Oliver 1970: 71-72; Kennel 1997: 361).

While the Piraeus did not eventually separate from Athens, it is possible to argue that Athens became more dependent on the Piraeus for its subsistence for the first time since the Classical period. The city went through periodic grain shortages during the imperial period, frequently leading to civil unrest, and several doles were introduced and re-established by various emperors. The continued need for shipments of grain from overseas regions, including Thessaly and Egypt, to feed the urban population arguably supported this status of dependence and maintained the civic link with the gateway community. In addition, increased opportunities for interregional exchange and trade contacts in the expanded forelands of a politically united Roman Mediterranean were arguably also instrumental in maintaining an official interest in the locality.

In addition, from the Late Hellenistic period, Athens increasingly relied on the continuous influx of pilgrims, tourists and students from across the empire as a mechanism for generating civic beneficence and economic revenue (Woolf 1997: 9). While the gradual refurbishment of the regional road network (cf. Alcock 1993: 121) is likely to have caused some decline in the role of the Piraeus in the reception and re-distribution of such traffic to Athens, this affected visitors

traveling from destinations in the western rather than the eastern part of the empire. Moreover, roads would primarily be at the disposal of those visitors that were entitled to use them, namely high-rank imperial officers and civic magistrates. Relative ease of and greater access to sea transport and ferrying (cf. Horden & Purcell 2000: 378) suggests that a great, if not *the greatest* numbers of visitors to Athens landed at the city's main port at the Saronic and then followed the main road to the city.

In essence, the Piraeus continued to serve as an urban centre the purposes for which it had been developed throughout the preceding centuries. Some of the functions which the town fulfilled in the context of the Athenian *polis* in the past, such as the operation of the naval yard, were apparently discontinued or used on a different scale than before. The new imperial configuration, however, with its attendant globalizing effects, resulted in a position for the port in the regional settlement structure and communication network which was circumscribed by the emerging role of Athens as a cultural metropolis of the eastern empire.

4. Economic and social structures

How much of the wealth that entered Athens was diverted back to the gateway city? Surviving evidence does not provide any clear answers. The epigraphic evidence for benefices to the town is meagre, at least when compared with the evidence from Athens, or indeed the lavish gifts by emperors and private individuals shored up to the sanctuary of Demeter and Kore at Eleusis (Clinton 1997). On the other hand, the Piraeus was certainly included in what appears to have been a massive project of urban re-development initiated by the civic authorities during the early imperial period (cf. Chapter 3).

Occasional dedications by civic officers and private individuals to emperors, such as Hadrian who is honoured as *ktistes* (= builder; *IG* III 2-3, 3373; cf. Boatwright 2000: 29) and Athenian magnates, such as the wife of Herodes Atticus in the mid-2nd century AD (*IG* II² 3607), allude to some form of unknown beneficence from these agents. In general, it appears that while gifts were granted to the local community, as in the case of Pompey's restoration of the Deigma in the 60s BC (cf. Chapter 3), these revenues were directed mainly towards keeping the port facilities going, rather than providing amenities for the

local population. Thus, while euergetism, probably also evident in the construction of the aqueduct, did play some role, it seems that, in comparison to bigger urban centres in Roman Greece or elsewhere in the empire (Woolf 1997: 9), the town relied on different strategies of generating revenue for its sustenance.

One of the reasons why the Piraeus endured as an urban centre until the Late Roman period, is that it offered particular prospects for employment for people from the surrounding region and beyond. The function of the port and the demands of incoming and outgoing human traffic must have supported a variety of ancillary services and professions, carried out either on a seasonal or year-round basis. Epigraphic and literary evidence allude to the presence of repairmen and harbour workers involved in maintenance services for ships, while textual sources and archaeological discoveries suggest that a substantial part of the local population was involved in the provision of secondary services – food, drink, accommodation and leisure activities – for crews, tourists and transit passengers. Another seasonal source of employment would have been provided by the operation of limestone quarries, which opened occasionally to supply building projects in the port, at Athens and its environs.

For the economy and social structure of the town, the archaeological evidence from the rescue excavations may be of particular importance. The house remains excavated at the DM site suggest the presence of some wealthy households in the Early – Middle imperial period, which were able to spend considerable sums on material embellishment and furnishings in the domestic context. The economic base of these households seems to have been partly supported by the receipt of rents from urban properties attached to the houses. The pattern is well known from other areas of the empire, and has prompted ancient historians to re-think the role of urban elites in local economy (Garnsey 1976; Pleket 1983; Parkins 1997). Apart from the management of these premises, owners appear to have been also involved in the retail business, either directly or through the employment of kin members, slaves or freedmen.

Although it is impossible to know whether domestic space was rented out for permanent residence or provisional lodging, there are signs that in the Late Roman period this line of business may have been taken up more intensively by property owners in the town. Older houses were strategically divided into

autonomous apartments consisting of two or more rooms and which could accommodate both work/ business space and residential activities. It is difficult to speculate whether this was generated by a demographic influx of people into the town during this time, but subdivision of the old houses in this context most probably reflects demand for residential space and the response to cover this as a fruitful economic enterprise.

Rather than relying on one source of income only, it appears that households in the town were involved in various strategies of subsistence, including retail and urban property investment. Interestingly, these activities appear to have been particularly lucrative or at least to have enjoyed some appeal, judging from other sources of evidence too. In the early 3rd century AD, the philosopher Proclus from the city of Naucratis in Egypt, is reported to have bought houses in the Piraeus and Athens and to have launched a business of luxury imports. This story will not be most representative for the entire population, but reveals the existence of a tendency towards diversification in the sources of revenue.

These strategies and activities were evidently not fixed but could be replaced by others, when demand changed or new opportunities appeared. The analysis of finds from the latest occupation levels of the houses excavated at the DM site suggests that, for example, shops in the Late Roman period may have sometimes switched from one service specialization or retail focus to another, indicating a certain degree of mobility and flexibility in economic behaviour of households in the town. The same may be said about domestic economy and production which is likely to have involved out-door activities such as bee-keeping, fishing and, occasionally hunting (Chapter 9).

Urban households were not only productive units but also centres of consumption. Pottery evidence from domestic contexts of the Roman period reveals interesting information about tastes and preferences in the consumption of table ceramics and amphora-borne products from various areas of the empire (Chapter 10). From this, it appears that the town relied extensively on trade with overseas markets for the provision of foodstuffs throughout the Roman period, while patterns in the supply of table pottery reflect the shifting preferences of the local population for the products of particular regions. Future study of these aspects of the pottery will undoubtedly establish finer distinctions and enable a better appreciation of trends in the nature and volume of trade in these products.

5. Social performance and cultural identity

Material culture and excavated finds may serve as sensitive tools in assessing how people in the town saw their role in the world and how they negotiated their identities with respect to other urban audiences in Roman Greece and beyond. Comparison with sites and landscapes in the Aegean and elsewhere highlight a particular local 'signature' in the consumption of pottery, that set the Piraeus apart from Athens and areas around it. Thus, Athenian table wares, do not seem to have been as popular as at Athens and appear to have become increasingly acceptable only from a later date than in the city. Despite the availability of and easier access to products from the immediate hinterland of the port, consumers in the Piraeus seem to have opted for products from neighbouring and distant overseas regions.

The lack of pottery data for the pre-Roman period makes a diachronic comparison of consumption habits particularly difficult. Focusing on aspects of the archaeological record which have attracted more attention in the past, it is possible to explore more fully other areas of social performance. Domestic space in the town during the Early-Middle Roman period suggests some important shifts in the ways people negotiated their privacy at home (Chapter 6). Compared to Classical houses in the town, from the Hellenistic period onwards Roman-period house plans suggest a greater liberty in movement and a re-configuration of the relationship of the household with the outside world. Is it accidental that the lack of bath-suites or bathing equipment in Roman-period houses coincides with a period of expansion of the culture of public bathing in the town?

Such shifts reveal the tension between past and present in Roman Greece, and ultimately pose questions about the degree of social and cultural change. This thesis has gone some way in exploring how archaeological data can be used to address these issues in an analytical and theoretically informed manner. Future archaeological work needs to focus more on how daily routines, habits and practices of the lives of individuals and communities were affected by incorporation in the Roman empire. The study of the urban communities of Greece in the Roman period may have a lot of future research potential provided that, next to the information for civic centres, more data from rescue excavations are studied and integrated into archaeological accounts.

